COUNTY OF SAN DIEGO

MULTIPLE SPECIES CONSERVATION PROGRAM

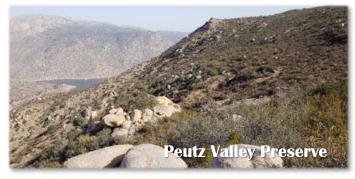
SOUTH COUNTY SUBAREA PLAN ANNUAL REPORT (YEAR 21) Reporting Period: January 1, 2018 – December 31, 2018

May 22, 2019















County of San Diego Multiple Species Conservation Program

South County Subarea Plan Annual Report (Year 21)

Reporting Period: January 1, 2018 – December 31, 2018

May 22, 2019

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Table of Contents

1.0) Ir	ntroduction	6
	1.1	MSCP Coordination Efforts	6
2.0) N	/ISCP Subarea Plan Updates	8
	2.1	Quino Checkerspot Butterfly Amendment	8
	2.2	MSCP Amendments	8
	2.3	MSCP Map Update	9
3.0	Н	abitat Gains and Losses	10
	3.1	Public and Partner Acquisitions Overview	11
	3.1	L.1 Public and Local/Non-Profit Acquisitions Tracking	15
	3.2	Habitat Gains and Losses within the Pre-Approved Mitigation Area	15
	3.3	HabiTrak	18
	3.4	Rough Step	19
	3.5	Mitigation Banks	24
	3.6	Mitigation Land Policy	25
	3.7	Clearing for Single-Family Residences on Small Parcels	27
	3.8	Agricultural Exemption	28
	3.9	Building Permit COIs	28
4.0) N	Nanagement and Monitoring	29
	4.1	Preserve Management of County Lands	32
	4.2	Resource Management Plans	46
	4.3	Management and Monitoring Partners	46
	4.4	Grant Funded Management and Monitoring Projects	48
	4.5	Research on County Property	52
	4.6	Preserve Biological Monitoring of County Lands	58

	4.7	Otay	Ranch Preserve – County and City of Chula Vista owned land	70
	4.8	Pres	erve Management of Private Mitigation Lands	73
	4.8	3.1.	Non-Compliant Private RMP Reporting	74
	4.8	3.2	2016 Annual Report Private RMP Review	74
5.0) F	Financ	ial Summary	76
	5.1	Co	unty Contribution	76
	5.2	Otay	Ranch Preserve Community Facility District 97-2	78
	5.3	Tran	sNet Funding	78
6.0) E	Educat	ion and Outreach	79
7.0) (Conclu	sion	81

Table of Contents

Figures	
Figure 1 Photo of Sycamore Canyon/Goodan Ranch Preserve (San Vicente Connection, Uridel)17
Figure 2 Photo of Lakeside Linkage Preserve Addition	. 17
Figure 3 Photo of Peutz Valley Preserve	. 18
Figure 4 Map of MSCP Biological Core Resource and Habitat Linkage Areas (Northern Half)	. 22
Figure 5 Map of MSCP Biological Core Resource and Habitat Linkage Areas (Southern Half)	. 23
Figure 6 Map of County Preserves/Parks within the South County MSCP and Legend	. 30
Figure 7 Photo of Pond at Barnett Ranch Preserve	. 33
Figure 8 Photo of Boulder Oaks Preserve Trail Revegetation	. 34
Figure 9 Photo of Ranger Presentation at Dos Picos Park	. 36
Figure 10 Photo of Luelf Pond Property Interpretative Sign	40
Figure 11 Photo of Sycamore Canyon/Goodan Ranch Preserve	. 45
Figure 12 Photo of Coastal Cactus Wren	. 50
Figure 13 Photo of California Gnatcatcher	. 53
Figure 14 Photo of Cholla	. 56
Figure 15 Photo of Coast Live Oak Tree	. 58
Figure 16 Photo of San Diego Thornmint	61
Figure 17 Photo of Burrowing Owl	64
Figure 18 Photo of Cows Grazing	. 68
Figure 19 Photo of Cactus	. 73
Figure 20 Photo of Louis A. Stelzer Park	. 81
Tables	
Table 1 MSCP Historical Baseline Preserve	. 10
Table 2 MSCP Private Mitigation	. 10
Table 3 MSCP Public Acquisitions	. 12
Table 4 MSCP Preserve Assembly Status	. 14
Table 5 Habitat Gains By Segment	. 21
Table 6 Habitat Losses By Segment	
Table 7 Mitigation Land Policy Projects	

Appendices

Appendix 1 A-B – Peutz Valley Preserve addition to MSCP Preserve

Appendix 2 - County Tracked Acquisitions Since 1998

Appendix 3 A-C - Wildlife Agency Tracked Acquisitions

Appendix 4 - Summary of MSCP Project Gains

Appendix 5 - County Acquisition: Sycamore Canyon/Goodan Ranch (San Vicente Connection, Uridel)

Appendix 6 - County Acquisition: Lakeside Linkage Addition

Appendix 7 - County Acquisition: Peutz Valley Preserve

Appendix 8 - Acquisition: The Escondido Creek Conservancy (Cielo Parcel "I")

Appendix 9 - Summary of MSCP Project Losses

Appendix 10 - Summary of Habitat Losses and Gains

Appendix 11 - Habitat Conservation Accounting Model

Appendix 12 - Mitigation Bank Status

Appendix 13 - COIs Issued for Clearing for Single Family Residences on Small Parcels

Appendix 14 - COIs Issued for Agricultural Clearing

Appendix 15 - 2018 Stewardship & Adaptive Management Activities at County Preserves

Appendix 16 - Private Mitigation Lands

Acronyms

BLM - Bureau of Land Management

BMO - Biological Mitigation Ordinance

BRCA - Biological Resource Core Area

CalTrans - California Department of Transportation

CDFW - California Department of Fish and Wildlife

CEQA - California Environmental Quality Act

CPG - Community Planning Group

COI - Certificate of Inclusion

DPR - County of San Diego Department of Parks and Recreation

EMP - Environmental Mitigation Program

HabiTrak - Habitat Tracking Reporting, State of California instrument

HCA - Habitat Conservation Area

HMA - Habitat Management Area

HOA - Homeowners Association

IA - Implementing Agreement

MHPA - Multiple Habitat Planning Area

MSCP - Multiple Species Conservation Program

OVRP - Otay Valley Regional Park

PAMA - Pre-Approved Mitigation Area

PDS - County of San Diego Department of Planning & Development Services

POM - Preserve Owner/Manager

PPM - Pacific Pocket Mouse

PSHB/KSHB - Polyphagous and Kuroshio Shot Hole Borers

RMP - Resource Management Plan

ROE - Right-Of-Entry Permit

SANDAG - San Diego Association of Governments

SDMMP - San Diego Management and Monitoring Program

SDRPF - San Diego River Park Foundation

SDRVC - San Dieguito River Valley Conservancy

SG - Sponsor Group

TMP - Targeted Monitoring Plan (formerly known as Comprehensive Monitoring Plan)

TNC - The Nature Conservancy

vi | Annual Report for the County of San Diego South County MSCP Subarea Plan, Year 21 May 22, 2019

TRVRP - Tijuana River Valley Regional Park

USFWS - United States Fish and Wildlife Service

USCBP - United States Customs and Border Protection

USGS - United States Geological Survey

WA/Wildlife Agencies - used collectively for the USFWS and CDFW

EXECUTIVE SUMMARY

This is the 21st annual report for the County of San Diego Multiple Species Conservation Program's (MSCP) South County Subarea Plan (Subarea Plan) adopted by the County of San Diego Board of Supervisors on October 22, 1997. This report was prepared in conformance with Section 14.2 of the Implementing Agreement (IA) executed between the County of San Diego (County), California Department of Fish and Wildlife and the United States Fish and Wildlife Service (Wildlife Agencies) on March 17, 1998. This report accounts for habitat gain and loss associated with acquisitions and development projects from January 1, 2018 through December 31, 2018 within the MSCP Subarea Plan boundary. It also discusses coordination efforts, MSCP Subarea Plan updates, land acquisitions, Preserve assembly, land management activities, species monitoring programs, education and outreach, and funding sources that are used by the County to meet its MSCP obligations.

The MSCP is critical for San Diego county's quality of life because it conserves the region's unique native habitats and wildlife for future generations to enjoy. Residents and visitors alike learn about the vital role of conservation through a multitude of environmental education activities that foster important connections with nature. The MSCP also protects the diversity of native plants and animals, including threatened and endangered species, works across political boundaries in a regional conservation effort, and protects watersheds and water quality. It ensures compliance with the federal Endangered Species Act and associated Habitat Conservation Plan permits, state Endangered Species Act, state Natural Community Conservation Planning Act and associated permits/authorizations; and it accommodates future growth by streamlining building regulations.

The MSCP Subarea Plan has an overall preservation goal of 98,379 acres. Preservation is prioritized within areas identified as having habitat with high biological value, which include the Pre-Approved Mitigation Area (PAMA) and the hard-lined preserve areas. The MSCP Preserve is assembled through a combination of baseline open space areas that existed in 1997, lands preserved as mitigation from development permit projects, and public agency and non-profit

conservation partner acquisitions from willing sellers.

From the adoption of the MSCP Subarea Plan in 1997 through 2018, the County and its MSCP partners have assembled 80 percent of the Preserve. In the first 21 years of this 50-year program, the County and its public agency and private conservation partners have assembled 78,565 acres of the proposed 98,379-acre MSCP Preserve.

During this reporting period, there were 705 acres of habitat gain within the MSCP Preserve. The County acquired 349 acres, which included the 19-acre Sycamore Canyon/Goodan Ranch [formerly San Vicente Connection] Uridel addition, the 75-acre Lakeside Linkage Addition, and the 255-acre Peutz Valley Preserve. The remaining acreage gains in the Preserve were associated with federal and state acquisitions (89 acres) and private land dedication required as a County condition of private development (267 acres).

In 2018, 10 acres of habitat were impacted in the PAMA and another 88 acres were impacted outside of the PAMA but within the MSCP Subarea Plan boundaries. The numerical gains show a significant investment toward the creation of a functional Preserve. Public acquisition continues despite the slower pace of land acquired through private mitigation. In order to meet the conservation goal for all of the covered species and preserve design, it is understood that additional lands beyond the original Preserve goal from 1997 may need to be acquired.

The County of San Diego Department of Parks and Recreation (DPR) owns approximately 52,000 acres of land, the vast majority of which is open space. Approximately 11,500 acres is active park land and other land. The remaining approximately 40,400 acres is open space land regularly maintained, managed and monitored by the County and is described below:

- 7,050 acres acquired and managed¹ since 1998, within the South County MSCP Subarea,
 and Tijuana River Valley and Otay Valley Regional Parks,
- 6,900 acres acquired and managed since 2001 in the future North County Plan Area,

2 | Annual Report for the County of San Diego South County MSCP Subarea Plan, Year 21. May 22, 2019

¹ 556 acres were acquired by County/with County assistance that are not owned by the County. Acreage owned in Otay Ranch Preserve but not managed by County is also not included.

- Plus an additional 55 acres in City of Encinitas HCP,
- 7,400 acres acquired and managed since 2001 in the East County Plan Area,
- 19,000 acres of open space owned and managed in all Plan or potential Plan Areas within the County at the time of MSCP Subarea Plan adoption in 1998 (historical baseline conserved lands). Approximately 5,500 of these acres are within the South County Plan Subarea.

In addition to the 52,000 acres of DPR owned lands, DPR and the City of Chula Vista jointly own approximately 2,800 acres of the 3,500 acres that have been conveyed to the Otay Ranch Preserve, with the City of Chula Vista exclusively owning the remaining 700 acres.

The County's commitment to its parks and open space conservation program is demonstrated by consistent dedication of funding for acquisition, management, and monitoring of these natural areas to preserve their biological value and provide compatible passive recreation opportunities, where appropriate. In Fiscal Year 2016-2017, the County Board of Supervisors appropriated \$10 million for acquisitions within the adopted South County MSCP Subarea and the proposed Draft North and East County Plan Areas. During this reporting period, approximately \$4.1 million of MSCP funds were spent on the 308 acres acquired in the MSCP Subarea Plan boundaries in addition to the \$110,000 leveraged to augment funding. In Fiscal Years 2017-2018 and 2018-2019, \$2.5 million of the \$10 million was shifted annually from acquisitions to monitoring and management. DPR calculates that the cost of staff, as well as management and monitoring efforts needed to successfully maintain DPR's open space lands, is \$170/acre. In 2018, DPR spent approximately \$6,868,000 to regularly maintain, manage and monitor approximately 40,400 acres of open space lands.

On County-owned/managed preserves, the County conducts environmental education and regular on-going management and monitoring activities such as public access control and enforcement, fencing, gate installation and repair, combustible fuel management, biological surveys, and invasive plant removal. Environmental education programs included ranger or docent led hikes and classes on the natural flora and fauna found in the San Diego County region.

Management and monitoring activities were conducted on County Preserves and private mitigation lands in accordance with their respective Resource Management Plans (RMPs). The County continued implementation of the Targeted Monitoring Plan (TMP), formerly referred to as the Comprehensive Monitoring Plan, including performing habitat and resource-specific surveys of County Preserves identified in the TMP. The County utilizes the TMP to execute the monitoring component of the Subarea Plan.

In addition to consistent on-going maintenance and monitoring, the County actively seeks grants to fund additional stewardship activities. These activities meet the MSCP's fourth Specific Objective to "implement a program for the conservation and management of habitats of federal and state endangered, threatened, or rare species", as well as the MSCP's Biological Goal (Section 1.2.1) to help conserve both diversity and functionality of the southwestern San Diego County ecosystem through preservation and adaptive management. These grants contribute to habitat restoration, invasive plant species management, and access control for County Preserves, which, in part, benefits MSCP Subarea Plan covered species including coastal cactus wren, arroyo toad, and southwestern pond turtle. In 2018, the following grant work was performed:

- Two SANDAG *TransNet* Environmental Mitigation Program (*Transnet* EMP) grants, which were awarded in previous years, funded various management activities on County Preserves.
- A California River Parkways grant supplemented on-going habitat restoration activities in the Tijuana River Valley Regional Park.
- A Natural Community Conservation Planning (NCCP) Local Assistant Grant (LAG)
 funded work to treat invasive, non-nature plant species, which expands upon
 current efforts being conducted through the existing Quino *TransNet* EMP grant.
- A California Department of Fish and Wildlife Watershed Restoration Grant Program Proposition 1 (CDFW Prop 1) grant funded work within the Tijuana River Valley.

- A Habitat Conservation Fund (HCF) and the Land and Water Conservation Fund (LWCF) funded habitat restoration project in the Tijuana River Valley Regional Park (TRVRP) was completed.
- A Transnet EMP grant for the eradication of bullfrogs within the Ramona Grasslands Preserve to enhance the arroyo toad population and increase the potential for a southwestern pond turtle population within the Preserve was awarded in 2018 and work will commence in 2019.

The work completed by the County in 2018 continues to meet its MSCP obligations by coordinating with its land acquisition partners to acquire, manage, and monitor its Preserve lands while performing outreach and education to the public on the value of these exceptional resources.

1.0 INTRODUCTION

The purpose of this document is to provide an update on the status of the Multiple Species Conservation Program (MSCP) South County Subarea Plan (Subarea Plan) for the current reporting period (January 1, 2018 — December 31, 2018). This reporting period marks the 21st year of implementing the MSCP Subarea Plan. The report includes information regarding habitat gains and losses; permits, amendments and other implementation activities; management and monitoring activities; funding sources; and education and outreach efforts. Annual tracking of Subarea gains, losses, management, and monitoring is required by Section 14.2 of the Implementing Agreement (IA) dated March 17, 1998 and the Habitat Conservation Plan/Natural Community Conservation Program Plan take permits/authorizations. Stewardship, management, and monitoring efforts that were implemented on DPR preserves located in both the draft MSCP North and Subarea Plan Areas are described for the entire DPR preserve and not exclusively for the area of the preserve in the MSCP Subarea Plan.

1.1 MSCP Coordination Efforts

MSCP Subarea Plan IA section 14.0 requires coordination with the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW), collectively called "Wildlife Agencies". Coordination meetings are scheduled regularly between the County and the Wildlife Agencies. Coordination also occurs regularly with regional technical groups, other jurisdictions, stakeholders and the public. The County continues to actively participate in regularly scheduled MSCP group meetings including the San Diego Association of Governments (SANDAG) *TransNet* Environmental Mitigation Program (EMP) Working Group, San Diego Management and Monitoring Program (SDMMP) Working Group, MSCP Annual Workshop, Quarterly Acquisitions coordination meetings, South County Land Managers Working Group, San Dieguito River Park Joint Powers Authority, San Diego River Conservancy, the Tijuana River Valley Recovery Team, the Tijuana River Water Quality Improvement Plan Working Group, the Tijuana River National Estuarine Research Reserve Advisory Council, the Mission Trails Regional Park Task Force, the Otay Ranch Preserve Owner/Manager (POM) Executive/Policy Committees and Joint

Staff, the Otay Valley Regional Park (OVRP) Executive/Policy Committees and Joint Staff, the OVRP citizens advisory committee, OVRP California Habitat Conservation Plan Coalition and the U.S. Border Management Task Force Group. The various MSCP group meetings consist of members from USFWS, CDFW, Bureau of Land Management (BLM), local/governmental participating agencies, private stakeholders, and members of the general public. The primary objectives of these meetings are to discuss land acquisitions, management, monitoring methodologies, conservation techniques, and regional coordination. These meetings provide meaningful educational information and create public awareness regarding the importance of habitat conservation and how it adds to quality of life.

MSCP Subarea Plan implementation also requires coordination among County departments. Regularly scheduled internal meetings regarding MSCP topics are held to facilitate and ensure consistency in implementing the MSCP Subarea Plan. Department of Parks and Recreation (DPR), Department of Planning & Development Services (PDS), Department of Public Works (DPW), and Department of General Services (DGS) MSCP staff meet regularly to discuss issues and exchange ideas.

2.0 MSCP SUBAREA PLAN UPDATES

The following discussion summarizes work completed on the proposed amendments and projects processed with Wildlife Agency staff concurrence during this reporting period.

2.1 Quino Checkerspot Butterfly Amendment

In 2018, the County continued work to add the federally endangered Quino checkerspot butterfly to the list of species covered by the MSCP Subarea Plan. Coordination was conducted to collaborate with the Wildlife Agencies on the preliminary analysis of conserved lands, the Conservation Strategy, and understanding current management efforts in the MSCP Subarea.

2.2 MSCP Amendments

This section covers proposed Minor or Major amendments to the Subarea Plan discussed with the Wildlife Agencies during 2018. There were two amendments discussed: OMC Tentative Parcel Map 21140 Minor Amendment and the East Otay Mesa Business Park Specific Plan Minor Amendment proposed by the Otay Sunroad 250 applicant. The County finalizes amendments upon concurrence from the Wildlife Agencies and when amendment conditions are satisfied.

Concurrence for the OMC Tentative Parcel Map 21140 Minor Amendment was granted by the Wildlife Agencies in a letter dated September 7, 2018. Should the project receive approval from the County and the applicant fulfill their conditions of approval, the Minor Amendment will be reflected in the Subarea Plan.

The Otay 250 Sunroad (previously known as Sunroad Spectrum) project was previously the subject of a Minor Amendment to the MSCP Subarea Plan; the USFWS and CDFW provided concurrence for the Minor Amendment in a letter dated November 14, 2003. Through the approval of the East Otay Mesa Business Park Specific Plan (a General Plan Amendment), the project area became partially designated as 'Preserve' and the remaining portion as 'Take Authorized,' completing the Minor Amendment conditions.

In 2015, the Otay 250 Sunroad project proposed amending the East Otay Mesa Business Park Specific Plan to establish a new mixed-use land use category to allow for residential, commercial, and adding employment uses while eliminating industrial uses. The County found the proposed project remained consistent with the conditions of the approved Minor Amendment from 2003 because the project footprint has not changed, no new significant impacts were identified, and the mitigation measures had previously been satisfied and implemented.

2.3 MSCP Map Update

The maps associated with the MSCP Subarea Plan was originally adopted by the County Board of Supervisors on October 22, 1997. The maps have been updated through the years to reflect changes in designations for Major and/or Minor Amendment areas to either "take authorized" or "preserve" designations. There were no map updates processed in 2018.

Discussions are on-going regarding the appropriate designation for areas within Otay Ranch Village 14.

3.0 HABITAT GAINS AND LOSSES

The MSCP Subarea Plan goal is to assemble a Preserve that includes approximately 98,379² acres in a configuration that will meet the goals of the MSCP and the MSCP Subarea Plan. The Preserve includes baseline open space acreage that was conserved prior to the MSCP Subarea Plan adoption in 1997 and conserved open space acreage that was acquired after 1997. Table 1 shows the historical breakdown, by landowner, of the 45,821-acre baseline Preserve.

Table 1. MSCP Subarea Plan Historical Baseline Preserve

Land Owner	Acreage
County	5,466 ¹
Federal and State	32,600
Private	7,755
Total Baseline Preserve	45,821

¹ An additional 5 acres were added into County baseline in 2016 as a result of the audit exercise described in Section 3.1.

Land acquired since 1997 to build out the Preserve, per the MSCP Subarea Plan and associated Implementing Agreement (IA), is conserved via private mitigation (Table 2) or public and local/non-profit acquisitions (Table 3). Private mitigation primarily includes gains acquired through the County's permitting processes for hardline agreements identified in the MSCP Subarea Plan or new developments and other regulations described in Section 3.3.

Table 2. MSCP Private Mitigation – Goal 33,713 acres

	Preserve	2017	2018	2018
Mitigation type	Goals	Preserve	Preserve	Preserve
		Total	Gains	Total
Dedicated Within Hardline	11,563	3,955	255	4,210
Dedicated Outside Hardline	22,150	2,055	12	2,067
TOTAL	33,713	6,010	267	6,277

² The original preserve conservation goal in the MSCP Subarea Plan was 101,268 acres, which was reduced to 98,379 acres when 2,890 acres of PAMA land was annexed into the City of Chula Vista.

3.1 Public and Partner Acquisitions Overview

The following section describes acquisitions by the public agency signatories and private, non-profit partners during the first 21 years of the MSCP Subarea Plan. The County and the Wildlife Agencies maintain up-to-date, accurate accounting of their acquisitions and acquisitions completed by partnering agencies which are reported to the State's HabiTrak database. In 2016, the County and the Wildlife Agencies concluded an audit of conserved land from public acquisition. As a result of the audit, 2,479 acres of County acquisitions were added to the Preserve, with 5 acres allocated to the Baseline Preserve total and 2,474 acres allocated to the Conserved Lands Preserve total. In 2017, the Wildlife Agencies approved the inclusion of an additional 173 acres into the Preserve prior to County for the Dictionary Hill acquisition. In 2018, the Wildlife Agencies approved the inclusion of 97 acres in the Preserve, of which 92 acres for Peutz Valley Preserve and 5 acres for Lakeside Linkage addition acquisitions. Data contained in Chapter 3 reflects these and the prior additions to the Preserve plus HabiTrak 2018 gains. The HabiTrak data base has not yet been updated to reflect the approved additions to the Preserve from 2016 through 2018.

Table 3. MSCP Public Acquisitions – Goal 18,850 acres

Agency	Acres Funded In Preserve	2018 Preserve Total Acres Owned and Managed	Complementary Conservation Owned and Managed ¹	Total Acres in the MSCP Subarea Plan Boundaries Owned and Managed
Federal				
USWS	3,129	8,828	2,673	11,501
BLM	1,830	1,830	2,609	4,439
Subtotal	4,959	10,658	5,280	15,940
State	11,464	14,430	11,427	25,857
County	4,332²	7,066³	0	6,181 ⁴
Local Partners	2,606	3,162	712	3,874
Grand Total	23,361	35,316	17,419	51,852 ⁴

¹"Complementary Conservation" = "Outside the Preserve", a HabiTrak designation.

Substantial progress has been made toward assembling the Preserve envisioned by the County's MSCP Subarea Plan. Section 10.4 of the IA states that the estimated conserved acreages through public acquisition to complete the Preserve "are approximate since the amount, timing, and location of land conserved through regulations, private mitigation and public acquisition are not exactly known." The MSCP Subarea Plan estimated that 18,850 acres would need to be conserved through public acquisitions to adequately assemble the Preserve. The MSCP Subarea Plan outlines that the 18,850 would be equally split between 9,425 acres acquired by the County with local funds and 9,425 acres acquired with federal and state funds. The County and the Wildlife Agencies have worked collaboratively to ensure that the acquisition obligation of the Plan will be successfully completed, although not occurring exactly as had been originally envisioned.

Of the 6,181 acres that the County has acquired and manages within the MSCP Subarea Plan, a portion of the acreage was funded solely or partially by State and Federal funds, in addition to local funds. Similarly, the County funded a portion of acquisition lands now owned and managed by local partners. The Wildlife Agencies have exceeded their estimated acquisition goal of 9,425 acres in outright ownership and management. Within the Preserve, acquisitions by

² Includes 205 acres County has purchased within other jurisdictions (Cities of San Diego and Chula Vista).

³ Includes 689 acres that the County manages within other jurisdictions (Cities of San Diego and Chula Vista).

⁴ Does not include 885 acres that the County manages within other jurisdictions (Cities of San Diego and Chula Vista.)

the Wildlife Agencies, local partners and the County total 35,316 acres, exceeding the public acquisitions goal of 18,850 acres. Within the Subarea Plan boundaries, land owned and/or managed by the Wildlife Agencies, local partners and the County total 51,852 acres.

Table 4 reveals that the assembly of the County's MSCP Subarea Plan Preserve, 21 years into the 50-year plan, has reached 80% of the preservation acreage goal. Collectively, the County, the Wildlife Agencies and local partners own and manage 78,565 acres of Preserve lands in the MSCP Subarea Plan boundaries. In addition to the 98,739-acre preservation acreage goal, the MSCP Subarea Plan also requires that the Preserve function for covered species by conserving specific wildlife corridors and habitat types. The County and the Wildlife Agencies will continue to look at potential gaps within the PAMA and Preserve to guide future acquisitions and private mitigation opportunities to ensure a functional MSCP Preserve.

Table 4 summarizes the assembly of the Preserve to-date and details the baseline Preserve lands as well as the Conserved Preserve lands that were acquired through both private mitigation and public acquisitions. The table also shows the MSCP Subarea Plan Preserve goals and 2018 Preserve gains and total acreage.

Table 4. Summary of MSCP Subarea Plan Preserve Assembly Status

Acreage	Preserve Goals	2017 Preserve	2018 Preserve Gains	2018 Preserve Total
County	5,461	5,466 ¹	N/A	5,466 ¹
Federal and State	32,600	32,600	N/A	32,600
Private	7,755	7,755	N/A	7,755
Total Historical Baseline Preserve	45,816	45,821	N/A	45,821 ²
Conserved Lands - Private Miti				
Dedicated Within Hardline	11,563	3,955	255	4,210
Dedicated Outside Hardline	22,150	2,055	12	2,067
Total Private Mitigation	33,713	6,010	267	6,277
Conserved Lands - Public Acqui	isitions			
Federal and State		24,998	89	25,087
County	18,850	6,717	348	7,066
Local/non-profit partners		3,162	0	3,162
Total Public Acquisitions	18,850	34,877	437	35,315 ²
Preserve Total	98,379	77,862	704	78,565 ²
Percent of Preservation Goal				80%

¹ County acquisitions adjusted to reflect previously reported Preserve acreage.

² Baseline Preserve acres may potentially be included in the "Conserved Lands – Public Acquisitions" total acreage. Therefore, the Preserve Total acreage is derived from summing Appendix 10 Summary of Habitat Losses and Gains' "Cumulative Gain" total and the 2016 through 2018 approved additions to the Preserve that have not been formally designated in Habitrak.

The County has acquired a net of 7,622 acres, after the deduction of land sold for County Mitigation Land Policy I-138, with 7,066 acres acquired in the Preserve. The 7,622 acres includes 885 acres that are owned and managed with the Cities of San Diego and Chula Vista in their MSCP Subarea Plans and 556 acres are owned by a non-profit or other local entity that the County contributed all or a part of the funds towards their conservation. Non-profit or other local partners have acquired 3,874 acres, of which 3,162 acres are in the MSCP Subarea Plan Preserve. Together, Preserve land acquired by the County and local conservation partners total 10,227 acres. The Wildlife Agencies have acquired 25,087 acres in the MSCP Subarea Plan Preserve.

3.1.1. Public and Local/Non Profit Acquisitions Tracking

Tracking of public, local government, and non-profit partners' acquisitions is completed using both the CDFW maintained Habitat Tracking Reporting (HabiTrak) database and its subsequent reports that are found in Appendices 4, 9, 10, and 11, as well as manual accounting, which can be found in Appendices 2 and 3A-C.

3.2. Habitat Gains and Losses within the Pre-Approved Mitigation Area

During 2018, the MSCP Subarea Plan reported habitat gains within the Preserve through acquisitions and dedications of mitigation land via the discretionary permit process. Habitat losses, due to permitted development within the PAMA and the MSCP Subarea Plan boundaries, are also reported. Mitigation gain and habitat loss may be associated with the following types of development projects for which approvals were granted and reported in certificates of inclusion (COIs) during the reporting period:

- Private projects (tentative maps/tentative parcel maps) with final map approval;
- Projects that have been issued grading permits;
- Building permits exempt from the Biological Mitigation Ordinance (BMO);
- New agricultural clearing exempt from the BMO;
- Lands acquired by the County and governmental agency for preservation;
- Approved mitigation bank lands with at least one credit used; and
- Changes to the Subarea Preserve boundaries, including amendments and annexations.

In 2018, Appendix 4 shows that there were 608 acres of habitat gain within the Preserve per HabiTrak, along with 97 acres that were also added to the Preserve but are not yet recorded

in HabiTrak. In addition to County acquisitions, 356 acres were gained in the Preserve from 89 acres of federal and state acquisitions, 255 acres of dedicated private hardline transfers, and 12 acres of private land dedication required as a condition of private development.

