

Attachment A - Multiple Species Conservation Program South County Subarea Plan Annual Report (Year 28)

FINAL

COUNTY OF SAN DIEGO
MULTIPLE SPECIES CONSERVATION
PROGRAM

SOUTH COUNTY SUBAREA PLAN
ANNUAL REPORT
YEAR 28

Reporting Period: January 1, 2025 – December 31, 2025
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County of San Diego Board of Supervisors
Paloma Aguirre, District 1

Joel Anderson, District 2

Terra Lawson-Remer, District 3

Monica Montgomery Steppe, District 4

Jim Desmond, District 5

Chief Administrative Officer
Ebony N. Shelton

Deputy Chief Administrative Officer, Land Use & Environment Group (LUEG)
Dahvia Lynch

Director, Department of Parks and Recreation (DPR)
Jason Hemmens

DPR Chief, Resource Management
Crystal Benham

Director, Department of Planning & Development Services (PDS)
Vince Nicoletti

PDS Chief, Sustainability Planning
Meghan Kelly

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	vii
Preserve Assembly.....	ix
Covered Projects.....	x
Habitat Gains and Losses.....	x
Species and Habitat Conservation.....	xi
Preserve Management	xi
Preserve Monitoring and Research	xii
Financial Summary.....	xiv
Program Administration	xiv
CHAPTER 1	1
Introduction	1
Chapter 2 Preserve Assembly.....	2
Chapter 3 Covered Projects	3
Chapter 4 Habitat Gains and Losses.....	3
Chapter 5 Species and Habitat Conservation.....	3
Chapter 6 Preserve Management	3
Chapter 7 Preserve Monitoring and Research.....	3
Chapter 8 Financial Summary.....	4
Chapter 9 Program Administration	4
CHAPTER 2	5
Preserve Assembly.....	5
2.1 Preserve Assembly Status	5
2.2 Baseline Preserve	9
2.3 Public and Partner Conservation	9
2.4 Private Mitigation.....	17
2.5 Mitigation Areas and Banks.....	17
2.6 Mitigation Land Policy (I-138).....	19
CHAPTER 3	23
Covered Projects.....	23
3.1 Clearing for Single Family Residences	23
3.2 Agricultural Exemption.....	24
CHAPTER 4	25
Habitat Gains and Losses.....	25
4.1 Habitat Gains and Losses	25

4.2	Habitat Tracking Reporting	26
4.3	Rough Step Analysis	27
CHAPTER 5	31
Species and Habitat Conservation.....		31
5.1	Habitat Conservation Goals.....	31
5.2	MSCP Preserve Effectiveness.....	34
CHAPTER 6	35
Preserve Management		35
6.1	County Resource Management Plan	35
6.2	Preserve Management of County Preserves	37
6.3	Private Mitigation Lands Management.....	68
6.4	Grant Funded Management Projects.....	83
6.5	Preserve Management Partnerships	93
6.6	Education and Outreach.....	95
CHAPTER 7	101
Preserve Monitoring and Research		101
7.1	Preserve Biological Monitoring of County Lands.....	104
7.2	Private Mitigation Lands Monitoring.....	140
7.3	Grant Funded Monitoring Projects.....	151
7.4	Preserve Monitoring and Research Partnerships.....	151
CHAPTER 8	167
Financial Summary.....		167
8.1	County Contribution.....	167
8.2	Otay Ranch Preserve Community Facility District 97-2.....	168
8.3	<i>TransNet</i> Funding.....	169
CHAPTER 9	171
Program Administration		171
9.1	MSCP Coordination Efforts	171
9.2	MSCP Subarea Plan Updates	172
CHAPTER 10	173
References		173

APPENDICES

- A-1 County Tracked Acquisitions Since 1998
- A-2 DPR Outside Preserve Acquisitions Post 2016
- B Wildlife Agency Tracked Acquisitions
- C Summary of MSCP Gains
- D MSCP Acquisitions by County of San Diego and Local Non-Profit Partners in Reporting Year
- E Summary of MSCP Losses
- F Summary of Habitat Losses and Gains
- G Habitat Conservation Accounting Model
- H Mitigation Bank Status
- I COIs Issued for Agricultural Clearing
- J Species and Habitat Conservation in County Preserves
- K Stewardship and Adaptive Management in County Parks and Preserves in Reporting Year
- L Private Mitigation Land Monitoring and Maintenance in Reporting Year
- M Stewardship and Management on Private Mitigation Lands
- N MSCP Covered Species on County Preserves and Current Status

List of Figures

Figure 1A. County Parks and Preserves Referenced in Report, MSCP Subarea Plan	11
Figure 1B. County Parks and Preserves Referenced in Report, Draft North County MSCP	13
Figure 1C. County Parks and Preserves Referenced in Annual Report, Future East County MSCP	15
Figure 2. MSCP Biological Core Resource Areas and Habitat Linkages with Gains and Losses in the Northern Half of the MSCP Subarea Plan Area.....	29
Figure 3. MSCP Biological Core Resource Areas and Habitat Linkages with Gains and Losses in the Southern Half of the MSCP Subarea Plan Area.....	30

List of Tables

Table 1. Summary of MSCP Subarea Plan Preserve Assembly Status	7
Table 2. MSCP Subarea Plan Historical Baseline Preserve	9
Table 3. MSCP Public and Partner Acquisitions Since 1998	10
Table 4. MSCP Private Mitigation.....	17
Table 5. Mitigation Banks Available for Private Mitigation	18
Table 6. Mitigation Land Policy	21
Table 7. MSCP Covered Projects in Reporting Year	23
Table 8. Habitat Gain and Loss in Reporting Year	26
Table 9. Habitat Gains and Losses by Segment Since 1998 per Habitrak.....	28
Table 10. Habitat Conservation Goals Achieved in Subarea Plan	32
Table 11. Habitat Conservation Goals Achieved in County Preserves for Metro-Lakeside- Jamul Segment.....	33
Table 12. Resource Management Plans for County Preserves	36
Table 13. Grant Funded Management Projects, Locations and MSCP Species Benefited in Reporting Year.....	84
Table 14. MSCP Covered Species or Habitats Documented by Program.....	101
Table 15. Targeted Monitoring Plan Species and Habitats by Location.....	107
Table 16. Targeted Monitoring Plan Species and Habitats Monitoring Frequency.....	109
Table 17. Targeted Monitoring Plan Species Monitored in Previous Reporting Years: Year-to-Year Comparison	113
Table 18. Incidental Observations of Other MSCP Covered Species During TMP Surveys in Reporting Year.....	117
Table 19. MSCP Covered Species Documented on Private Mitigation Lands in Reporting Year	143
Table 20. MSCP Covered Species Surveys and General Monitoring Frequency on Private Mitigation Lands in Reporting Year	146
Table 21. Preserve Monitoring and Research Partnerships Projects, Monitoring Targets, and Locations in Reporting Year.....	152

ACRONYMS

BLM – Bureau of Land Management
BMO – Biological Mitigation Ordinance
Board – Board of Supervisors
CAP – Climate Action Plan
CDFW – California Department of Fish and Wildlife
CEQA – California Environmental Quality Act
CIVICS – Community Involved Vocational Inmate Crew Service
COI – Certificate of Inclusion
County – County of San Diego
County Preserves – County-owned or managed parks or preserves with preserve lands
DCSS – Diegan coastal sage scrub
DGS – County of San Diego Department of General Services
DIY – Do-it-Yourself
DPR – County of San Diego Department of Parks and Recreation
DPW – County of San Diego Department of Public Works
EOTAS – East Otay Trail Alignment Study
GIS – Geographic Information System
HabiTrak – Habitat Tracking Reporting, State of California instrument and database
HCP – Habitat Conservation Plan
HOA – Homeowners Association
IA – Implementing Agreement
LUEG – Land Use & Environmental Group
MD – Management Directive
MHPA – Multiple Habitat Planning Area
MLP – Mitigation Land Policy
MSCP – Sub-Regional Multiple Species Conservation Program
MSCP Preserve – Multiple Species Conservation Program Subarea Plan Preserve
Otay Ranch POM – Otay Ranch Preserve Owner/Manager
PAMA – Pre-Approved Mitigation Area
PDS – County of San Diego Planning & Development Services
PEIR – Programmatic Environmental Impact Report
POM – Preserve Owner/Manager
RDF – Regional Decarbonization Framework
RDM – Residual Dry Matter
RECON – RECON Environmental, Inc.
REPI – U.S. Navy Readiness and Environmental Protection Integration
RMP – Resource Management Plan
RMWD – Ramona Municipal Water District
ROE – Right-Of-Entry Permit
RWQCB – Regional Water Quality Control Board
SANDAG – San Diego Association of Governments
SDGE – San Diego Gas & Electric
SDHS – San Diego Humane Society
SDNHM – San Diego Natural History Museum
SDMMP – San Diego Management and Monitoring Program
SDMS – San Diego Mycological Society
STEAM – Science, Technology, Engineering, Arts, and Math

Subarea Plan – South County Subarea Plan
SWRCB – State Water Resources Control Board
TMP – Targeted Monitoring Plan (formerly known as Comprehensive Monitoring Plan)
TransNet EMP – Environmental Mitigation Program for regional transportation projects administered by SANDAG
USACE – United States Army Corps of Engineers
USFWS – United States Fish and Wildlife Service
USGS – United States Geological Survey
WCB – Wildlife Conservation Board
Wildlife Agencies – used collectively for the USFWS and CDFW

EXECUTIVE SUMMARY



MULTIPLE SPECIES CONSERVATION PROGRAM SUBAREA PLAN

81,914 acres preserved

83% of MSCP Preserve goal achieved

13,730 acres County-owned, managed or funded

30 County Parks and Preserves



Reporting Year Highlights

348 acre MSCP
Preserve increase

49 MSCP covered
species monitored or
documented in County
Preserves

11 Grant-funded
management projects

2 MSCP Preserve
management partnership
projects

19
MSCP Preserve
monitoring and
research partnerships

This is the 28th annual report for the County of San Diego (County) Multiple Species Conservation Program's (MSCP) South County Subarea Plan (Subarea Plan) adopted by the County Board of Supervisors on October 22, 1997, for a term of 50 years. This report was prepared in conformance with Section 14.2 of the Implementing Agreement (IA) executed between the County, California Department of Fish and Wildlife (CDFW), and the United States Fish and Wildlife Service (USFWS) (collectively referred to as Wildlife Agencies) on March 17, 1998. The 50-year permit requires the preservation, protection, and creation of connections between biologically valuable habitats while encouraging development in less sensitive areas. This report accounts for MSCP Subarea Plan implementation from January 1 through December 31, 2025, and summarizes key accomplishments for the permit term. Topics include the following:

- Preserve assembly
- Covered projects
- Habitat gain and loss
- Species and habitat conservation
- Preserve management
- Preserve monitoring and research
- Financial summary, and
- Program administration.

The MSCP Subarea Plan serves to conserve the region's native habitats, plants, and animals for the enjoyment of future generations; protect the vast diversity of native plants and animals (including threatened and endangered species); and ensure opportunities for passive recreation. This unique regional conservation program, one of only 17 completed in California and with one of the largest covered species lists, works across jurisdictional boundaries, protects watersheds and water quality, and accommodates future growth by simplifying building regulations. It also ensures compliance with many federal and state regulations including the Federal Endangered Species Act and associated Habitat Conservation Plan permits, State Endangered Species Act, and State Natural Communities Conservation Planning Act and associated permits.

The County's partnership with the Wildlife Agencies through the MSCP ensures that the unincorporated area's rich biodiversity is conserved while allowing development to occur through the County's permitting process. The MSCP provides the basis for the County to receive an incidental take permit from the Wildlife Agencies. An incidental take permit is a permit that can be issued under the Federal and State Endangered Species Acts for lawful projects that might result in impacts to endangered or threatened species or the species' habitat. The incidental take permit the County receives through the MSCP can be extended to future development projects that comply with the MSCP so that those projects do not have to secure their own separate incidental take permits from the Wildlife Agencies. Through this permitting mechanism, the MSCP helps streamline permitting, provide regional conservation of natural habitats, and facilitate economic growth in the unincorporated area. The Annual Report highlights the monitoring efforts conducted for sensitive plant and animal species within the

South County Subarea Plan boundaries that ensure long-term viability of habitat and species. In addition, the Annual Report highlights land stewardship activities for preserve lands, such as installing fencing and signage, patrolling preserve lands, managing public access areas, removing invasive species, and planting trees and vegetation.

Preserve Assembly

The goal of the South County Subarea Plan is to assemble a 98,379-acre South County Subarea Plan Preserve (MSCP Preserve). The MSCP Preserve is assembled through preserve lands acquired prior to 1998 (baseline conserved lands), lands acquired since 1998 by the County and its federal, state, and local non-profit partners (conserved lands), and lands added to the MSCP Preserve through mitigation from private development projects (private mitigation)¹. Preservation is prioritized within areas identified as having habitat with high biological value or within a habitat linkage². These are the Pre-Approved Mitigation Areas (PAMA) and the hardline preserve areas. Hardline preserve areas are lands that will be included in the MSCP Preserve as a result of negotiations between the County, Wildlife Agencies, and landowners. The Department of Parks and Recreation (DPR) implements the MSCP through land acquisition, management, and monitoring of preserve lands to ensure preservation of sensitive species and habitat.