In 2018, County acquisitions toward the Preserve totaled 349 acres in three separate acquisitions. The 19-acre Sycamore Canyon/Goodan Ranch addition, formerly called the San Vicente Connection - Uridel addition, and is adjacent to other County conserved properties east of State Route 67, features only coastal sage scrub habitat. The 75-acre Lakeside Linkage Preserve addition features 70 acres of coastal sage scrub inside the Preserve and 5 acres outside of the Preserve but were approved by the Wildlife Agencies to be added to the Preserve due to its adjacency to PAMA. These 5 acres will be tracked manually until they are formally entered into HabiTrak. The 255-acre Peutz Valley Preserve in western Alpine was added to the Preserve in 2018 as approved by the Wildlife Agencies via correspondence that can be found in Appendix 1 A-B. Peutz Valley Preserve is adjacent to and complements PAMA, with 235 acres of chaparral, 11 acres of coastal sage scrub, 4 acres coastal and chaparral scrub, 4 acres oak riparian forest and just under 1 acre designated as urban/developed. Prior to its acceptance by the Wildlife Agencies, 163 acres was categorized as hardline preserve or within PAMA and does show up as a gain in HabiTrak. The remaining 92 acres was either categorized as take authorized or was uncategorized MSCP land (outside of PAMA and neither hardline preserve nor take authorized). The 92 acres are being tracked manually after Wildlife Agencies' pre-approval into the Preserve. HabiTrak has not yet been updated to reflect the Wildlife Agencies' acceptance of the 97-acre 2018 additions to the Preserve, the 173-acre 2017 Dictionary Hill addition to the Preserve, and the 2016 audit results. Photos and maps of each of the three separate acquisitions can be found in Figures 1, 2, and 3 as well as Appendices 5, 6, and 7.

Losses in 2018 in the Preserve were 10 acres within PAMA, part of a total of 98 acres impacted by development projects within the MSCP Subarea Plan boundaries (Appendix 9).

Since 1998, cumulative gains within the Preserve total 78,565 acres and losses within the Preserve, which can be found in Appendix 10, total 1,395 acres. In total, the assembly of the Preserve to date has reached 80% of the MSCP Subarea Plan's 98,379-acre conservation goal.

The achievement of 80% Preserve assembly in the first 21 years of the 50-year MSCP Subarea Plan highlights the County's on-going work with the Wildlife Agencies to successfully build a functional Preserve.



Figure 1. Sycamore Canyon/Goodan Ranch Preserve (San Vicente Connection, Uridel) acquired by the County in 2018.



Figure 2. Lakeside Linkage Preserve Addition acquired by the County in 2018.



Figure 3. Peutz Valley Preserve acquired by the County in 2018.

3.3 Habitat Tracking Reporting

CDFW maintains the Habitat Tracking Reporting database (HabiTrak) toolset designed to track habitat loss and gains over time due to public and private development projects. HabiTrak reports for 2018 are attached to this report for acres gained within the MSCP Subarea Plan boundaries (Appendix 4), acres lost within the MSCP Subarea Plan boundaries (Appendix 9), and acreage lost and gained by habitat type within the MSCP Subarea Plan boundaries (Appendix 10). In addition to tracking acreage gain and loss within the MSCP Subarea Plan boundaries, the Habitrak reports also track losses and gains within PAMA, which is referred to as acres inside Habitat Preserve in the reports. in Appendices 4, 9 (Summary of MSCP Losses), and 10 (Summary of Habitat Losses and Gains/Rough Step Status), which are prepared by the CDFW maintained software. In addition to the acquisitions within the Preserve, HabiTrak also tracks the complementary or "Outside the Preserve" acquisitions, which HabiTrak shows as more than 24,068 acres, while the County and agencies manually count hundreds of these acres within the Preserve.

Due to the timing of updates in HabiTrak, acreage that has been approved to be included as a gain in the Preserve but has not formally been entered into HabiTrak between 2016 and 2018, and accounting of losses due to mitigation land policy credits, the cumulative gains and losses of acreage within the MSCP Subarea Plan boundaries in the HabiTrak reports differ from the Preserve assembly totals reported in previous sections of this report.

The cumulative gain within the MSCP Subarea Plan boundaries indicated by HabiTrak is 75,815 acres and a loss of 1,395 acres. HabiTrak data for the County MSCP Subarea Plan does not show the total of 885 acres jointly owned and managed by the County in the cities of San Diego and Chula Vista as the acreage is outside of the County of San Diego's MSCP Subarea Plan but within the South County MSCP Plan. Manual accounting County acreages in Appendix 2 also differ from HabiTrak because County numbers accurately show year-to-year manual County updates and subtraction of acres used for mitigation land policy credits. The Wildlife Agencies' acquisitions totals are also tracked manually and may differ from HabiTrak. The manual accounting numbers are corrected when errors are noted and audits performed. Additionally, through the discretionary permitting process, the California Environmental Quality Act (CEQA) requires the identification of potential impacts. The corresponding loss of habitat resulting from development and habitat conserved through mitigation is tracked. Habitat loss through ministerial projects that do not require a discretionary permit are in this report.

The HabiTrak database and report formats have undergone updates and changes, and the numbers are corrected once inputs are received. In HabiTrak, the cumulative habitat gain of conserved lands by public agencies and local partners since 1998 represents 77 percent of the Preserve's conservation goal as it doesn't include the approved additions between 2016 and 2018. As such, a combination of HabiTrak reports and manual accounting of gains and losses within both the MSCP Subarea Plan boundaries and Preserve is utilized to total Preserve assemblage by land owner type.

3.4 Rough Step Analysis

Rough step is the comparison of the total gains and losses within and outside of PAMA or hardline preserve areas. The purpose of rough step is to ensure that the conservation of high quality habitat and development in lower quality habitat occurs in roughly the same amounts at the same time. Tables 5 and 6 show the gains and losses inside and outside of PAMA or hardline preserve area for each of the four segments within the MSCP Subarea Plan. As the Lake Hodges and South County segments are both hardline preserve areas, PAMA only applies to the North and South Metro-Lakeside-Jamul segments. The majority of habitat gains for the four segments

occurred within PAMA or hardline preserve areas, while the majority of habitat loss occurred outside of PAMA or hardline preserve areas. This numerical comparison indicates that the overall conservation goals are being met to create a functional Preserve as high quality habitat within PAMA and hardline preserve areas is being conserved and lower quality habitat is being developed. A visual rough step analysis of the biological core resource and habitat linkage areas are depicted in Figures 4 and 5.

Table 5. Habitat Gains by Segment Since 1998 per HabiTrak³

Segment	Outside PAMA / Hardline Preserve Areas (acres)	Inside PAMA / Hardline Preserve Areas (acres)	2018 Total (acres)
Lake Hodges	515	2,904	3,419
North Metro-Lakeside-Jamul	6,859	10,648	17,507
South Metro-Lakeside-Jamul	11,284	13,101	24,385
South County	1,745	10,189	11,934
Total	20,403	36,842	57,245

Table 6. Habitat Loss by Segment Since 19984

Segment	Outside PAMA / Hardline Preserve Areas (acres)	Inside PAMA / Hardline Preserve Areas (acres)	2018 Total (acres)
Lake Hodges	2,460	91	2,551
North Metro-Lakeside-Jamul	3,755	592	4,347
South Metro-Lakeside-Jamul	3,138	551	3,689
South County	554	130	680
Total	9,907	1,364	11,271

³ Data in Table 5 is taken from HabiTrak Appendix 4.

⁴ Data in Table 6 is taken from HabiTrak Appendix 9.

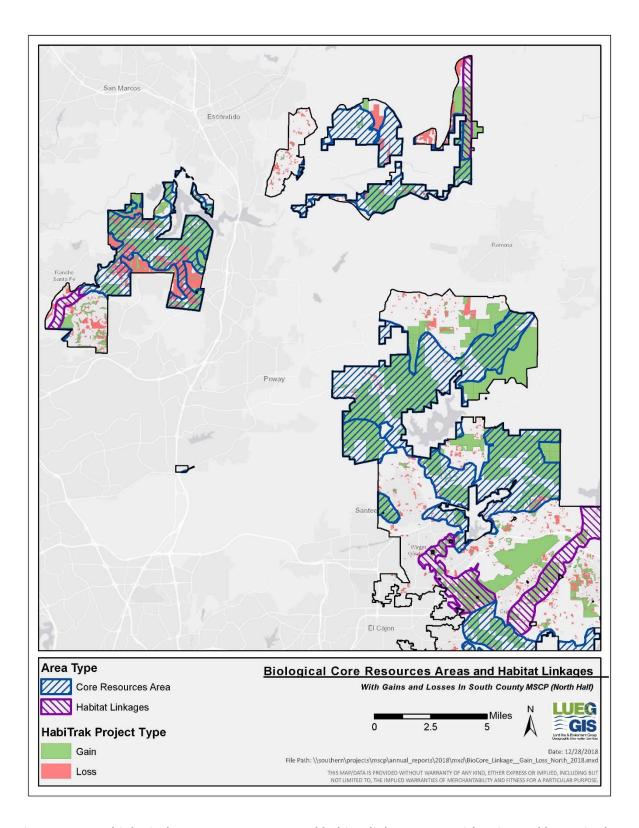


Figure 4. MSCP biological core resource areas and habitat linkage areas with gains and losses in the north half of the MSCP South County Subarea.

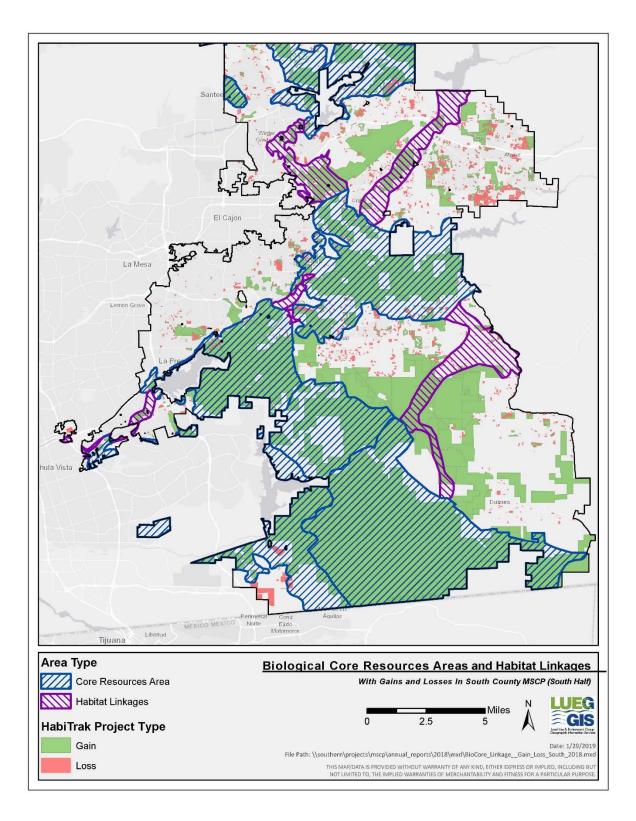


Figure 5. MSCP biological core resource areas and habitat linkage areas with gains and losses in the south half of the MSCP South County Subarea.

In addition to total acreage and visual analysis, rough step status can be determined by comparing gains and losses of vegetation types inside and outside PAMA in the North and South Metro-Lakeside-Jamul segments. Appendix 11 reports on the conservation of each vegetation type within the Metro-Lakeside-Jamul segment, as required by Section 4.4 of the MSCP Subarea Plan and Section 14 of the IA. It should be noted that existing vegetation maps used to develop baseline conditions in HabiTrak are regional in nature and may not be consistent with actual onthe-ground conditions. By December 31, 2018, the cumulative gain within PAMA, for all vegetation types, was 30,928 acres, while the cumulative loss within PAMA, for all vegetation types, was 90 acres. This data also indicates that conservation is proceeding in rough step with development.

3.5 Mitigation Banks

Per Section 9.13 of the IA, two types of mitigation banks are allowed in the MSCP Subarea Plan and are formal banks approved by the Wildlife Agencies and banks that existed prior to adoption of the IA. Information on mitigation banks approved by the Wildlife Agencies or others can be found at https://www.wildlife.ca.gov/Conservation/Planning/Banking.

Since the adoption of the MSCP, several mitigation banks have been established in the County, with the approval of the Wildlife Agencies, to be used to mitigate impacts to sensitive biological resources resulting from the County Department of Public Works' construction, improvement and maintenance projects. These banks are not used for mitigating private development projects as they were established for DPW projects. Use of credits is determined based on quality of habitat impacted in relation to quality of habitat available and is subject to approval by the U.S. Army Corps of Engineers, USFWS, CDFW and Regional Water Quality Control Board. These banks include the Sweetwater River Off-Site Mitigation Area, Boden Canyon Mitigation Bank, Old Castle Road Mitigation Bank, Singing Hills Conservation Bank, and Rancho San Diego Mitigation Bank. Appendix 12 depicts the status of each of these banks.

3.6 Mitigation Land Policy (I-138)

In January 2010, the Board of Supervisors adopted Board of Supervisors Mitigation Land Policy (MLP) I-138, Mitigation on County-Owned Land Managed by the Department of Parks and Recreation, which does not replace nor supersede Board of Supervisors Banking Mitigation Policy I-117. Policy I-117 was included as part of the original MSCP approvals and sets the procedures to be followed in establishing, using, and managing mitigation banks. MLP I-138 describes the County's program for acquiring land and making it available to mitigate the biological impacts of public and private projects through the sale of mitigation credits. Although MLP I-138 is not a mitigation bank, it authorizes DPR to administer the sale of mitigation credits. MLP I-138 sets forth methods by which the value of the mitigation credits may be determined and requires applicants to pay for the valuation. The policy also requires an endowment for annual stewardship costs. A Certificate of Mitigation and Purchase Agreement is required for each transaction. The County trades the conveyance of mitigation credits to purchasers and the application of mitigation credits to development projects. County numbers, in Table 7 and Appendix 2, accurately show year-to-year manual County updates and subtraction of acres used for MLP credits. There were no MLP sales within the MSCP Subarea Plan boundaries in 2018. Table 7 also shows revenue generated since adoption in the Subarea Plan from the sale of mitigation credits in accordance with the MLP. The County considers requests to use MLP I-138 on the preserves listed below according to GIS mapping of the vegetation available on those sites, the portion of which generally are acquired with County funds.

Table 7. 2018 Mitigation Land Policy

Project	South County Credits Sold	South County Credit Cost	Endowment	Preserve	Date
LOSSAN Double Tracking and Mid-Coast Light Rail Project	10	\$350,000	\$630,644	Tijuana River Valley Regional Park ¹	7/11/2016
San Vicente Road Improvement (SC Portion)	8.04	\$254,562	\$85,650	Lawrence & Barbara Daley	6/10/2015
Central Avenue Drainage Improvement and Woodside Flood Control	0.37	\$14,800	\$2,220	Lawrence & Barbara Daley	1/21/2014
Swiss Park Staging Area	1	\$23,300	\$6,000	Furby East Otay Mesa	1/17/2013
San Ysidro Freight Yard Improvement Project	1.75	\$61,250	\$10,500	Tijuana River Valley Regional Park ¹	2/14/2013
Five Dept. of Public Works projects (Tavern Rd., Wing Ave., Woodside Ave., Emery Rd., Jamacha Blvd.)	2.45	\$98,000	\$14,700	Lawrence & Barbara Daley	10/2/2012
Tuscan Ridge	1.07	\$16,050	\$4,060	Louis A. Stelzer Park	5/3/2011
Dictionary Hill-Maria Ave.	0.31	\$7,225	\$1,240	Lakeside Linkage	6/16/2011
	24.99	\$825,187	\$755,014	\$1,580,201	
	Total credits	Total income	Total Endowment	Total Income & Endowment	

¹ Park is outside of the County MSCP Subarea Plan Area but is within the City of San Diego MSCP

3.7 Clearing for Single-Family Residences on Small Parcels

Per Section 4.3.4.2 of the MSCP Subarea Plan and as implemented by the BMO, parcels which are less than 10 acres, occurring within the MSCP Subarea Plan boundaries that were zoned for single-family dwellings and contained a dwelling unit as of October 22, 1997, are exempt from the clearing regulations.

Within the PAMA, parcels existing as of January 1, 1997 without a dwelling unit as of October 22, 1997, and are less than 10 acres and zoned for single-family residential uses, are allowed to clear up to two acres, provided that clearing and grading of such two-acre portions does not interfere with achieving the goals and criteria of the MSCP Subarea Plan. These exempted acres are tracked and were accounted for within the Subarea Plan which was designed and developed with anticipation of these clearing exemptions not interfering with the County's ability to achieve the goals and objective of the Subarea Plan. Grading and clearing on the remaining portion of the parcel must meet the mitigation requirements of the BMO. Outside the PAMA, grading and clearing on parcels less than 10 acres, zoned for single-family residential uses as of January 1, 1997 and without a dwelling unit as of October 22, 1997, shall be permitted for clearing on a total of five acres. Clearing the remainder of the parcel shall be subject to the requirements of the MSCP Subarea Plan and BMO.

Clearing for fuel management, as required by a Fire Marshal, is not counted in computing the number of acres cleared. Vegetation clearing ordered by a Fire Marshal is consistent with the provisions included in the Memorandum of Understanding (MOU) between the USFWS, CDFW, CAL FIRE, the San Diego Fire Chief's Association, and Fire Districts Associations of San Diego County. The County only tracks vegetation clearing associated with the permits it issues.

Private landowners of parcels zoned for single-family residences without a dwelling unit as of October 22, 1997, can apply for a Certificate of Inclusion (COI) for their property. COIs are issued for clearing or grading of two or five acres depending on whether the parcel is in the PAMA or not, and 10 acres if a house existed on the parcel before October 1997, even if the landowners intend to clear less. The MSCP Subarea Plan does not have a limit for how many total acres can

be cleared for single-family residences. Appendix 13 shows COIs issued in 2018 for clearing habitat on parcels 10 acres or smaller.

3.8 Agricultural Exemption

Section 4.3.4.3 of the MSCP Subarea Plan allows up to 3,000 acres of clearing and grading for agriculture without mitigation requirements of the MSCP Subarea Plan and the BMO. When clearing and grading of habitat reaches 3,000 acres, all other clearing and grading for agriculture will be subject to the mitigation requirements of the MSCP Subarea Plan and the BMO. Private landowners can apply for a COI for agricultural clearing and grading until the 3,000 acres is reached. COIs issued for agricultural clearing in the Subarea since the MSCP Subarea Plan was approved are listed in Appendix 14, a cumulative reporting. In 2018, no agricultural clearing COIs were issued. Since 1998, the County has issued COIs covering 1,224 acres for agricultural clearing or 41 percent of the 3,000 acres.

3.9 Building Permit COIs

The PDS Building Division issues COIs that allow habitat clearing of the amount needed to construct per the approved Building Permit. Habitat clearing acreages for these projects in 2018 are enumerated in Appendix 9 and cumulatively included in Appendix 10.

4.0 MANAGEMENT AND MONITORING

Management and monitoring of preserves within the MSCP Subarea Plan is an important element of the Preserve success and the overall success of the MSCP Subregional Plan. The overall management goal of the MSCP Subregional Plan and the MSCP Subarea Plan is to ensure that the biological value and function of natural resources are maintained or improved over time where land is preserved as part of the MSCP through acquisition, regulation (the discretionary permit process), mitigation or other means. In conformance with Section 10.9 (Preserve Management), Section 10.10 (Preserve Management Program) and Section 14.5 (Biological Monitoring) of the IA, the County is responsible for managing and monitoring the land it owns or acquires as well as ensuring that other private mitigation lands dedicated to the County within the Preserve are managed and monitored consistent with the MSCP Subarea Plan. Figure 6 displays all County Parks and Preserves referenced in Sections 4.1 through 4.5. This chapter summarizes the stewardship activities on County lands and highlights the biological monitoring activities that have been conducted on County lands. The monitoring results and management activities for both County owned and managed open space lands as well as private mitigation land within the MSCP Subarea Plan Preserve will be analyzed in future Annual Reports to ascertain if the Preserve is effectively functioning or if management activities need to be adapted or modified to ensure the effectiveness of the Preserve assembly in order to achieve the conservation goals of the Subarea Plan.

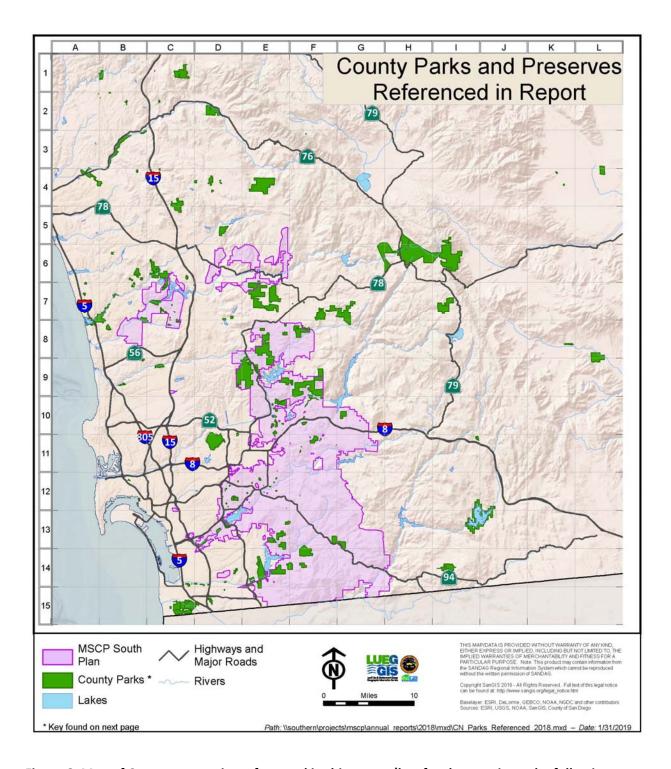


Figure 6. Map of County properties referenced in this report (key for the map is on the following page)

Map Key:

County Parks and Preserves Referenced in Report

South County (SC) Subarea Plan

	recurry (ee) caracarea riair
F8	Barnett Ranch Preserve*
E8, E9	Boulder Oaks Preserve
E10	Cactus Park
E12	Damon Lane Park
C6, C7	Del Dios Highlands Preserve*
D12	Dictionary Hill Preserve
E8	Dos Picos Park
F9	El Capitan Preserve*
F9, F10	El Monte Park
F10	Flinn Springs Park
D15	Furby-North Property
E10, E11	Lakeside Linkage Preserve
F13, G13	Lawrence & Barbara Daley Preserve
E10	Lindo Lake Park
B9, C9	Los Penasquitos Canyon Preserve
E10	Louis A. Stelzer Park
E8	Luelf Pond Preserve
B7, B8	Lusardi Creek Preserve
E9, F9	Oakoasis Preserve
F9	Old Ironsides Park
E14	Otay Lakes Park
D14, E13, E14, F14	Otay Ranch Preserve
C14, D14, E14	Otay Valley Regional Park
G9	Peutz Valley Preserve
E7	Ramona Grasslands Preserve*
E9	San Vicente Connection
C7	Santa Fe Valley Preserve
F11	Stoneridge Preserve
D13	Sweetwater Regional Park
D9, E9	Sycamore Canyon / Goodan Ranch Preserve
C15	Tijuana River Valley Regional Park

Draft North County (NC) Subarea Plan

В6	Diamond Trail (TET) Property
B6, C6	Escondido Creek Preserve
C6	Felicita Park
A4	Guajome Park
E4	Hellhole Canyon Preserve
B2	Live Oak Park
F7, G7	Mt. Gower Preserve
A4	Rancho Guajome Adobe Park
В6	Sage Hill Preserve
В8	San Dieguito Park
A7, B7	San Elijo Lagoon Ecological
	Reserve
В3	San Luis Rey River Park
B1	Santa Margarita Preserve
F7	Simon Preserve
D2	Wilderness Gardens Preserve

Future East County (EC) Subarea Plan

ratare East County (EC) Subarca Fiam	
L8,9	Agua Caliente Park
112, 113	Lake Morena Park
J12, J13	
F3	Palomar Mountain Park
l11	Pine Valley Park
l14	Potrero Park
G5, G6,	
H5, H6,	Santa Ysabel Preserve
16	
K8	Vallecito Park
15, 16	Volcan Mt. Wilderness Preserve
17	William Heise Park
	·

^{*}Portions of Preserves are also in the Draft MSCP North County Plan

4.1 Preserve Management of County Lands

Ongoing stewardship and adaptive management activities performed in 2018 on County lands, in addition to standard management practices not related to covered species such as park ranger patrols, are described below and summarized in Appendix 15. As a standard management practice, dead or dying trees in the parks and preserves are replaced with habitat appropriate native tree species that include coast live oak, Engelmann oak, sycamore, cottonwood, and arroyo willow, among other species. The exact tree species planted may not be specified for each park and preserve. Replacement of dead or dying trees benefits MSCP covered species by providing habitat for nesting birds and cover for foraging amphibians. Invasive, non-native plant species treatment and removal is also conducted on parks and preserves and the targeted plant species may not be specified but would most likely include mustard and non-native annual grasses, among other species. The acreage and appropriate San Diego County Subarea Plan Segment (Lake Hodges, Metropolitan-Lakeside-Jamul, and South County) Community Planning Group (CPG) for each park or preserve is located is noted next to the park or preserve name.

Barnett Ranch Preserve, 646 acres (MSCP); 62 acres Draft North County MSCP, Metropolitan-Lakeside-Jamul Segment

County Park Rangers planted 17 coast live oak trees as well as 20 shrub and other non-tree species including white sage and coastal sage brush over a two-acre area to benefit on-site sensitive resources including orange-throated whiptail, San Diego horned lizard, Cooper's hawk, golden eagle, southern California rufous-crowned sparrow, western bluebird, mule deer, and mountain lion. A well adjacent to an existing ephemeral pond was fitted with a solar panel to power the wellhead pump so that the pond contained water year around (Figure 7). The supplemental water provides water to native wildlife, including mule deer and mountain lion, and the pond was utilized during the dry seasons.



Figure 7. Barnett Ranch Preserve pond.

Invasive non-native plant species treatment and removal efforts included hand-pulling, shoveling, and herbicidal use to remove goats head and Russian thistle in the 1-acre staging area. Two new interpretive signs, two signs stating the Preserve's hours of operation, and two signs regarding the requirement that dogs must be on leashes were installed. County staff removed trash and debris from the staging area and installed a large entry gate with a remote to stop unauthorized vehicle access. A horse step was also installed to prevent unauthorized motorcycle activity. Approximately 3 acres of existing fire breaks, close to residential property, were created using mowers and string trimmers along Deviney Road. County Park Rangers also hosted a ranger-led hike and tree planting activity for a group of boy scouts.

Boulder Oaks Preserve, 2,016 acres, Metropolitan-Lakeside-Jamul Segment

County Park Rangers planted 70 trees including coast live oaks, sycamores, and cottonwoods. County Park Rangers also planted 142 non-tree species including white sage, coastal sagebrush, elderberry, sugar bush, and toyon. Installation of trees and shrub species benefits the on-site sensitive resources including San Diego horned lizard, Cooper's hawk, golden eagle, southern California rufous-crowned sparrow, western bluebird mule deer, mountain lion

County staff restored a deteriorating 16-ft bridge that is utilized both by staff and wildlife. Invasive non-native plant species removal efforts included hand pulling, digging, and herbicide application to treat one acre of artichoke thistle, one acre of star thistle, and 10 acres of dyers rocket. Removal and treatment of invasive non-native plants benefits on-site sensitive resources including on-site freshwater marsh. A total of 15 new signs, including 'No Public Access', EXIT, speeding signs, 'No Hunting', and preserve name 'Boulder Oaks Preserve', were installed. Access control measures included the installation of 200 ft of new cedar fence, the repair for a 40 ft barbed wire fence, and the restoration of a 500 ft wood rail fence. County staff restored a large pond where cattails were becoming overabundant and drying out the available surface water in the pond, which benefited native wildlife including great blue heron, small-footed myotis, Yuma myotis, Pocketed free-tailed bat, western mastiff bat, mule deer, and mountain lion. Approximately 6 acres of existing fuel management efforts took place along the 1.5 mile road into the preserve and surrounding structures, as well as mowing and spin trimming 15 ft on both sides of the road. A closed trail revegetation project at Boulder Oaks Preserve is shown in Figure 8.



Figure 8. Revegetation of a closed trail at Boulder Oaks Preserve.

Damon Lane Park, 29 acres, Metropolitan-Lakeside-Jamul Segment

County Park Rangers planted six coast live oak trees as part of a habitat restoration effort and supplemental watered the trees throughout the year to establish them through the dry season. Approximately 10 acres of castor bean, jimson weed, and arundo were hand-pulled and cut with string trimmers as part of the invasive non-native plant species control methods. Approximately 100 invasive non-native fan palms were also removed as well as one eucalyptus tree that had been uprooted by high winds. Removal of these invasive non-native plants benefited the on-site sensitive habitat southern arroyo willow riparian forest providing habitat for riparian species. County Park rangers installed five notification signs (three permanent and two temporary) and three gates. Additionally, 20 ft of chain link fencing and a quarter mile of a wood/steel fence was repaired. Maintenance of existing fire breaks was performed primarily along the perimeter of the park with string trimmers and mowers.

Del Dios Highlands Preserve, 774 acres total (271 acres MSCP and 503 acres Draft North County MSCP), Metropolitan-Lakeside-Jamul Segment

The Preserve is currently managed per the MSCP since the North County MSCP is in draft form. County Park Ranger staff removed wild mustard from 1.5 acres. Eucalyptus trees, covering a 12-acre area of the Preserve, were removed as part of the invasive non-native plant species eradication efforts. County Park Rangers installed two habitat restoration signs and two new gates, as well as replaced two swing gates. In effort to control unauthorized access, County Park staff blocked off unauthorized trails and put up signage to deter unauthorized access and trail usage. The Encinitas baccharis population on the Preserve was mapped in 2015 and three monitoring plots were determined. In 2015 a total population of 250 individuals were determined within the monitoring plots in 2017 the entire Preserve population was determined to be 344 individuals.

Dictionary Hill Preserve, 176 acres, Metropolitan-Lakeside-Jamul Segment

County staff installed approximately 1,600 ft of new post-wire fencing as well as one new metal gate. A chain was added to the East Ivy Trailhead and fence was constructed along the northern side of the Property's boundary in order to deter unauthorized foot and vehicle access.

County Park Rangers performed approximately 4.5 acres of existing fire break maintenance along the southern edge of the park using string trimmers. One hike, led by a County Park Ranger, was attended by 10 visitors who learned about native plant and animal species that can be found on the Property.

Dos Picos Park, 79 acres, Metropolitan-Lakeside-Jamul Segment

County Park Rangers planted approximately 260 trees, which included coastal live oak, Engelmann oak, cedar, and California sycamore. In addition, approximately 300 non-tree species were planted that included toyon, California sagebrush, prickly pear cactus, and yerba santa. The prickly pear cactus plantings could attract coastal cactus wren present on adjacent conserved lands. Invasive non-native plant species treatment and removal efforts included the use of string trimmers, mowing, hand-pulling, and herbicide application of mustard, stinging nettle, and milk thistle. A total of seven new signs were installed which included information about site markers and recycling information. County Park staff repaired 25 ft of chain-link fencing and conducted frequent patrols of the area to deter unauthorized access of motor vehicles. Approximately five acres of existing fire breaks were maintained using string trimmers and mowers. County Park Rangers held multiple educational activities including nature guided hikes and animal showing/presentations to more than 700 park visitors. A County Park Ranger giving a presentation about native wildlife is shown in Figure 9.



Figure 9. Dos Picos Park Ranger conducting an educational talk about native wildlife.

El Capitan Preserve, 2,795 acres, Metropolitan-Lakeside-Jamul Segment

Invasive non-native plant species control efforts included removing one-quarter acre of pampas grass. County Park rangers repaired four informational and one entrance signs and replaced four additional informative signs to keep users on trail to decrease potential impacts to plants and animals.. County Park Rangers increased patrol frequency in response to car breakins. Golden eagle nest sites have been observed on the south facing cliffs of El Cajon Mountain. The locations of these nest sites are approximately 1.5 miles south of the authorized trail system within the Preserve. This trail is not closed during golden eagle nesting season because of the distance from the nest and topography blocking views. As of 2016 the golden eagle nest was occupied but was not successful. DPR staff is coordinating with U.S. Forest Service and City of San Diego located to the east and south respectively of the Preserve to determine measures to deter unauthorized access by mountain climbers. During the warm months, County Park staff assisted in a number of rescues within the preserve, with most of the people requiring water and the rest were evacuated via helicopter to receive more through medical attention. The Warrior Hike hosted 233 participants at the Preserve.

El Monte Park, 106 acres, Metropolitan-Lakeside-Jamul Segment

Invasive non-native plant species control measures that were implemented included hand pulling and herbicide application on puncture vine, fox tails, cheese weed, stinging-nettle, tree tobacco, tumbleweed, and wild mustard over 14 acres within the Park. Removal of invasive non-native plants benefits on-site vegetation including southern coast live oak riparian woodland and sensitive species delicate clarkia and red shouldered hawk. Additionally, on the Helix Flume Trail mitigation parcel in the northern portion of the Park within the San Diego River there is ongoing monitoring and patrolling of habitat for unauthorized trails. A fire break that was created in 2016 was maintained by County Park staff. County Park Rangers also planted 21 Engelmann oak trees and repaired a 60 ft concrete fence. County Park staff held a variety of interpretive programs including Discovery Programs, Hawk Talks, Nature Hikes, Movies in the Park, and various community events for more than 1,800 park visitors.

Flinn Springs Park, 80 acres (33 acres MSCP), Metropolitan-Lakeside-Jamul Segment

County Park Rangers planted 60 Engelmann oak trees and 7 willow trees. Invasive non-native plant species control efforts included hand pulling approximately one acre of castor bean and removing invasive palm trees within the on-site riparian habitat to benefit sensitive species including Cooper's hawk and mule deer. The Park is adjacent to Crestridge Ecological Preserve, so treatment of invasive non-native plants on the Park benefits movement of animals through both properties and benefits native plants. One new horse crossing gate was installed, which minimized unauthorized vehicle access. Approximately 6 acres of existing fire break maintenance efforts took place along the northern boundary of the property using string trimmers. County Park Rangers held multiple educational outreach events including Discovery Programs and nature hikes with approximately 800 park visitors participating in these events.

Furby-North Property, 83 acres, City of San Diego MHPA

County staff installed 3 new wire fences and T-stakes as well as 6 new metal swing gates in an effort to prevent unauthorized motorized vehicle access. Invasive non-native plant species treatment was conducted to remove approximately one acre of stinknet from the boundary of the Property. Addition of signage, fencing and gates on the Property prevents unauthorized access into and across the Property and allows for future active restoration of the unauthorized trails as outlined in the Property Resource Management Plan. Treatment of invasive non-native plants on the Property benefits coastal California gnatcatcher and cactus wren.

Lakeside Linkage Preserve, 135 acres, Metropolitan-Lakeside-Jamul Segment

Invasive non-native plant species treatment and removal efforts included hand pulling half an acre of castor bean benefiting on-site Diegan coastal sage scrub, coastal California gnatcatcher, coastal cactus wren, Cooper's hawk, southern California rufous-crowned sparrow, western bluebird, and orange-throated whiptail. County Park Rangers maintained existing fire breaks around Whitaker Road. County Park Rangers led one nature education hike along the Lakeside Linkage Whitaker trail that was attended by 35 Preserve visitors.

Lawrence and Barbara Daley Preserve, 604 acres, Metropolitan-Lakeside-Jamul Segment

Preserve staff maintained and replaced access control measures. Approximately 40 trees were removed that had died due to drought conditions and disease and were replaced by 100 new trees which included coast live oak. These oak trees will provide additional habitat for nesting great horned owl and western bluebird. Fuel management on 5 acres of the Preserve was completed on existing fire breaks.

Los Penasquitos Canyon Preserve, 277 acres, City of San Diego

County Park Rangers planted 175 trees including coast live oak, sycamore, Fremont cottonwood, elderberry, and arroyo willow. Out of the 175 trees planted, 135 of them were part of a 1.5-acre habitat restoration project to restore riparian woodland habitat west of the adobe ranch house. Additionally, near the staging area, a half-acre area of coastal sagebrush and other sage scrub plant community species were planted. Approximately, 100 non-tree plant species (such as shrubs, perennials, and cacti) including toyon, California sunflower, white sage, blue sage, California poppy, laurel sumac, coastal prickly pear, buckwheat, and rod wirelettuce were installed on-site. Installation of native trees and plants in the Preserve provides habitat for sensitive animals including least Bell's vireo and coastal California gnatcatcher. Invasive nonnative plant species control measures included the use of string trimmers and mowing on approximately 16 acres to control star thistle and prickly Russian thistle; and hand pulling and cutting on approximately 15 acres to control fennel, curly dock, honey mesquite, date palm, peppertree, fan palm, and tobacco tree. The removal of invasive non-native plants benefits onsite vegetation communities and associated native plants and animals. Approximately 320 ft of new wood and wire fencing was put up by County Park staff. Existing fire break maintenance was performed on the south rim of the canyon, north of Capcano Road and East of the eastern terminus of Alkaid Drive. County Park Rangers increased patrol frequency and public education outreach in an effort to educate visitors and minimize unauthorized access to Los Penasquitos Creek. Other environmental education efforts implemented included 20 Discovery Programs, Cub Scout and Girl Scout nature hikes, Hey Pollinator! Programs, Tecolote Family Day, a MSCP Family Event, and other various educational programs and engaged more than 1,850 visitors.

Luelf Pond Property, 87 acres, Metropolitan-Lakeside-Jamul Segment

County Park Rangers planted 40 trees including arroyo willow and coast live oak as well as 24 non-tree species that included water sage, elderberry, and coastal sagebrush. Installation of trees and non-tree species benefits on-site sensitive species including Cooper's hawk, golden eagle, mule deer, and mountain lion. Invasive non-native plant species control measures included shoveling/hand pulling 1 acre of tobacco tree and chain sawing/hand pulling 1 acre of castor bean. Seven new signs were installed that encompassed interpretive displays, restoration areas, and park hours. Approximately 20 ft of barbless wire fencing was installed. County Park Rangers used string trimmers along 0.7 mile of trail, performed 1 acre of existing firebreak maintenance along Duck Pond Lane, and cut down and chipped 9 dead large coast live oaks to reduce fire fuel loads and to make room to plant new trees to help restore the riparian habitat. One of the interpretive signs installed at Luelf Pond Property focused on mountain lions and ways to identify them (Figure 10).



Figure 10. Interpretative sign installed at Luelf Pond Property in 2018.

Louis A. Stelzer Park, 373 acres, Metropolitan-Lakeside-Jamul Segment

County Park Rangers planted approximately 420 coast live oaks, 200 sycamores, 280 willows, and 150 cottonwood trees, which exceeded the goal of planting 1,000 trees to replace trees that had died due to drought and disease. Invasive non-native plant species control efforts

included hand pulling and the use of hand tools to remove castor bean from a 14-acre area. Replacement of trees and removal of invasive non-native plants benefits on-site MSCP covered species including San Diego goldenstar, San Diego horned lizard, orange-throated whiptail, and northern harrier. County Park staff also repaired two informational and two entrance signs and installed 60 feet of wooden fence and 2 wooden gates. Installation of signs, fences, and gates provides information and protection of on-site plants and animals. Public education and outreach efforts, which helped educate more than 5,300 visitors, included interpretive talks to 82 classes of students, as well as an Earth Fair, Career Fair, Science Fair, Live Well event, zoo presentation, interpretive talks, the Meeker Campout, Go Play Get Fit Program, Critter Program/Slime Day, and the Not So Scary Estuary event.

Lusardi Creek Preserve, 224 acres, Lake Hodges Segment

Fuel management on over 1 acre along existing fire breaks was completed along Artesian and Rio Vista Roads by County Park Rangers. A habitat restoration project to restore approximately 3 acres on the Preserve that were impacted by the Witch Creek Fire was completed in 2018. This project

Oakoasis Preserve, 436 acres, Metropolitan-Lakeside-Jamul Segment

County Park Rangers guided 400 student volunteers, from St. Augustin High School, in a restoration project which included the installation of approximately 50 Engelmann oaks and 50 coast live oaks within the on-site woodland vegetation and 100 western sycamores, 400 cottonwoods, and 1,600 willow trees within the on-site riparian forest vegetation. The restoration project also included the installation of an automated irrigation system to provide supplemental water to the newly planted trees until the trees are well established. These restoration efforts benefit on-site sensitive animal species including California rufous-crowned sparrow, yellow breasted chat, and white-tailed kite. Invasive non-native plant species control efforts included hand pulling and use of herbicide to treat and remove stinkwort over 38 acres on the Preserve to benefit native plants and animals. County Park rangers repaired one entrance gate and one informational sign and worked with the California Conservation Corps to remove dead brush from the Oakoasis campground. County Park staff increased patrols to help deter

illegal dumping and parking near the Preserve's entrance road. Existing fire breaks were maintained around the ranger residence, volunteer pads, garage, and water tank. Environmental education outreach included Star Parties, interpretive talks to scout groups, a Plantapalooza, and a Movie in the Park night to help educate approximately 1,200 Preserve visitors.

Otay Lakes Regional Park, 79 acres, South County Segment

County Park staff planted 4 coast live oak trees to provide shade in the developed areas of the Park. County Park staff also placed woodchips and planted drought tolerant plants such as agave and aloe on approximately 7 acres as part of a restoration project within the on-site Diegan coastal sage scrub habitat. Invasive non-native plant species control efforts included hand-pulling non-native plant species over a 16-acre area. Restoration efforts and removal of invasive non-native plants benefit sensitive species including coastal California gnatcatcher and northern harrier. Existing fire breaks were maintained on approximately 10 acres using hand tools. Environmental outreach efforts included 12 ranger-led nature hikes, 2 Monarch Butterfly Educational Programs, a Stargazing Party, and a "Holidays by the Lake" event all of which helped educated approximately 335 visitors.

Otay Valley Regional Park, 3,106 acres, South County Segment and Cities of San Diego and Chula Vista

County Park Rangers used hand tools for invasive non-native plant species removal over approximately 19 acres at the Otay Valley Regional Park (OVRP). Invasive non-native plant removal benefits sensitive vegetation communities and species in the Park including maritime succulent scrub, freshwater marsh, coastal sage scrub, coastal California gnatcatcher, San Diego horned lizard, and Cooper's hawk. County Park staff increased regular patrols and put up k-rail barriers to prevent unauthorized motorized vehicle access, which proved to significantly reduce the unauthorized access. Environmental outreach efforts included Discover Otay Valley Regional Park Day Program that was attended by approximately 150 visitors. This summary does not include efforts lead by the City of San Diego within the OVRP. Additional management and monitoring efforts conducted by the City of San Diego are reported in the City of San Diego MSCP Annual Report.

Ramona Grasslands Preserve, 3,490 acres (276 acres MSCP), Metropolitan-Lakeside-Jamul Segment CPG

The Preserve is currently managed per the MSCP since the North County MSCP is in draft form. Management activities in the MSCP portion of the Preserve included trail maintenance of Old Survey Road 97 in the northwest portion of the Preserve. A majority of management activities in 2018 occurred in the portion of the Preserve located in the Draft North County MSCP including invasive non-native plant removal, posting of signs, and installation of fences. Invasive non-native plant species control efforts included hand pulling and shoveling tobacco tree, tamarisk, and Russian thistle over approximately 10 acres. Removal of invasive non-native plants within the Preserve benefits many sensitive vegetation communities and species including Diegan coastal sage scrub, riparian, non-native grassland, arroyo toad, Stephens' kangaroo rat, golden eagle, Cooper's hawk, and mule deer. Thirteen new signs were installed for protection of sensitive resources. County Park Rangers also installed 48 feet of pillar log fencing in the southwest portion of the Preserve to assist trail users to stay on trail. Environmental outreach efforts included the County Park Rangers staffing 2 events with a public touch table focusing on native wildlife that were visited by approximately 450 attendees.

Stoneridge Preserve, 245 acres, Metropolitan-Lakeside-Jamul Segment

County Park Rangers removed trash/debris along Mountain View and maintained approximately one acre of existing fire break using string trimmers along Kelly Drive. Park Rangers installed four new "No Parking" signs and cleaned up approximately 100 pounds of illegally dumped trash along Mountain View Road. Removal of trash and debris from the Preserve benefits the sensitive resources on-site including Diegan coastal sage scrub, southern mixed chaparral, San Diego coast horned lizard, orange-throated whiptail, coastal California gnatcatcher, Cooper's hawk, southern California rufous-crowned sparrow, western bluebird, and mule deer.

Sweetwater Regional Park and Open Space, 495 acres, South County Segment

County Park Rangers planted three incense cedar and two Torrey pine trees. Invasive nonnative plant species control efforts included hand pulling, use of hand saws, and herbicide application to treat and remove approximately 0.20 acres of Mexican palm, 0.10 acres of tamarisk and 0.10 acres of Russian thistle benefiting riparian habitat and least Bell's vireo. County Park staff also repaired three lodge pole fences. Existing fire breaks were maintained around Morrison Pond with the assistance of the CCC. Public education and outreach efforts to 200 Park visitors included a Hawk Talk, interpretive presentations at the Ranger's office, a ranger-led hike, drop-in interpretive chats with rangers, and a Green Friday event.

Sycamore Canyon/Goodan Ranch Preserve, 2,572 acres, Metropolitan-Lakeside-Jamul Segment

County Park Rangers planted approximately 100 coast live oak trees and 150 non-tree species including toyon, elderberry, and white sage adjacent to the ranger station where there is an existing oak tree grove and a native plant garden. Invasive non-native plant species control efforts included hand pulling and herbicide application to black mustard, western thistle, tamarisk, and pampas grass over approximately 50 acres on the Preserve within the Sycamore Canyon creek and on adjacent upland areas. Planting of trees and shrubs and treatment of invasive non-native plants benefits the on-site sensitive resources including southern coast live oak riparian forest, coast live oak woodland, southern mixed chaparral, San Diego horned lizard, orange-throated whiptail, Cooper's hawk, southern California rufous-crowned sparrow, and western bluebird, mule deer, and mountain lion. Park staff also installed eight new habitat restoration signs. Unauthorized access control measures included the installation of 260 ft of fencing. Existing fire breaks were maintained along the Preserve and SR-67 roadways and included light pruning/thinning of native shrub habitat in the staging areas. Public education and outreach efforts included Raptor Programs, a STAR party, a volunteer work day, and a Martha's Trail Nature Hike that were attended by more than 350 participants. An overview of the Sycamore Canyon/Goodan Ranch Preserve is shown in Figure 11.



Figure 11. Sycamore Canyon/Goodan Ranch Preserve.

Tijuana River Valley Regional Park, 1,800 acres, City of San Diego

County Park Rangers planted 50 trees including coast live oak and cottonwood as well as 50 milkweed plants in the Park Bird and Butterfly Garden benefiting sensitive species including monarch butterflies, orange-throated whiptail, northern harrier, and Cooper's hawk. Invasive non-native plant species control efforts included hand pulling, string trimmer use, and herbicide application to hottentot-fig, Russian thistle, crown daisy, castor bean, tamarisk, tree tobacco, stink net, arundo, and poke weed benefiting sensitive habitat and species including riparian habitat and least Bell's vireo. County Park staff installed 12 new informational/enforcement signs and 50 new directional trail signs as well as 3,000 ft of new lodge pole fencing. County Park staff also patrolled the park daily to prevent illegal dumping and unauthorized site access. Approximately four acres of existing fire breaks were maintained. A total of 18 educational nature programs were attended by approximately 160 people. The County continued enhancement and restoration of both upland and riparian habitat within the park, including the removal of invasive non-native plant species and seeding of upland native plants on Spooner's Mesa on approximately 65 acres. Additional efforts included tamarisk removal/habitat restoration near the Bird and Butterfly Garden, continued maintenance and monitoring of Southwest Trails, and passive trails restoration and revegetation as mitigation for the TRVRP trails project.

4.2 Resource Management Plans

The County prepares Resource Management Plans (RMPs) to document biological and cultural resources onsite and to provide guidance on management and preservation of the resources within Preserves in accordance with Area Specific Management Directives pursuant to the requirements of the MSCP Subarea Plan Framework Management Plan (County 2001). RMPs for all County owned/managed Preserves within the MSCP Subarea Plan and completion dates or date of most recent update follow: Barnett Ranch (2004), Tijuana River Valley Regional Park (2007), Boulder Oaks (2008), El Capitan (2009), El Monte (2009), Lusardi Creek (2009), Louis A. Stelzer (2009), Oakoasis (2009), Lakeside Linkage (2010), Del Dios Highlands (2011), Lawrence and Barbara Daley (2011), Furby-North (2012), Stoneridge (2013), and Sycamore Canyon/Goodan Ranch (2013). A total of two RMPs were completed or updated in 2018 for Sage Hill Preserve (draft North County MSCP) and Potrero/Mason Property (draft East County MSCP). In 2018 biological resources inventory surveys were completed for a 30-acre addition to Lusardi Creek Preserve, Barnett Ranch Preserve, Holly Oaks County Park, Luelf Pond Preserve, and Tijuana River Valley Regional Park, all located in the MSCP. Updated Resource Management Plans for all Properties will be prepared in 2019. Dictionary Hill Preserve biological and cultural resources surveys began in 2018 and will be completed in 2019. Sycamore Canyon/Goodan Ranch Preserve (Reams/Thomson, Uridel, Navarro, Moore/Moffett, and Berkeley Hering Properties) biological and cultural resources inventory surveys are planned to begin in 2019.

Additionally, the Otay Ranch Phase 2 Resource Management Plan⁵ was updated in 2018 and was adopted by the County Board of Supervisors on September 12, 2018 and Chula Vista City Council on November 27, 2018. Management and monitoring activities of Otay Ranch Preserve are discussed in Section 4.7.

4.3 Management and Monitoring Partners

The regular management, monitoring and invasive non-native species removal activities performed by County rangers, staff and contractors is augmented by other organizations and

⁵ https://www.sandiegocounty.gov/parks/openspace/Otay_Ranch.html

^{46 |} Annual Report for the County of San Diego South County MSCP Subarea Plan, Year 21. May 22, 2019

projects at various parks and Preserves, including those detailed below. Only County MSCP Parks and Preserves are mentioned, but many research projects listed below extend well outside of the Preserves in the MSCP Subarea Plan. *County Parks and Preserves fully outside of the MSCP Subarea Plan boundaries are not in bold in the heading.*

Tijuana River Valley Regional Park

Installation and Monitoring of Floating Trash Removal System at the Smuggler's Gulch Drainage Channel - In 2017, Alta Terra and the Earth Island Institute began planning the installation of a floating trash removal system. The trash removal system is comprised of repurposed plastic trash booms placed in the Smuggler's Gulch drainage channel during the wet season. The three-year project includes the installation of the trash booms at the beginning of each year's wet season, monitoring the trash captured by the boom system, removal of the captured trash, and the removal of trash booms during dry season in order to allow for regular channel maintenance. It is anticipated that this system will be functional in 2019. This project benefits the Park and adjacent conserved lands because removal of trash before reaching the portion of the Tijuana River within the Park creates a healthier environment.

Silviculture and Vegetation Management - In January 2017, the University of California San Diego (UCSD) implemented Tree Culture, a landscape management pilot program, in partnership with Wild Willow Educational Farm. The program's vegetation management methods focus on altering or redistributing fire loads, the amount of available fuel per unit area, which have built up due to tree die-off by invasive beetles, drought and disease. The fuel load management methods include locally turning the fuel loads into the topsoil. Aggressive pruning methods will be used in the program to promote the health and propagation of existing trees, increase biodiversity per unit area, improve air circulation in the canopy, increase soil moisture retention, reduce presence of fungus and burrowing insects in the canopy, and increase fire resistance. The results from the program will help guide future fire fuel load management efforts. This project benefits the Park by providing for healthier trees and increasing biodiversity within the Park.

Phase 2 of the Wetland Restoration Project - In December 2016, CalTrans began Phase II of their wetland restoration project within approximately 10 acres of wetland habitat in the Tijuana River Valley Regional Park. This project is a continuation of Phase I of the restoration activity, which began in 2013, and involves mitigation associated with the Mid Coast Transit Project. Elements of this project include invasive non-native plant species treatment and removal, debris/trash removal, planting of native wetland plants, and temporary irrigation installation. Following the completion of the active restoration, a minimum of 5 years has been dedicated to monitoring in order to ensure mitigation efforts have been successful. Restoration of on-site wetland habitat benefits the MSCP covered species found within the Park including least Bell's vireo, northern harrier, and Cooper's hawk.

El Capitan Preserve

Invasive Plant Removal - In 2017, the San Diego River Park Foundation (SDRPF) began a two-year project which focuses on the treatment and removal of non-native invasive species on their property just south of the El Capitan Preserve boundary. SDRPF utilize the El Capitan Preserve Trail to access the project site for land management and vegetation and wildlife monitoring activities. This project also includes the removal of invasive fountain grass and other noted invasive non-native plant species within a ¼ mile buffer along the trail within the Preserve in order to prevent spread into the SDRPF project area. Removal of invasive non-native plants on adjacent SDRPF property prevents the spread of these plants onto the Preserve.

4.4 Grant Funded Management and Monitoring Projects

In addition to consistent on-going maintenance and monitoring, the County actively seeks grants to fund additional stewardship activities. These activities meet the MSCP's fourth Specific Objective to "implement a program for the conservation and management of habitats of federal and state endangered, threatened, or rare species", as well as the MSCP's Biological Goal (Section 1.2.1) to help conserve both diversity and functionality of the southwestern San Diego County ecosystem through preservation and adaptive management. These grants contribute to habitat restoration, invasive plant species management, and access control for County Preserves, which, in part, benefitted MSCP Subarea Plan covered species including coastal cactus wren, arroyo

toad, and southwestern pond turtle. Work performed in 2018, described below, was funded by three SANDAG *TransNet* Environmental Mitigation Program (*Transnet* EMP) grants, one California River Parkways grant, one Natural Community Conservation Planning Local Assistance Grant (NCCP LAG), one California Department of Fish and Wildlife Watershed Restoration Grant Program Proposition 1 (CDFW Prop 1) grant, and one project funded through the Habitat Conservation Fund (HCF) and the Land and Water Conservation Fund (LWCF). One of the *Transnet* EMP grants, for the eradication of bullfrogs within the Ramona Grasslands Preserve to enhance the arroyo toad population and increase the potential for a southwestern pond turtle population within the Preserve, was awarded in 2018 and work will commence in 2019.

Otay River Valley Cactus Wren Habitat Restoration (\$70,440)

In 2015, the County was awarded a 3-year *TransNet* EMP grant to increase suitable habitat and improve connectivity for the coastal cactus wren within the Otay River Valley through restoration and enhancement of 3 acres of coastal cactus wren habitat. Work performed in 2018 included herbicide treatment of invasive non-native plant species and redistribution of native plant species seed previously collected within the restoration site. A coastal cactus wren survey, vegetation survey, and photographic monitoring occurred to monitor and assess the progress of the restoration efforts. The grant work was completed in 2018 and complemented the County's Salt Creek Coastal Cactus Wren Habitat Enhancement/Restoration Project, which was completed in 2014 and funded by previous *TransNet* EMP grant cycles. The project successfully reduced nonnative cover and increased the proportion of native habitat suitable for coastal cactus wren and other native animals, which helps meet the MSCP Subarea Plan's goals and objectives. A cactus wren in the Salt Creek Coastal Cactus Wren Habitat Enhancement/Restoration Project area (Figure 12).



Figure 12. Coastal cactus wren in the Salt Creek Coastal Cactus Wren Habitat Enhancement/Restoration Project area.

Quino Checkerspot Butterfly Restoration and Enhancement (2016 - \$44,000 and 2017 - \$42,414)

In 2016, the County was awarded a *TransNet* EMP grant to reduce threats to a Quino checkerspot butterfly population in Otay by increasing and improving existing habitat through road closures, preventing off-road activity, adding fencing and signage, and removing invasive non-native plant species cover. Work performed in 2018 included adult and larval Quino surveys, invasive plant species treatment and removal, seeding of dot-seed plantain (*Plantago erecta*), access control fencing and signage installation, road closures, and biological monitoring. Habitat restoration efforts through this grant will be completed in early 2019, as a 6-month extension was approved, allowing further invasive non-native plant treatments to occur.

In 2017, the County was awarded an NCCP LAG grant to enhance Quino checkerspot butterfly habitat through nonnative invasive plant species treatment within 6 acres of suitable Quino habitat in the Otay Ranch Preserve. Work in 2018 included flagging of *Plantago erecta* on site, herbicide treatment of non-native plants, and quantitative monitoring of plant cover. Habitat enhancement and invasive non-native plant species removal efforts associated with this grant will be completed in 2019.

Improving existing habitat through road closures, preventing off-road activity, adding fencing and signage, and removing invasive non-native plant species also benefits on-site Diegan coastal sage scrub potentially attracting coastal California gnatcatcher.

Ramona Grasslands Preserve Bullfrog Eradication/Arroyo Toad (\$80,000)

In 2018, the County was awarded an 18-month *Transnet* EMP grant to enhance the existing arroyo toad population and increase the potential for a southwestern pond turtle population within Ramona Grasslands Preserve, focused within the Santa Maria Creek and adjacent water district treatment ponds. This will occur through eradication efforts of bullfrogs within the area. Bullfrogs have been documented to eat juvenile and adult arroyo toads and juvenile southwestern pond turtles. Work for this eradication project will commence in 2019. The Preserve is currently being managed under the MSCP because the North County MSCP is still in draft form. As stated above arroyo toad and southwestern pond turtle benefiting from the project are both covered under the MSCP.

Tijuana River Valley Regional Park Brown Property Fill Removal/Restoration (\$1,328,000)

In 2017, the County was awarded a CDFW Prop 1 grant. This grant will conduct the necessary technical studies, design, and environmental review and documentation to restore the hydrology of the Tijuana River and habitat functions of the project area by future removal of fill on and adjacent to the Brown Property in TRVRP. The project commenced in Summer 2018 and will be completed Summer 2021. Work completed in 2018 included initiation of design, technical studies, and environmental review. This project will benefit many wildlife species, including the MSCP Subarea Plan covered species least Bell's vireo.

Tijuana River Valley Regional Park Invasive Removal, Restoration and Interpretive Signage (\$494,920)

In 2016, the County was awarded a 3-year grant from the California River Parkways Grant Program to supplement the ongoing habitat restoration activities along the Tijuana River Corridor within the Tijuana River Valley Regional Park. The project involves removal of invasive non-native plants species, including stands of tamarisk, and restoring the site by planting native plant species

seed and container stock. In 2018, tamarisk stands were removed, additional native plant species were planted, and three educational interpretive signs were installed highlighting native plants, animals, and climate adaptation. Plant establishment activities, including supplemental watering and herbicide treatments of invasive non-native plant species, occurred as needed throughout the year. This project will be completed in 2020 for the benefit of listed species including least Bell's vireo which is a covered species under the MSCP Subarea Plan.

Tijuana River Valley Regional Park Habitat Restoration (Wildlife Conservation Board - \$1.2 million and Land and Water Conservation Fund - \$858,913)

In connection with the mitigation and monitoring program for the TRVRP Trails Project, ongoing habitat restoration of approximately 30 acres is ongoing. The Wildlife Conservation Board (WCB) and the Land and Water Conservation Fund (LWCF) funded restoration efforts on Monument Mesa and Spooner's Mesa, which included over 10 acres of native Diegan coastal sage scrub restoration benefitting MSCP covered species including coastal California gnatcatcher, northern harrier, Cooper's hawk, orange-throated whiptail, San Diego barrel cactus, and wart-stemmed ceanothus. In 2018, access control measures were continued to further protect passive restoration and invasive non-native plants species control efforts continued. Both HCF and LWCF grants were completed in 2018, however restoration efforts throughout the TRVRP continue.

4.5 Research on County Property

Research occurred on County-owned Preserve lands through the County's right-of-entry (ROE) permit process. ROE's were requested by federal and state agencies and local Universities, museums, and environmental organizations. In the past, the County has not charged for ROEs. Due to the extensive review ROEs require to ensure compliance with the MSCP and County rules, a fee to recover a portion of the processing cost may be implemented in the future. In 2018, these studies focused on species such as cactus wren, the coastal California gnatcatcher, the Kuroshio shot hole borer and other species in and out of the MSCP Subarea Plan Area. Several studies are summarized below. Only County MSCP Parks and Preserves are mentioned, but many research projects listed below extend well outside of the Preserves in the MSCP Subarea Plan. County Parks and Preserves fully outside of the MSCP Subarea Plan boundaries are not in bold in the heading.

Sweetwater Regional Park, Tijuana River Valley Park, Otay Valley Regional Park, Louis A.