The MSCP Preserve acreage is equal to the baseline acres plus acres gained within PAMA and hardline preserve areas from private mitigation and public and non-profit conservation partner acquisitions. In general, acquisitions or private mitigation outside PAMA or hardline preserve areas are considered complementary conservation and do not count towards the MSCP Preserve. However, the Wildlife Agencies have approved complementary County acquisitions outside the 1997 PAMA to be counted in the MSCP Preserve as they contribute to the biological goals of the MSCP. These acres are reported below as habitat gains.

The County has successfully implemented the South County Subarea Plan for 28 years, assembling 81,914 acres of the MSCP Preserve, which represents 83% of the 98,739-acre conservation goal. County, federal, state, and local non-profit partner acquisitions, as well as private development mitigation all contribute to the assemblage of the MSCP Preserve. County-owned, managed, or funded conserved lands in the MSCP Subarea Plan Area totals 13,730 acres³ (17%), while federal and state conserved lands contribute approximately 61% of the assembled MSCP Preserve. Local non-profit acquisitions have contributed approximately 4%, and private mitigation has contributed approximately 18% to the conserved 81,914 acres.

The County owns or manages 30 properties within the MSCP Preserve. These lands are managed for the benefit of the MSCP covered species and habitats. During the 2025 reporting period, January 1, 2025, to December 31, 2025, 348 acres were added to the MSCP Preserve (conserved within the PAMA and hardline preserve areas) through County and local non-profit acquisitions and private mitigation. The County acquired a total of 1 acre. Local and non-profit partners acquired 275 acres located within PAMA and added to the MSCP Preserve. Private land dedication required as a County condition of private development added 72 acres.

¹ All acquisitions are from willing sellers.

² Habitat linkages are corridors that allow plants and animals to move between biological core resource areas (areas of high quality habitat suitable to sustaining MSCP covered species).

³ All acreage reported for MSCP Preserve Assemblage utilizes GIS acreages, as opposed to Assessor's acreages, as the HabiTrak database only uses GIS acreages. GIS and Assessor's acreages can vary depending on terrain and mapping factors.

During the course of the 50-year MSCP permit, the County and MSCP partners understood that once the MSCP Preserve had reached a large size, the focus on the MSCP Preserve would shift from assemblage of preserve lands to ensuring that the MSCP Preserve is successfully functioning and meeting its goals and objectives. As the MSCP Preserve is now 81,914 acres (83% of the preservation goal), DPR is working with its local, state and federal partners to assess the overall MSCP preserve goals and objectives as well as the biological functionality of the assemble preserve including configuration. This includes analyzing, from a regional perspective, habitat and species monitoring data and configuration of the conserved lands across the 81,914 acres. This effort will be ongoing through the term of the permit.

Covered Projects

The County permitted 27 development projects in the reporting period in the MSCP Subarea Plan Area, all of which were residential projects. No agricultural exemptions were issued during the reporting period.

Habitat Gains and Losses

The South County Subarea Plan states that the rate of development and associated habitat impacts must not exceed the rate of conservation of preserve lands within the South County Subarea Plan's boundaries. This goal is to ensure that the two actions are occurring at approximately the same pace or are within "step" or "rough step" of one another. Rough step is the relationship between the conservation of preserve lands and impacts to habitat due to development. The two actions should be balanced, with impacts to habitat due to development not exceeding the conservation of preserve lands.

In the Annual Report, lands added to the Preserve are described as a "gain," and development within the South County Subarea Plan boundaries are described as a "loss." There was a total of 784 acres of habitat gains and 179 acres of habitat losses in the reporting period. Preservation within areas identified as having habitat with high biological value, PAMA and the hardline preserve areas, was 348 acres. There were an additional 436 acres of complementary conservation outside these areas. Habitat losses total 29 acres inside PAMA and hardline preserve areas and 149 acres outside these areas.

Cumulatively, the MSCP Preserve is in compliance with the rough step analysis, with habitat gains exceeding habitat losses. Rough step compares total gains and losses within and outside of PAMA and hardline preserve areas categorized by total acres and habitat types. 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. Habitat located within the PAMA, or hardline preserve areas, is considered high-quality, while low-quality habitat is outside these areas. Cumulatively, the majority of habitat gains occurred within PAMA and hardline preserve areas, while the majority of habitat losses occurred outside of PAMA and hardline preserve areas. This indicates that the overall conservation goals are being met to create a functional MSCP Preserve as high-quality habitat within PAMA and hardline preserve areas are being conserved and lower-quality habitat is being developed.

Species and Habitat Conservation

The overall goal of the MSCP and Subarea Plan is to have a biologically functional MSCP Preserve that conserves vegetation communities (habitat) in the appropriate areas and quantities so that the MSCP covered species that depend upon them are successfully protected in perpetuity. The Subarea Plan outlined goals for how large the MSCP Preserve should be, how many acres of different habitat types should be conserved, and how many occurrences of MSCP covered species should be protected at the end of the 50-year permit term. The MSCP Preserve is created through the conservation efforts of the County, federal and state partners, local non-profits, and private development mitigation. There are 18 vegetation communities listed in the Subarea Plan's habitat conservation goals. By the end of 2025, two of the vegetation community goals, southern maritime chaparral and Tecate cypress forest, have been successfully met. Three additional habitat types, chaparral, riparian forest and disturbed wetland, are at nearly 90% of the conservation goal. Understanding how the MSCP Preserve is functioning from a biological perspective has been an on-going effort for the County and the Wildlife Agencies and regional conservation partners. Revising the approach of the analysis to evaluate the entirety of the MSCP Preserve occurred in 2025. Next steps for the revised approach include completing the development of a complementary dataset for the HabiTrak GIS data, working with regional partners on selecting metrics to evaluate biological function, and utilizing the dataset and metric to analyze the biological functionality of the MSCP Preserve.

Preserve Management

The County Preserves' stewardship and adaptive management ensures biological value and function of natural resources are maintained or enhanced. The County provides land stewardship of County Preserves through habitat restoration, invasive plant and animal control, replacement tree planting and inventory, access control, fire management, and environmental education. Land stewardship activities are guided by preserve-specific Resource Management Plans (RMPs), annual work plans, and monitoring activities. RMPs provide guidance for the continued management and protection of biological and cultural resources. The County has prepared 16 RMPs for County Preserves in the MSCP Subarea Plan Area and is updating existing RMPs for County Preserves that have new additions and preparing new RMPs for newer acquisitions. Management and maintenance of County Preserves are conducted by staff and volunteers that implement stewardship activities such as installing fencing and signage, patrolling preserve lands, managing public access areas, removing invasive species, and planting trees and native vegetation. Adaptive management is using preserve monitoring to inform stewardship. For example, if monitoring finds invasive, non-native plants increasing in extent and negatively impacting MSCP covered species and habitats, stewardship actions would control the invasive, non-native plants.

Ranger reports on County Preserves documented habitat restoration, access control, fire management, environmental education, and invasive, non-native plant and animal control actions completed to benefit MSCP covered species and habitats.

Grant-funded projects across eight County Preserves benefited MSCP covered species, such as San Diego thornmint, variegated dudleya, willowy monardella, coastal California gnatcatcher, least Bell's vireo, coastal cactus wren, northern harrier, Cooper's hawk, golden eagle, arroyo toad, southwestern pond turtle, southern mule deer, and mountain lion, and included habitat restoration, access control, invasive, non-native plant control, invasive non-native animal control, and trail alignment. Grant funding totaled approximately \$24.4 million and was provided

by 11 grants, County General Funds, and one local agency matching. Grant funding came from three Wildlife Conservation Board Proposition 68 grants, one CDFW Natural Community Conservation Planning Local Assistance grant, one State Coastal Conservancy Proposition 68 grant, one CDFW 30x30 Grant Program grant, one CDFW Proposition 1 grant, one TransNet Environmental Mitigation Program (EMP) grant, one U.S Navy Readiness and Environmental Protection Integration Program grant, and two State Water Resources Control Board (SWRCB) Border Water Quality Infrastructure grant.

Preserve management partners implemented two management projects across three County Preserves to benefit wetland, riparian, stream, and coastal sage scrub habitats. Partners were the City of San Diego Stormwater Department and Public Utilities Department.

Private mitigation lands management was documented for 23 properties and included habitat restoration, access control, fire management, environmental education, invasive, non-native plant control, and invasive non-native wildlife control actions completed to benefit MSCP covered species and habitats.

Environmental education informs the public about the county's natural and cultural resources. In 2025, the County was excited to offer many popular educational programs and approximately 25,000 guests participated in over 750 programs. County Preserve visitors were able to attend in-person ranger-led hikes and programs, Hawktober raptor talks, Discovery Program events, and other popular environmental education programs and activities. County Park staff participated in the San Diego Festival of Science & Engineering by providing a nature discovery table featuring several live animals during their Expo Day event. Also, DPR partnered with Nature Unplugged to host ranger-led hikes during their 2025 Hike-a-Thon, which helped raise funds for their scholarship and subsidy program for organizations and communities in need. The County also continued the environmental education programs of the TRACK Trails Program, Green Friday, Nature Explorers Program, and partnering with the San Diego Astronomy Association on several in-person events. In addition, DPR maintains social media accounts to inform San Diego County residents and visitors of what is occurring on DPR's preserve lands. DPR field staff and volunteers implement education and interpretation programs to connect people to nature, thereby allowing residents and visitors to understand the importance of conserving natural resources and helping to inspire the next generation of environmental stewards.

Preserve Monitoring and Research

The MSCP monitoring program on County Preserves includes various monitoring efforts, including implementation of the Targeted Monitoring Plan (TMP), biodiversity inventory surveys, research partnerships, and special-status species monitoring. DPR manages and monitors vegetation communities within County preserve lands that provide habitat for special-status species and MSCP covered species⁴. In addition, DPR manages and monitors MSCP covered species at the species level. MSCP covered species monitoring focuses on species for which population-level monitoring is considered critical for effective management. DPR conducts biological monitoring of sensitive plants, animals, and habitats by conducting biodiversity

⁴ Special-status species are species that have been assessed and their population status has been found to be in decline or non-sustainable without conservation measures being implemented. These species are listed or are candidates to be listed under the Federal Endangered Species Act, California Endangered Species Act, State Species of Special Concern or are found on other watch lists. Not all special-status species are MSCP covered species. MSCP covered species include species that, if present, indicate that the habitat and other species living in that same habitat should be doing well or were species that could have been impacted by County or private development activities.

inventory surveys and implementation of the TMP. The TMP includes focused goals and objectives as well as detailed monitoring protocols for specific plants and animal species and habitat types. The TMP is implemented annually and provides important data to measure success of meeting the MSCP species specific goals and objectives. Biodiversity inventory surveys are used to document plant and animal species and habitats (including sensitive species and habitats), identify and address habitat stressors/threats, and map invasive plants and animals. Biodiversity inventory surveys are conducted on new properties after acquisition.

In addition to biodiversity inventory surveys, additional special-status species monitoring is conducted at certain County Preserves to further protect the sensitive resources that are specific to certain County Preserves. For example, raptor foraging monitoring is conducted annually at Ramona Grasslands Preserve. Raptor foraging monitoring ensures that raptors (including hawks and eagles) are successfully thriving within the Ramona Grasslands Preserve as there are numerous raptor nests in and around the preserve. Successful raptor use of the preserve is a result of properly managed habitat that supports prey populations.

DPR conducts species and habitat monitoring on County Preserves to ensure not only that the species and habitats are conserved properly, but that appropriate adaptive management strategies are identified and implemented as quickly as possible when needed. As the monitoring data is collected each year, species trends are more deeply understood and assist DPR with successful conservation and sustaining of the species. TMP survey results not only assist in determining when adaptive management strategies need to be implemented for species threatened from identified stressors, such as invasive, non-native plant species, but also identify species that are stable or increasing in numbers.

These efforts have monitored or documented 49 MSCP covered species in County Preserves and an additional three MSCP covered species on private mitigation lands, as well as approximately 188 special-status species living within County preserve lands, demonstrating that conservation efforts have been effective in protecting regionally important species and ensuring a thriving ecosystem.

TMP monitoring was performed for MSCP covered species across 22 County Preserves during the reporting period, including 14 preserves in the South County MSCP Subarea. During the reporting period, TMP monitoring and management efforts targeted 18 MSCP covered species (and one habitat) and documented an additional 19 MSCP covered species during these monitoring efforts. Raptor surveys and annual residual dry matter (RDM) monitoring were conducted at Ramona Grasslands Preserve during the reporting period.

Preserve monitoring and research partnership projects totaled 19 in the reporting year across 30 County Preserves in the South County MSCP Subarea. These projects inform stewardship and adaptive management in County Preserves and the MSCP Preserve. Monitoring and research topics included MSCP covered species such as arroyo toad, southwestern pond turtle, coastal California gnatcatcher, least Bell's vireo, coastal cactus wren, southwestern willow flycatcher, tricolored blackbird, American badger, mountain lion, Orcutt's brodiaea, Encinitas baccharis, and willowy monardella, as well as other species inside and outside of the MSCP Subarea Plan Area. Research occurred on County Preserves through the County's right-of-entry (ROE) permit process. ROEs were requested by federal and state agencies, universities, the San Diego Zoo, the San Diego Natural History Museum, environmental organizations, a wildlife rehabilitation organization, a community science organization, and a public utility company.