Stelzer Park, Damon Lane Park, San Vicente Connection, Santa Fe Valley Preserve, Ramona
Grasslands Preserve, Sycamore Canyon/Goodan Ranch Preserve, Lusardi Creek Preserve,
Lawrence and Barbara Daley Preserve, Stoneridge Preserve, El Capitan Preserve, Otay Ranch
Preserve, Santa Margarita Preserve, Wilderness Gardens Preserve, Sage Hill Preserve, and

Diamond Hill (TET) Property

MSCP Regional Coastal California Gnatcatcher Monitoring – USGS began, in early 2015, to monitor coastal California gnatcatcher in order to ascertain the species' status on conserved lands in San Diego County and to understand how gnatcatcher occupancy is correlated to coastal sage scrub plant species composition, cover, and structure. This study will continue through September 2019. A coastal California gnatcatcher is shown in Figure 13.



Figure 13. California gnatcatcher.

Tijuana River Valley Regional Park, Otay Valley Regional Park, and Los Peñasquitos Canyon Preserve

Kuroshio Shot Hole Borer Monitoring - To slow and minimize the spread of the Kuroshio shot hole borer (KSHB) and Fusarium sp. in southern San Diego County riparian habitat, Southwest Wetlands Interpretive Association (SWIA) began monitoring KSHB infestation rates, forest damage intensity levels and regrowth of native tree species seedlings. Monitoring efforts began in August 2016 and will extend through August 2019. Preliminary findings indicate that the

KSHB has continued its spread within riparian forests in Tijuana River Valley, where it has severely impacted willow trees. Continued research will examine the spread of the shot hole borer, riparian habitat recovery, and appropriate best management practices for prevention and eradication of KSHB and *Fusarium* dieback. In 2017, the study area was expanded to include Otay Valley Regional Park and Los Peñasquitos Canyon Preserve. Monitoring efforts will inform management of KSHB across the MSCP Preserve.

Tijuana River Valley Regional Park

Bioblitz Citizen Science Surveys - In March 2018, Sula Vanderplank launched a year-long Border BioBlitz project; a communal citizen-science effort to record as many species as possible on each side of the US-Mexico border. Independent citizen scientists were organized as a team part of the Next Generation Sonoran Desert Researchers broader Border BioBlitz initiative. Groups of biologists and citizen scientists collect observational data for one survey day, four times a year, to document photographs, GPS coordinates, and observational data which is uploaded on the online database iNaturalist.org. The BioBlitz has documented over 2,000 observations within the past year and will conclude in March 2019. Species data collected during the BioBlitz will add to the species list for the Park.

Pacific Pocket Mouse Survey, Horned Lizard Trapping, Argentine Ant Surveys - In October 2018, USGS began a multi-species surveying project which includes trapping of Blainville's Horned Lizard (MSCP Covered Species), baiting and collecting of invasive Argentine Ants, and non-invasive presence surveys for the federally listed Pacific Pocket Mouse (PPM). The project is intending to ascertain the presence/absence of the PPM which will potentially help inform the development of reintroduction plans for this species. Tissue samples of the Blainville's Horned Lizard will be collected to supplement phase 2 of an NCCP local assistance grant to collect genetic data on populations of Blainville's horned lizard and to fill in sampling gaps that exist in the current dataset. Data will be used to determine levels of genetic isolation and the barriers that inhibit gene flow for populations in San Diego County. Results of this study will be used to determine the overall population conditions for the three focus species.

Barnett Ranch Preserve, Boulder Oaks Preserve, Del Dios Highlands Preserve, Dos Picos Park, El

Capitan Preserve, El Monte Park, Flinn Springs Park, Rancho Guajome Adobe Park, Guajome Park, Lakeside Linkage Preserve, Lindo Lake Park, Los Peñasquitos Canyon Preserve, Luelf Pond Preserve, Oakoasis Preserve, Otay Lakes Park, Otay Valley Regional Park, Ramona Grasslands Preserve, Louis A. Stelzer Park, Sweetwater Regional Park, Sycamore Canyon/Goodan Ranch Preserve, Tijuana River Valley Regional Park, Agua Caliente Park, Escondido Creek Preserve, Felicita Park, Hellhole Canyon Preserve, Lake Morena Park, Live Oak Park, Mt. Gower Preserve, Palomar Mountain Park, Pine Valley Park, Potrero Park, San Dieguito Park, San Elijo Lagoon Ecological Reserve, Santa Ysabel Preserve, Simon Preserve, Volcan Mountain Wilderness Preserve, Wilderness Gardens Preserve, and William Heise Park

San Diego County Plant Atlas Project - Throughout County Preserves, the San Diego Natural History Museum (SDNHM) continued Plant Atlas Project efforts, which started in 2005, with the collection of specimens of non-threatened plant species. Trained volunteers will continue their collection of museum-quality voucher plant specimens through 2019. Collected specimens will be stored and cared for at the San Diego Herbarium and will eventually be included in the San Diego County Plant Atlas Project database.

Cactus Park

MSCP regional Coastal Cactus Wren Surveys - In 2017, The Nature Conservancy (TNC) and USGS began a two-year study of the coastal cactus wren to evaluate the quality of the previously mapped cactus patches, map cactus patches on previously inaccessible lands, conduct presence/absence surveys, and conduct nest monitoring activities if funding permits. Cactus Park, approximately 60-acre property located in the community of Lakeside northwest of Lake Jennings a historic location supporting a population of cactus wren. Data collected during this project will help determine why the coastal cactus wren population has steadily declined in the Otay region in the last three decades and the current status of cactus wrens and cactus habitat in southern San Diego. This information will be used to make an informed decision regarding the current and future needs for maintaining a viable cactus wren population in coastal California, which is currently isolated from nearby cactus wren populations to the north. Cholla (a critical component of healthy coastal cactus wren habitat) from the Otay Valley Regional Park is shown in Figure 14.



Figure 14. Flowering cholla in Otay Valley Regional Park.

This project is part of a regional effort to restore cactus wren populations within the County.

DPR has received grant funding to restore habitat for cactus wren within the Otay River Valley complementing previous grant funded work in the Salt Creek area. These projects assist with the recovery of the Otay genetic cluster as identified by SDMMP.

Lakeside Linkage Preserve, Sweetwater Regional Park, Otay Valley Regional Park, Furby-North Property, and Otay Ranch Preserve

MSCP regional *Coastal Cactus Wren Surveys* - In February 2018, USGS began coastal cactus wren field studies in southern San Diego County funded by SANDAG. The study includes evaluating the quality of previously mapped cactus patches, map cactus patches on previously inaccessible lands, conduct presence/absence surveys in the Otay and Sweetwater areas, and to potentially conduct nest monitoring activities of occupied territories if funding permits. The results of this study will provide information on the current state of the cactus wrens and cactus habitat in southern San Diego County that will be used to make informed decisions regarding the current and future needs for maintaining viable cactus wren populations in coastal California.

Barnett Ranch Preserve, Boulder Oaks Preserve, Del Dios Highlands Preserve, El Capitan Preserve, Sycamore Canyon/Goodan Ranch Preserve, Lakeside Linkage Preserve, Los Penasquitos Canyon Preserve, Luelf Pond Preserve, Lusardi Creek Preserve, Oakoasis Preserve Ramona Grasslands Preserve, Dos Picos County Park, El Monte County Park, Otay Valley Regional Park, Otay Ranch Preserve, Louis A. Stelzer County Park, Tijuana River Valley Regional Park, Hellhole Canyon Preserve, Mt. Gower Preserve, San Elijo Lagoon Ecological Reserve, Santa Margarita Preserve, Santa Ysabel Preserve, Simon Preserve, Volcan Mountain Wilderness Preserve, Old Ironsides Park, Potrero County Park, William Heise Park, and Wilderness Gardens Preserve

Wildlife Release - The Fund for Animals Wildlife Center obtained a right of entry permit in 2018 for the purpose of releasing rehabilitated wildlife back to their native habitat within multiple County Parks and Preserves. The animal species released included raccoons, coyotes and possums. These species are already present in the local ecosystem and do not impede the conservation of MSCP covered species within DPR properties.

Barnett Ranch Preserve, Boulder Oaks Preserve, Del Dios Highlands, El Capitan Preserve, Sycamore Canyon/Goodan Ranch Preserve, Lakeside Linkage Preserve, Los Penasquitos Canyon Preserve, Luelf Pond Preserve, Lusardi Creek Preserve, Oakoasis Preserve, Otay Ranch Preserve, Ramona Grasslands Preserve, Tijuana River Valley Regional Park, Hellhole Canyon Preserve, Mt. Gower Preserve, San Elijo Lagoon Ecological Reserve, Santa Margarita Preserve, Santa Ysabel Preserve, Simon County Preserve, Volcan Mountain Wilderness Preserve, and Wilderness Gardens Preserve

MSCP regional *Badger Survey* - In 2017, USGS began a yearlong survey to ascertain presence/absence of badgers at multiple County properties. Citizen science volunteers, with the collaboration of biologists, used a phone hotline and email to report badger sightings. Surveys conducted by USGS included the use of infrared cameras and badger hair snags. This survey concluded in July 2018, and the results will be used to determine the activity of local badgers and identify priority areas.

Tijuana River Valley Regional Park, Flinn Springs Park, Louis A. Stelzer Park, Otay Valley Regional Park, Sycamore Canyon/Goodan Ranch Preserve, Lusardi Creek Preserve, Guajome Park, Rancho Guajome Adobe Park, Live Oak Park, San Dieguito Park, San Luis Rey River Park, San Elijo Lagoon Ecological Reserve, and Wilderness Gardens Preserve

Biocontrol of Shot Hole Borers - In July 2016, Dr. Akif Eskalen of UC Riverside (UCR) began a five-year research project to study local biocontrol options and develop a phylogenetically informed risk model for incidence and spread of *Fusarium sp.* and their insect vectors, polyphagous and Kuroshio shot hole borers (PSHB/KSHB), throughout southern California. UCR biologists are monitoring pest and disease establishment and distribution in addition to determining whether trunk injections of systemic pesticides can be effectively deployed within critical reproductive hosts to protect highly valued trees from infestations. In 2017, the study area was expanded to include Flinn Springs Park, Louis A. Stelzer Park, Otay Valley Regional Park, Sycamore Canyon/Goodan Ranch Preserve, Lusardi Creek Preserve, and San Dieguito Park. Coast live oak trees, one of the many host tree species vulnerable to invasive shot hole borers, is shown in Figure 15.



Figure 15. Coast live oak trees are vulnerable to invasive shot hole borers in San Diego County.

4.6 Preserve Biological Monitoring of County Lands

Monitoring within the MSCP includes implementation of the Comprehensive Monitoring Plan, now referred to as the Targeted Monitoring Plan (TMP) and annual residual dry matter

monitoring on Ramona Grasslands and Santa Ysabel Preserves. The TMP, consists of a combination of surveillance-type monitoring (e.g., ongoing assessments of threats and habitat condition, and presence/absence surveys to confirm presence of certain species), baseline condition assessments to determine population-specific threats and conditions, and monitoring to assess the response of a particular species to specific management treatments. Habitats and species included in the current TMP include vernal pool, alkali playa, San Diego thornmint, Encinitas baccharis, Lakeside ceanothus, variegated dudleya, willowy monardella, spreading navarretia, San Miguel savory, San Diego fairy shrimp, arroyo toad, tri-colored blackbird, golden eagle, burrowing owl, cactus wren, bald eagle, and Stephens' kangaroo rat. Preserves in the TMP include Lusardi Creek Preserve, Lakeside Linkage Preserve, Sycamore Canyon/Goodan Ranch Preserve, Ramona Grasslands Preserve, Boulder Oaks Preserve, Del Dios Highlands Preserve, El Capitan Preserve, El Monte Regional Park, Oakoasis Preserve, and Stelzer Regional Park. Ramona Grasslands and the northern half of Del Dios Highlands Preserves are located within the draft North County MSCP and are included in the current TMP due to the number of sensitive onsite resources, and existing conservation easements and deed restrictions that require their conservation and management.

The County is currently in the process of updating the TMP with ten additional Preserves/Properties including Barnett Ranch Preserve, Furby-North Property, Tijuana-River Valley Regional Park, Lawrence and Barbara Daley Preserve, Stoneridge Preserve, Hellhole Canyon Preserve, Mt. Olympus Preserve, Santa Margarita Preserve, Simon Preserve, Wilderness Gardens Preserve. With the addition of these properties all Preserves/Properties in the MSCP with RMPs are now addressed in the TMP. The Wildlife Agencies will be included in the review process of the TMP. The updated TMP is planned to be finalized in 2019.

During this reporting period, the County continued implementation of the TMP. The TMP prioritizes preserve level monitoring to allocate funding where it is most needed. It includes focused management and monitoring goals and objectives for target resources and detailed monitoring protocols. The County utilizes the TMP to implement the biological goals and objectives discussed in Section 6.4.1 of the MSCP Sub-regional Plan and Section 14.5 of the MSCP Subarea Plan.

In 2018, per the monitoring schedule of the TMP, five preserves were monitored including: Sycamore Canyon/Goodan Ranch, Boulder Oaks, Lusardi Creek, Lakeside Linkage and Ramona Grasslands Preserves. The County performed rare plant, raptor foraging, tricolored blackbird, arroyo toad, burrowing owl, Stephens' kangaroo rat, coastal cactus wren⁶, and vernal pool/alkali playa monitoring, as described below.

Raptor Foraging Study – Ramona Grasslands Preserve

The County continued the raptor foraging study on Ramona Grasslands Preserve in 2018 as outlined in the TMP. The study methodology from the Targeted Monitoring Plan has remained the same except for the two additional observation points within the southwest portion of the Preserve. Through consultation with U.S. Geological Survey it was determined placing observation points at varying distances from the center of the southwest portion of the Preserve could possibly provide more information. A total of eight surveys were performed during the fall season (August – November). Special-status raptors observed in 2018 included bald eagle, golden eagle, American peregrine falcon, and northern harrier. In December 2018, two surveys were performed, and bald and golden eagles were observed utilizing the Preserve. Surveys are planned to continue into 2019 including monitoring of the off-site golden eagle nest to determine occupancy and nesting outcome and/or fledging success.

MSCP Rare Plant Monitoring - Sycamore Canyon/Goodan Ranch, Boulder Oaks, and Lusardi **Creek Preserves**

Sixteen (16) rare plant monitoring plots were established within five of the TMP Preserves in 2018. Eleven (11) monitoring plots for San Diego thornmint were monitored in the Sycamore Canyon/Goodan Ranch Preserve. Two (2) monitoring plots for San Miguel Savory were monitored in Boulder Oaks Preserve. One (1) monitoring plot for variegated dudleya was monitored in Lusardi Creek Preserve and one monitoring plot at Sycamore Canyon/Goodan Ranch Preserve. One (1) monitoring plot for willowy monardella was monitored in Sycamore Canyon/Goodan Ranch Preserve.

⁶ The cactus wren is listed in the MSCP Subarea Plan as the San Diego cactus wren, but is now commonly referred to as the coastal cactus wren and will be called such in this report.

Sycamore Canyon/Goodan Ranch Preserve

San Diego Thornmint: Within the 11 monitoring plots for San Diego thornmint, 5,525 plants were detected which was a decrease from 47,800 plants detected in 2017. The County received very low measurable precipitation in 2018, so this decrease was expected; however, the seedbank at the Preserve has a lot of seed especially after the 2017 seed bank addition. In 2018, Conservation Biology Institute and the Friends of Sycamore Canyon/Goodan Ranch Preserve performed the monitoring. Overall, the habitat of San Diego thornmint remains heavily under threat from the invasive purple false brome and other non-native grasses. In 2018 the County sought out grant funding to address the invasive non-native plants around the San Diego thornmint population in the Preserve. The County did not receive grant funding but was asked by the same granting agency to reapply in 2019 with an expansion of the treatment area to include Sycamore Canyon Creek. The San Diego thornmint monitoring plots are currently monitored on an annual basis. Grant funding was secured in 2012 for treatment of invasive non-native plants within the Preserve and included portions of the San Diego thornmint population. San Diego thornmint is shown in Figure 16.



Figure 16. San Diego thornmint.

Variegated Dudleya: Within the one monitoring plot for variegated dudleya in the Preserve, 63 plants were detected. Overall, the habitat of variegated dudleya is under heavy invasion from purple false brome. In 2018 the County sought out grant funding to address the

invasive non-native plants impacting the variegated dudleya population. The County did not receive grant funding but was asked by the same granting agency to reapply in 2019 with an expansion of the treatment area to include Sycamore Canyon Creek. The variegated dudleya monitoring plot is currently monitored on an annual basis. Grant funding was secured in 2012 for treatment of invasive non-native plants within the Preserve and included the variegated dudleya population.

Willowy monardella: Within the one monitoring plot for willowy monardella in the Preserve, 63 plants were detected, almost all were in fruiting stage. The estimated population size of 283 individuals remained consistent with the 2017 estimated population size. Overall, the population of willowy monardella appears to be doing well with minor invasive non-native plant species management required.

Boulder Oaks Preserve

San Miguel Savory: Within the two monitoring plots for San Miguel Savory in the Boulder Oaks Preserve, a total of 75 plants were observed. The total known population of San Miguel savory within the Preserve in 2018 was 145 individuals which remained consistent with 2017's population size. The population of San Miguel savory appeared stable and doing well. Invasive non-native species cover was extremely low in the monitoring plots with no immediate threats detected.

Lusardi Creek Preserve

Variegated Dudleya: Within the one monitoring plot for variegated dudleya established in Lusardi Creek Preserve, a total of 140 variegated dudleya individuals, all flowering, were detected. Overall, the habitat of variegated dudleya is under heavy invasion from purple false brome. In 2018, the County began treatment of invasive non-native plants adjacent to the variegated dudleya population on the Preserve. Invasive non-native plant cover was maintained at or below 10 percent cover.

Ramona Grasslands Preserve

Tricolored Blackbird: Ramona Grasslands Preserve was assessed, with a focus area on Santa Maria Creek and the on-site stock pond, for presence of tricolored blackbird and suitable nesting habitat. Habitat assessment and mapping occurred on May 3, 2018. No nesting or foraging tricolored blackbirds were observed in during 2018 focused surveys, nor incidentally during other monitoring surveys within the Preserve.

Riparian habitat on Ramona Grasslands Preserve could potentially serve as "overflow" nesting area for a tricolored blackbird colony nesting on Rainbow Municipal Water District lands. However, there is no marsh habitat on Ramona Grasslands Preserve of sufficient size and quality to support a primary tricolored blackbird colony. Tricolored blackbird nesting within riparian areas on Ramona Grasslands Preserve would be unlikely. Marginally suitable tricolored blackbird nesting habitat occurs in riparian thickets along Santa Maria Creek from Rangeland Road northwest approximately 5,000 feet

A stock pond located within the southwest portion of Ramona Grasslands Preserve was assessed in 2017 and again in 2018 to determine if habitat enhancement would provide adequate tricolored blackbird nesting habitat. The stock pond had small patches of bulrush (*Schoenoplectus* sp.) along the western edge of the pond. The pond is approximately 0.7 acre in surface area during maximum inundation. It was determined that the stock pond is not large enough to be enhanced into suitable nesting habitat for a tricolored bird colony.

Burrowing Owl - Seven areas of Ramona Grasslands Preserve were surveyed for presence of nesting burrowing owl in spring and summer 2018, with a focus on the presence or abundance of California ground squirrels (*Otospermophilus beecheyi*) and suitable burrow complexes. Burrowing owl is shown in Figure 17.



Figure 17. Burrowing owl.

The grasslands areas of Ramona consist of thousands of acres of open, gently rolling grasslands. The portions of the Ramona grasslands within Ramona Grasslands Preserve include several areas around the perimeter of the Ramona airport and Ramona Municipal Water District (RMWD) lands. This includes 1) a large grassland south/southwest of Ramona airport and east of Rangeland Road, 2) grasslands west of Rangeland Road and immediately north of Highland Valley Road, 3) a small section of grasslands northwest of RMWD lands on the west side of the Preserve, 4) approximately 160 acres north of the northern RMWD pond and southwest of the Highland Hills residential development, and 5) the grasslands immediately north of Ramona airport.

Based upon results from a burrowing owl habitat assessments and surveys conducted in 2016, seven areas on Ramona Grasslands Preserve were determined have the highest suitability for burrowing owl occupation. These areas represent approximately 200-acres of the highest quality potential breeding habitat. The survey areas were chosen based on the presence of California ground squirrels, their burrows, or rock outcrops that provide natural refugia for ground squirrels and burrowing owls. Burrowing owls in southern California typically utilize small mammal burrows for nesting sites and, therefore, their breeding distribution is strongly correlated with the presence, density, and distribution of ground squirrels.

The 2018 burrowing owl breeding season surveys methods were based on the recommended guidelines provided in the 2012 Staff Report on Burrowing Owl Mitigation

prepared by California Department of Fish and Game (CDFG). Four complete surveys of the targeted areas were conducted between May 8 and July 12, 2018, during the height of the burrowing owl breeding season (defined in the 2012 CDFG Staff Report as April 15 to July 15). The surveys were completed at least 3 weeks apart, and at least one visit was conducted after June 15.

No burrowing owls were observed during the 2018 focused surveys. Grasses within Ramona Grasslands Preserve were either very short (<6") or nonexistent, providing conditions suitable for high detectability for burrows and burrowing owl sign. Ramona Grasslands Preserve continues to provide suitable foraging and nesting habitat for burrowing owls. No adaptive management actions were determined to be necessary to improve or expand suitable habitat for burrowing owl at Ramona Grasslands Preserve. Surveys conducted in 2018 supplied additional information regarding the distribution of ground squirrels at Ramona Grasslands Preserve. In order the maximize the potential for burrowing owl detection within Ramona Grasslands Preserve for future surveys, adjustments to the survey areas were recommended and will be implemented during the 2019 survey period.

Stephens' Kangaroo Rat: The 2017/2018 monitoring effort included a habitat assessment of the 28 plots established during the 2016 Stephens' kangaroo rat (SKR) monitoring effort per the TMP. Habitat assessments were performed on December 21, 2017 and January 4, 2018. Of the 28 monitoring plots, 14 were deemed occupied and 14 were considered not occupied with SKR based solely on the presence or absence of likely SKR sign. Plots were also assigned a general SKR potential rating based on the quality of potentially suitable SKR habitat and the density of apparent kangaroo rat sign. Eleven monitoring plots were characterized as having a high potential for SKR, 5 were characterized as having a moderate potential, 7 were assigned a low potential rating, and 5 were characterized as having no potential. In general, sample plots conditions appeared similar in the winter of 2017-2018 season to the conditions reported in 2016. Eighteen plots showed no change in the rating of SKR potential. Of the 10 plots that did show a change in the rating, 3 had an improved rating and 7 had a declined rating. The Preserve is currently grazed, so grazing intensity could be increased in duration in areas identified to support SKR in order to control vegetation growth within the Preserve and improve habitat

conditions for SKR. In 2018 SKR were observed in the southeast portion of the Preserve. SKR had not been previously observed in this area of the Preserve. The TMP SKR monitoring methodology will be augmented to include this area in future monitoring surveys.

Arroyo Toad: Monitoring reaches established along Santa Maria Creek were located and surveyed on May 2 and 3, 2018. Within the monitoring reaches along Santa Maria Creek, a habitat assessment was conducted to document the current condition of arroyo toad habitat. Ponding areas were surveyed for the presence of arroyo toad tadpoles or eggs as well as the presence of any predators including bullfrogs, bullfrog tadpoles, fish, and crayfish. Locations of perennial invasive non-native plant species, including tamarisk or giant reed, was mapped. Representative photographs of the habitat condition were taken. Observations of aquatic wildlife were recorded.

The Santa Maria Creek channel and surrounding upland habitat on Ramona Grasslands Preserve appears to be stable and provides adequate cover for all life stages of arroyo toad. There are unvegetated sandy banks providing appropriate foraging area and burrowing refugia for adult arroyo toads. At the time of the site visits, portions of the creek were flowing or ponded and occupied by arroyo toad tadpoles. Recruitment appeared strong as sections of the creek, which were occupied, contained good numbers of tadpoles relative to the size of the available wetted habitat. Bullfrogs, mosquitofish, red swamp crayfish, and bullhead catfish were observed in Santa Maria Creek during the spring 2018 surveys. Focused removal of bullfrogs will begin in early 2019 along Santa Maria Creek and within the settling ponds on the adjacent Ramona Municipal Water District property. This project is funded through the San Diego Association of Governments TransNet Environmental Mitigation Program.

Vernal Pool/Alkali Playa: Two qualitative monitoring surveys of vernal pools/alkali playas at Ramona Grasslands Preserve were conducted in 2018. The winter survey was conducted on February 23, 2018 and the spring survey was conducted on May 2, 2018. Qualitative monitoring was conducted within the subset of 20 vernal pools selected. Qualitative vernal pool monitoring surveys include inspections for water quality, edge effects, invasive non-native plant species, topographic disturbance, vernal pool indicator plant species, and target sensitive plant and animal species.

Rainfall was below average in 2018. Ramona Airport reported approximately 5.94 inches of measurable precipitation during the hydrologic period of July 1, 2017 to June 30, 2018. Most of that precipitation fell during one storm event, from January 9 to 10, 2018, with 3.27 inches of rainfall measured. Two other moderate storms, with over 0.5 inches of rainfall, occurred on February 27 and March 11, 2018. No ponding was observed at any pool on February 23, 2018, a period when most pools would normally be inundated. Spring surveys were conducted during a weekend of light rain on May 2, 2018.

Five plants that are highly restricted to and indicative of vernal pools (i.e. vernal pool indicator plant species) were observed in the monitoring basins. Woolly marbles, flowering quillwort, hairy clover fern, water pygmyweed, and prairie plantain. Rare annual tarplants, southern tarplant and graceful tarplant, were found in 14 of the monitoring pools in 2018. Spreading navarretia, a vernal pool indicator plant species, was not observed in any of the monitored basins in 2018.

Several upland invasive non-native plant species are widespread through Ramona Grasslands Preserve and are present in most pools, including red-beaked filaree and wild barley. Several problematic invasive non-native wetland plants were present in vernal pools including perennial ryegrass, grass poly, and brass buttons. Through implementation of the TMP in 2019 treatment of invasive non-native plants will be conducted.

Residual Dry Matter Monitoring – Ramona Grasslands Preserve

Residual dry matter (RDM) surveys were performed in December 2018 at 53 predetermined vegetation monitoring plots within 10 management units in the Preserve. RDM surveys were conducted to ascertain grazing intensity and to inform grazing management decisions. Two (2) management units are not proposed for managed grazing due to vegetation community and topography respectively. The 2018 RDM report provided monitoring results and recommendations for 2019 grazing management. All management units but two (2) fell below their target RDM values. Most management units fell below their target RDM values in 2018, likely due to drought conditions affecting San Diego County and timing of monitoring in late December 2018. The rancher will be directed to reduce the number of cattle in 2019 in the

management units that fell below their target RDM values in 2018 to prevent overgrazing, especially if drought conditions persist. RDM monitoring occurs on an annual basis in October at the end of the growing season. Monitoring in 2018 occurred late in the season because of timing issues, so results varied from previous monitoring results. Figure 18 shows cows grazing on the Preserve.



Figure 18. Cows grazing on the Ramona Grasslands Preserve

The following plant species were observed to be the most common within or adjacent to the monitoring plots in 2018: broad-leaf filaree, saltgrass, western ragweed, short-pod mustard, coast goldenbush, redstem filaree, black mustard, brome grass, wild oat, common sandaster, doveweed, California sagebrush, and California buckwheat. Southern tarplant, a 1B.1 California Rare Plant Rank (CRPR) listed plant, and graceful tarplant, a 4.2 CRPR listed plant were previously documented during RDM monitoring from 2014 through 2017 but were not detected during 2018 RDM monitoring. Southern tarplant and graceful tarplant bloom from May to November; therefore, identifying them in December is challenging because the species' lack their distinguishing flowers at that point in the year.

While conducting RDM monitoring in 2018, several milk thistle seedlings and artichoke thistles were observed in the southern portions of the Preserve and a tree tobacco was observed in the southeast corner of the Preserve. The southeast corner of the Preserve also continues to

be inundated with Russian thistle. Management actions will be taken to eradicate the invasive non-native plant species observed during the 2018 RDM monitoring efforts.

In 2018 a Grazing Management Plan including Ramona Grasslands, Santa Ysabel, and Boulder Oaks Preserves was prepared to re-examine current grazing levels at each Preserve and efficiencies of current grazing Management Units to support associated sensitive resources. The Plan will be finalized in 2019.

<u>Lakeside Linkage Preserve</u>

Coastal Cactus Wren: Cactus restoration occurred within two areas (north and south) of the central property of the Lakeside Linkage Preserve through a SANDAG *TransNet* Environmental Mitigation Program (EMP) 5-year long grant. Monitoring was performed to determine if coastal cactus wren is occupying the property and nesting within the cactus restoration areas. A total of four avian point count surveys were conducted during 2018 at six point count stations on the Preserve, on March 24, April 07, May 17, and June 14, 2018. Immediately after the point count surveys were conducted, cactus restoration areas and other areas with large cactus on the Preserve were inspected for presence of cactus wren nests. A habitat evaluation and threats assessment were performed on July 13, 2018.

Coastal cactus wren were observed foraging on Lakeside Linkage Preserve during the 2018 monitoring surveys. A single male cactus wren was observed north of the north-central avian point count station. A pair of cactus wren were observed west of the same north-central avian point count station. This pair was observed carrying food offsite, indicating potential offsite nesting. The northern cactus restoration area was thoroughly inspected for presence of cactus wren nests, but no nests were found.

The northern and southern restoration areas were determined to be in good condition. The southern restoration area had some maintenance issues related to unauthorized dirt bike activity and some smaller unauthorized trails. California buckwheat, broom baccharis, and mustard were growing within and adjacent to cactus patches, which creates a ladder for cactus wren predators to access potential nesting sites; this was occurring in 10 to 25 percent of the cactus patches. Maintenance is proposed in 2019, outside of the bird breeding season (February

15 to August 15), to remove ladder plants from the cactus patches within the cactus restoration areas.

4.7 Otay Ranch Preserve – County and City of Chula Vista owned land

The County and City of Chula Vista jointly work as the Otay Ranch Preserve Owner/Manager (POM) and are responsible for implementing the RMP management and monitoring strategies within the 3,508-acre Otay Ranch Preserve. In 2018, additional lands were conveyed to Otay Ranch POM, management and monitoring efforts will commence on those lands in 2019. The Otay Ranch Management and monitoring of the Preserve is funded through the collection of assessments from Community Facility District 97-2 (CFD 97-2) administered by the City of Chula Vista.

Primary tasks performed in 2018 included surveys for coastal cactus wren, least Bell's vireo, yellow-billed cuckoo, Harbison dun skipper and focused rare plant species. Vernal pool plant monitoring as well as wet season fairy shrimp surveys were also conducted. Vegetation mapping was conducted within the Salt Creek and San Ysidro parcels. Brown-headed cowbird trapping occurred in the riparian habitat at Salt Creek and the Otay River within the Salt Creek parcels. Monitoring for both Kuroshio shot hole borer (KSHB) was completed in the riparian habitat within the Salt Creek parcel and gold-spotted oak borer (GSOB) monitoring was completed in the oak woodland habitat within the Dulzura parcels. Additionally, surveys were conducted in support of the Management Strategic Plan for Conserved Lands in Western San Diego County (MSP) Inspect and Manage (IMG) program for San Diego goldenstar, variegated dudleya, Jennifer's monardella, San Miguel savory, and Orcutt's brodiaea.

Cactus wren survey results from 2018 include three (3) families each with a minimum of two (2) nestlings, four (4) pairs, eleven (11) individuals, and twenty-five (25) individuals on the Salt Creek parcels and one (1) pair on the Millenia parcels. Least Bell's vireo results from 2018 include fourteen (14) territorial paired males and seven (7) successful nests on the Salt Creek parcels. Yellow-billed cuckoo results from 2018 include no individuals observed at the Salt Creek parcels. Focused surveys for Harbison dun skipper was conducted at the Salt Creek and San Ysidro parcels in May and June. No Harbison dun skipper was observed in May at both properties; due to poor

site conditions observed in May, the Salt Creek property was not resurveyed in June; and two adult butterflies were observed at the San Ysidro parcel in June.

Focused fairy shrimp surveys were proposed within 7 ponding areas previously surveyed in 2013 and 30 ponding areas that had not previously been surveyed at the Salt Creek parcels. Rainfall was not enough for surveys to occur in four of the ponding areas previously surveyed in 2013 or the 30 vernal pools that were restored in September 2015 as part of the Quino checkerspot butterfly Recovery Program. Surveys were conducted within three ponding areas previously surveyed in 2013 and three ponding areas that had not previously been surveyed at the Salt Creek parcels. Results of the 2018 surveys included confirmed San Diego fairy shrimp at Ponding Area Numbers 2b and 3 and Versatile fairy shrimp confirmed at Ponding Area Numbers 4b, 4c, 5 and 7. Ponding Area Numbers 4b and 4c had not been previously surveyed in 2013. In 2013 San Diego fairy shrimp had previously been confirmed at Ponding Area Number 7.

Focused vernal pool plant surveys documenting flora within the 39 ponding areas (manmade road ruts and swales) previously surveyed in 2013 at the Salt Creek parcels were conducted in 2018. In addition, the 30 vernal pools that were restored in September 2015 as part of the Quino checkerspot butterfly recovery program were surveyed. Vernal pool plant species were found in 61 out of 68 ponding areas. Vernal pool plant species were not found in ponding areas 8, 9, 10, 15, 16, 18, and 51. The following vernal pool plant species were observed: dwarf brodiaea, water pygmyweed, annual hairgrass, pale spike-rush, toad rush, shining peppergrass, grass poly, clover fern, hooked navarretia, adobe popcornflower, prairie plantain, dot-seed plantain, dwarf woollyheads, and slender woolly-marbles. Additionally, 30 non-native plant species were observed in the ponding areas during surveys. Of these, red brome and saltcedar have a Cal-IPC rating of high.

Brown-headed cowbird trapping performed in 2018 on the Salt Creek parcels resulted in the capture of 5 males and 6 females.

Kuroshio shot hole borer (KSHB) monitoring was conducted within the Salt Creek parcels between mid-January and mid-March. Monitoring in 2018 consisted of trapping during one of the peak flight seasons. Results from the trapping period of January 26 – March 11, 2018

includes five (5) KSHB positive traps, 31 KSHB negative traps, and 62 KSHB specimens were collected.

Gold-spotted oak borer (GSOB) monitoring was conducted once within the oak woodland at the Dulzura parcels. Prior to conducting field work, a recent aerial was inspected for any canopy die-off. A field visit to visually inspect trees for GSOB sign was conducted in March 2018. No signs of GSOB were observed.

Rare plant surveys were performed on the properties and included San Diego goldenstar, variegated dudelya, Jennifer's monardella, San Miguel savory, and Orcutt's brodiaea. Survey results showed a variation in plant population numbers from previous survey years (2014, 2017, and 2016). All previously surveyed plant populations are intact even though some population numbers were low.

Habitat maintenance activities were also performed to control weeds and enhancement habitat for sensitive species and habitats, including coastal cactus wren, Quino checkerspot butterfly, and vernal pools. The Early Detection Rapid Response program also focused removal efforts on stinkwort to control newly emerging infestations in the Salt Creek parcels. Access management efforts included the installation of signage and fences to prevent illegal access and block unauthorized trails as well as coordinating with US Border Patrol and adjacent land managers. Restoration efforts of a closed off-highway vehicle trail included planting native plant species and installing erosion control methods that were completed in 2017 were maintained in 2018 by treating invasive, non-native plant species. A contracted biologist conducted site visits on a regular basis to document any access issues, illegal dumping, previously undocumented species of plants and wildlife, non-native plant species detection, and overall health of the Preserve. A cactus in flower is shown in Figure 19.



Figure 19. Cactus in flower.

The Otay Ranch Phase 2 Resource Management Plan was comprehensively updated in 2018 to incorporate County and City of Chula Vista actions that have occurred in Otay Ranch (through Dec 2017), as well as reflect changes in regional biota monitoring and management priorities and standards. No new policy decisions or actions were proposed in the update. The document was adopted by the County Board of Supervisors and Chula Vista City Council and will serve as a replacement of the 1996 Phase 2 RMP including amendments in the County and City, respectively.

4.8 Preserve Management of Private Mitigation Lands

Resource Management Plans (RMPs) are required as a condition of development entitlements when biological resources have been determined to be impacted by the proposed development, and the acreage of required mitigation exceeds 50 acres, on or off-site. RMPs may also be required when open space less than 50 acres is proposed if a particularly sensitive resource is present that would benefit from active management and/or monitoring. RMPs are approved by the Department of Planning and Development Services (PDS) and require submission of annual monitoring reports focusing on the resource attributes of that specific site detailing the monitoring and habitat management activities conducted within the previous year. Controlling and managing public access through fencing, signage and patrolling is another component of the RMPs. Annual reports also document any issues and the overall health of the Preserve and allow the County to assess the biological integrity of the open space habitats

protected by each RMP. Annual reports are publicly available online through the PDS Document Library found on the PDS webpage. Appendix 16 provides a general overview of the sixteen (16) RMPs located within the MSCP Subarea Plan including a description of the habitat conservation area, required surveys, and monitoring/maintenance status for each RMP. In 2018, continued organization of the RMP Program led to an update in the number of RMP projects. In 2017, 18 RMP projects were accounted for however, three RMPs were removed from the 2018 inventory because they are not located within the MSCP Subarea Plan (RMP 03-001 Onyx Ridge, RMP 08-001 Bridges – Santa Fe Creek, and RMP 10-002 Rancho Santa Fe). Additionally, one RMP was added to the 2018 inventory (RMP 11-002 Lonestar).

Annual RMP report due dates vary from project to project. An accounting of RMP annual report submissions revealed that in 2018, 10 of the 16 (62.5%) RMPs submitted reports for the 2017/2018 reporting period. The following is a summary of the annual RMP monitoring reports received in 2018.

4.8.1. Non-Compliant Private RMP Reporting

Six (6) of the 16 (37.5%) RMPs did not submit annual reports for the 2017-2018 calendar year. These 6 non-compliant RMPs include: RMP 98-001 Bernardo Lakes; RMP 02-001 McCrink; RMP 02-003 Maranatha chapel; RMP 03-002 El Apajo; RMP 06-005 Artesian Trail; RMP 99-003 Salviati Golem. In 2018, RMP 99-003 Salviati Golem was added as non-compliant because it did not submit an annual report for the 2017/2018 reporting period. The County continues to evaluate options to achieve compliance, including additional correspondence and meeting requests with responsible entities and individuals, engaging the land management community for assistance, reliance on the easement and/or management agreement to remedy, and, if necessary, involve the County Code Compliance section.

4.8.2 2018 Annual Report Private RMP Review

Ten (10) of the 16 (50%) RMPs submitted reports for the 2018 calendar year. Each report was reviewed by County Staff to evaluate compliance with the RMP document terms. A review letter notifying managers of the need, if any, to address specific management topics was prepared by County staff and sent to the responsible habitat manager and/or property owner.

Common areas for improvement in future reports include addressing financial status, monitoring results, and complying with the general provisions of the approved RMP. The Wildlife Agencies are routinely copied on all correspondence from the County to the land managers regarding annual monitoring reports wherein greater detail of the report review results can be obtained. Appendix 16 provides further reporting status of each RMP. Annual Reports can be viewed by searching for the applicable Record ID (which are included on the correspondence letters) in the PDS Document Library available on the PDS website; https://www.sandiegocounty.gov/content/sdc/pds/doclibrary.html.

5.0 FINANCIAL SUMMARY

The County is responsible for funding acquisition, management and monitoring of lands within the MSCP South County Subarea Plan. The costs associated with these activities may be funded through local and regional sources. The County primarily uses General Fund monies to acquire land or leverage funding to acquire additional preserve lands. Additionally, the County Board of Supervisors annually appropriates funding for ongoing management and monitoring efforts. Management and monitoring efforts for conveyed lands in the Otay Ranch Preserve, which are jointly owned and managed by the County and the City of Chula Vista, are funded through Community Facilities District CFD 97-2 administered by the City of Chula Vista. Lastly, the County has sought additional funding through various grant programs such as those offered through the SANDAG *TransNet* Environmental Mitigation Program (EMP).

5.1 County Contribution

As in years past, the County Board of Supervisors appropriated \$10 million for acquisition of open space throughout the adopted Subarea and planned MSCP North County Plan and MSCP East County Plan Areas for Fiscal Year 2016-2017. However, for Fiscal Years 2017-2018 and 2018-2019, \$2.5 million of the funding was shifted from acquisition to management and monitoring of the Preserve lands each fiscal year. These funds were used to create and staff two positions dedicated solely to implementing the MSCP, as well as hiring County rangers to manage the open space lands. In Fiscal Year 2017-2018, \$1 million was allocated to implementing activities to support the MSCP, including the biological monitoring that occurs in the MSCP Subarea Plan open space areas via the County's TMP and updating the TMP to include additional County preserves. In Fiscal Year 2018-2019, approximately \$640,000 was allocated to MSCP implementation activities, including TMP's biological monitoring surveys and cactus wren habitat restoration projects.

During this reporting period, in the South County Subarea, the County acquired 348 acres, the 19-acre Sycamore Canyon/Goodan Ranch (formerly San Vicente Connection) Uridel

addition, the 75-acre Lakeside Linkage Centex, and the 255-acre Peutz Valley Preserve acquisitions. Over \$4.1 million of MSCP funds were used to acquire the three acquisitions, in addition to over \$100,000 that was leveraged to help buy the properties. Since 1998, the County has invested \$44.5 million which leveraged nearly \$34.5 million of other funding to acquire 7,622 acres in the MSCP Subarea Plan, including 556 acres managed by County partners.

The Board of Supervisors allocates funding for ongoing management and monitoring efforts on 40,400 acres within the MSCP Subarea and future MSCP North County Plan and MSCP East County Plan Areas, 21,400 acres of which were acquired since the MSCP Subarea Plan was adopted. The cost for MSCP management and maintenance are intertwined in the County DPR operating budget. The County spends approximately \$170 per acre to staff, manage, monitor and maintain its open space lands. In this reporting period, approximately \$6.9 million was spent to successfully manage and maintain the County's MSCP open space lands. The County is working to track MSCP expenses to reflect on-going stewardship funding. The acreage of the three MSCP Plan Areas include approximately:

- 7,050 acres acquired and managed within the South County MSCP Subarea, Tijuana
 River Valley, Otay Valley Regional Park since 1998,
- 6,900 acres acquired and managed in the future North County Plan Area since 2001
 - Plus an additional 55 acres in City of Encinitas HCP,
- 7,400 acres acquired and managed in the future East County Plan Areas since 2001,
- The original 19,000 of open space owned and managed within the County upon MSCP
 Subarea Plan adoption, approximately 5,500 acres in the Subarea.

In addition to the 40,400 acres of DPR owned open space lands, DPR and the City of Chula Vista jointly own approximately 2,800 acres of the 3,500 acres that have been conveyed to the Otay Ranch Preserve, with the City of Chula Vista exclusively owning the remaining 700 acres.

5.2 Otay Ranch Preserve Community Facility District 97-2

Community Facility District 97-2 funds, administered by the City of Chula Vista, are used for managing and monitoring the Otay Ranch Preserve. The approved budget for FY2018-2019 is \$500,000 for preserve monitoring, operations and maintenance. Preserve monitoring includes schedules surveys for various species by parcel, focused rare plant surveys, baseline surveys for newly acquired properties, land stewardship, meetings and on-going coordination, and reporting. Operations and maintenance include access control and invasive species treatment activities.

5.3 TransNet Funding

SANDAG is a regional transportation agency responsible for administering *TransNet* funds collected as a local half-cent sales tax for transportation improvements. The vote to extend the *TransNet* tax in 2004 included \$850 million to fund land acquisition, land management, and species monitoring of mitigation lands for local and regional transportation projects known as the *TransNet* EMP. From SANDAG's *TransNet* Environmental Mitigation Program (EMP), as of June 2018, the \$850 million *TransNet* EMP has supported the acquisition of 40 properties throughout the region, totaling more than 8,780 acres⁷. As of May 2015, SANDAG had expended more than \$21 million to manage and monitor the regional habitat Preserve system. The County has received almost \$2 million of management and monitoring grants from 2006 through 2018.

7 http://www.keepsandiegomoving.com/EMP/EMP-management-monitoring.aspx

6.0 EDUCATION AND OUTREACH

One of DPR's key activities is educating the public about the County's natural and cultural resources. Rangers and volunteers are trained to lead environmental education programs and provide multiple interpretive services to the public. Presentations are available to people of all ages at schools, parks, campgrounds, interpretive centers, camps, scout groups, and churches. Among these programs are:

- Discovery Program: This program, offered at no cost to participants, has assisted hundreds of educators and elementary school students to explore the wealth of nature at local parks and in their own backyards. In 2018, DPR expanded this program to eight parks total. Approximately 41 schools were able to visit their local parks instead of traveling to only one park offering the program county-wide. The hands-on courses include a pre-field trip ranger visit to the school, activities for classroom use, a field trip and ranger led-hikes, and post-field trip activities for classroom and home use. The curriculum correlates with Next Generation Science Standards and includes the subjects of plants and photosynthesis, astronomy, birds, Native Americans, geology, insects, and general ecology.
- TRACK Trails Program: This program helps children explore the beauty of nature as part of
 the national *Kids in Parks* campaign. It features kiosks at trailheads with brochures detailing
 fun and adventurous aspects of hikes offered. Children then earn prizes by visiting the TRACK
 Trails website and tracking their adventures in their online nature journals.
- Animal ambassadors: Over 4,300 park visitors met our ambassador raptors in 2018 through various programs conducted by park rangers, and even more programs are being planned in the year ahead at our Discovery Program parks.
- Display center interpretation
- Wildlife conservation programs with live animals
- Environmental presentations at parks and preserves
- Daily interpretation at park and preserve nature centers, museums and at kiosks
- MSCP and environmental presentations to community groups and service boards

- Ranger-led nature talks, slide shows, walks and hikes
- Community service projects which include on-going tree care and watering
- Stormwater and Watershed Education
- Family Campouts
- Leave No Trace Program
- Online Naturalist Program: DPR is currently developing an online education platform that
 will be free to the public and cover a range of topics that focus on the natural and cultural
 resources in our region. This program will also be based on the Next Generation Science
 Standards.

7.0 CONCLUSION

During the first 21 years of this 50-year program, the County and its agency and private conservation partners have assembled 78,565 acres of the 98,379-acre Preserve. This represents 80% of the Preserve Assembly goal. The County is committed to continuing to work in good faith with its partners to assemble a functional Preserve comprised of at least 98,379 acres, functioning wildlife movement corridors, and a diversity of native plant communities. The Board of Supervisors maintains its commitment to the parks and open space conservation program by continuing its annual appropriation for acquiring, managing and monitoring these natural lands. Ongoing preservation combined with management and species monitoring of preserve areas will enable the County to conserve San Diego's unique native habitats and wildlife for future generations to enjoy.

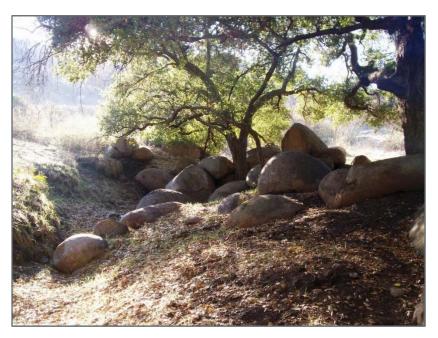


Figure 20. Open space habitat at Louis A. Stelzer Park.

Appendix 1A Peutz Valley Preserve Letter to Wildlife Agencies



County of San Diego

BRIAN ALBRIGHT DIRECTOR (858) 966-1301 **DEPARTMENT OF PARKS AND RECREATION**

5500 OVERLAND AVENUE, SUITE 410, SAN DIEGO, CA 92123 Administrative Office (858) 694-3030 www.sdparks.org

April 24, 2017

Doreen Stadtlander U.S. Fish and Wildlife Service Carlsbad CA 92128-3406 Dave Mayer CA Dept. of Fish and Wildlife San Diego CA 92123

Sent via email:

PROPERTY NORTH OF PEUTZ VALLEY ROAD - WEST ALPINE, CA

Dear Ms. Stadtlander and Mr. Mayer:

This letter is to memorialize the County request and discussion the County and your agencies (Wildlife Agencies, W.A.s) had on Thursday April 13, 2017 concerning the W.A.s support of the biological value to expand the South County Multiple Species Conservation Program Preserve corridor north of Peutz Valley Road as it connects with the U.S. Forest Service land.

As discussed, the County is considering potential acquisition of two properties, both which contain land not in a Pre-Approved Mitigation Area (PAMA). Regardless, after seeing the maps and hearing the details of the biology of the two parcels, repeated below, the W.A.s stated their support for the biological value of expanding the Preserve at this site.

Helix (Lambron)

- 240 acres overall
- ~66 acres are "take authorized" (balance ~175 acres are hardline Preserve/can be acquired and added to the Preserve)
- The 66 acres consist of mostly (~62 acres) of very high, high and moderate
 quality chaparral with up to 2 acres of moderate quality coastal sage scrub and 2
 acres of low quality chaparral





Appendix 1A Peutz Valley Preserve Letter to Wildlife Agencies

Gildred

- Included for acquisitions in previous Section 6 applications and immediately north of Helix (Lambron)
- 280 acres overall abuts directly with U.S. Forest Service land
- ~234 acres are outside of PAMA
- The 234 acres consist of a majority of high quality chaparral with some very high and low to moderate quality acreage and less than 1 acre of very quality southern coast live oak riparian forest

We look forward to your written confirmation of proceeding with potential acquisition and crediting within the Preserve of the non-PAMA portions of these properties. If you have any questions, please do not hesitate to phone Deborah Mosley, Acting Chief, Resource Management Division, at (858) 966-1373.

Sincerely,

BRIAN ALBRIGHT Director

Attachment

cc: Deborah Mosley, Acting Chief Mary Niez, Acquisitions Manager

Appendix 1B Peutz Valley Preserve E-mail From USFWS

Niez, Mary

From:

Mosley, Deborah

Sent:

Friday, June 09, 2017 3:36 PM

To:

Niez, Mary

Subject:

FW: Property North of Peutz Valley Road- West Alpine

FYI

From: Stadtlander, Doreen [mailto:doreen stadtlander@fws.gov]

Sent: Friday, June 09, 2017 3:30 PM

To: Mosley, Deborah **Cc:** Dave Mayer

Subject: Property North of Peutz Valley Road- West Alpine

Dear Ms Mosley

In response to your letter dated April 24, 2017, we are confirming that the potential acquisition of the 240-acre property that we discussed at our April 13, 2017, meeting has biological merit and is worthy of the County's consideration.

Sincerely,

Doreen Stadtlander

Doreen Stadtlander Division Chief Carlsbad Fish and Wildlife Office 2177 Salk Avenue, Suite 250 Carlsbad, CA 92008 (760) 431-9440, ext. 223

Appendix 2 County Tracked Acquis Area and Property Name	Owned By Local/Non- Profits	Preserve / Hardline Owned By County	MHPA & Chula Vista	Total Acres	Land Cost	Non County Funds	Funding Source
1998							
Tijuana River Valley, Arietta			39	39	\$ 478,000	\$ 478,000	State
Tijuana River Valley, Calmat Option I			164	164	\$ 1,225,272	\$ 1,225,272	State, City of San Diego
Tijuana River Valley, West/Dymott			40	40	\$ 410,000	\$ 410,000	State
1999							
Tijuana River Valley, Calmat Option Final			28	28	\$ 208,837	\$ 208,837	State
Lakeside, Arabo		9		9	\$ 160,000	\$ 80,000	County, State, Federal
Lakeside, Ham		48		48	\$ 800,000	\$ 400,000	County, State, Federal
Lakeside, HJMD		33		33	\$ 490,000	\$ 245,000	County, State, Federal
Lakeside, Yunis		13		13	\$ 270,000	\$ 135,000	County, State, Federal
Lusardi Creek, Rancho Vista		98		98	\$ 1,845,500	\$ 922,750	County, State, Federal
2000							
Lusardi Creek, Santa Fe Views		97		97	\$ 1,976,000	\$ 988,000	County, State
Hollenbeck Canyon, L&B Daley Pres, Ph I		290		290	\$ 1,000,000		County
Hollenbeck Canyon, L&B Daley Pres, Ph II		291		291	\$ 1,000,000		County
Lakeside, United Brokers		8		8	\$ 153,000	\$ 76,500	County, State
Tijuana River Valley, Piper/Shelton			142	142	\$ 1,752,750	\$ 1,252,750	County, State
Wright's Field, Alpine School District	41	0		41	\$ 425,000	\$ 250,000	County, State, Federal
Wright's Field, Union Bank	40	0		40	\$ 356,633	\$ 208,437	County, State
2001							
Lakeside, Pavel		11		11	\$ 200,000	\$ 100,000	County, State
Otay River Valley Park, Malcolm			1	1	\$ 46,000	\$ 46,000	County, Developer
Otay River Valley Park, O Brien			8	8	\$ 205,500	\$ 102,724	Developer negotiated by County
2002							
Lakeside, Shuler		59		59	\$ 425,000	\$ 425,000	State, Federal
Tijuana River Valley, Hanson			74	74	\$ 1,387,500		County
Tijuana River Valley, Skibbe			10	10	\$ 485,000	\$ 485,000	State, City (Federal)
Wright's Field, Findel Ranch	29			29	\$ 500,000		County
Iron Mountain, Ramona Serena/ Barnett Ranch		665		665	\$ 4,440,000	\$ 2,000,000	County, State, Federal

^{2-1 |} Annual Report for the County of San Diego South County MSCP Subarea Plan, Year 21. May 22, 2019

Area and Property Name	Owned By Local/Non- Profits	Preserve / Hardline Owned By County	MHPA & Chula Vista	Total Acres	Land Cost	Non County Funds	Funding Source
2003							
Otay River Valley Park, Hirlinger- Baker		0	8	8	\$ 95,000		State, Federal
Iron Mountain, Berkeley Hering		59		59	\$ 457,200	\$ 395,000	County, State, Federal
Iron Mountain, Boulder Oaks		1271		1271	\$ 4,410,000	\$ 3,307,500	County, State, Federal
Iron Mountain, Reams Thomsen		46		46	\$ 180,000	\$ 180,000	County, State, Federal
Sycamore Canyon Preserve (I- 122)		28		28			County, I-122
East Otay Mesa, Furby North			79	79	\$ 1,296,600		County
Otay River Valley Park, Munson Otay			19	19	\$ 13,300	\$ 13,300	State
Tijuana River Valley, Horwin			21	21	\$ 365,000	\$ 365,000	State
Tijuana River Valley, Nelson Sloan			73	73	\$ 699,782	\$ 699,782	State
Wright's Field, Apollo 120 acres	120			120	\$ 1,800,000	\$ 1,000,000	County, State
2004							
Escondido Creek, Polo (110 acs, but 4 acs in NC)		106		106	\$ 1,700,000	\$ 326,000	County, I-122 (8 acs), State
Sycamore Canyon Preserve (I- 122)		63		63			County, I-122
Otay River Valley Park, Georgiana Smith		89		89	\$ 2,611,000	\$ 2,611,000	State
Otay River Valley Park, Greg Smith		98		98	\$ 3,243,000	\$ 3,243,000	State
2005				30	ψ 5/ <u>2</u> :5/555	ψ 5/ <u>2</u> 15/555	
Stoneridge (fka Harbison), Bahde Donation		20		20			County acquired donation (interdept) post MSCP creation
Otay River Valley Park, Grindle		8		8	\$ 138,000	\$ 91,200	County, State
Otay River Valley Park, Kimball		13		13	\$ 196,000	\$ 196,000	State
Otay River Valley Park, Lanzetta			6	6	\$ 125,000	\$ 125,000	State
Tijuana River Valley, Dairy Mart Ponds			60	60			County had managed for State, State formalized by transfer
2006							
Otay River Valley Park, Sandoval (1 & 2)			13	13	\$ 700,000	\$ 700,000	State
Otay River Valley Park, Otay Land Company			114	114	\$ 1,490,000	\$ 1,490,000	State
Pitchford (MLJ at Stelzer)		3		3	\$ 75,000		County
Sheriff's East Mesa Buffer		9		9	\$ 45,000		County

^{2-2 |} Annual Report for the County of San Diego South County MSCP Subarea Plan, Year 21. May 22, 2019

Area and Property Name	Owned By Local/Non- Profits	Preserve / Hardline Owned By County	MHPA & Chula Vista	Total Acres	Land Cost	Non County Funds	Funding Source
2007							
Greenfield Transfer Mitig 17 acs	17			17	\$1		Olivenhain Wtr Mitigation Mgt
2008							
Del Dios Highlands (Greer)		10		10	\$ 675,000		County
Sycamore Canyon/Goodan Ranch (Armstrong)		20		20	\$ 160,000		County
Ramona Grasslands (Gildred Portion in SC MSCP)		463		463	\$ 3,630,000	\$ 3,217,500	County, State, Federal
2009							
Christopherhill TET dedication - Dedication was 69 acres in 2009 with all but 5 acs baseline then; Now 5 acs approved as Preserve							County accepted in bankruptcy settlement
2010							
Del Dios Highlands (Helix- Lambron)		153		153	\$ 4,000,000	\$ 2,600,000	County, Federal
Sycamore Canyon southern additions		150		150	\$ 1,310,000	, , ,	County
Lakeside Hansen Pond (Endangered Habitats Conservancy)	141			141	\$ 4,000,000	\$ 3,000,000	County, State, EHC
2011							
Stoneridge Preserve - Worley		227		227	\$ 2,650,000		County
Sycamore Canyon/Goodan Ranch		112		112	\$ 2,820,000	\$ 200,000	County, State
Mit Land Policy Deduction- Stelzer, Lakeside Linkage		-1		-1			
2012							
San Diego River Foundation El Capitan	158			158	\$ 205,000	\$ 5,000	County, Non Profit
Boulder Oaks -Salvation Army		748		748	\$ 6,555,000		County
Mit Lnd Policy Deduction - L B Daley		-2		-2			
2013							
Oakoasis-Sophisticated Investments		37		37	\$ 72,000		County
Sycamore Canyon/Goodan Ranch (South-Barratt American)		18		18	\$ 180,000		County

^{2-3 |} Annual Report for the County of San Diego South County MSCP Subarea Plan, Year 21. May 22, 2019

Area and Property Name	Owned By Local/Non- Profits	Preserve / Hardline Owned By County	MHPA & Chula Vista	Total Acres	Land Cost	Non County Funds	Funding Source
Otay River Valley Park, Reed/Paintball City							
MHPA	8			8	\$ 262,500		General Fund
Lusardi Creek, Fingal		31		31	\$ 1,360,000	\$ 200,000	County, State
Mit Lnd Policy Deduction -			-3	-3			
Tijuana River Valley			-5	-5			
2014							
Stoneridge Preserve (tax default)		1		1	\$ 9,563		County
Mit Lnd Policy Deduction - L B Daley		0		-0.37			
2015							
Flinn Springs MSCP		33		33	\$ 400,000		County
Sycamore Canyon/Goodan		100		100	\$ 810,000	\$ 200,000	County, State
Sycamore Canyon/Goodan		40		40	\$ 541,000		County
Mit Lnd Policy Deduction - L B Daley		-8		-8			
2016							
S.Vicente Connection (Navarro)		23		23	\$ 224,000		County
Mit Lnd Policy Deduction -				-10			
Tijuana River Valley			-10	-10			
2017							
S. Vicente Connection (Moore-Moffet)		69		69	\$ 627,670		County
Dictionary Hill - approved in 2017 prior to		173		173	\$ 5,467,000		County
acquisition to be included in Preserve							
2018							
S. Vicente (Uridel)		19		19	\$ 223,000	\$ 111,500	County/State
Lakeside Linkage (Centex)		75		75	\$ 2,250,000		County
Peutz Valley Preserve (Helix Lnd)		255		255	\$ 1,651,000		County/State
TOTAL	556	6,181	885	7,622	\$ 79,962,608	\$ 34,316,052	

^{*}Includes 2,474 acres added to Preserve in 2016 and 174 acres added in 2017, plus 5 acres as Preserve in 2016