Private mitigation lands monitoring detected 24 MSCP covered species across 18 properties, including four MSCP covered species not observed on County Preserves.

Financial Summary

The County Board of Supervisors appropriates funds for land acquisition and management and monitoring of preserve lands throughout the adopted MSCP Subarea Plan Area, draft North County MSCP Plan Area, and proposed East County MSCP Plan Area.

Land acquisition appropriations fund land purchases, land stewardship, and biodiversity inventory surveys. Since 1998, the County has invested over \$56 million which leveraged over \$35 million of other funding to acquire 8,832 acres in the MSCP Subarea Plan, including 556 acres owned by County partners. The County has acquired (through acquisitions, management agreements, or leveraged funding) a total of 13,730 acres of preserve lands in the MSCP Subarea Plan (baseline preserve lands plus lands conserved since 1998).

Management and monitoring appropriations fund staff positions, contracting resources, and capital expenses dedicated solely to MSCP monitoring and stewardship activities. MSCP monitoring staff oversee MSCP covered species and habitat monitoring. County Rangers provide operational “boots on the ground” to manage County Preserves. MSCP monitoring activities included biological monitoring in County Preserves via the County’s TMP, monitoring of special-status species not included in the TMP, and monitoring of sensitive species during and after park improvement projects. MSCP stewardship activities include habitat restoration, access control, fire management, environmental education, and invasive, non-native plant and animal control. Approximately \$24.4 million of grant funding augments annual appropriations for projects spanning Fiscal Year 2016-2017 through Fiscal Year 2024-2025. DPR maintains its commitment to its parks and preserve lands conservation program by continuing to allocate funding for the management and monitoring of County Preserves.

Management and monitoring on private mitigation lands is funded through mechanisms established during the RMP approval process (i.e., special districts, endowments, or annual fees). The health of these endowments and use of these funds are reported in the RMP annual reports.

Program Administration

The County coordinates implementation of the MSCP Subarea Plan with the Wildlife Agencies. In 2025, one Minor Amendment was approved and 18 acres is now changed to take authorized in the MSCP Subarea Plan boundary. The MSCP Subarea Plan maps have been updated to reflect these changes.

CHAPTER 1

Introduction

San Diego County is home to an exceptionally diverse range of habitats, supporting more than 200 rare, threatened, or endangered species throughout the area. To protect the region's biodiversity, in 1997, the County of San Diego (County) partnered with 11 other jurisdictions, community stakeholders, the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) (collectively referred to as Wildlife Agencies) to develop the Multiple Species Conservation Program (MSCP). The MSCP is a long term, regional habitat conservation program focused on balancing the protection of plant and animal species with recreation, development, and agricultural activities within San Diego region. On October 22, 1997, the County Board of Supervisors (Board) adopted the 50-year MSCP South County Subarea Plan, which includes the unincorporated areas in the southwestern portion of the region.

The County's partnership with the Wildlife Agencies, through the MSCP, ensures the unincorporated area's rich biodiversity is conserved while allowing development to occur through the County's permitting process. Through the MSCP, development applicants can rely on the County's permits under the Federal Endangered Species Act, State Endangered Species Act, and State Natural Communities Conservation Planning Act to impact threatened and endangered species and their habitats, eliminating the need for individual project-by-project permitting under these regulations.

The South County Subarea Plan Implementing Agreement (IA) between the County and Wildlife Agencies, became effective on March 17, 1998. Per the IA, each year the County prepares a MSCP South County Subarea Plan Annual Report that includes information about habitat gained through acquisitions or dedications of preserve lands, habitat lost due to development, and the management and monitoring efforts performed to ensure the assembled MSCP Preserve is functioning successfully. The reporting period for the Annual Report and past annual reports has been based on the calendar year. Future reporting periods may be adjusted to align with the County's fiscal year from July 1 through June 30.

The 2025 Annual Report summarizes habitat gains and losses as well as County management and monitoring programs within the South County Subarea Plan boundaries for the reporting year of January 1, 2025 through December 31, 2025, and ongoing progress from previous reporting years. The 2025 reporting period marks the 28th year of implementing the MSCP Subarea Plan.

In addition to the adopted South County Subarea Plan, there are two additional MSCP planning areas in the unincorporated area: the draft North County Plan and future East County Plan. On October 28, 2020, the County's Board of Supervisors directed staff to develop a plan for the draft North County Plan Area, like the plan currently in place for the South County Subarea Plan. The draft North County Plan will cover the northwestern portion of the unincorporated area and is anticipated to be brought to the Board of Supervisors for consideration in 2027. The eastern portion of the unincorporated area is covered by the future East County Plan, which will be prepared after North County Plan adoption.

The Department of Parks and Recreation (DPR) implements the MSCP in all three MSCP planning areas through land acquisition, management, and monitoring of preserve lands to

ensure preservation of sensitive species and habitat. The acquisition criteria for County preserve land includes high-quality habitat and biodiversity, biological connectivity, access, and value. DPR works closely with a County-wide acquisition roundtable team consisting of staff from the Climate Action Plan (CAP) update, Regional Decarbonization Framework (RDF), Department of Public Works (DPW), Department of Environmental Health and Quality, Planning & Development Services (PDS), Agriculture, Weights and Measures, and Department of General Services (DGS) to analyze potential acquisitions from a multi-faceted perspective to ensure alignment with the County's sustainability programs including the CAP update, water quality protection, and RDF.

The County evaluates multiple factors when considering preserve lands for potential acquisition and inclusion into County preserve lands, including biology, connectivity, accessibility, and value. Foremost is an evaluation of wildlife biology. The land should include quality habitat and/or opportunities to restore habitat that supports regional biodiversity. Connectivity is another factor the County considers. The County seeks land that supports wildlife corridors and connectivity for sustainable wildlife movement. Connectivity to County preserve lands makes long-term management and stewardship more efficient because the same operational team can perform those functions. While a contiguous property preserves not only the habitat but also the financial resources that help extend the County's reach and maximize resource utilization, it is recognized that smaller, noncontiguous properties will not be excluded for consideration of conservation as they can play a critical role in filling in conservation gaps in wildlife corridors and linkages. Accessibility to potential acquisitions is another factor considered. The County must be able to access all its lands to meet stewardship and monitoring requirements as well as potential access to the public for passive recreation and environmental education where appropriate. Limited and sustainable public access that does not negatively impact sensitive resources is an integral part of the MSCP. Lastly, the County considers financial and economic value to ensure that public resources are wisely invested. The County only considers land with willing sellers who agree to sell at appraised value or less.

Chapter 2 Preserve Assembly

The South County Subarea Plan requires the County, Wildlife Agencies, and partnering agencies to conserve 98,379 acres (MSCP Preserve). The MSCP Preserve goal of 98,379 acres was determined by the area needed to successfully conserve populations of MSCP covered species, associated high-quality habitats, and wildlife linkages between large, conserved areas. Habitat that is mostly intact or has not been degraded by impacts such as from development activities or a high frequency of fires is generally considered to be high-quality. To create opportunities for residents and visitors to connect with nature, passive recreation is allowed within County preserve lands in areas where MSCP covered species, and habitat would not be impacted.

Chapter 2, *Preserve Assembly*, summarizes land acquisitions and conveyances into the MSCP Preserve in the reporting year and cumulatively. The Baseline Preserve, land already preserved at the time of the MSCP Subarea Plan adoption, is quantified. Conservation lands acquired by Wildlife Agencies, Bureau of Land Management (BLM), non-profit partners, and County are documented for the reporting year and cumulatively. Mitigation lands conserved by private entities and mitigation banks providing mitigation for MSCP covered species are also documented. Together, these lands comprise the MSCP Preserve and provide regional conservation for plants, animals, and their habitats in the unincorporated county.

Chapter 3 Covered Projects

The County permits development under the MSCP Subarea Plan for private and public projects (covered projects). Chapter 3, *Covered Projects*, documents covered projects permitted by the County in the reporting year under the MSCP Subarea Plan. Project reporting includes clearing for single-family residences on small parcels and agricultural exemptions.

Chapter 4 Habitat Gains and Losses

Annual tracking of Subarea Plan gains, losses, management, and monitoring is required by Section 14.2 of the IA, and the Habitat Conservation Plan (HCP) and Natural Community Conservation Planning Act permits. Chapter 4, *Habitat Gains and Losses*, documents the cumulative habitat gain from MSCP Preserve assembly and habitat loss from covered projects. All habitat gains and losses are reported annually to CDFW and tracked in a central database called HabiTrak. The HabiTrak reports generated by CDFW are used to track permit compliance and ensure that rough step permit requirements are being met. Rough step is the relationship between the conservation of preserve lands and impacts to habitat due to development. The two actions should be balanced, with impacts to habitat due to development not exceeding the conservation of preserve lands.

Chapter 5 Species and Habitat Conservation

Implementation of the South County Subarea Plan protects habitat and species through the acquisition, management, and monitoring of dedicated preserve lands and MSCP covered plant and animal species. Chapter 5, *Species and Habitat Conservation* documents the Subarea Plan's habitat conservation goals and contribution to those goals by the assembled MSCP Preserve. The approach, past and future, of evaluating the effectiveness, from a biologically functional perspective, of the MSCP Preserve is also discussed.

Chapter 6 Preserve Management

The County Preserves are managed for the benefit of MSCP covered species. Chapter 6, *Preserve Management*, documents stewardship, management, and education implemented on County Preserves, including Otay Ranch Preserve (which is jointly owned and managed by the County and the City of Chula Vista), and private mitigation lands. Resource Management Plans (RMPs) incorporate biodiversity inventory surveys and provide management and monitoring directives for MSCP covered species and habitats. Annual work plans direct resources to implement management actions. Habitat restoration, access control, fire management, environmental education, and invasive, non-native plants and animal control actions reported by County rangers and consulting staff are summarized for County Preserves, and MSCP covered species and habitats benefited are identified. These same actions and benefits are summarized for grant-funded management projects, preserve management partnerships, and private mitigation lands.

Chapter 7 Preserve Monitoring and Research

The County Preserves are monitored to determine the effectiveness of habitat conservation and management actions for MSCP covered species and habitats. Chapter 7, *Preserve Monitoring and Research*, summarizes MSCP covered species and habitat monitored or documented. The Targeted Monitoring Plan (TMP) monitors a sub-set of County Preserves and informs adaptive

management. TMP results are provided for the target MSCP covered species. Grant-funded monitoring projects, monitoring and research partnerships, and private mitigation lands monitoring descriptions and results are provided. Monitoring results are used to inform updates of RMPs, TMPs, and annual work plans.

Chapter 8 Financial Summary

The County funds acquisition, management, and monitoring of County Preserves. Chapter 8, *Financial Summary*, summarizes County and grant funding used to implement its MSCP Subarea program. Funding sources include the General Fund, Otay Ranch Preserve Community Facilities District 97-2, and grants.

Chapter 9 Program Administration

The County works with regional partners to implement and update the MSCP Subarea Plan. Chapter 9, *Program Administration*, reports key accomplishments, coordination efforts, minor and major amendments, and map updates.

CHAPTER 2

Preserve Assembly

Through December 31, 2025, the MSCP Preserve totals 81,914 acres and 83% of the 98,379-acre conservation target. It is comprised of land owned or managed by the County, Wildlife Agencies, BLM, local partners and non-profits, and private mitigation. In the reporting year, January 1, 2025, to December 31, 2025, 348 acres were added to the MSCP Preserve. This includes 1 acre preserved by the County, 275 acres preserved by non-profits, and 72 acres preserved by private mitigation. The 275 acres preserved by non-profits, and added to the MSCP Preserve in 2025, had not previously been added into HabiTrak and to the MSCP Preserve and were corrected in 2025. The MSCP Preserve benefits MSCP covered species and habitats.

Acreage reported in Chapters 2, 3, 4, and 5 are Geographic Information System (GIS) acreage as opposed to Assessor's acreage. GIS acreage is utilized in the aforementioned chapters as MSCP Preserve gains and losses are tracked in HabiTrak, the CDFW database, using GIS acreage. For consistency, GIS acreage is used when reporting on acreage for MSCP Preserve assemblage, losses, and how the conserved lands within the MSCP Preserve are successfully meeting MSCP and Subarea Plan goals and objectives. Acreage reported in Chapter 6 is in both Assessor's and GIS acreage. Assessor's acreage is reported in Chapters 6 and 8 as this is the formal unit of measurement the County utilizes internally for real estate acquisitions, accounting, and reporting. The use of GIS acreage vs Assessor's acreage is specified at the beginning of each chapter.

2.1 Preserve Assembly Status

The MSCP Preserve totals 81,914 acres with 83% of the 98,379-acre preservation goal achieved (**Table 1, Summary of MSCP Subarea Plan Preserve Assembly Status**). The County, Wildlife Agencies, BLM, local and non-profit partners, and private entities own and manage MSCP Preserve lands. The MSCP Preserve is assembled through a combination of baseline preserve lands that existed in 1997, lands preserved as mitigation from development permit projects, and public agency and non-profit conservation partner acquisitions from willing sellers. "Historical Baseline Preserve" is land conserved prior to MSCP Subarea Plan adoption in 1997. It includes County-owned, -managed, or -funded lands (5,466 acres); Wildlife Agencies and BLM lands (32,600 acres); and private mitigation areas (7,755 acres). "Conserved lands since 1998" includes lands preserved by these same entities, plus lands conserved by local and non-profit partners. Preservation is prioritized within areas identified as having habitat with high biological value or as habitat linkages, which include the PAMA and the hardline preserve areas.⁵ MSCP Preserve goals are split between public acquisitions (including local/non-profit partners) and private mitigation with each having a preserve goal⁶.