U.S. FWS Acqu	isitions in	County SubArea Since 1	1998				California			Federal G	Government							
Refuge Unit	TrackNo	Property Name	Total Acres	Total Acres in MSCP MHPA	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Total Donated Value	Total Cost of Property	Year	Land Manager	Fee Owner	Funding Source
San Diego NWR - Otay- Sweetwater	10	FDIC (Rancho San Diego)	1167	1144	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1996	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	10a	FDIC (Rancho San Diego)	475	468	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1996	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	10b	FDIC (Rancho San Diego)	28	28	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1996	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	10c	FDIC (Rancho San Diego)	129	129	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1996	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	10d	FDIC (Rancho San Diego)	26	0	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1996	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	101	Emerald Properties Corp (N. San Miguel)	500	499	217	216	43%	\$1,300	283	283	57%	\$1,700	\$850	\$3,000	1997	USFWS	USFWS	Prop 117 and LWCF
San Diego NWR - Otay- Sweetwater	240	National Fish and Wildlife Foundation (Smith "V parcel")	278	278	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1997	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	92	Doenges, Robert S. & William S.	87	85	0	0	0%	\$0	87	85	100%	\$446	\$0	\$446	1998	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	137	Hamel (I)	45	2	0	0	0%	\$0	45	2	100%	\$211	\$0	\$211	1998	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	199	Liker	8	8	0	0	0%	\$0	8	8	100%	\$150	\$0	\$150	1998	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	200	TPL (Las Montanas I)	276	112	0	0	0%	\$0	276	112	100%	\$1,800	\$0	\$1,800	1998	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	222	Singing Hills (Duncan)	79	76	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1998	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	101a	Emerald Properties Corp (N. San Miguel)	1188	1176	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1998	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	200a	TPL (Las Montanas II)	661	279	0	0	0%	\$0	661	279	100%	\$1,500	\$0	\$1,500	1998	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	237a	Mozaffarian	10	10	0	0	0%	\$0	10	10	100%	\$40	\$0	\$40	1998	USFWS	USFWS	LWCF

U.S. FWS Acqu	isitions in	County SubArea Since 1	.998			State of	California			Federal G	overnment							
Refuge Unit	TrackNo	Property Name	Total Acres	Total Acres in MSCP MHPA	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Total Donated Value	Total Cost of Property	Year	Land Manager	Fee Owner	Funding Source
San Diego NWR - Otay- Sweetwater	237b	Mozaffarian	5	5	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1998	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	1	Department of Treasury (Gomez)	88	26	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1999	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	23	Beitmann	5	5	0	0	0%	\$0	5	5	100%	\$28	\$0	\$28	1999	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	84	DeGuzman	34	0	0	0	0%	\$0	34	0	100%	\$153	\$0	\$153	1999	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	85	DeGuzman	41	0	0	0	0%	\$0	41	0	100%	\$180	\$0	\$180	1999	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	86	DeGuzman	37	0	0	0	0%	\$0	37	0	100%	\$180	\$0	\$180	1999	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	89	Desert Pacific Council/Boy Scouts	90	0	0	0	0%	\$0	90	0	100%	\$393	\$0	\$393	1999	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	137a	Hamel (II)	79	0	0	0	0%	\$0	79	0	100%	\$319	\$0	\$319	1999	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	200b	TPL (McGinty Ranch I)	582	582	0	0	0%	\$0	582	582	100%	\$1,675	\$0	\$1,675	1999	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	200c	TPL (McGinty Ranch II)	112	112	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1999	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	132	Grant, Kenneth Carlton	15	10	0	0	0%	\$0	15	10	100%	\$140	\$0	\$140	2000	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	164	Immenschuh	641	640	0	0	0%	\$0	641	640	100%	\$1,760	\$0	\$1,760	2000	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	288	Rice	253	0	0	0	0%	\$0	253	0	100%	\$1,140	\$0	\$1,140	2000	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	288a	Rice	1	0	0	0	0%	\$0	1	0	100%	\$3	\$0	\$3	2000	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	15	Clarke	38	38	0	0	0%	\$0	38	38	100%	\$170	\$0	\$170	2001	USFWS	USFWS	LWCF

U.S. FWS Acqu	isitions in	County SubArea Since 1	1998			State of	California			Federal G	Government							
Refuge Unit	TrackNo	Property Name	Total Acres	Total Acres in MSCP MHPA	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Total Donated Value	Total Cost of Property	Year	Land Manager	Fee Owner	Funding Source
San Diego NWR - Otay- Sweetwater	200f	TPL (Shinohara I)	85	78	0	0	0%	\$0	85	78	100%	\$2,700	\$0	\$2,700	2001	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	288b	Rice	286	6	0	0	0%	\$0	286	6	100%	\$1,332	\$0	\$1,332	2001	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	12	Sampo	69	18	0	0	0%	\$0	69	18	100%	\$280	\$0	\$280	2002	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	14	Mills	19	19	0	0	0%	\$0	19	19	100%	\$115	\$0	\$115	2002	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	200g	TPL (Shinohara II)	40	34	0	0	0%	\$0	40	34	100%	\$1,381	\$0	\$1,381	2002	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	13	Asistoisdmr Holdings	37	0	0	0	0%	\$0	37	0	100%	\$260	\$0	\$260	2004	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	16	Baker Trust	19	0	0	0	0%	\$0	19	0	100%	\$100	\$0	\$100	2004	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	315	Chula Vista 186 LLC	185	0	0	0	0%	\$0	185	0	100%	\$1,302	\$0	\$1,302	2004	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	16a	Baker Trust	1	1	0	0	0%	\$0	1	1	100%	\$5	\$0	\$5	2004	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	200h	TPL (Shinohara III)	369	368	0	0	0%	\$0	369	368	100%	\$4,540	\$0	\$4,540	2004	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	180	King	5	0	0	0	0%	\$0	5	0	100%	\$175	\$0	\$175	2005	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	230	Mitchell	3	0	0	0	0%	\$0	3	0	100%	\$250	\$0	\$250	2005	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	295	Roberts	10	0	0	0	0%	\$0	10	0	100%	\$225	\$0	\$225	2005	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	296	Robinson	10	0	0	0	0%	\$0	10	0	100%	\$55	\$0	\$55	2005	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	3a	County of San Diego	22	22	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2005	USFWS	USFWS	None

U.S. FWS Acqu	isitions in (County SubArea Since	1998			State of	California			Federal G	Government							<u> </u>
Refuge Unit		Property Name	Total Acres	Total Acres in MSCP MHPA	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Total Donated Value	Total Cost of Property	Year	Land Manager	Fee Owner	Funding Source
San Diego NWR - Otay- Sweetwater	175	Kelly, etal	5	0	0	0	0%	\$0	5	0	100%	\$205	\$0	\$205	2006	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	103h	TET	53	0	0	0	0%	\$0	53	0	100%	\$225	\$0	\$225	2006	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	363	Brown	41	41	0	0	0%	\$0	41	41	100%	\$50	\$0	\$50	2007	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	396	Wilhite	41	41	0	0	0%	\$0	41	41	100%	\$480	\$0	\$480	2007	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	297	Catholic Diocese	27	0	0	0	0%	\$0	27	0	100%	\$150	\$0	\$150	2009	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	103a	TET	338	338	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2009	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	272	TET (Pointe?)	261	260	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2010	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	357	Jones	20	0	0	0	0%	\$0	20	0	100%	\$230	\$0	\$230	2010	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	104	Evans	2	1	0	0	0%	\$0	2	1	100%	\$87	\$0	\$87	2011	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	176	Kennerly	10	0	0	0	0%	\$0	10	0	100%	\$80	\$0	\$80	2011	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	251	Nauman	2	0	0	0	0%	\$0	2	0	100%	\$78	\$0	\$78	2011	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	302	Salerno	10	0	0	0	0%	\$0	10	0	100%	\$80	\$0	\$80	2011	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	319	Sevel	1	0	0	0	0%	\$0	1	0	100%	\$33	\$0	\$33	2011	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	411	Lauss	2	0	0	0	0%	\$0	2	0	100%	\$52	\$0	\$52	2011	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	71	The Nature Conservancy	1858	1309	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2012	USFWS	USFWS	None

U.S. FWS Acqu	isitions in	County SubArea Since 1	1998			State of	California			Federal G	overnment							
Refuge Unit	TrackNo	Property Name	Total Acres	Total Acres in MSCP MHPA	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Total Donated Value	Total Cost of Property	Year	Land Manager	Fee Owner	Funding Source
San Diego NWR - Otay- Sweetwater	127	Cuevas	10	0	0	0	0%	\$0	10	0	100%	\$235	\$0	\$235	2012	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	266	Peppard	10	0	0	0	0%	\$0	0	0	0%	\$0	\$0	\$250	2012	USFWS	USFWS	Other
San Diego NWR - Otay- Sweetwater	149	Heuschele	6	0	0	0	0%	\$0	6	0	100%	\$35	\$0	\$35	2013	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	194	Lee	6	0	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2013	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	102b	Trimark	167	167	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2013	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	326	Bols	41	9	0	0	0%	\$0	0	0	0%	\$0	\$0	\$220	2014	USFWS	USFWS	Other
San Diego NWR - Otay- Sweetwater	388a	Bella Lago	10	10	0	0	0%	\$0	0	0	100%	\$0	\$0	\$0	2014	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	238	Spring Valley Ranch	43	43	0	0	0%	\$0	43	43	100%	\$435	\$0	\$435	2015	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	98	Beaver Hollow	120	120	0	0	0%	\$0	120	120	100%	\$975	\$0	\$975	2016	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	290	Riedman	41	41	0	0	0%	\$0	41	41	100%	\$285	\$0	\$285	2016	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	312	TNC Schooler	3	3	0	0	0%	\$0	3	3	100%	\$45	\$0	\$45	2016	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	367	Trachtenberg	4	4	0	0	0%	\$0	4	4	100%	\$70	\$0	\$70	2016	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	503	Neuner/Weller	82	82	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2016	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	2	Millar Ranch	2	0	0	0	0%	\$0	0	0	0%	\$0	\$0	UNK	2017	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	2a	GoKart	19	18	0	0	0%	\$0	0	0	0%	\$0	\$0	UNK	2016	USFWS	USFWS	None

U.S. FWS Acqu	isitions in	County SubArea Since	1998			State of	California			Federal G	iovernment							
Refuge Unit	TrackNo	Property Name	Total Acres	Total Acres in MSCP MHPA	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP MHPA	Agency % Contribution	Agency's Cost (000s)	Total Donated Value	Total Cost of Property	Year	Land Manager	Fee Owner	Funding Source
San Diego NWR - Otay- Sweetwater	327	Sickles	10	0	0	0	0%	\$0	10	0	100%	\$235	\$0	\$235	2016	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	114	North	0.32	0	0	0	0%	\$0	0.32	0	100%	\$7	\$0	\$7	2016	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	192	Alshadir*	23	23	0	0	0%	\$0	23	23	100%	\$188	\$0	\$188	2018	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	55	Chow*	19	18	0	0	0%	\$0	18	18	100%	\$155	\$0	\$155	2018	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	2e	Millar*	21	21	0	0	0%	\$0	0	0	0%	\$0	\$190	\$0	2018	USFWS	USFWS	None
San Diego NWR - Otay- Sweetwater	2d	SR94/54*	51	19	0	0	0%	\$0	0	0	0%	\$0	\$510	\$0	2018	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	2b	Bonita Meadows*	3	1	0	0	0%	\$0	0	0	0%	\$0	\$1,140	\$0	2018	USFWS	USFWS	LWCF
San Diego NWR - Otay- Sweetwater	2c	Bonita Meadows*			0	0	0%	\$0	0	0	0%	\$0	\$1,140	\$0	2018	USFWS	USFWS	LWCF
Totals		. II wassure f	11,501	8,828	217	216		\$1,300	4,816	2,913		\$29,121	\$3,830	\$30,891				

^{*2018} gains acreages reported by USFWS for these acquisitions differed from HabiTrak reported acreages. HabiTrak acreages were inserted in this table and these discrepancies will be corrected in future reports. HabiTrak numbers were used to calculate total acreages gains in the Annual Report.

CaseNum	Property Name	Total Acres	Agency's Prorated Acres Purchased	Acres in MHPA only	Prorated acres in MHPA only	Acres in MHPA Amend- ment Area	Prorated acres in MHPA Amend- ment Area	Acres in MSCP MHPA (both)	Prorated Acres in MSCP MHPA (both)	Agency % Contri- bution	Agency's Cost (000s)	Total Cost of Property (000s)	Fund Authority	Year Acquired	Land Manager	Fee Owner
CACA037104	Helix/Lambron	381	381	381	381	0	0	381	381	100%	\$1,090.0	\$1,090.0	LWCF	1997	BLM	BLM
CACA039258	TPL (Sycamore Canyon)	354	354	167	167	23	23	190	190	100%	\$750.0	\$750.0	LWCF	1998	BLM	BLM
CACA040203	Anderson	126	126	1	1	0	0	1	1	100%	\$250.0	\$250.0	LWCF	2000	BLM	BLM
CACA040237	TPL (Rancho Jamul)	1,093	1093	253	253	7	7	260	260	100%	\$2,000.0	\$2,000.0	LWCF	1999	BLM	BLM
CACA040314	TET (Marron Valley)	332	332	332	332	0	0	332	332	100%	\$1,021.0	\$1,021.0	LWCF	1999	BLM	BLM
CACA041430	Anderson/Hendron	31	31	0	0	0	0	0	0	100%	\$60.0	\$60.0	LWCF	2000	BLM	BLM
CACA041516	TET	33	33	33	33	0	0	33	33	100%	\$80.0	\$80.0	LWCF	2000	BLM	BLM
CACA042687	TPL (Clark Ranch)	947	947	4	4	0	0	4	4	100%	\$3,867.0	\$3,867.0	LWCF	2001	BLM	BLM
CACA043168	Fetters	162	162	0	0	162	162	162	162	100%	\$325.1	\$325.1	LWCF	2002	BLM	BLM
CACA044234	Cain	461	461	23	23	437	437	461	461	100%	\$1,320.0	\$1,320.0	LWCF	2002	BLM	BLM
CACA045193	Brailsford/Keller	42	42	1	1	0	0	1	1	100%	\$140.0	\$140.0	LWCF	2004	BLM	BLM
CACA045308	Klein	118	118	1	1	0	0	1	1	100%	\$470.0	\$470.0	LWCF	2004	BLM	BLM
CACA046156	TPL	359	359	4	4	0	0	4	4	100%	\$1,436.0	\$1,436.0	LWCF	2004	BLM	BLM
CACA050366	TET (O'Neal Cnyn) Donation	167 4,606	0 4,439	0 1,200	0 1,200	167 796	0 629	167 1,997	0 1,830		\$0.0	\$0.0	None	2009	BLM	BLM
		4,000	4,439	1,200	1,200	796	029	1,397	1,030		312,0U3.1	\$12,809.1				

CA Dept of Fish and Wild	life Acquisit	tions in County SubArea Since 1998				State of Calif	ornia Funded		Fe	deral Gove	rnment Funded							
Property Name	Parcel History#	Parcel Name	Total Acres	Total Acres in MSCP	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP	Agency % Contribution	Agency's Cost (000s)	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP	Agency % Contribution	Agency's Cost (000s)	Total Donated Value (000s)	Total Cost of Property	Year	Land Manager	Fee Owner	Funding Source
2.1.0	821737	Boden Canyon (Phase I)	572	506	524	463	92%	\$2,172	0	0	0%	\$0	\$442	\$2,372	1998	CDFW	CDFW	Prop 117
Boden Canyon Ecological Reserve	821826	Boden Canyon (Expansion #1)	604	548	558	506	92%	\$2,180	0	0	0%	\$0	\$430	\$2,360	1999	CDFW	CDFW	Prop 117
	821858	Boden Canyon (Expansion #2)	67	64	67	64	100%	\$210	0	0	0%	\$0	\$105	\$210	1999	CDFW	CDFW	Prop 117
	822300	Monte Vista Ranch (Iron Mountain, Expansion #3)	392	390	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2008	CDFW	CDFW	Mitigation
Canada de San Vicente	822399	Monte Vista Ranch	4,026	1,558	2,453	949	61%	\$9,700	1,573	609	39%	\$6,221	\$0	\$15,921	2009	CDFW	CDFW	Prop 12 and Section 6
	822506	Monte Vista Ranch (Iron Mountain, Expansion #4)	314	11	0	0	0%	\$0	314	11	100%	\$2,100	\$300	\$2,100	2010	CDFW	CDFW	Section 6
	822883	Bonfils	266	9	93	3	35%	\$158	173	6	65%	\$293	\$0	\$450	2014	CDFW	CDFW	Prop 117 and Section 6
	821774	Crestridge	2,372	1,958	857	707	36%	\$3,506	0	0	0%	\$0	\$1,889	\$3,506	1999	CDFW	CDFW	Prop 117
Crestridge Ecological	821964	Crestridge Expansion #1	256	256	0	0	0%	\$0	0	0	0%	\$0	\$0	\$2,258	2002	CDFW	CDFW	Mitigation
Reserve	822003	Rancho Montana Unit Pilgrim Mitigation Bank (CALTRANS)	125	125	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2002	CDFW	CDFW	N/A
	821913	Hollenbeck Canyon (Expansion #1 - Original CDFG Segment)	3241	945	3,170	925	98%	\$10,997	0	0	0%	\$0	\$0	\$11,240	2001	CDFW	CDFW	General Fund & Prop12
	822132	Hollenbeck Canyon (Expansion #2 - Honey Springs Ranch)	2012	82	2,012	82	100%	\$7,420	0	0	0%	\$0	\$0	\$7,420	2004	CDFW	CDFW	Prop 12
	822257	Hollenbeck Canyon (Expansion #3)	304	0	50	0	17%	\$205	254	0	83%	\$1,031	\$0	\$1,235	2006	CDFW	CDFW	Prop 12 and Section 6
	822632	Hollenbeck Canyon Wildlife Area, Expansion #4	577	34	178	10	31%	\$693	393	23	68%	\$1,532	\$87	\$2,250	2011	CDFW	CDFW	Prop 40 and Section 6
Hollenbeck Canyon	822907	Hollenbeck Canyon Wildlife Area, Expansion #5	381	79	88	18	23%	\$361	0	0	0%	\$0	\$0	\$1,564	2015	CDFW	CDFW	Prop 117
Wildlife Area	822908	Hollenbeck Canyon Wildlife Area, Expansion #6	187	166	66	58	35%	\$253	121	108	65%	\$467	\$0	\$720	2016	CDFW	CDFW	Prop 117
	12-2016 rptd "pending"; 12-2017 rptd 822915	Hollenbeck Canyon Wildlife Area, Expansion #7 HabiTrak 17-123	27	0	10	0	35%	\$84	18	0	65%	\$156	\$0	\$240	2016	CDFW	CDFW	Prop 117
	HabiTrak 17-124; Hist# 822923	Hollenbeck Canyon Wildlife Area APNs 59710009, 59710011, 59710012 11/7/2016	113															
Lake Hodges Ecological Reserve	821996	Pilgrim Mitigation Parcels (CALTRANS)	19	19	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2002	CDFW	CDFW	N/A
McGinty Mountain Ecological Reserve	821486	McGinty Mountain Expansion #2 - Willow Glen	200	200	110	110	55%	\$357	0	0	0%	\$0	\$583	\$647	1996	CDFW	CDFW	Prop 70

CA Dept of Fish and Wild	life Acquisi	tions in County SubArea Since 1998				State of Calif	ornia Funded		Fe	ederal Gover	rnment Funded							
Property Name	Parcel History #	Parcel Name	Total Acres	Total Acres in MSCP	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP	Agency % Contribution	Agency's Cost (000s)	Agency's Prorated Acres Purchased	Agency's Prorated Acres in MSCP	Agency % Contribution	Agency's Cost (000s)	Total Donated Value (000s)	Total Cost of Property	Year	Land Manager	Fee Owner	Funding Source
Otay Mountain Ecological Reserve	821509	Otay Mt North	211	211	211	211	100%	\$2,880	0	0	0%	\$0	\$0	\$2,880	1996	CDFW	CDFW	Prop 117 and Prop 70
	822061	Otay Village 15	1,037	1,037	392	392	38%	\$7,376	436	436	42%	\$8,200	\$0	\$19,500	2004	CDFW	CDFW	Prop 12 and Section 6
	821560	Rancho Jamul (Phase 1)	2,268	1,532	627	423	28%	\$1,050	1,641	1,108	72%	\$2,750	\$0	\$3,800	1997	CDFW	CDFW	Section 6 Prop 117 and Section 6
	821809	Rancho Jamul (Expansion #1)	1,398	986	466	329	33%	\$800	932	657	67%	\$1,600	\$800	\$2,400	1998	CDFW	CDFW	Natural Resources
	821962	Rancho Jamul ER (Expansion #2 - HQ)	40	4	40	4	100%	\$2,000	0	0	0%	\$0	\$0	\$2,000	2001	CDFW	CDFW	Prop 12
Rancho Jamul Ecological Reserve	822037	Rancho Jamul Proctor Valley Unit (Villages 14 and 16)	1,463	811	421	233	29%	\$6,475	1,042	577	71%	\$16,025	\$0	\$22,500	2003	USFWS	CDFW	Prop 12 and Section 6
		Expansion 4	3	1	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2018	CDFW	CDFW	Mitigation
	822074	Rancho Jamul Expansion #3 (CalMat Quarry)	551	551	551	551	100%	\$6,450	0	0	\$0	\$0	\$0	\$6,450	2004	CDFW	CDFW	Prop 12
	821881	Iron Mountain Wildlife Area - Boys & Girls Club	240	240	0	0	0%	\$0	0	0	\$0	\$0	\$803	\$0	2000	CDFW	CDFW	N/A
San Vicente Highlands		Briles	1,181	1,181	1,181	1,181	100%	\$3,800 \$115	0	0	\$0 \$0	\$0 \$0	\$0 \$0	\$3,800 \$115	2000 2018	CDFW CDFW	CDFW	Prop 12 Prop 117
Ü	822584	Environmental Trust Bankruptcy (San Vicente)	0	0	0	0	0%	\$0	0	0	\$0	\$0	\$2,160	\$0	2009	CDFW	CDFW	Mitigation
	821488	Sycuan Peak (Expansion #1)	122	122	122	122	100%	\$413	0	0	\$0	\$0	\$0	\$413	1996	CDFW	CDFW	EEMP
	821554	Sycuan Peak (Expansion #2)	297	297	78	78	26%	\$250	0	0	\$0	\$0	\$0	\$950	1997	CDFW	CDFW	Prop 117, ISTEA. EEMP
	821740	Sycuan Peak (Expansion #3)	253	252	253	252	100%	\$700	0	0	\$0	\$0	\$123	\$700	1998	CDFW	CDFW	Prop 70 and Prop 117
	822292	Sycuan Peak (Expansion #4)	601	177	150	44	25%	\$367	451	132	75%	\$1,100	\$0	\$1,467	2006	CDFW	CDFW	Prop 12 and Section 6
	822900	Sycuan Peak (Expansion #5)	76	69	27	24	35%	\$53	49	45	65%	\$97	\$0	\$150	2015	CDFW	CDFW	Prop 117
Sycuan Peak Ecological	822909	Sycuan Peak (Expansion #6)	2	2	1	1	35%	\$11	1	1	65%	\$19	\$0	\$30	2016	CDFW	CDFW	Prop 117
Reserve	822914	Sycuan Peak (Expansion #7) HabiTrak 17-121	10	0	4	0	35%	\$11	7	0	65%	\$21	\$0	\$32	2016	CDFW	CDFW	Prop 117
	17-122; Hist# 822920	Sycuan Peak Ecological Reserve APN 52109008 10/25/2016	40															
Totals	_		25,857	14,430	14,766	7,750		\$71,044	7,406	3,714		\$41,613	\$7,723	\$121,680				

Appendix 4 Summary of MSCP Gains

Summary of Project Gains



Acres

MSCP South San Diego County

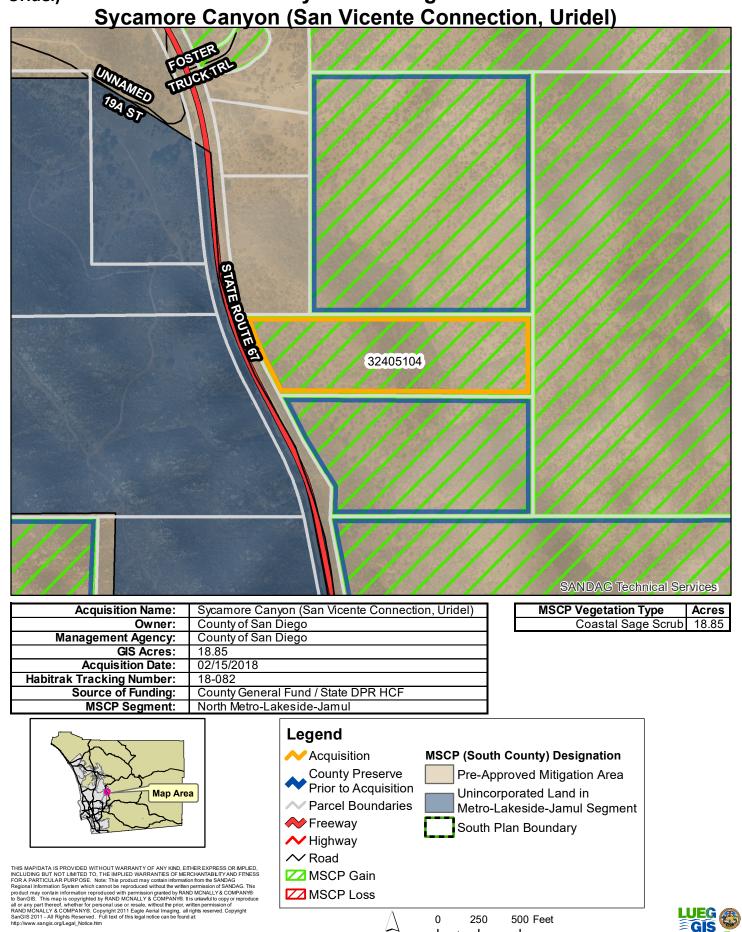
County of San Diego

From 1/1/2018 To 12/31/2018

Project Tracking #	Project Name	Location	Applicant	APN	Date Cons.	Status	Mgmt Resp.	Conservation Type	Mit. Bank Credits Used	Acres Outside Habitat Preserve	Acres Inside Habitat Preserve	Total Acres
Segment: La		1	Te no i	1	1/0/0040	lo :	lu p e	Ta	1 000	0101		25.22
18-086	Cielo Parcel "I"		Escondido Creek Conservancy	264-322-0200 264-322-0400 264-322-0500 264-322-0600 264-322-0700 264-322-0800 264-322-0900 264-322-1300 264-322-1400 264-322-1900 264-322-2000 264-322-2000 264-322-2100 264-322-2100		Gain	Non-Profit	Acquisition	0.00	24.91	0.31	25.23
				264-322-2300 264-322-2400 264-411-0400 264-411-0500								
·	nment: Lake Hodges orth Metro Lakeside Jamul								0.00	24.91	0.31	25.23
18-116	BP Thirtle, Christopher and Nicole		Private	597-262-0900	11/27/2018	Gain	Private	Easement	0.00	0.09	0.00	0.09
18-124	Esmt Doc No 0158712		Private	382-011-0500 382-011-2500 382-011-3000 382-011-3100			Private	Easement	0.00	16.54	11.19	27.73
18-083	Lakeside Linkage (Centex)		County of San Diego	397-180-1300			Local	Acquisition	0.00	4.77	70.21	74.98
18-084	Peutz Valley (Helix Land)		County of San Diego	402-160-1800 402-160-1900 402-160-2000 402-261-0100		Gain	Local	Acquisition	0.00	91.63	163.01	254.64
18-108	San Vicente Highlands		CDFW	324-050-1300	1/23/2018	Gain	State	Acquisition	0.00	0.00	7.00	7.00

Project Tracking #	ix 4 Summary of I	Location	County of S	San Diego APN	Date Cons	Status	Mgmt Resp.	Conservation Type	Mit. Bank Credits Used	Acres Outside Habitat Preserve	Acres Inside Habitat Preserve	Total Acre
	rth Metro Lakeside Jamul	Location	Арричин	ALIV	00113.	Otatas	теор.	Турс	Oreans Osca	11000110	11030170	Total Acres
18-082	Sycamore Canyon (San Vicente Connection, Uridel)		County of San Diego	324-051-0400	2/15/2018	Gain	Local	Acquisition	0.00	0.00	18.85	18.85
Total for Segi	ment: North Metro Lakeside	Jamul	•	•			•	-	0.00	113.03	270.27	383.3
Segment: So	uth County											
18-087	Alshadir		USFWS	596-010-1100	3/28/2018	Gain	Federal	Acquisition	0.00	0.00	22.66	22.60
18-088	Chow		USFWS	596-010-7900	3/27/2018	Gain	Federal	Acquisition	0.00	1.34	17.73	19.0
18-089	Millar	SE ROW of SR 94 and Singer Lane	USFWS		2/13/2018	Gain	Federal	Acquisition	0.00	0.06	20.98	21.0
18-085	Otay Ranch POM (Ridge)		County of San Diego and City of Chula Vista	598-140-0400 598-140-0500	8/9/2018	Gain	Local	Easement	0.00	0.00	255.17	255.1
18-107	Rancho Jamul ER, Expansion 4	por (3.44 ac.) of the associated parcel (86 ac)	CDFW	597-060-0500	5/8/2018	Gain	State	Acquisition	0.00	2.23	1.16	3.3
18-091	SR94/54	South of Campo Rd and Jamacha Blvd	USFWS		9/20/2018	Gain	Federal	Acquisition	0.00	1.15	18.06	19.2
Segment: So	ment: South County uth Metro Lakeside Jamul	Ta	I.			1	Ta .	1-	0.00	4.78	335.77	340.5
18-081	Bio Easement 7000175	Parcel ID: 5365174	Private		5/23/2018		Private	Easement	0.00	0.65	0.50	1.1
18-090	Bonita Meadows		USFWS	590-250-0500 594-081-0200 595-010-1500	5/23/2018	Gain	Federal	Acquisition	0.00	1.74	1.15	2.89
18-110	BP Scott, James and Carla		Private	404-220-6600	12/13/2018	Gain	Private	Easement	0.00	1.08	0.00	1.0
18-107	Rancho Jamul ER, Expansion 4	por (3.44 ac.) of the associated parcel (86 ac)	CDFW	597-060-0500	5/8/2018	Gain	State	Acquisition	0.00	0.04	0.00	0.0
18-091	SR94/54	South of Campo Rd and Jamacha Blvd	USFWS		9/20/2018	Gain	Federal	Acquisition	0.00	31.60	0.64	32.2
Total for Segi	ment: South Metro Lakeside	Jamul	•	•			-	•	0.00	35.11	2.28	37.40
Total for Age	ency: County of San Diego								0.00	177.84	608.64	786.48

Appendix 5County Acquisition: Sycamore Canyon/Goodan Ranch (San Vicente Connection, Uridel) County of San Diego



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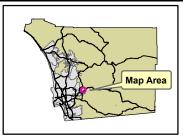
Appendix 6 County Acquisition: Lakeside Linkage (Centex)

County of San Diego Lakeside Linkage Addition



Acquisition Name:	Lakeside Linkage (Centex)
Owner:	County of San Diego
Management Agency:	County of San Diego
GIS Acres:	74.97
Acquisition Date:	12/27/2018
Habitrak Tracking Number:	18-083
Source of Funding:	County General Fund
MSCP Segment:	North Metro-Lakeside-Jamul

	Acres
Coastal Sage Scrub	70.21
Urban / Developed	4.77



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Legend

Acquisition
County Preserve
Prior to Acquisition
Parcel Boundaries
Road
MSCP (South County) Designation
Pre-Approved Mitigation Area
Unincorporated Land in
Metro-Lakeside-Jamul Segment
South Plan Boundary

MSCP Loss

http://www.sangis.org/Legal_Notice.htm

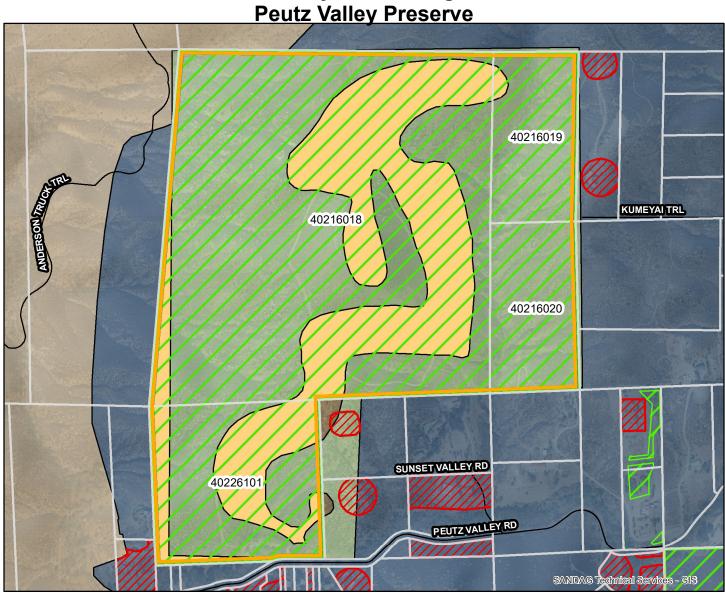
Path: \\southern\projects\mscp\annual_reports\2018\mxd\Acq_Lakeside_Linkage_Centex.mxd - Date: 12/28/2018



) 250 500 Feet



Appendix 7 County Acquisition: Peutz Valley Preserve
County of San Diego



-	
Acquisition Name:	Peutz Valley (Helix Land)
Owner:	County of San Diego
Management Agency:	County of San Diego
GIS Acres:	254.63
Acquisition Date:	12/27/2018
Habitrak Tracking Number:	18-084
Source of Funding:	County General Fund / State DPR HCF
MSCP Segment:	North Metro-Lakeside-Jamul

MSCP Vegetation Type	Acres
Chaparral	234.55
Coastal Sage Scrub	11.43
Coastal Sage-Chaparral Scrub	4.06
Oak Riparian Forest	3.82
Urban / Developed	0.77



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Legend

Acquisition

Acquisition. Not in PAMA, but still to be counted in Preserve*

County Preserve
Prior to Acquisition

Parcel Boundaries

raicei bouilu

✓ Road

MSCP Gain

MSCP Loss

MSCP (South County) Designation

Pre-Approved Mitigation Area

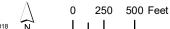
Hardline Preserve

Take Authorized Area

Unincorporated Land in

Metro-Lakeside-Jamul Segment

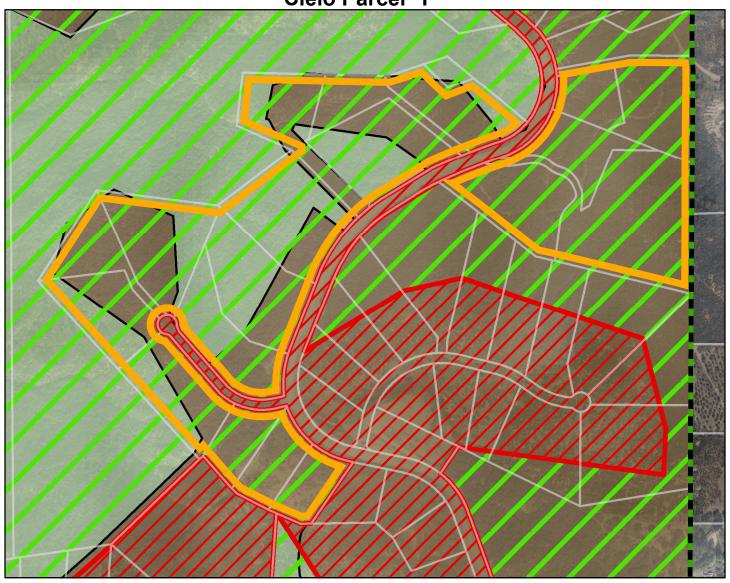
South Plan Boundary





property contributes to the biological goals of MSCP and the buildout of the 98,379-acre Preserve. 7-1 | Annual Report for the County of San Diego South County MSCP Subarea Plan, Year 21.

Appendix 8 Acquisition: The Escondido Creek Conservancy (Cielo Parcel "I") The Escondido Creek Conservancy Cielo Parcel "I"



Acquisition Name:	Cielo Parcel 'I'
Owner:	Escondido Creek Conservancy
Management Agency:	Escondido Creek Conservancy
GIS Acres:	44.63 (Total Acquired) / 25.23 (New HabiTrak Gains)
Acquisition Date:	4/6/2018
Habitrak Tracking Number:	18-086
MSCP Segment:	Lake Hodges

MSCP Vegetation Type	Acres
Chaparral	15.09
Coastal Sage-Chaparral Scrub	9.71
Oak Riparian Forest	0.42
Oak Woodland	0.02



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0 250 500 Feet



Summary of Project Losses MSCP South San Diego County



County of San Diego

From 1/1/2018 To 12/31/2018

Project Tracking #	Project Name	Location	Applicant	APN	Date of Loss	Status	CEQA Doc.	Activity Type	Acres Outside Habitat Preserve	Acres Inside Habitat Preserve	Total Acres
Segment: La	ke Hodges										
18-036	BP Biancamano		Biancamano	267-142-0500	6/15/2018	Loss	0	Single-Family Residential	0.78	0.00	0.78
Total for Seg	ment: Lake Hodges								0.78	0.00	0.78
Segment: No	orth Metro Lakeside Jamul										
18-019	BP Adrian Kaheaku		Adrian Kaheaku	241-080-2300	5/3/2018	Loss	0	Single-Family Residential	0.18	0.00	0.18
18-058	BP Arrechea, Raul and Mayora		Arrechea, Raul and Mayora	305-091-0500	9/19/2018	Loss	0	Single-Family Residential	0.22	0.00	0.22
18-002	BP Ashfar		Ashfar	269-173-0900	5/25/2018	Loss	0	Single-Family Residential	0.00	0.10	0.10
18-069	BP Bart, Brandon		Bart, Brandon	395-432-1000	10/3/2018	Loss	0	Single-Family Residential	0.00	0.06	0.06
18-075	BP Cannon, Nathan and Rachel		Cannon, Nathan and Rachel	272-161-0500	11/5/2018	Loss	0	Single-Family Residential	1.33	0.00	1.33
18-023	BP Chris Thirtle		Chris Thirtle	403-442-4500	5/7/2018	Loss	0	Single-Family Residential	0.13	0.00	0.13
18-049	BP Cuichta, Brian and Shannon		Cuichta, Brian and Shannon	377-040-3200	8/13/2018	Loss	0	Single-Family Residential	0.58	0.00	0.58
18-012	BP Dave Kleinsmith		Dave Kleinsmith	396-191-0200	3/21/2018	Loss	0	Single-Family Residential	0.09	0.04	0.13
18-044	BP Edwards, Philip		Edwards, Philip	396-192-0400	7/19/2018	Loss	0	Single-Family Residential	0.00	0.18	0.18
18-077	BP Farrell, Kevin		Farrell, Kevin	270-081-0600	6/5/2018	Loss	0	Single-Family Residential	0.47	0.00	0.47
18-010	BP Gert Zanger		Gert Zanger	285-111-1800	2/26/2018	Loss	0	Single-Family Residential	0.17	0.00	0.17
18-064	BP Grangetto Ranches Inc.		Grangetto Ranches Inc.	241-041-2000	10/16/2018	Loss	0	Single-Family Residential	0.94	0.00	0.94
18-072	BP Gray, Edward and Leslie		Gray, Edward and Leslie	396-042-5700	8/30/2018	Loss	0	Single-Family Residential	1.10	0.00	1.10
18-053	BP Hart, Eric and Autumn		Hart, Eric and Autumn	379-102-5800	8/31/2018	Loss	0	Single-Family Residential	0.23	0.00	0.23
18-063	BP Hass Family Trust		Hass Family Trust	323-110-5200	10/22/2018	Loss	0	Single-Family Residential	0.00	0.12	0.12
18-060	BP High Meadow Ranch		High Meadow Ranch	389-062-0100	10/30/2018	Loss	0	Single-Family Residential	0.90	0.00	0.90

County of San Diego

Project Tracking #	Project Name	Location	Applicant	APN	Date of Loss	Status	CEQA Doc.	Activity Type	Outside Habitat Preserve	Acres Inside Habitat Preserve	Total Acres
	rth Metro Lakeside Jamul		••					<u> </u>			
18-062	BP High Meadow Ranch		High Meadow Ranch	389-092-0800	10/29/2018	Loss	0	Single-Family Residential	0.12	1.14	1.26
18-073	BP High Meadow Ranch		High Meadow Ranch	389-091-1400	10/2/2018	Loss	0	Single-Family Residential	1.13	0.00	1.13
18-061	BP High Meadow Ranch		High Meadow Ranch	389-062-0300	10/30/2018	Loss	0	Single-Family Residential	0.85	0.00	0.85
18-043	BP Jackman, Michael		Jackman, Michael	379-240-1200	7/19/2018	Loss	0	Single-Family Residential	0.12	0.00	0.12
18-003	BP Mason Shepard		Mason Shepard	329-140-0900	2/5/2018	Loss	0	Single-Family Residential	0.16	0.00	0.16
18-070	BP Mihalik Family Trust		Mihalik Family Trust	305-050-3400	9/28/2018	Loss	0	Single-Family Residential	0.20	0.00	0.20
18-037	BP Mikhara		Mikhara	400-390-0500	6/22/2018	Loss	0	Single-Family Residential	0.75	0.33	1.08
18-114	BP Nephew, Alan and Karen		Nephew, Alan and Karen	375-160-3300	11/27/2018	Loss	0	Single-Family Residential	0.67	0.00	0.67
18-005	BP Randall Vincent		Randall Vincent	283-032-8400	1/23/2018	Loss	0	Single-Family Residential	1.34	0.00	1.34
18-017	BP Richard Fore		Richard Fore	237-290-1200	4/4/2018	Loss	0	Single-Family Residential	0.20	0.00	0.20
18-011	BP Ronald Doss		Ronald Doss	278-232-0800	2/28/2018	Loss	0	Single-Family Residential	1.47	0.00	1.47
18-115	BP Soliday, Brett and Wendy		Soliday, Brett and Wendy	269-152-0500	11/27/2018	Loss	0	Single-Family Residential	0.24	0.00	0.24
18-042	BP Statham, Richard		Statham, Richard	375-160-1800	7/19/2018	Loss	0	Single-Family Residential	0.22	0.00	0.22
18-116	BP Thirtle, Christopher and Nicole		Thirtle, Christopher and Nicole	403-442-4500	11/27/2018	Loss	0	Single-Family Residential	0.25	0.00	0.25
18-035	BP Tomkinson		Tomkinson	329-150-0500	6/15/2018	Loss	0	Single-Family Residential	1.13	0.00	1.13
18-008	BP Troy Castelblanco		Troy Castelblanco	324-010-5900	1/11/2018	Loss	0	Single-Family Residential	0.08	0.64	0.71
18-038	BP Vildibill, Lindsay		Vildibill, Lindsay	402-220-3500	6/20/2018	Loss	0	Single-Family Residential	1.11	0.00	1.11
18-079	BP Wachs, Robert and Lisa		Wachs, Robert and Lisa	276-060-1600	11/19/2018	Loss	0	Single-Family Residential	0.21	0.00	0.21
18-121	BP WTW Properties Inc		WTW Properties Inc	270-089-0800	12/21/2018	Loss	0	Single-Family Residential	0.36	0.00	0.36
18-097	COI Barraco, Frank and Thelma		Barraco, Frank and Thelma	377-020-0800	8/22/2018	Loss	0	Single-Family Residential	1.01	0.00	1.01
18-093	COI Mikha, Ryan		Mikha, Ryan	400-390-0500	3/28/2018	Loss	0	Single-Family Residential	0.39	0.00	0.39

County of San Diego

Project Tracking #	Project Name	Location	Applicant	APN	Date of Loss	Status	CEQA Doc.	Activity Type	Outside Habitat Preserve	Acres Inside Habitat Preserve	Total Acres
Segment: No	orth Metro Lakeside Jamul										
18-117	COI Morgan, Clifton		Morgan, Clifton	239-290-7900	12/17/2018	Loss	0	Single-Family Residential	0.54	0.00	0.54
18-092	COI Morreale, Alberto and Michelle		Morreale, Alberto and Michelle	329-120-5500	11/30/2018	Loss	0	Single-Family Residential	0.89	0.00	0.89
18-099	COI Paradise, John and Bonnie		Paradise, John and Bonnie	404-013-8600	4/18/2018	Loss	0	Single-Family Residential	1.22	0.00	1.22
18-109	COI Stacy, Bruce and Carol		Stacy, Bruce and Carol	402-300-3600	2/1/2018	Loss	0	Single-Family Residential	2.91	0.00	2.91
18-033	PM Presidio Riker Ranch		Presidio Riker Ranch	398-390-6700	10/12/2018	Loss	0	Single-Family Residential	6.19	0.02	6.21
18-031	PM Robert Stewart		Robert Stewart	397-060-8000	2/23/2018	Loss	0	Single-Family Residential	2.93	0.00	2.93
Total for Seg	ment: North Metro Lakeside Ja	mul	•	•	•	•	•	•	33.03	2.64	35.67
Segment: So	outh County										
18-078	BP Lone Star Property LP.		Lone Star Property LP.	648-040-1100	11/9/2018	Loss	0	Commercial	1.65	0.00	1.65
18-015	BP Ron Johnson		Ron Johnson	596-212-1200	3/27/2018	Loss	0	Single-Family Residential	0.05	1.27	1.32
18-032	COSD Sweetwater Regional Park		County of San Diego	590-110-0600	6/20/2018	Loss	0	Active Parks	4.43	0.00	4.43
Total for Seg	ment: South County								6.12	1.27	7.39
Segment: So	outh Metro Lakeside Jamul										
18-113	BP		Alvarez, Sergio	600-201-0100	12/7/2018	Loss	0	Single-Family Residential	0.16	0.00	0.16
18-068	BP acobs, Matthew and Leyna		acobs, Matthew and Leyna	599-051-2800	9/28/2018	Loss	0	Single-Family Residential	0.96	0.00	0.96
18-051	BP Altenil Corporate LTD		Altenil Corporate LTD	600-191-0600	8/14/2018	Loss	0	Single-Family Residential	3.30	0.00	3.30
18-009	BP Azevedo Family Trust		Azevedo Family Trust	579-408-2100	1/5/2018	Loss	0	Single-Family Residential	0.14	0.00	0.14
18-016	BP Ben Lapid		Ben Lapid	585-120-2300	1/1/2018	Loss	0	Single-Family Residential	0.00	1.12	1.12
18-059	BP Bernard, Teryl		Bernard, Teryl	596-280-1500	10/31/2018	Loss	0	Single-Family Residential	0.19	0.00	0.19
18-066	BP Britt, Elon		Britt, Elon	403-011-1600	10/5/2018	Loss	0	Single-Family Residential	0.00	0.99	0.99
18-006	BP Bruno Del Bianco		Bruno Del Bianco	399-320-4200	2/6/2018	Loss	0	Single-Family Residential	0.21	0.00	0.21
18-034	BP Burruss		Burruss	590-230-4800	6/12/2018	Loss	0	Single-Family Residential	0.15	0.00	0.15
18-052	BP Danner, Kenneth		Danner, Kenneth	597-042-3500	8/16/2018	Loss	0	Single-Family Residential	1.22	0.00	1.22

^{9-3 |} Annual Report for the County of San Diego South County MSCP Subarea Plan, Year 21. May 22, 2019

County of San Diego

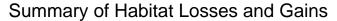
Appendi	ix 9 Summary of ivi		County of San Diego					Acres Outside	Acres Inside		
Project Tracking #	Project Name	Location	Applicant	APN	Date of Loss	Status	CEQA Doc.	Activity Type	Habitat Preserve	Habitat Preserve	Total Acres
Segment: So	uth Metro Lakeside Jamul										
18-080	BP Darrell Little		Darrell Little	511-250-1400	6/7/2018	Loss	0	Single-Family Residential	0.32	0.00	0.32
18-022	BP David Dennett		David Dennett	401-171-1800	5/14/2018	Loss	0	Single-Family Residential	0.23	0.00	0.23
18-055	BP DM Construction		DM Construction	599-200-5600	8/8/2018	Loss	0	Single-Family Residential	0.46	0.00	0.46
18-029	BP Donovan family trust		Donovan family trust	522-020-4400	4/10/2018	Loss	0	Single-Family Residential	0.00	0.22	0.22
18-076	BP Driscoll, Shaun and Cynthia		Driscoll, Shaun and Cynthia	404-471-0600	11/2/2018	Loss	0	Single-Family Residential	1.08	0.00	1.08
18-119	BP Eden, Kory		Eden, Kory	599-051-1000	12/24/2018	Loss	0	Single-Family Residential	0.00	0.15	0.15
18-050	BP Ekel, Steven and Heidi		Ekel, Steven and Heidi	589-424-3300	8/15/2018	Loss	0	Single-Family Residential	0.14	0.00	0.14
18-030	BP Fauzi Zora		Fauzi Zora	519-132-0700	2/5/2018	Loss	0	Single-Family Residential	0.41	0.56	0.97
18-020	BP Hagan Family Trust		Hagan Family Trust	599-220-7000	5/2/2018	Loss	0	Single-Family Residential	0.76	0.00	0.76
18-040	BP Holzer, William		Holzer, William	401-130-1700	7/5/2018	Loss	0	Single-Family Residential	0.83	0.00	0.83
18-067	BP Huddleston, Richard and Donna		Huddleston, Richard and Donna	513-073-2500	10/5/2018	Loss	0	Single-Family Residential	0.27	0.00	0.27
18-025	BP James Larson		James Larson	596-250-0700	4/16/2018	Loss	0	Single-Family Residential	1.85	0.00	1.85
18-014	BP Jeremiah Larson		Jeremiah Larson	596-250-0900	3/26/2018	Loss	0	Single-Family Residential	1.63	0.00	1.63
18-120	BP Kimari, Andrew		Kimari, Andrew	517-241-0500	12/20/2018	Loss	0	Single-Family Residential	0.43	0.00	0.43
18-111	BP Knoll, David		Knoll, David	597-262-0900	12/13/2018	Loss	0	Single-Family Residential	0.17	0.00	0.17
18-047	BP Lapid, Joshua		Lapid, Joshua	585-120-0800	8/7/2018	Loss	0	Single-Family Residential	0.00	1.25	1.25
18-056	BP Maizuss, Janet		Maizuss, Janet	401-210-1800	9/10/2018	Loss	0	Single-Family Residential	0.00	0.04	0.04
18-007	BP Matt Schick		Matt Schick	599-140-5300	1/3/2018	Loss	0	Single-Family Residential	1.09	0.00	1.09
18-026	BP Michael Freyler		Michael Freyler	600-131-1600	2/27/2018	Loss	0	Single-Family Residential	1.68	0.00	1.68
18-071	BP Mounier, Donald and Wanda		Mounier, Donald and Wanda	401-210-1600	9/21/2018	Loss	0	Single-Family Residential	0.00	0.31	0.31
18-074	BP Nevarez, Victor and Raquel		Nevarez, Victor and Raquel	599-101-0300	11/6/2018	Loss	0	Single-Family Residential	0.00	0.13	0.13

County of San Diego

Project	Draiget Name	Location	Applicant	APN	Date of	Status	CEQA Doc.	Activity Type	Outside Habitat Preserve	Acres Inside Habitat Preserve	Total Acres
Tracking #	Project Name uth Metro Lakeside Jamul	Location	Applicant	APN	LOSS	Status	DOC.	Activity Type	Preserve	Preserve	Total Acres
	i	1	Nicener Contolor	I	5/8/2018	Lana	То	Cinalo Family	0.25	0.00	0.25
18-021	BP Nicanor Gonzalez		Nicanor Gonzalez	519-110-2200	5/8/2018	Loss	ľ	Single-Family Residential	0.25	0.00	0.25
18-118	BP Nichelson, Adam		Nichelson, Adam	519-200-2500	12/27/2018	Loss	0	Single-Family Residential	0.16	0.00	0.16
18-027	BP Nickolas Barron		Nickolas Barron	649-170-2200	1/1/2018	Loss	0	Single-Family Residential	1.42	0.00	1.42
18-054	BP Ocampo, Enrique		Ocampo, Enrique	579-395-2300	8/31/2018	Loss	0	Single-Family Residential	0.23	0.00	0.23
18-045	BP Old Stone Inc.		Old Stone Inc.	578-041-2400	7/17/2018	Loss	0	Single-Family Residential	0.24	0.00	0.24
18-004	BP Patrick Merlet		Patrick Merlet	504-242-5700	1/26/2018	Loss	0	Single-Family Residential	0.49	0.00	0.49
18-122	BP Peter Rios Estates		Peter Rios Estates	398-110-3200	1/11/2018	Loss	0	Multi-Family Residential	2.36	0.00	2.36
18-028	BP Rigoberto Valenzuela		Rigoberto Valenzuela	649-190-1800	4/17/2018	Loss	0	Single-Family Residential	0.99	0.00	0.99
18-024	BP Robert Harris		Robert Harris	599-280-1900	4/9/2018	Loss	0	Single-Family Residential	0.15	0.00	0.15
18-048	BP Roland, Robert and Melissa		Roland, Robert and Melissa	599-110-4700	8/2/2018	Loss	0	Single-Family Residential	0.00	0.18	0.18
18-041	BP Rosales		Rosales	401-061-0800	5/31/2018	Loss	0	Single-Family Residential	1.31	0.00	1.31
18-110	BP Scott, James and Carla		Scott, James and Carla	404-220-6600	12/13/2018	Loss	0	Single-Family Residential	1.42	0.00	1.42
18-046	BP Snyder, James		Snyder, James	504-211-1700	7/19/2018	Loss	0	Single-Family Residential	1.17	0.00	1.17
18-039	BP Sorchy		Sorchy	404-160-7700	6/28/2018	Loss	0	Single-Family Residential	0.62	0.00	0.62
18-065	BP Velarde, Ramon		Velarde, Ramon	404-251-1900	10/10/2018	Loss	0	Single-Family Residential	1.26	0.00	1.26
18-057	BP Vongsotsavanh, Art and Sida		Vongsotsavanh, Art and Sida	521-010-0200	9/13/2018	Loss	0	Single-Family Residential	1.51	0.00	1.51
18-112	BP Westmorland, Robin		Westmorland, Robin	504-250-1400	12/12/2018	Loss	0	Single-Family Residential	0.73	0.00	0.73
18-106	COI Agave Rentals		Agave Rentals	584-582-4700	12/12/2018	Loss	0	Single-Family Residential	0.20	0.07	0.27
18-102	COI Brown, Gregory		Brown, Gregory	508-230-0100	11/7/2018	Loss	0	Single-Family Residential	2.76	0.00	2.76
18-094	COI CU HOA		CU HOA	402-211-0200	2/13/2018	Loss	0	Single-Family Residential	0.08	1.58	1.66
18-098	COI Kemerko Realty LLC		Kemerko Realty LLC	401-090-8500	2/14/2018	Loss	0	Single-Family Residential	4.59	0.00	4.59

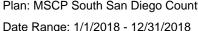
County of San Diego

Project Tracking #	Project Name	Location	Applicant	APN	Date of Loss	Status	CEQA Doc.	Activity Type	Outside Habitat Preserve	Acres Inside Habitat Preserve	Total Acres
Segment: So	outh Metro Lakeside Jamul							<u> </u>			
18-096	COI Larson, James and Ruth		Larson, James and Ruth	596-250-0700	3/15/2018	Loss	0	Single-Family Residential	3.21	0.00	3.21
18-101	COI Osmon Homes LLC		Osmon Homes LLC	504-172-7600	11/14/2018	Loss	0	Single-Family Residential	0.35	0.00	0.35
18-100	COI Root, Daniel and Katherine		Root, Daniel and Katherine	404-320-5900	5/29/2018	Loss	0	Single-Family Residential	0.26	0.00	0.26
18-105	COI Sarkis, Youel and Jwan		Sarkis, Youel and Jwan	596-270-0100	8/27/2018	Loss	0	Single-Family Residential	1.95	0.00	1.95
18-095	COI Smith Family Trust		Smith Family Trust	520-050-2900	6/29/2018	Loss	0	Single-Family Residential	2.03	0.00	2.03
18-104	COI Weinrich Family Enterprises Inc		Weinrich Family Enterprises Inc	579-396-5400	6/22/2018	Loss	0	Single-Family Residential	0.17	0.00	0.17
18-103	COI Weinrich Family Enterprises Inc		Weinrich Family Enterprises Inc	579-396-4200	6/22/2018	Loss	0	Single-Family Residential	0.15	0.00	0.15
18-032	COSD Sweetwater Regional Park		County of San Diego	590-110-0600	6/20/2018	Loss	0	Active Parks	0.00	0.00	0.00
Total for Seg	ment: South Metro Lakeside Ja	mul	•	•	•		•	•	47.78	6.58	54.36
Total for Age	ency: County of San Diego								87.71	10.49	98.20





Project Gain Status: Gain Project Loss Status: Loss





							Date Ka	nge. 1/1/2016	- 12/31/20					
County of San Diego		Δ	cres Inside the H	abitat Prese	rve Planning Are	а		Acres Outside the	Habitat Pre	eserve		Total	Acres	
		Hab	oitat Loss		Habitat Gain		Hab	oitat Loss	Hal	oitat Gain	Hab	oitat Loss	Hal	oitat Gain
Habitat Type	Target Cons.	Current Period	Cummulative	Current Period	Cummulative	Cons. to Date %	Current Period	Cummulative	Current Period	Cummulative	Current Period	Cummulative	Current Period	Cummulative
Beach	0	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Saltpan	0	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southern Foredunes	0	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southern Coastal Bluff Scrub	0	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coastal Sage Scrub	42,873	2.76	684.78	373.31	29,438.37	68.66 %	7.87	1,344.69	29.90	7,866.46	10.63	2,029.46	403.22	37,304.83
Maritime Succulent Scrub	6	0.00	0.00	0.00	3.89	64.77 %	0.00	0.00	0.00	8.23	0.00	0.00	0.00	12.12
Chaparral	39,871	3.22	300.19	192.46	33,827.24	84.84 %	14.93	2,867.60	97.95	9,517.22	18.15	3,167.78	290.41	43,344.45
Southern Maritime Chaparral	5	0.00	1.95	0.00	5.82	116.31 %	0.00	10.06	0.00	22.66	0.00	12.01	0.00	28.47
Coastal Sage-Chaparral Scrub	1,325	0.00	12.40	2.82	1,008.94	76.15 %	5.58	133.58	10.95	1,115.49	5.58	145.98	13.77	2,124.43
Grassland	3,171	1.25	52.50	5.99	1,958.76	61.77 %	7.97	1,188.58	6.04	980.50	9.22	1,241.08	12.03	2,939.26
Southern Coastal Salt Marsh	0	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Freshwater Marsh	233	0.00	0.06	6.56	143.24	61.48 %	0.00	4.46	0.00	59.74	0.00	4.52	6.56	202.98
Riparian Forest	348	0.00	0.45	9.59	311.67	89.56 %	0.00	2.00	2.68	74.33	0.00	2.45	12.27	385.99
Oak Riparian Forest	2,192	0.00	32.87	2.73	1,004.27	45.82 %	0.65	47.15	3.68	472.17	0.65	80.02	6.42	1,476.44
Riparian Woodland	20	0.00	0.00	0.00	10.88	54.39 %	0.00	0.00	0.00	6.45	0.00	0.00	0.00	17.33
Riparian Scrub	383	0.00	4.28	8.45	121.93	31.83 %	0.00	14.37	0.64	69.06	0.00	18.66	9.09	190.98
Oak Woodland	2,211	1.12	42.96	0.00	1,112.56	50.32 %	3.09	161.57	0.00	466.81	4.20	204.53	0.00	1,579.38
Torrey Pine Forest	0	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tecate Cypress Forest	5,589	0.00	0.00	0.00	5,601.41	100.22 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,601.41
Eucalyptus Woodland	105	0.00	9.19	0.00	44.29	42.19 %	0.36	414.30	0.00	66.82	0.36	423.49	0.00	111.12
Open Water	149	0.00	0.00	0.00	38.93	26.13 %	0.00	6.24	4.27	37.42	0.00	6.24	4.27	76.36
Disturbed Wetland	90	0.00	1.99	0.30	78.99	87.77 %	0.00	16.25	0.00	26.00	0.00	18.24	0.30	104.99
Natural Floodchannel	225	0.00	0.00	0.00	30.76	13.67 %	0.00	0.00	0.00	4.83	0.00	0.00	0.00	35.59
Shallow Bays	0	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pacific Ocean/Deep Bay	0	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.80

10.86

30.60

87.71

709.28

1,346.71

2,071.33

10,338.16

3.68

0.00

18.03

177.84

365.98

588.75

2,318.85

24,067.77

7.88

10.91

30.60

Note: The Agriculture and Urban/Developed category is included to account for all land included within a project and habitat preserve planning area.