The MSCP Preserve acreage is baseline acres plus acres gained within PAMA and hardline preserve areas from private mitigation and public and non-profit conservation partner

⁵ Hardline preserve areas are lands that will be included in the MSCP Preserve as a result of negotiations between the County, Wildlife Agencies, and landowners.

⁶ The Historical Baseline Preserve and Conserved Lands Since 1998 shown in Table 1 do not add up to the total MSCP Preserve, as a subset of Historical Baseline is also potentially counted by some agencies in the Conserved Lands Since 1998. Record keeping has evolved during MSCP Subarea Plan implementation. HabiTrak data and approved County complementary acquisitions are used to determine the MSCP Preserve size.

acquisitions (**Table 1, Summary of MSCP Subarea Plan Preserve Assembly Status**). The Wildlife Agencies have approved complementary County acquisitions outside the 1997 PAMA areas to be counted in the MSCP Preserve as they contribute to the biological goals of the MSCP. In general, private mitigation or acquisitions outside PAMA or hardline preserve areas is complementary conservation and does not count toward the MSCP Preserve.

In addition to the 98,379-acre preservation acreage goal, the MSCP Subarea Plan also requires that the MSCP 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 hardline preserve areas to guide future acquisitions and private mitigation opportunities to ensure a functional MSCP Preserve.

TABLE 1. SUMMARY OF MSCP SUBAREA PLAN PRESERVE ASSEMBLY STATUS

Landowner	MSCP Preserve Goals (acres)	2024 MSCP Preserve Total (acres)	2025 MSCP Preserve Gain (acres)	2025 MSCP Preserve Total (acres)	% Achieved
Historical Baseline Preserve					
County ^a	5,461	5,466	-	5,466	100%
Federal and State	32,600	32,600	-	32,600	100%
Private	7,755	7,755	-	7,755	100%
Total	45,816	45,821	-	45,821	100%
Conserved Lands Since 1998					
Public and Partner Conservation					
Federal and State		25,962	-	25,962	
County ^a		8,271	1	8,272	
Local/non-profit partners		3,347	275	3,622	
Total	18,850	37,580	276	37,856	201%
Private Mitigation					
Dedicated Within Hardline	11,563	4,643	-	4,643	40%
Dedicated Outside Hardline	22,150	2,104	72	2,176	10%
Total	33,713	6,747	72	6,819	20%
MSCP Preserve Total^b					
Total	98,379	81,566	348	81,914	83%

NOTES:

a County acquisitions adjusted to reflect previously reported MSCP Preserve acreage.

b Baseline Preserve acres may be included in the "Conserved Lands – Public Acquisitions" total acreage. Therefore, the MSCP Preserve Total acreage is derived from summing Appendix F, Summary of Habitat Losses and Gains. "Cumulative Gain" total and Appendix A, the 2016 through 2025 approved additions to the MSCP Preserve that have not been formally designated in HabiTrak.

SOURCES: 2024 Annual Report and 2025 HabiTrak report Summary of Project Gains included in Appendix C, Summary of MSCP Gains.

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2.2 Baseline Preserve

The MSCP Preserve includes baseline preserve land acreage that was conserved prior to MSCP Subarea Plan adoption in 1997. **Table 2, MSCP Subarea Plan Historical Baseline Preserve**, shows the historical breakdown, by landowner, of the 45,821-acre Baseline Preserve.

TABLE 2. MSCP SUBAREA PLAN HISTORICAL BASELINE PRESERVE

Landowner	Acres
County	5,466
Federal and State	32,600
Private	7,755
Total Baseline Preserve	45,821

2.3 Public and Partner Conservation

Public and partner acquisitions owned and managed in the MSCP Preserve total 38,292 acres (**Table 3, MSCP Public and Partner Acquisitions Since 1998**). Within the MSCP Subarea Plan boundaries, land owned and/or managed by the Wildlife Agencies, BLM, local partners, and the County total 57,588 acres. Section 10.4 of the IA states that the estimated conserved acreages through public acquisition to complete the MSCP 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 MSCP Preserve. The MSCP Subarea Plan outlines that the 18,850 acres would be split between 9,425 acres acquired by the County with local funds and 9,425 acres acquired with federal and state funds. Total acquisitions by the federal, state, and County, 34,238 acres, exceeds the public acquisition goal of 18,850 acres.

The County and the Wildlife Agencies maintain up-to-date, accurate accounting of their acquisitions and acquisitions completed by partnering agencies. Tracking of public, local government, and non-profit partners’ acquisitions is completed using both the CDFW maintained HabiTrak database and its subsequent reports that are found in **Appendices C, E, F, and G**, as well as manual accounting, which can be found in **Appendices A and B**.

The County has made several manual adjustments to HabiTrak accounting from 2016-2019 with approval from the Wildlife Agencies. In 2016, the County and the Wildlife Agencies concluded an accounting of conserved lands from public acquisition. As a result of the audit, 2,479 acres of County acquisitions were added to the MSCP Preserve, with five acres allocated to the Baseline MSCP Preserve total and 2,474 acres allocated to the MSCP Preserve total.

Since 2017, the County has contributed to the MSCP Preserve with acquisitions outside of PAMA and hardline areas (**Appendix A-2**). In 2017, the Wildlife Agencies approved the inclusion of an additional 173 acres⁷ in the MSCP Preserve for the County’s Dictionary Hill acquisition. Subsequent acquisitions for Dictionary Hill, Peutz Valley, Lakeside Linkage, Ramona Grasslands, Skyline, Santa Fe Valley Preserves and Sweetwater Regional Park have

⁷ A total of 177 acres was specified in the letter to the Wildlife Agencies for the inclusion of Dictionary Hill Preserve into the MSCP Preserve. The letter used Assessor’s acreage. In HabiTrak, GIS acreage for the same parcels totaled 173 acres. The 173 acres has been used in the manual accounting of County acquisitions added to the MSCP Preserve.

resulted in 309.5 acres of non-PAMA or hardline area conservation of preserve lands to add to the MSCP Preserve. Data contained in this chapter reflects these manual additions to the MSCP Preserve plus those reported as HabiTrak 2025 habitat gains (**Appendix C**). HabiTrak has not been updated to reflect these changes.

TABLE 3. MSCP PUBLIC AND PARTNER ACQUISITIONS SINCE 1998

Agency	Funded In MSCP Preserve (acres)	2025 MSCP Preserve Total Owned and Managed (acres)	Complementary Conservation Owned and Managed ^a (acres)	Total in the MSCP Subarea Plan Boundaries Owned and Managed (acres)
Federal				
USFWS	3,135	8,840	3,197	12,037
BLM	1,830	1,830	2,609	4,439
Subtotal	4,965	10,670	5,806	16,476
Non-Federal				
State	12,164	15,849	11,557	27,406
County	5,181 ^b	8,272 ^c	0	7,354 ^d
Local Partners	3,066	3,622	1,327	4,949
Subtotal	20,411	27,743	12,884	40,627
Total				
Grand Total	25,376	38,413	18,690	,57,103

NOTES:

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

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

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

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

SOURCES: 2024 Annual Report; Appendix B, Wildlife Agency Tracked Acquisitions; Appendix A-1, County Tracked Acquisitions Since 1998; Appendix C, Summary of MSCP Gains

County Preserve Lands

The County has acquired and/or managed 13,730 acres in the MSCP Subarea Plan Area (**Tables 2 and 3** and **Figure 1**). This includes 5,466 acres of baseline and 8,272 acres of newly acquired conserved lands. In 2025, the County acquired 1 acre addition to Dictionary Hill Preserve.

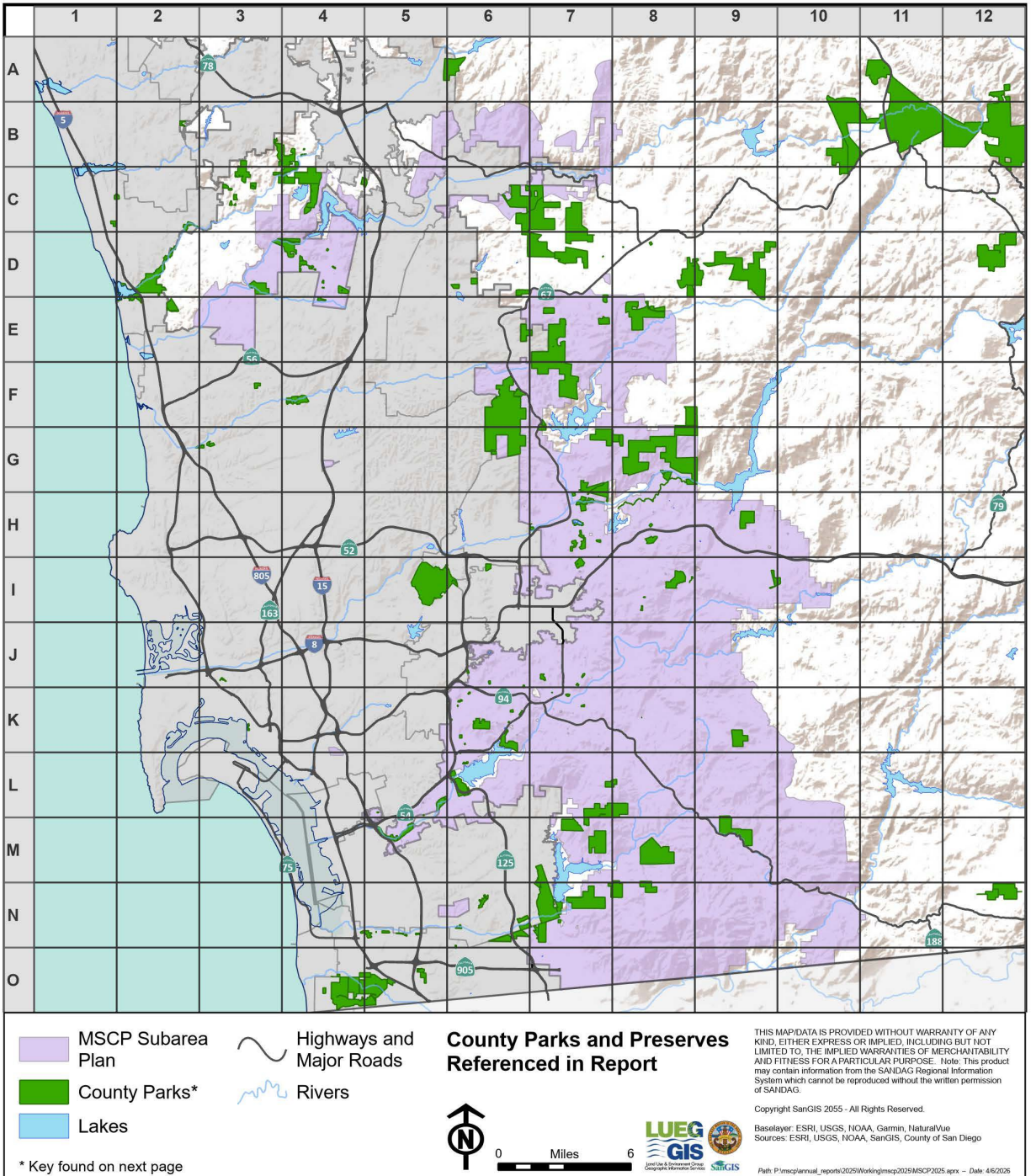


Figure 1A. County Parks and Preserves Referenced in Report, MSCP Subarea Plan

Map Key is on the following page

Map Key:

Figure 1A. County Parks and Preserves Referenced in Report, MSCP Subarea Plan

Grid Square	Name
E8	Barnett Ranch County Preserve
E7	Boulder Oaks County Preserve
D4	Christopher Hill County Preserve
J7	Damon Lane County Park
C4	Del Dios Highlands County Preserve
K6	Dictionary Hill County Preserve
E7	Dos Picos County Park
F8	El Capitan County Preserve
G8	El Monte County Park
H8	Flinn Springs County Park
D7	Holly Oaks County Preserve
E6	Iron Mountain Preserve
H7	Lakeside Community Center
H7	Lakeside Linkage County Preserve
L9	Lawrence and Barbara Daley County Preserve
H7	Lindo Lake County Park
G7	Louis A. Stelzer County Park
E7	Luelf Pond County Preserve
D3	Lusardi Creek County Preserve
G7	Oakoasis County Preserve
I8	Old Ironsides County Park
N7	Otay Lakes County Park
N6	Otay Ranch POM
N6	Otay Valley Regional Park
H9	Peutz Valley County Preserve
C6	Ramona Grasslands County Preserve
D3	Santa Fe Valley Preserve
K9	Skyline Preserve
L6	Spring Valley Community Center
K6	Spring Valley County Park
I8	Stoneridge County Preserve
L6	Sweetwater Regional Park
F6	Sycamore Canyon / Goodan Ranch County Preserve

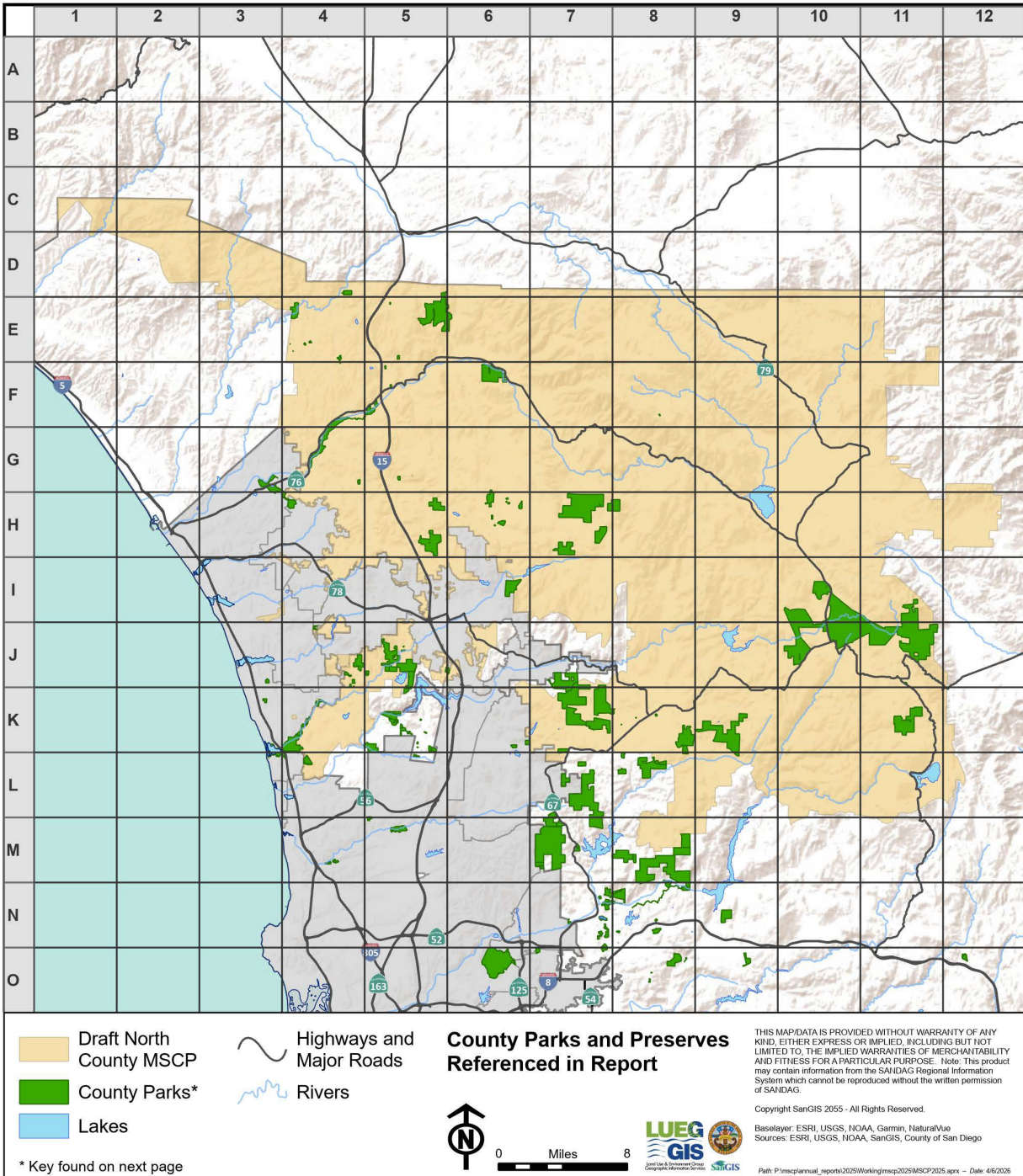


Figure 1B. County Parks and Preserves Referenced in Report, Draft North County MSCP

Map Key is on the following page

Map Key:

Figure 1B. County Parks and Preserves Referenced in Report, Draft North County MSCP

Grid Square	Name
L8	Barnett Ranch County Preserve
I6	Bottle Peak County Preserve
J5	Del Dios Highlands County Preserve
J4	Diamond Trail County Preserve
M8	El Capitan County Preserve
J4,K4,J5	Escondido Creek County Preserve
E4	Fallbrook Community Center
J5	Felicita County Park
G3,H3,H4	Guajome County Park
H7,H8	Hellhole Canyon County Preserve
H5	Hidden Meadows County Preserve
H6	Keys Creek County Preserve
G5	Knollwood County Preserve
E4,F4	Live Oak County Park
H5,I5	Mountain Meadow County Preserve
K8,K9,L9	Mt. Gower County Preserve
D5,E5,E6	Mt. Olympus County Preserve
F8	Palomar Mountain County Park
H7	Paradise Mountain County Preserve
J7,K7	Ramona Grasslands County Preserve
H4	Rancho Guajome Adobe
J4	Sage Hill County Preserve
L4	San Dieguito County Park
K3,L3,K4,L4	San Elijo Lagoon and Ecological Reserve
F4,G4,F5	San Luis Rey River Park
D4,E4	Santa Margarita County Preserve
K8	Santa Maria Creek County Park
I10,J10,I11,J11	Santa Ysabel East County Preserve
I10,J10	Santa Ysabel West County Preserve
K8,L8	Simon County Preserve
I11,J11	Volcan Mountain County Preserve
F6	Wilderness Gardens County Preserve
K11	William Heise County Park

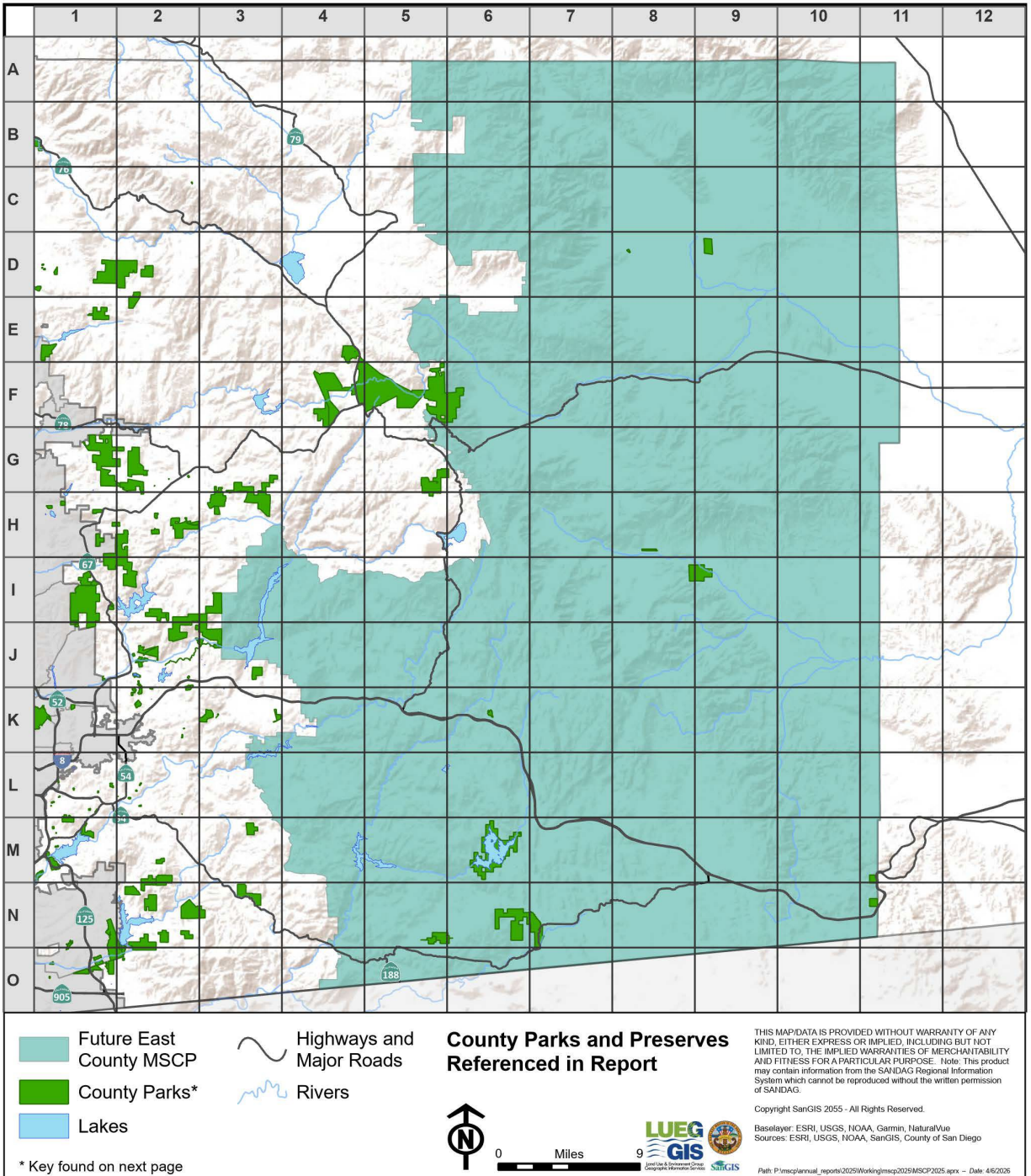


Figure 1C. County Parks and Preserves Referenced in Annual Report, Future East County MSCP

Map Key is on the following page

Map Key:

Figure 1C. County Parks and Preserves Referenced in Report, Future East County MSCP

Grid Square	Name
I8,I9	Agua Caliente County Park
J3	El Capitan County Preserve
N11	In-Ko-Pah County Park
M6	Lake Morena County Park
N5,N6	Mason County Preserve
K6	Pine Valley County Park
N5	Potrero County Park
N6,N7,O7	Star Ranch
F5	Volcan Mountain County Preserve

2.4 Private Mitigation

Private mitigation has conserved 6,819 acres in the MSCP Preserve (**Table 4, MSCP Private Mitigation**). In the reporting year, 72 acres of private mitigation were added to the MSCP Preserve. Private mitigation primarily includes gains acquired through the County’s permitting processes. Hardline agreements identified in the MSCP Subarea Plan (including Otay Ranch Preserve Owner/Manager [POM]) are found in the “Dedicated Private Hardline” totals. Private mitigation for new developments and other regulations is found in the “Privately Dedicated Lands” totals. A reconciliation of the MSCP private mitigation lands acreage and updated ownership of the dedicated private hardline (hardline areas) and privately dedicated lands is in process and is anticipated to be completed in 2026 in coordination with the Wildlife Agencies and reflected in the 2026 MSCP Annual Report.

When the Subarea Plan was adopted, private mitigation was estimated to conserve 33,713 acres over the permit term solely through private development. However, private development has not occurred as rapidly as expected, leading to fewer habitat impacts and, consequently, less acreage conserved through private mitigation. In addition to the slower private development rate, some of the lands originally anticipated to be conserved through private development mitigation have instead been conserved instead by the County and its local non-profit partners. Specifically, hardline conservation was initially planned to be implemented by solely through private mitigation, however, hardline conservation has been completed by not only private development mitigation, but by the County, Wildlife Agencies, and local partners. An analysis of how hardline and private mitigation conservation was is currently underway and conversations with the Wildlife Agencies are ongoing. One of the results of the reconciliation effort will be reported in the 2027 Annual Report and will break down the ownership or acquisition funding (e.g. County, Federal, State, private mitigation) that was used to help meet hardline acreage goal of 11,563 acres. The reconciliation effort will also result in updated acreages of lands conserved outside of the hardline areas through private development mitigation.

TABLE 4. MSCP PRIVATE MITIGATION

Mitigation Type	MSCP Preserve Goal (acres)	2024 Cumulative (acres)	2025 MSCP Preserve Gains (acres)	2025 MSCP Preserve Total (acres)
Dedicated Private Hardline ^a	11,563	4,643	0	4,643
Privately Dedicated Lands ^b	22,150	2,104	72	2,176
TOTAL	33,713	6,747	72	6,819

NOTES:

a Dedicated Private Hardline are HabiTrak Acres Inside Habitat Preserve.

b Privately Dedicated Lands are HabiTrak Acres Inside Habitat Preserve attributed to Private.

2.5 Mitigation Areas and Banks

Four County owned and managed mitigation areas, Boden Canyon, Rancho San Diego, Singing Hills, and Sweetwater, are established in the unincorporated county. Rancho San Diego, Singing Hills, and Sweetwater are in the South County Plan Area boundary. With the Wildlife Agencies’ approval, they are used to mitigate impacts to sensitive biological resources resulting from the County DPW construction, improvement, and maintenance projects. These mitigation areas 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 United States Army Corps of Engineers (USACE),

USFWS, CDFW, and Regional Water Quality Control Board (RWQCB). During the reporting period, 0.0 acres were used from County-owned mitigation areas. The status of each of the mitigation areas is detailed in **Appendix H** and summarized below.

Boden Canyon. Mitigation area totals 39.50 acres and includes the seven habitat types of coast live oak woodland, coastal sage scrub, Engelmann oak woodland, mixed chaparral, native grasslands, non-native grasslands, and southern riparian/oak woodland. All credits for four of the seven habitat types have been used. Credits totaling 15.68 acres for mixed chaparral, native grasslands and non-native grasslands remain.

Rancho San Diego. Mitigation area totals 409.20 acres and includes the seven habitat types of coast live oak woodland, coastal sage scrub, non-native grassland, marsh/riparian scrub/floodplain, mixed chaparral, native grasslands, and southern riparian/oak woodland. Credits totaling 248.34 acres remain.