6.41

0.00

0.00

608.64

455.51

544.28

73.40

75,815.13

110.61

97.76

42.77

1,394.77

0

0

0

2.08

0.06

0.00

10.49

Disturbed Land

Urban/Developed

Agency Total:

Agriculture

Appendix 10 Summary of Habitat Losses and Gains

819.89

1,444.47

2,114.10

11,732.93

10.09

0.00

18.04

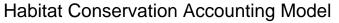
786.48

821.49

2,863.13

99,882.90

662.15







Appendix 11 Habitat Conservation Accounting Model

From 1/1/2018 To 12/31/2018

Project Gain Status: Gain Project Loss Status: Loss

County of San Diego Beach	Habitat Preserve 0	Target 0	Estimated Take	Conservation Ratio		Max. Allowable Impacts		+ or - Max.
2000.1			0		Preserve 0.00	for the Current Period	Current Period 0.00	Allowable Impacts
Saltpan		0			0.00	0.00	0.00	n/a
Southern Foredunes	0	0	0		0.00	0.00	0.00	n/a
Southern Coastal Bluff Scrub	0	0	0		0.00	0.00	0.00	n/a
Coastal Sage Scrub	23,569	18,717	4,852	3.86	12,205.22	3,332.76	8.64	-
Maritime Succulent Scrub	0	0	0	0.00	0.00	0.00	0.00	n/a
Chaparral	22,179	18,662	3,517	5.31	13,842.97	2,699.63	18.15	-
Southern Maritime Chaparral	0	0	0	0.00	0.00	0.00	0.00	n/a
Coastal Sage-Chaparral Scrub	1,366	1,152	214	5.38	824.29	159.21	5.58	-
Grassland	2,145	1,741	404	4.31	1,085.05	267.01	6.20	-
Southern Coastal Salt Marsh	0	0	0	0.00	0.00	0.00	0.00	n/a
Freshwater Marsh	15	15	0	0.00	6.75	0.00	0.00	n/a
Riparian Forest	84	84	0	0.00	86.09	0.00	0.00	n/a
Oak Riparian Forest	2,044	2,043	1	2,043.00	931.12	0.51	0.65	+
Riparian Woodland	6	6	0	0.00	4.24	0.00	0.00	n/a
Riparian Scrub	298	298	0	0.00	55.10	0.00	0.00	n/a
Oak Woodland	2,355	1,912	443	4.32	1,026.33	258.32	4.20	-
Torrey Pine Forest	0	0	0	0.00	0.00	0.00	0.00	n/a
Tecate Cypress Forest	0	0	0	0.00	0.00	0.00	0.00	n/a
Eucalyptus Woodland	53	41	12	3.42	13.33	4.71	0.36	-
Open Water	124	124	0	0.00	18.39	0.00	0.00	n/a
Disturbed Wetland	52	52	0	0.00	47.10	0.00	0.00	n/a
Natural Floodchannel	197	197	0	0.00	12.81	0.00	0.00	n/a
Shallow Bays	0	0	0	0.00	0.00	0.00	0.00	n/a
Pacific Ocean/Deep Bay	0	0	0	0.00	0.00	0.00	0.00	n/a
Disturbed Land	1,259	0	1,259	0.00	253.70	0.00	7.88	+
Agriculture	1,608	0	1,608	0.00	485.44	0.00	9.16	+

Appendix 11 Habitat Conservation Accounting Model

County of San Diego	Total Subarea Habitat Preserve	Conservation Target	Es	stimated Take	Conservation Ratio	Cumulative Conservation Inside Habitat Preserve	Max. Allowable Impacts for the Current Period	Actual Loss Inside Habitat Preserve for Current Period	+ or - Max. Allowable Impacts
Urban/Developed	0		0	0	0.00	29.99	0.00	29.20	+
Total Acres for Agency: County of San Diego						30.927.93		90.03	

Note: The Agriculture and Urban/Developed category is included to account for all land included within a project and habitat preserve planning area.

This report only pertains to the Metro-Lakeside-Jamul segment of the County's subarea plan. It includes gains that occur within the Preapproved Mitigation Area (PAMA) while counting all losses within the entire segment.

Appendix 12 Mitigation Bank Status

	Coast Live Oak Woodland	Coastal Sage Scrub	Disturbed/ Ruderal	Engelmann Oak Woodland	Marsh/ Riparian Scrub/Floodplain	Mixed Chaparral	Native Grasslands	Non- Native Grasslands	Southern Willow Scrub	Southern Riparian/ Oak Woodland	Totals
Boden Canyo	n			-						-	
Total	0.8	10.2	0	2.5	0	14.9	0.1	1	0	10	39.5
Used	0.8	10.2	0	2.5	0	0	0	0.32	0	10	23.82
Remaining	0	0	0	0	0	14.9	0.1	0.68	0	0	15.68
Old Castle											
Total	0.62	41.2	0	0	0	17.95	0	0	0.25	0	60.02
Used	0.62	40.856	0	0	0	3.53	0	0	0.11	0	45.116
Remaining	0	0.344	0	0	0	14.42	0	0	0.14	0	14.904
Rancho San D	iego										
Total	4.8	226.2	80.3	0	2.4	19.6	3.4	0	0	72.5	409.2
Used	2.85	126.2597	6.215	0	0.34	7.63	0.51	0	0	16.7	160.5047
Remaining	1.95	99.9403	74.085	0	2.06	11.97	2.89	0	0	55.8	248.6953
Singing Hills											
Total	0	69.7	0	0	0	0	0	0	0	0	69.7
Used	0	0.695	0	0	0	0	0	0	0	0	0.695
Remaining	0	69.005	0	0	0	0	0	0	0	0	69.005
Sweetwater											
Total	0	0	0	0	24.33	0	0	0	0	0	24.33
Used	0	0	0	0	17.714	0	0	0	0	0	17.714
Remaining	0	0	0	0	6.616	0	0	0	0	0	6.616
Total Remaining	1.95	169.2893	74.085	0	8.676	41.29	2.99	0.68	0.14	55.8	354.9003

^{12-1 |} Annual Report for the County of San Diego South County MSCP Subarea Plan, Year 21 May 22, 2019

Appendix 13 COIs Issued in 2018 for Clearing for Single-Family Residences on Small Parcels (10 acres or less in size)

	Date Issued	APN	Acres Allowed to be Cleared by BMO	Actual Site Acreage
1	1/21/2018	520-221-02	5 acres	2.91
2	2/1/2018	420-300-36	5 acres	3.14
3	2/13/2018	402-211-02	2 acres	2.68
4	2/14/2018	401-090-85	10 acres	4.27
5	2/27/2018	272-160-50	5 acres	1.06
6	3/1/2018	404-160-77	5 acres	0.62
7	3/15/2018	596-250-14 (596-250-07)	5 acres	10
8	3/19/2018	403-220-47	5 acres	1.3
9	3/23/2018	504-211-17	5 acres	1.12
10	3/28/2018	400-390-05	5 acres	1.8
11	3/28/2018	272-160-44	5 acres	2.17
12	4/18/2018	404-013-86 (404-013-38)	5 acres	1.56
13	5/29/2018	404-320-59	5 acres	4.95
14	5/29/2018	579-376-24	5 acres	6,600 sq ft
15	6/22/2018	404-332-29	5 acres	3.22
16	6/22/2018	579-396-42	5 acres	6,800 sq ft
17	6/22/2018	579-396-54	5 acres	7,500 sq ft
18	6/29/2018	520-050-29	5 acres	9.71
19	8/16/2018	520-021-18	5 acres	2.12
20	8/22/2018	377-020-08	5 acres	0.99
21	8/27/2018	596-270-01	10 acres	2.52
22	10/2/2018	303-014-13	5 acres	2
23	10/2/2018	399-320-48	5 acres	12,200 sq ft
24	10/2/2018	399-320-49	5 acres	11,900 sq ft
25	10/3/2018	402-330-36	5 acres	1.19
26	10/23/2018	404-320-45	5 acres	5.31
27	10/29/2018	269-193-22	10 acres	1.21
28	11/7/2018	508-230-01	5 acres	2.85
29	11/14/2018	504-172-76	5 acres	24,300 sq ft
30	11/30/2018	329-120-55	5 acres	6.90 acres
31	12/6/2018	519-220-62	5 acres	1.07
32	12/12/2018	584-582-47	5 acres	0.27
33 Note	12/17/2018	239-290-79	5 acres	0.71

Notes:

Parenthesis include the former APNs. APN – Assessor Parcel Number BMO – Biological Mitigation Ordinance

sq ft - square feet

Appendix 14 COIs Issued for Agricultural Clearing

Date Issued	APN	Permit Number	Site Name	Acres
12/11/00	399-020-17	AE301	Gibson	28.60
03/16/01	513-080-23	AE01-005	Boney	2.00
01/14/04	285-030-10	AD03-051	Royden	9.86
01/14/04	327-011-03	AD03-051	Royden	42.72
08/09/04	375-171-03	AD 04-048	Shank	1.00
08/09/04	375-171-04	AD 04-048	Shank	1.00
3/31/2011	Portions of 389-091-05, -06, -25	None	High Meadow Ranch	6.55
8/10/2011	240-270-58, 242-010-71, 242-010-72, 242-030-37, 242-030-38, 242-031-03, 242-080-01, 242-080-07, 243-110-01, 243-110-04, 243-150-05, 244-020-04	AD 11-017	Rancho Guejito	763.00
10/13/2011	242-070-07	AD 09-058	Rockwood Ranch	29.30
2/12/2015	242-070-07	None	Rancho Guejito	13.77
7/2/2015	243-020-05,07,10, 243-030-02, 243- 070-01,08	PDS2015-LDGRMN-20025	Vineyard Ranch	35.9
12/3/2015	242-010-71,73, 242-030-38, 242-070- 09,12,13,14, 242-270-57	PDS2015-LDGRMJ-30016	Rancho Guejito	279.1
1/14/2016	585-113-22	PDS2015-AD-15-013	Nencini	10.9
		Total		1,223.7

Appendix 15 2018 Stewardship and Adaptive Management Activities at County Parks and Preserves

Preserve	Status	Habitat Restoration	Invas. Spec. Control + Removal	Hazardous or Non-Native Tree Removal	Trail Maint. & Repair/ Restoration	Signage Install/ Repair + Access Control	Fencing Install/ Repair	Fuel Mgmt.	Environmental Education	Research
Barnett Ranch Preserve	Open	Planted 17 trees, 20 non-tree species	1 acre	Removed 5 trees	Backfilled partially eroded trail	Installed 6 signs	Installed 1 entry gate	3 acres	Ranger-Led Hike and Tree Planting, 17 visitors	Yes
Boulder Oaks Preserve	Closed	Planted 70 trees, 142 non-tree species	12 acres	Removed 15 trees	16' bridge repair	Installed 15 signs	Repaired ~40' of barbed wire fencing, Installed 200' of new cedar fence	6 acres	n/a	Yes
Cactus Park	Open	n/a	n/a	n/a	n/a	n/a	n/a	Maintained fire breaks	n/a	Yes
Damon Lane Park	Open	Planted 6 trees	10 acres	Removed 101 trees	n/a	Installed 5 signs	Repaired 20' of chain link, Repaired ¼ mile of wood/steel fence, Installed 3 electronic/ chain gates	Maintained fire breaks	n/a	Yes
Del Dios Highlands Preserve	Open	n/a	13.5 acres	Removed 40 trees	Brushed out illegal trails posted signage	Installed 2 signs	Replaced 2 swing gates, Installed two farm gates	n/a	n/a	Yes

Appendix 15 Stewardship and Adaptive Management Activities at County Parks and Preserves

Preserve	Status	Habitat Restoration	Invas. Spec. Control + Removal	Hazardous or Non-Native Tree Removal	Trail Maint. & Repair/ Restoration	Signage Install/ Repair + Access Control	Fencing Install/ Repair	Fuel Mgmt.	Environmental Education	Research
Dictionary Hill	Open	n/a	n/a	n/a	n/a	n/a	Installed 1600' new post-wire fence and 1 new gate	4.5 acres	1 ranger-led hike, 10 visitors	No
Dos Picos Park	Open	Planted 259 trees, 300 non-tree species	12 acres	Removed 6 trees	n/a	7 signs installed	Repaired 25' chain-link fence	5 acres	Animal showings, guided nature hikes, cooking demonstration 700+ visitors	Yes
El Capitan Preserve	Open	n/a	.25 acre	n/a	Repairs to El Capitan Trail	5 signs repaired 4 signs replaced	n/a	n/a	Warrior Hike, 233 participants	Yes
El Monte Park	Open	Planted 21 trees	~16 acres	Removed 10 trees	Regular patrols for unauthorized trail usage	n/a	Repaired 60' of concrete fence	Fire break established	Discovery Program, Hawk Talk, nature Hikes, Movies at the park, 1800+ visitors	Yes
Flinn Springs	Open	Planted 67 trees	1 acre	n/a	n/a	n/a	Installed 1 new horse crossing gate	6 acres	17 events, 800 visitors	Yes
Furby-North Property	Closed	n/a	Population of invasive stinknet was treated	n/a	n/a	n/a	Installed 3 new wire fences & t- stakes & 6 new metal swing gates	n/a	n/a	Yes

Appendix 15 Stewardship and Adaptive Management Activities at County Parks and Preserves

Preserve	Status	Habitat Restoration	Invas. Spec. Control + Removal	Hazardous or Non-Native Tree Removal	Trail Maint. & Repair/ Restoration	Signage Install/ Repair + Access Control	Fencing Install/ Repair	Fuel Mgmt.	Environmental Education	Research
Lakeside Linkage Preserve	Open	n/a	0.5 acre	Removed 4 trees	n/a	n/a	n/a	Maintained fire breaks	Ranger Led-Hike, 35 visitors	Yes
Lawrence and Barbara Daley Preserve	Closed	Planted 100 trees	n/a	Removed 42 trees	n/a	n/a	n/a	5 acres	n/a	Yes
Los Penasquitos Canyon Preserve	Open	Planted 175 trees, 100 non-tree species, .5 acre coastal sagebrush	31 acres	Removed 157 trees	1.5 acre	n/a	Installed ~320' new wood/wire fence	Maintained fire breaks	29 programs, 1,850 visitors	Yes
Luelf Pond	Open	Planted 40 trees, 24 non-tree species	2 acres	Removed 14 trees	Spin trimmed .7 miles of trail	7 new signs	Installed ~20' of barbless wire fence	~ 1 acre	n/a	Yes
Lusardi Creek Preserve	Open	n/a	1 acre	n/a	n/a	n/a	n/a	n/a	n/a	Yes
Oakoasis Preserve	Open	Planted 2,205 trees	38 acres	n/a	n/a	2 signs repaired	n/a	Dead brush removal in campground Maintained. fire breaks	Star Parties, Interpretive Talks, Plantapalooza and Moves in the Park, 1,213 visitors	Yes
Otay Lakes County Park	Open	Planted 4 trees	16 acres	n/a	7 acres	n/a	n/a	10 acres	16 programs, 335 visitors	Yes
Otay Valley Regional Park	Open	n/a	19 acres	n/a	n/a	K-rail barriers	n/a	n/a	1 program, 150 visitors	Yes

Appendix 15 Stewardship and Adaptive Management Activities at County Parks and Preserves

Preserve	Status	Habitat Restoration	Invas. Spec. Control + Removal	Hazardous or Non-Native Tree Removal	Trail Maint. & Repair/ Restoration	Signage Install/ Repair + Access Control	Fencing Install/ Repair	Fuel Mgmt.	Environmental Education	Research
Ramona Grasslands	Open	Planted 20 non-tree species	10 acres	Removed 2 trees	3-mile trial opened	13 signs installed	48' of pillar log fencing	n/a	2 Nature programs, 446 visitors	Yes
Louis A. Stelzer Park	Open	Planted 1,047 trees	14 acres	n/a	n/a	4 signs repaired	Installed 60' wooden fence, 2 wooden gates	n/a	82 Classes, Interpretive Talks, Variety of Programming, ~5,300 visitors	Yes
Stoneridge Preserve	Closed	n/a	n/a	n/a	n/a	4 signs installed	n/a	1 acre	n/a	Yes
Sweetwater Regional Park	Open	n/a	.4 acres	removed 64 trees	n/a	n/a	Repaired 3 lodge poll fences	Maintained fire breaks	Hawk Talk, Interpretive Presentations, guided hike, Green Friday, 200 visitors	Yes
Sycamore Canyon/Goodan Ranch Preserve	Open	Planted 99 trees, 150 non-tree species	50 acres	Removed 2 trees	n/a	8 signs installed	260' of t- post fencing	Maintained fire breaks	13 programs, 350+ visitors	Yes
Tijuana River Valley Regional Park	Open	Planted 50 trees, 50 non-trees	~ 3.5 acres	Removed 10 trees	Closing and patrol of illegal trails	62 signs installed	3000' of lodge pole	~4 acres	18 nature programs, 160 visitors	Yes

	RMP Number	Project Name	APNs	Final RMP Date	Habitat Manager	Annual Report Due	Habitat Conservation Area Description	Surveys ¹	Project graded / built?	Monitoring / Maintenance Status
1	PDS2008- 3914-98-001	Bernardo Lakes	678-070-31, 678-420-26, 27, 678-421- 01, 678-422- 01,02,04, 678-430-25, 35, 678-432- 01	February 1998	None.	December 31	A total of 111.8 acres of open space is dedicated with 71.8 acres of the 111.8 previously conveyed. The open space is located west of the current western termini of Rancho Bernardo Road, immediately north of Artesian Road and wets of Four Gee Road. The property consists mostly of coastal sage scrub with some freshwater marsh, southern willow scrub, and non-native grassland.	Sensitive Species (annually)	yes	Former TET property. Per Open Space Maintenance Agreement, HOA responsible to find replacement HM. Enforcement is under discussion.
2	PDS2008- 3914-99-001	4S Ranch, Ralphs Family Preserve	678-030-07, 678-031-01	Sep-99	Joaquin Meza	August 1	Approximately 1,065 acres immediately south of Lake Hodges, including coastal sage scrub, southern mixed chaparral, native and nonnative grassland.	Report any new populations of invasive plants	yes	2017-2018 report was submitted and reviewed by county staff, no major concerns.
3	PDS2012- 3914-99- 002-01 and PDS2012- 3914-99- 002-02	4S Ranch	Lusardi Creek Portion (south) 312- 284-01, 312- 285-01, 312- 150-04 Artesian Creek Portion (mid) 678- 670-21, 678- 671-03 North 678-050-49, 678-030-08, 678-050-51	Sep-99	Kyle Matthews Habitat Restoration Sciences, Inc. 4901 El Camino Real, Suite D, Carlsbad, CA, 92008	September 30	A total of approximately 547 acres of open space is located on this property. 312 acres are located in the northern portion of the project, adjacent to the Ralph's Family Reserve, and 230 acres is located in the southerly portion of the site within La Jolla Valley, surrounding the Lusardi Creek riparian corridor.	Report any new populations of invasive plants	yes	2017-2018 report was submitted and reviewed by county staff, no major concerns.

	RMP Number	Project Name	APNs	Final RMP Date	Habitat Manager	Annual Report Due	Habitat Conservation Area Description	Surveys ¹	Project graded / built?	Monitoring / Maintenance Status
4	PDS2008- 3914-99-003	Salviati-Golem "East Gorge"	678-020-02, 03, 678-021- 02, 03, 265- 320-03	Jan-00	San Dieguito River Valley Joint Powers Authority	December 31	154 acres of open space was set aside to preserve California adolphia, southwestern spiny rush, San Diego marsh elder, Del Mar manzanita, wartstemmed ceanothus, California gnatcatcher, southern California rufous-crowned sparrow, coastal western whiptail, and mountain lion.	CAGN (twice annually)	yes	Annual reports have not been submitted. Enforcement is under discussion.
5	PDS2008- 3914-99-004	Starwood- Crosby at Rancho Santa Fe	265-320-18, 21, 22, 24, 18, 265-291- 21, 25, 27, 265-290-41, 43, 267-050- 42, 44, 46	6/28/2004	Rincon Consultants	March 1	The open space is equivalent to approximately 170 acres, located in the north-central San Diego County, along the San Dieguito River corridor south of Del Dios Highway at Bing Crosby Boulevard. 14 sensitive plant species and 12 sensitive wildlife species were observed onsite: California adolphia, San Diego mesa mint, San Diego button celery, spreading navarretia, Orcutt's brodiaea, San Diego ambrosia, Del Mar manzanita, Nuttall's scrub oak, San Diego barrel cactus, San Diego marsh elder, San Diego sagewort, southwestern spiny rush, summer holly, wartstemmed ceanothus, San Diego fairy shrimp, orangethroated whiptail, Bell's sage sparrow, California horned lark, California gnatcatcher, Cooper's hawk, great blue heron, loggerhead shrike, northern harrier, southern California rufous-crowned sparrow, white-tailed kite, and San Diego black-tailed jackrabbit.	Sensitive Species (annually)	yes	2017-2018 report was submitted and reviewed by county staff, no major concerns.

	RMP Number	Project Name	APNs	Final RMP Date	Habitat Manager	Annual Report Due	Habitat Conservation Area Description	Surveys ¹	Project graded / built?	Monitoring / Maintenance Status
6	PDS2008- 3914-99-005	Woodridge	395-151-70, 395-151-69, 395-432-30, 395-432-31	Last Updated 2016 (2016- 2020 Management Plan)	Center For Natural Lands Management	December 1	Located south of Pino Drive and west of Lakeview Drive in Lakeside, about 1/2 mile west of Lake Jennings. The site has approximately 55 acres of Diegan coastal sage scrub and native grasslands, and a small patch of eucalyptus woodland, and supports the federally-listed threatened coastal California gnatcatcher. The Center for Natural Lands Management received title to the property in the December of 1999 at which time the Woodridge habitat conservation areas management commenced. The County of San Diego holds an Open Space Easement on the conservation area.	Coastal Sage Scrub Monitoring (2 out of 5 years) CAGN (2 out of 5 years) Delicate Clarkia (1 out of 5 years)	yes	2017-2018 report was submitted and reviewed by county staff, no major concerns.
7	PDS2008- 3914-01-001	Blossom Valley	390-061-03, 390-061-04	Last Updated 2012 (2012- 2017 Management Plan)	Center For Natural Lands Management	December 1	The 286-acre habitat conservation area was dedicated in fee to the Center for Natural Lands Management in July 2009 as off-site mitigation for the Blossom Valley Estates development. The site is located in Blossom Valley, about 2 miles east of Lake Jennings. The site supports Diegan coastal sage scrub, southern mixed chaparral, and coast live oak woodland that all burned completely during the Cedar Fire in 2003. The site's terrain is very steep and rugged.	DCSS and SMC Assessment (1 out of 5 years) Oak Tree Assessment for GSOB (annually) CAGN (2 out of 5 years) Rush-like Bristleweed and Englemann Oak (1 out of 5 years)	yes	2017-2018 report was submitted and reviewed by county staff, no major concerns.
8	PDS2008- 3914-02-001	Santa Fe Valley McCrink Ranch	267-060-40, 45, 265-320- 11, 13, 19, 20, 23, 25	1/10/2003	Helix aka San Diego Conservency	N/A	This 270-acre preserve area is located in west-central San Diego County, approximately 5 miles east of Interstate 5 and 3 miles west of Interstate 15, south of Del Dios Highway. The site primarily supports coastal sage scrub and southern mixed chaparral.	Sensitive Species (annually)	yes	County owned open space formerly managed by TET. No previous annual reports submitted. Enforcement under discussion.

^{16-3 |} Annual Report for the County of San Diego South County MSCP Subarea Plan, Year 20. May 22, 2019

	RMP Number	Project Name	APNs	Final RMP Date	Habitat Manager	Annual Report Due	Habitat Conservation Area Description	Surveys ¹	Project graded / built?	Monitoring / Maintenance Status
9	PDS2008- 3914-02-003	Maranatha Chapel	267-060-37	10/30/2002		December 31	The project is located at the western terminus of Rancho Bernardo Road, between Artesian Road and Del Dios Highway. Approximately 117 acres of open space is located on a rectangular parcel. Nearly half of the property is Diegan coastal sage scrub habitat (65.98 acres), with the remaining habitat as non-native grassland (27.32 acres), chaparral (8.81 acres), oak woodland (1.5 acres), freshwater marsh (0.99-acre), eucalyptus woodland, disturbed (roads), and developed land.	CAGN (every two years) Rare Plant (every two years)	yes	Land Manager/Owners have poor history of reporting. Previous efforts with County Counsel to induce compliance have not been successful. County staff continues to evaluate options to gain successful compliance with the annual reporting requirement.
10	PDS2008- 3914-03-002	El Apajo	268-360-15	Jun-03		December 31	This 25.6-acre open space area was conserved for annual grassland and wetlands. It is located within the San Dieguito River Valley along Via de Santa Fe Road northwest of its junction with El Apajo Road.	Avian and Amphibian (annually) Floral Inventory (every 5 years)	yes	Project does not have a maintenance agreement. Annual reports have not been submitted. Enforcement is under discussion.
11	PD\$2010- 3914-05-004	Greenhills Ranch	395-452-01	Sep-06	Habitat Restoration Sciences	January 31	The 44.04 acre open space is located south of Lake Jennings Road and west of Interstate 8. Observed on the property were California gnatcatcher, southern California rufouscrowned sparrow, silvery legless lizard, Coronado skink, western spadefoot, black-tailed jackrabbit, mule deer, turkey vulture, Bewick's wren, San Diego sunflower, prostrate spineflower, and ashy spikemoss.	CAGN (every 2 years) San Diego Cactus Wren (every 2 years)	yes	2017-2018 report was submitted and reviewed by county staff, no major concerns.

	RMP Number	Project Name	APNs	Final RMP Date	Habitat Manager	Annual Report Due	Habitat Conservation Area Description	Surveys ¹	Project graded / built?	Monitoring / Maintenance Status
12	PDS2009- 3914-06-005	Artesian Trail	267-142-33, 34, 35, 36	4/17/2007 RMP to be implemented beginning 6/1/07.	San Dieguito River Park Conservancy, P.O. Box 89, Del Mar, CA 92019	September	The project dedicated approximately 3.2 acres of land into open space in response to a four lot subdivision. The site is located in the Community of Rancho Santa Fe, four miles west of Interstate 15, south of Artesian Road. The property preserves approximately 2.6 acres of non-native grassland and 06-acre of coastal sage scrub. Observed on the property were approximately 688 federally threatened thread-leaf brodiaea (<i>Brodiaea filifolia</i>), and approximately 155 California adolphia (<i>Adolphia californica</i>).	Thread-leaf Brodiaea (annually)	Yes; based on aerial photograph review, pads were graded between 2006 and 2008.	Annual reports have not been submitted. PDS and County Counsel are discussing possible follow-up.
13	PDS2012- 3914-11-002	Lonestar	646-030-21- 00, 646-070- 36-00, 646- 070-37-00	PAR 12-9- 2011	San Diego Habitat Conservancy	January	Non-native grassland and CSS in East Otay Mesa. The Preserve provides habitat for several sensitive animal species, including the California gnatcatcher, Coronado skink burrowing owl, and white-tailed kite.	Sensitive Plant Species (every 5 years) CAGN (2 out of every 5 years) Fairy Shrimp (2 out of every 5 years)	yes – offsite parcel dedicated for mitigation	2017 report was submitted and reviewed by county staff, no major concerns.
14	PDS2014- RMPM-10- 003	East Otay Mesa (EOM) aka Rancho Vista del Mar	Por 648-01- 02, 03, 648- 040-31, 49, 55 and 648- 050-20	2/1/2012	Open Space Management, Inc.	January	92 acres located on the west and east sides of Alta Road north of Calzada de la Fuente in East Otay Mesa. Habitats are coastal sage scrub, chaparral, and non-native grassland. Supports burrowing owls, barrel cactus, Matilija poppy, and San Diego sunflower.	CAGN (every 3 years) Burrowing Owl and Raptor (annually) Quino Checkerspot Butterfly (every 3 years) Sensitive Plant (every 3 years)	yes	2017 report was submitted and reviewed by county staff, no major concerns.

	RMP Number	Project Name	APNs	Final RMP Date	Habitat Manager	Annual Report Due	Habitat Conservation Area Description	Surveys ¹	Project graded / built?	Monitoring / Maintenance Status
15	PDS2015- RMPM-12- 002	Sloane Canyon	521-080-11	11/14/13	Open Space Management, Inc.	February	The Sloane Canyon open space comprises 39.3 acres on Sloane Canyon Road in Jamul. It includes 4.72 acres of riparian woodland, 6.0 acres of Diegan coastal sage scrub, 9.71 acres of Diegan coastal sage scrub/chaparral, 17.2 acres of southern mixed chaparral, and 1.67 acres of disturbed habitat.	Plant and Animal Species (every 3 years)	Yes	2017-2018 report was submitted and reviewed by county staff, no major concerns.
16	PDS-2015- RMPM-12- 003	Trevi Hills/ High Meadow Ranch	389-091-21- 00	2/21/2013	Open Space Management, Inc.	February	The Trevi Hills/ High Meadow Ranch open space comprises approximately 350 acres off Muth Valley Road and High Meadow Road. The open space provides for the long-term conservation of intact southern mixed chaparral habitat and the Lakeside ceanothus or Lakeside wild lilac (Ceanothus cyaneus).	Lakeside Ceanothus (every 5 years)	In process	2017-2018 report was submitted and reviewed by county staff, no major concerns.

Notes:

¹ Subject to change due to RMP updates and/or adaptive management

APN - Assessor Parcel Number

CAGN – coastal California gnatcatcher

DCSS – Diegan Coastal Sage Scrub GSOB – gold-spotted oak borer

HOA – Homeowners Association

HM - habitat manager

RMP – Resource Management Plan

SMC - Southern Maritime Chaparral

TET – The Environmental Trust, Inc.