Singing Hills. Mitigation area totals 69.70 acres for coastal sage scrub. Credits totaling 69.01 remain.

Sweetwater. Mitigation area totals 24.33 acres for marsh/riparian scrub/floodplain. Credits totaling 5.19 remain.

Per Section 9.13 of the IA, two types of mitigation banks are allowed in the MSCP Subarea Plan – formal banks approved by the Wildlife Agencies and banks that existed prior to adoption of the IA. **Table 5, *Mitigation Banks Available for Private Mitigation***, includes a list of approved mitigation banks in the South County Plan Area that are available for private mitigation. Additional information on approved mitigation banks can be found at www.wildlife.ca.gov/Conservation/Planning/Banking.

TABLE 5. MITIGATION BANKS AVAILABLE FOR PRIVATE MITIGATION

Mitigation Bank	Credit Manager	Conserved Credits ^a	Available Credits ^b	Potential Credits ^c
Crestridge Conservation Bank	J. Whalen Associates, Inc.	844.42	1,660	N/A
Daley Ranch Conservation Bank	City of Escondido	719.48	2,122.52	N/A
Ramona Grasslands Conservation Bank	McCollum Associates	185.63	24.8	N/A
San Miguel Conservation Bank	San Diego County Water Authority	629.45	556.55	N/A
San Vicente Conservation Bank	Mitigation Land Specialists	304.69	15.31	N/A
Skyline Conservation Bank	Skyline Land Partners, LLC	90	0	108.4
Willow Road Conservation Bank	Mitigation Credit Services, LLC	49.02	20.98	N/A

Please note: Credit reservations and pending transactions are not reflected in the available credits total and credits can have specific requirements for use. Potential purchasers need to contact the credit manager to verify availability and requirement fulfillment.

^a Conserved credits are credits that have been sold.

^b Available credits are credits that have been released by the signatory agency and are currently available for sale.

^c Potential credits are credits that have been approved through a bank agreement but will not be for sale until signed off by the signatory agency. Once the credits are signed off, they are released and become available credits. An N/A in this column signifies that all credits for that bank have been released.

2.6 Mitigation Land Policy (I-138)

In November 2020, the County Board of Supervisors reestablished the Board of Supervisors Mitigation Land Policy (MLP) I-138, Mitigation on County-Owned Land Managed by DPR, which does not replace nor supersede Board of Supervisors Policy I-117, Mitigation Banking Policy. Policy I-117 was included as part of the original MSCP approvals and sets the procedures 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 6, Mitigation Land Policy**, and **Appendix A**, accurately show year-to-year manual County updates and subtraction of acres used for MLP credits. There were no mitigation credits sold in 2025. **Table 6** also shows revenue generated since adoption in the MSCP 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 in **Table 6** according to GIS mapping of the vegetation available on those sites, which are generally acquired with County funds. The County also uses MLP within the other MSCP Plan Areas, but these numbers are not reported in this document.

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TABLE 6. MITIGATION LAND POLICY

Date	MSCP Plan Area	Project	Preserve	Credits Sold	Mitigation Credit Cost	Endowment For Stewardship
5/3/2011	SC	Tuscan Ridge	Louis A. Stelzer Park	1.070	\$16,050.00	\$4,060.00
6/22/2011	SC	Dictionary Hill - Maria Ave	Lakeside Linkage	0.310	\$7,225.00	\$1,240.00
10/2/2012	SC	DPW South (5) - Tavern Rd, Wing Ave, Woodside Ave., Emery Rd, Jamacha Blvd	Lawrence & Barbara Daley	2.450	\$98,000.00	\$14,700.00
1/17/2013	City of SD	Swiss Park Staging Area	Furby-North (East Otay Mesa)	1.000	\$23,300.00	\$6,000.00
2/14/2013	City of SD	San Ysidro Freight Yard Improvement	Tijuana River Valley Regional Park ^a	1.750	\$61,250.00	\$10,500.00
1/21/2014	SC	Central Ave Drainage Improvement and Woodside Ave Flood Control	Lawrence & Barbara Daley	0.370	\$14,800.00	\$2,220.00
6/10/2015	SC	San Vicente Rd Improvement - Ramona	Lawrence & Barbara Daley	8.040	\$223,512.00	\$60,300.00
7/11/2016	City of SD	LOSSAN double-tracking and Mid-Coast light rail	Tijuana River Valley Regional Park ^a	10.000	\$350,000.00	\$630,644.00
10/13/2023	SC	Furby-North County Preserve	Furby-North County Preserve	0.166	\$12,118.00	\$74,903.76
TOTAL				25.156	\$806,255.00	\$804,567.76
		Add:				
		Interest Earned			\$21,375.90	\$185,048.46

Date	MSCP Plan Area	Project	Preserve	Credits Sold	Mitigation Credit Cost	Endowment For Stewardship	
		MLP Funding used for MSCP Acquisitions					
		MLP Funded MSCP Acquisitions	MSCP Plan Area		Funding		
		Rice El Capitan MSCP Acquisition	SC		\$ (60,275.00)		
		SR 67 Preserve Expansion	SC		\$ (254,562.00)		
		Remaining SC MSCP MLP Funds Available			\$512,793.90	\$989,616.22	

NOTES:

^a Park is outside of the MSCP Subarea Plan Area but is within the City of San Diego MSCP

SOURCE: DPR

CHAPTER 3

Covered Projects

Section 4.3.4 of the MSCP Subarea Plan discusses clearing and grading permit exemptions for single-family residences and agriculture. The County issues Certificates of Inclusion (COIs) to track exempt acres. The County permitted 27 development projects in the reporting period in the MSCP Subarea Plan Area, all of which were residential projects. No agricultural exemptions were issued during the reporting period. Habitat clearing acreages for development projects in 2025 are cumulatively included in **Appendix E**. The number of covered projects and associated permit types are included in **Table 7, MSCP Covered Projects in Reporting Year**.

Acreage reported in Chapter 3 is in GIS acreage as opposed to Assessor’s acreage. GIS acreage is utilized as MSCP Preserve gains and losses are tracked in HabiTrak, the CDFW database, using GIS acreage. For consistency, GIS acreage will be used when reporting on acreage for MSCP Preserve assemblage, losses, and how the conserved lands within the MSCP Preserve are successfully meeting MSCP and Subarea Plan goals and objectives.

TABLE 7. MSCP COVERED PROJECTS IN REPORTING YEAR

Permit Type	Number of Projects
Single Family Exemptions COI	27
Agricultural Exemption COI	0
TOTAL SINCE 1998	4,475

SOURCE: 2025 HabiTrak Report found in Appendix E, Summary of MSCP Losses

3.1 Clearing for Single Family Residences

COIs were issued for 27 permits for single-family residential projects. Not all projects cleared totaled up to the two or five allowable acres which resulted to 25 acres in 2025 in exemptions. Private landowners of parcels existing as of January 1, 1997, within the MSCP Subarea Plan boundaries and zoned for single-family residences, can apply for a COI for their property. COIs are issued for clearing or grading of two or five acres depending on whether the parcel is in PAMA or not, and ten acres if a house existed on the parcel before October 22, 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 E** includes COIs for permits issued in 2025 for clearing habitat on parcels ten acres or smaller.

The following details the grading and clearing exemptions provided in Section 4.3.4.2 of the MSCP Subarea Plan, as implemented by the Biological Mitigation Ordinance (BMO). Parcels which are less than ten 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 PAMA, parcels existing as of January 1, 1997, without a dwelling unit as of October 22, 1997, and are less than ten 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. Grading and clearing on the remaining portion of the parcel must meet the mitigation requirements of the BMO. Outside PAMA, grading and clearing on parcels less than

ten 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.

These exempted acres are tracked and were accounted for within the MSCP 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 objectives of the MSCP Subarea Plan.

3.2 Agricultural Exemption

No COIs were issued for agricultural exemptions in 2025. Section 4.3.4.3 of the MSCP Subarea Plan allows up to 3,000 acres of cumulative clearing and grading for agriculture without mitigation requirements of the MSCP Subarea Plan and the BMO. When the 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 are reached. COIs issued for agricultural clearing in the Subarea since the MSCP Subarea Plan was approved are listed in **Appendix I**, a cumulative reporting. Since 1998, the County has issued 13 COIs covering 1,224 acres for agricultural clearing or 41% of the 3,000 acres.

CHAPTER 4

Habitat Gains and Losses

There was a total of 784 acres of habitat gains and 179 acres of habitat losses in the reporting period. This includes 348 acres of habitat gain inside the MSCP Preserve and 436 acres of complementary conservation.⁸ Habitat losses total 29 acres inside PAMA and hardline preserve areas and 149 acres outside these areas. Cumulatively, the MSCP Subarea Plan is in compliance with the rough step analysis, which ensures that habitat gains do not exceed habitat losses.⁹ From 1998 to 2025, the majority of habitat gains occurred within PAMA and hardline preserve areas, while the majority of habitat loss occurred outside of PAMA and hardline preserve areas. This indicates that the overall conservation goals are being met to create a functional MSCP Preserve as high-quality habitat within PAMA, hardline preserve areas are being conserved, and lower-quality habitat is being developed.

As previously stated, acreage reported in Chapter 4 is in GIS acreage as opposed to Assessor's acreage. GIS acreage is utilized as MSCP Preserve gains and losses are tracked in HabiTrak, the CDFW database, using GIS acreage. For consistency, GIS acreage will be used when reporting on acreage for MSCP Preserve assemblage, losses, and how the conserved lands within the MSCP Preserve are successfully meeting MSCP and Subarea Plan goals and objectives.

4.1 Habitat Gains and Losses

Habitat gains of 347.6 acres and habitat losses of 29.3 acres occurred within PAMA and hardline preserve areas in the reporting period, see **Table 8**, *Habitat Gain and Loss in Reporting Year*, and **Appendix F**.¹⁰ Habitat gains were reported within the MSCP Preserve through acquisitions and dedications of mitigation land via the discretionary permit process. Habitat losses were reported from permitted development within PAMA and hardline preserve areas. Mitigation gain and habitat loss were associated with the following types of projects for which approvals were granted and reported in COIs during the reporting period.

- Private projects (tentative maps/tentative parcel maps) with final map approval.
- Projects issued grading permits.
- Building permits exempt from the BMO.
- Lands acquired for preservation.

⁸ Appendix C, *Summary of MSCP Gains*, includes HabiTrak Summary of Project Gains, total of "Inside the Preserve" and County complementary acquisitions.

⁹ Appendix F, *Summary of Habitat Losses and Gains*, includes HabiTrak Summary of Project Losses and Gains.

¹⁰ Appendix C, *Summary of MSCP Gains*, includes HabiTrak Summary of Project Gains, total of "Inside the Preserve" and County complementary acquisitions.

Habitat Gains

In 2025, conserved land additions within PAMA and hardline preserve areas included non-profit acquisitions (275.4 acres), and private dedications in PAMA (72.1 acres [**Appendix C**]). There were 347.6 acres of habitat gain within the MSCP Preserve per HabiTrak.

Habitat Losses

Losses in 2025 were 29.3 acres within PAMA and hardline preserve areas, part of a total of 178.6 acres impacted by development projects within the MSCP Subarea Plan boundaries (**Table 8** and **Appendix E**).

TABLE 8. HABITAT GAIN AND LOSS IN REPORTING YEAR

Habitat Gain/Loss	Outside PAMA and Hardline Preserve Areas	Inside PAMA and Hardline Preserve Areas	Total
Habitat Gains			
County	0.54	-	0.54
Federal and State	-	-	-
Local/Non-profit partners	223.0	275.4	498.4
Private Mitigation Outside Hardline	212.7	72.1	284.8
Private Mitigation Inside Hardline	-	-	-
Total	436.2	347.56	783.8
Habitat Losses			
Total	149.3	29.3	178.6

SOURCES: 2025 HabiTrak reports found in Appendix C, Summary of MSCP Gains, Appendix E, Summary of MSCP Losses.

4.2 Habitat Tracking Reporting

CDFW maintains the HabiTrak toolset designed to track habitat losses and gains over time due to public and private development projects. HabiTrak reports for 2025 are attached to this reporting for the MSCP Subarea and are as follows.

- **Appendix C, Summary of MSCP Gains**, documents new acquisitions in the reporting year. Habitat gains in and outside PAMA and hardline preserve areas, as well as total acreage preserved by acquisition, are tracked. Habitat gains inside PAMA and hardline preserve areas are referred to as Acres Inside Habitat Preserve. These habitat gains represent the MSCP Preserve. Habitat gains outside PAMA and hardline preserve areas are referred to as Acres Outside Habitat Preserve. These habitat gains represent complementary conservation.
- **Appendix E, Summary of MSCP Losses**, documents habitat losses from covered project impacts by segment in the reporting year. Habitat losses inside and outside PAMA and hardline preserve areas, as well as total acreage lost by project, are tracked. Habitat losses inside PAMA and hardline preserve areas are referred to as Acres Inside Habitat Preserve. Habitat losses outside PAMA and hardline preserve areas are referred to as Acres Outside Habitat Preserve.

- **Appendix F**, *Summary of Habitat Losses and Gains*, documents both habitat losses and gains for MSCP habitats in the reporting year and cumulatively. Like in the above, habitat gains and losses are tracked inside and outside PAMA and hardline preserve areas and cumulatively.
- **Appendix G**, *Habitat Conservation Accounting Model*, documents compliance with rough step proportionality. It reports on habitat losses and gains within PAMA and hardline preserve areas only for the North and South Metro-Lakeside-Jamul segments. It is within these segments that specific conservation ratios must be met.

Habitat gains and losses differ from those entered in HabiTrak as corrections for County acquisitions counted as Inside the Preserve are outstanding or not yet recorded in HabiTrak for reporting years 2016 through 2025. For example, in 2019, 144 acres of habitat gains should be attributed to the MSCP Preserve rather than outside PAMA and hardline preserve areas for County acquisitions. In other years, accounting for losses due to MLP credits may need adjustment. For these reasons, the cumulative gains and losses of acreage within the MSCP Subarea Plan boundaries in the HabiTrak reports differ from the MSCP Preserve assembly totals reported in previous sections of this report.

HabiTrak reports a 79,124-acre cumulative gain within PAMA and hardline preserve areas and a loss of 1,610 acres (**Appendix F**). HabiTrak data for the 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. The acreage is outside of the MSCP Subarea Plan Area, but included in the County-owned, managed or funded lands in the MSCP Preserve. Manual accounting of County acreages in **Appendix A** also differs from HabiTrak because County numbers accurately show year-to-year manual County updates and subtraction of acres used for MLP 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 are 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. As such, a combination of HabiTrak reports and manual accounting of gains and losses within both the MSCP Subarea Plan boundaries and MSCP Preserve is utilized to total MSCP Preserve assemblage by landowner type documented in **Table 1 and Table 3**.

4.3 Rough Step Analysis

Rough step is the comparison of the total gains and losses within and outside of PAMA and hardline preserve areas in terms of total acres and habitat types. The purpose of rough step is to ensure that the conservation of high-quality habitat and habitat linkages, those lands inside PAMA and hardline preserve areas, occurs roughly in the same amounts at the same time as development outside PAMA and hardline preserve areas. **Table 9, Habitat Gains and Losses by Segment Since 1988 Per HabiTrak**, shows the cumulative gains and losses inside and outside of PAMA and hardline preserve areas for each of the four segments within the MSCP Subarea Plan.

The majority of habitat gains for the four segments occurred within PAMA and hardline preserve areas, while the majority of habitat loss occurred outside of PAMA and hardline preserve areas. This numerical comparison indicates that the overall conservation goals are being met to create a functional MSCP 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 areas and habitat linkages are depicted in **Figure 2** and **Figure 3**.

Rough step status can also be determined by comparing gains and losses of vegetation types inside and outside PAMA in the North and South Metro-Lakeside-Jamul segments. (PAMA designations only apply to the North and South Metro-Lakeside-Jamul segments. Lake Hodges and South County are both hardline preserve areas.) **Appendix G** 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 on-the-ground conditions. This data also indicates that conservation is proceeding in rough step with development. The report in **Appendix G** demonstrates the County's compliance with MSCP Subarea Plan Objective 1 "*Acknowledge the no-net-loss-of-wetlands standard to satisfy state and federal wetland goals, policies, and standards.*"

TABLE 9. HABITAT GAINS AND LOSSES BY SEGMENT SINCE 1998 PER HABITRAK

Segment	Cumulative (acres)		Total
	Outside PAMA and Hardline Preserve Areas	Inside PAMA and Hardline Preserve Areas	
Habitat Gain			
Lake Hodges	546	2,964	3,510
North Metro-Lakeside-Jamul	7,054	11,966	19,020
South Metro-Lakeside-Jamul	12,780	13,809	26,589
South County	2,040	11,485	13,525
Total	22,420	40,224	62,644
Habitat Losses			
Lake Hodges	2,529	108	2,637
North Metro-Lakeside-Jamul	4,108	735	4,843
South Metro-Lakeside-Jamul	3,525	611	4,136
South County	1,199	160	1,359
Total	11,361	1,614	12,976

NOTE: Totals may not add up due to rounding.

SOURCE: 2024 Annual Report plus 2025 HabiTrak reports found in Appendix C, *Summary of MSCP Gains and Appendix G, Habitat Conservation Accounting Model*.

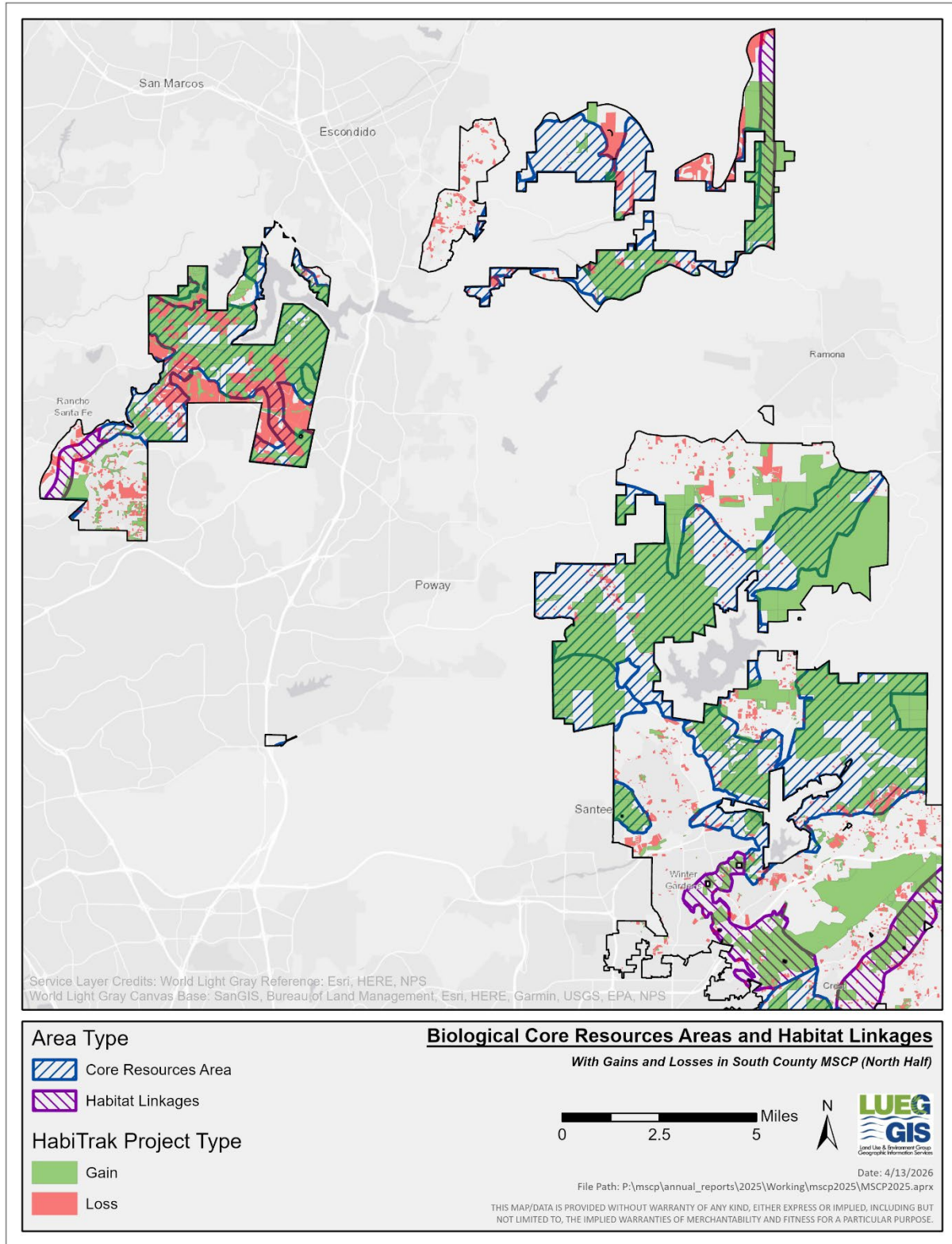


Figure 2. MSCP Biological Core Resource Areas and Habitat Linkages with Gains and Losses in the Northern Half of the MSCP Subarea Plan Area.

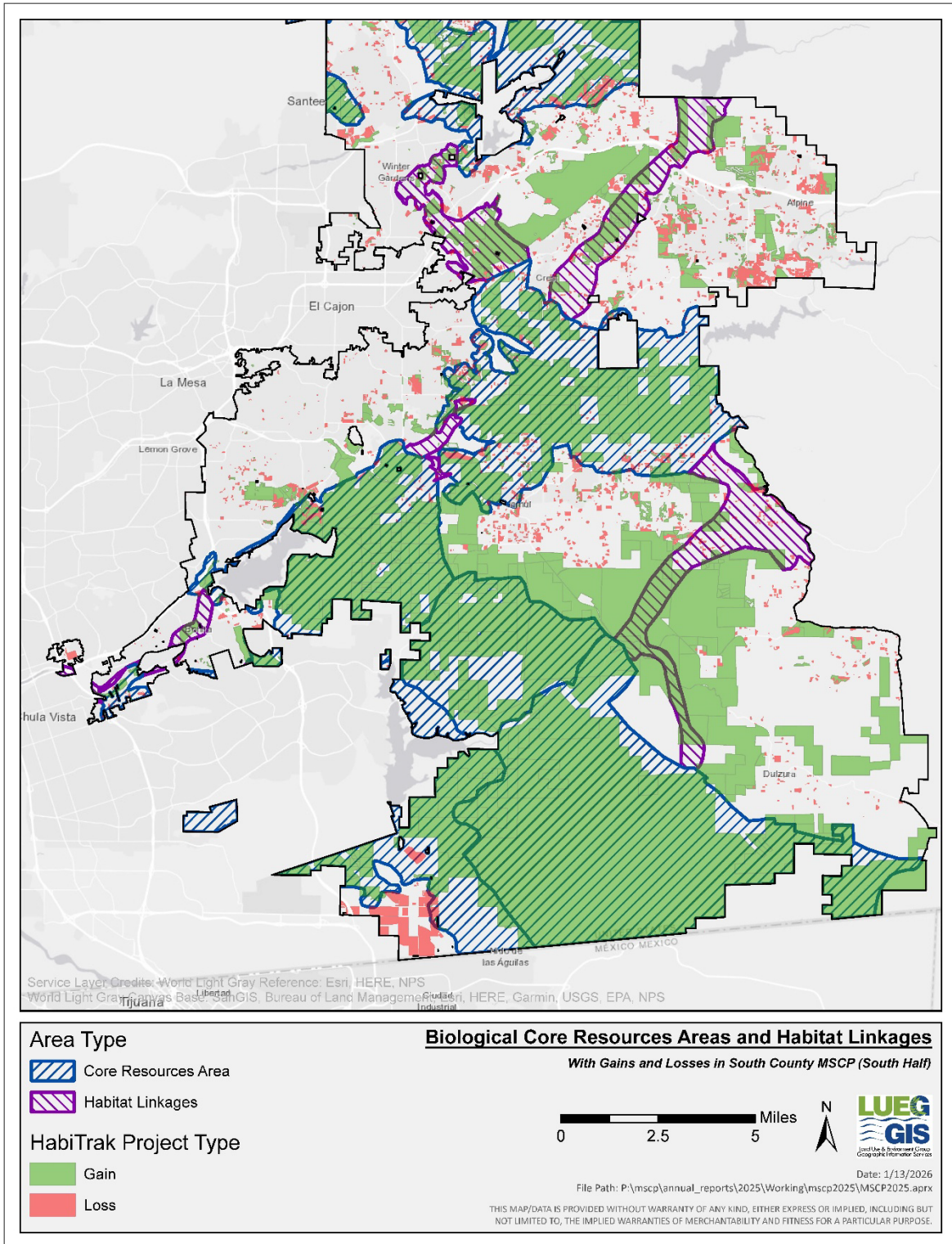


Figure 3. MSCP Biological Core Resource Areas and Habitat Linkages with Gains and Losses in the Southern Half of the MSCP Subarea Plan Area.

CHAPTER 5

Species and Habitat Conservation

The ultimate goal of the MSCP and Subarea Plan is to have a biologically functional MSCP Preserve that conserves vegetation communities (habitat) in the appropriate areas and quantities so that the MSCP covered species that depend upon them are successfully protected in perpetuity. The Subarea Plan outlined goals for how large the MSCP Preserve should be, how many acres of different habitat types should be conserved, and how many occurrences of MSCP covered species should be protected at the end of the 50-year permit term. It is recognized that successfully meeting the compliance goals of the MSCP Preserve may not ensure a biologically functional MSCP Preserve as other factors, including MSCP Preserve configuration, which will be assessed. The MSCP Preserve is created through the conservation efforts of the County, federal and state partners, local non-profits, and private development mitigation.

2025 marks the 28th year of the MSCP and Subarea Plan and the MSCP Preserve is currently over 80% assembled. Given that the County is just over half-way through the 50-year permit term, the County initiated efforts to determine the effectiveness of the MSCP Preserve. The first efforts were reported in previous MSCP Annual Reports and showed the County's contribution to the MSCP Preserve. In 2025, the approach of reviewing the effectiveness of the MSCP Preserve was expanded to include not only County lands, but also lands that were conserved by partnering entities. The MSCP and Subarea Plan acknowledge that a biologically functional MSCP Preserve may need to be larger than the 98,379-acre conservation goal; this may be required to ensure specific habitat types or areas are conserved to support the species that are covered in the Subarea Plan. As such, a foundational change from the previous analysis involves not only considering conservation from a MSCP compliance perspective, but also evaluating the effectiveness of the assembled MSCP Preserve. This chapter is intended to memorialize the revised approach that will be taken to assess preserve functionality, describe what efforts were completed during the 2025 reporting period, and outline next steps for the analysis.

5.1 Habitat Conservation Goals

The conservation goals of the Subarea Plan from when the Plan was adopted can be found in Sections 1.2.1 and 1.2.2. However, after adoption of the Plan, a portion of the County's Subarea Plan in the Otay Ranch area was annexed out of the County's Subarea Plan and into the City of Chula Vista's Subarea Plan. This annexation caused land that was originally under the County's jurisdiction to be removed and therefore no longer available to meet the County's conservation goals. The habitat conservation goals were subsequently revised in coordination with the Wildlife Agencies and are reflected in HabiTrak reports, specifically in the *Summary of Habitat Losses and Gains* for the entire Subarea Plan (**Appendix F**) and *Habitat Conservation Accounting Model* for the Metro-Lakeside-Jamul segment (**Appendix G**) within the column labeled "Target Cons."

The revised habitat conservation goals for the entire Subarea Plan are reflected in Table 10 as the Habitat Target Conservation Goals. The 18 vegetation communities were unchanged from the original vegetation communities listed in Subarea Plan Table 1-2. The habitat types found within the MSCP Preserve, as of December 31, 2025, reveals that two of the vegetation community goals that had smaller habitat acreage goals, southern maritime chaparral and

Tecate cypress forest, have been successfully met. Three additional habitat types, chaparral, riparian forest and disturbed wetland, are at nearly 90% of the conservation goal. Two habitat types, coastal sage scrub and chaparral, are at 73% and 88% of the conservation goals with over 30,000 acres of conservation having occurred for each vegetation community type. Understanding the progress made to date to conserve specific habitat types will help the County and its conservation partners to focus future acquisitions on specific vegetation communities that do not currently meet the conservation goals, such as the riparian habitats including riparian scrub at 32% and oak riparian forest at 48%.

TABLE 10. HABITAT CONSERVATION GOALS ACHIEVED IN SUBAREA PLAN

Vegetation Community	Area within MSCP Subarea Plan (acres)	Habitat Target Conservation Goals^a (acres)	Cumulative Conservation to 12/31/2025 (acres)	Cumulative Conservation to 12/31/2025^b (percent)
Coastal Sage Scrub	44,185	42,873	31,239.64	72.87%
Maritime Succulent Scrub	14	6	3.89	64.77%
Chaparral	41,265	39,871	35,006.91	87.80%
Southern Maritime Chaparral	12	5	5.82	116.31%
Coastal Sage Scrub/Chaparral	1,480	1,325	1,018.23	76.85%
Grassland	3,057	3,171	2,083.25	65.70%
Freshwater Marsh	219	233	186.36	79.98%
Riparian Forest	308	348	311.80	89.60%
Oak Riparian Forest	2,014	2,192	1,052.55	48.02%
Riparian Woodland	18	20	10.88	54.39%
Riparian Scrub	387	383	123.66	32.29%
Oak Woodland	2,673	2,211	1,166.25	52.75%
Tecate Cypress Forest	5,369	5,589	5,605.24	100.29%
Eucalyptus Woodland	101	105	46.03	43.84%
Open Water	147	149	39.60	26.58%
Disturbed Wetland	73	90	78.99	87.77%
Natural Flood Channel	253	225	34.23	15.22%
Other Habitat^c	7,126	-	1,110.75	

^aHabitat Goals identified in Table 1-2 were adjusted and updated in Habittrak to reflect annexations into Chula Vista

^bComponent parts may not add up to 100% because of rounding errors.

^cOther Habitat includes areas mapped as non-native vegetation, unvegetated habitat, disturbed land, agriculture, and urban/developed.

NOTES: Vegetation Communities listed are those identified in MSCP Subarea Plan Table 1-2. Habitat Protection Goals for the San Diego County Subarea (Appendix F).

SOURCE: CDFW Habittrak, LUEG-GIS.

The habitat conservation goals for the Metro-Lakeside-Jamul segment of the Subarea Plan are reported in Table 11 (**Appendix G**). While the *Habitat Conservation Accounting Model* HabiTrak report is also used to determine if development is not outpacing the rate of conservation (rough step), the vegetation communities conservation goals and how they are being met by the assembled MSCP Preserve are reported as well. The habitat types found within the MSCP Preserve, as of December 31, 2025, reveals that the vegetation community goal of riparian forest has been successfully met for this segment. Four vegetation communities, chaparral, coastal sage scrub/chaparral, riparian woodland, and disturbed wetland are at or over 70% of the conservation goal. As with the habitat goals for the entire Subarea Plan, understanding the progress made to date to conserve specific habitat types within the Metro-Lakeside-Jamul segment will help to focus future acquisitions on specific vegetation communities that are slower in meeting the conservation goals, such as the riparian habitats including riparian scrub at 19% and oak riparian forest at 48%.

TABLE 11. HABITAT CONSERVATION GOALS ACHIEVED IN COUNTY PRESERVES FOR METRO-LAKESIDE-JAMUL SEGMENT

Vegetation Community	Area within MLJ Segment Within PAMA (acres)	Habitat Target Conservation Goals for Segment (acres)	Cumulative Conservation to 12/31/2025 (acres)	Cumulative Conservation to 12/31/2025 ^a (percent)
Coastal Sage Scrub	23,569	18,717	12,983.61	69.37%
Maritime Succulent Scrub	-	-	-	-
Chaparral	22,179	18,662	14,671.10	78.61%
Southern Maritime Chaparral	-	-	-	-
Coastal Sage Scrub/Chaparral	1,366	1,152	833.58	72.36%
Grassland	2,145	1,741	1,086.62	62.41%
Freshwater Marsh	15	15	6.75	45.00%
Riparian Forest	84	84	86.09	102.49%
Oak Riparian Forest	2,044	2,043	979.40	47.94%
Riparian Woodland	6	6	4.24	70.67%
Riparian Scrub	298	298	56.85	19.08%
Oak Woodland	2,355	1,912	1,050.83	54.96%
Tecate Cypress Forest	-	-	-	-
Eucalyptus Woodland	53	41	13.52	32.98%
Open Water	124	124	18.39	14.83%
Disturbed Wetland	52	52	47.10	90.58%
Natural Flood Channel	197	197	13.09	6.64%
Other Habitat ^b	2,867	-	773.05	

^a Component parts may not add to total because of rounding errors.

^b Other Habitat includes areas mapped as non-native vegetation, unvegetated habitat, disturbed land, agriculture, and urban/developed.

NOTES: Vegetation Communities listed are those identified in MSCP Subarea Plan Table 1-2. Habitat Protection Goals for the San Diego County Subarea (Appendix G). Acreages listed are from HabiTrak.

SOURCE: County, LUEG-GIS.

5.2 MSCP Preserve Effectiveness

The approach to the effectiveness analysis for the assembled MSCP Preserve was modified from the approach used in previous Annual Reports. Discussions and coordination with the Wildlife Agencies and regional partners, including San Diego Management and Monitoring Program (SDMMP), were conducted to reorganize the analysis. It was also recognized that a different, complementary dataset (in addition to the data in HabiTrak) would be needed to conduct further analysis of the structure of the assembled MSCP Preserve. Ultimately, the analysis will look at the assembled MSCP Preserve as whole, at the different vegetation types conserved, where species occurrence conservation has been completed, conservation within the habitat linkages and corridors, and from a land management perspective.

Efforts in 2025 included multiple discussions with the Wildlife Agencies on the revised approach. Coordination with SDMMP on their efforts of developing the *State of the Preserve* analysis and report (<https://sdmmp.com/metrics/>) was also conducted. Efforts to complete a complementary dataset for the HabiTrak GIS data began during the reporting period. This complimentary dataset, which is based on the HabiTrak dataset, entailed reviewing all the parcels that have been entered into HabiTrak since the adoption of the Subarea Plan and updating that data to reflect current ownership and parcel boundaries. This dataset also includes the County's conservation of lands outside of PAMA that have been incorporated into the MSCP Preserve with agreement from the Wildlife Agencies. By updating this dataset and reflecting current ownership, the analysis will be able to evaluate land management for the parcels in the MSCP Preserve and determine if there are any management gaps that need to be rectified.

Efforts for the MSCP Preserve effectiveness analysis will continue in the next reporting period. The development of the complementary dataset will be completed. While the dataset is still being developed, coordination with the Wildlife Agencies and regional partners, including SDMMP, will help determine the metrics to be used to analyze the biological functionality of the MSCP Preserve. The dataset and the metrics will then be utilized to evaluate how the MSCP Preserve is functioning in terms of habitat and species conservation, linkages, land management, and to help guide future conservation acquisitions and management decisions. Draft results of the analysis are anticipated to be included in the 2026 MSCP Annual Report.

CHAPTER 6

Preserve Management

Preserve management within the MSCP Subarea is an important element of the MSCP Preserve success and the overall success of the MSCP Subarea Plan. The overall management goal of 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 IA Section 10.9, *Preserve Management*, and Section 10.10, *Preserve Management Program*, the County is responsible for managing the land it owns or acquires as well as ensuring that other private mitigation lands within the MSCP Preserve are managed consistent with the MSCP Subarea Plan. This chapter summarizes the stewardship activities in County Preserves and private mitigation areas. Private mitigation lands stewardship activities are summarized in *Section 6.3, Private Mitigation Lands Management*.

6.1 County Resource Management Plan

The County has a coordinated stewardship, monitoring, and adaptive management program to ensure proper management and protection of sensitive species and habitat on County Preserves. The RMPs provide a framework for long-term stewardship/management and monitoring actions required to protect biological resources on County Preserves. RMPs document biological and cultural resources on-site and provide guidance on management and preservation of those resources in accordance with Management Directives (MDs) pursuant to the requirements of the MSCP Subarea Plan Framework Management Plan (County 2001) and Table 3-5 of the MSCP Plan. To develop County Preserve-specific RMPs, the County conducts biodiversity inventory surveys that document the biological and cultural resources on the property. The County prepares RMPs for County Preserves larger than 300 acres or under 300 acres for County Preserves with unique habitat or species values. Their preparation is prioritized annually across all three MSCP Plan areas. The County has prepared or is in the process of preparing 20 RMPs in the MSCP Subarea Plan Area. RMPs are updated as needed, such as when additional biodiversity inventory surveys are completed or there are additions to existing County Preserves. Land stewardship/management actions are generally implemented by ranger staff. RMPs are in progress for Dictionary Hill, Iron Mountain, Peutz Valley, and Skyline Preserve, all of which are located within the MSCP Subarea Plan boundaries. RMP updates are in progress for Barnett Ranch, Boulder Oaks, Lakeside Linkage, Lusardi Creek, Ramona Grasslands, and Tijuana River Valley Regional Park, all (or portions) of which are located within the MSCP Subarea Plan boundaries. Management completed in the reporting year is summarized in Section 6.2 and **Appendix K**.

The County also conducts targeted monitoring on County Preserves to ensure species are thriving, to identify threats and stressors, and to identify appropriate adaptive management activities to further support biological and cultural resources. The monitoring is guided by the County's TMP. The TMP is an adaptive implementation plan that includes focused goals and objectives for target MSCP covered species and habitats and detailed monitoring protocols. As part of the County's monitoring program, biodiversity inventory surveys are conducted on newly acquired properties that are part of the County Preserve. The biodiversity inventory surveys are used to identify the appropriate monitoring for each property, consistent with the TMP. The TMP and monitoring results are provided in Chapter 7, *Preserve Monitoring and Research*. Adaptive

management actions informed by TMP monitoring are included in Section 6.2, Preserve Management of County Preserves.

In the reporting year, the County performed biological resources inventory surveys for one MSCP Subarea Plan County property. Following the transfer of the McCrink Ranch Property, now part of the Santa Fe Valley Preserve, to DPR in 2024, habitat mapping, incidental observations of special-status plant and animal species, and invasive non-native plant surveys were performed on the property in 2025.

Table 12, Resource Management Plans for County Preserves, reflects the current status of biodiversity inventory surveys and RMPs for the County Preserves with RMPs completed or updated.

TABLE 12. RESOURCE MANAGEMENT PLANS FOR COUNTY PRESERVES

County Preserve	Biodiversity Inventory Surveys Completed	RMP Completed/ Updated
1. Barnett Ranch Preserve	2001-2003, 2018	2004
Holly Oaks Park ^a	2018	
Luelf Pond Preserve ^a	2018	
2. Boulder Oaks Preserve	2007, 2013	2008
3. Del Dios Highlands Preserve ^b	2008-2011	2011
4. Dictionary Hill Preserve	2020	
5. El Capitan Preserve	2008	2009
6. El Monte Park	2008	2009
7. Furby-North Property	2011	2012
8. Iron Mountain Preserve	2021	
9. Lakeside Linkage Preserve	2008, 2021	2010
10. Lawrence and Barbara Daley Preserve	2009-2010	2011
11. Lusardi Creek Preserve	2008, 2018	2009
12. Oakoasis Preserve	2008	2009
13. Otay Ranch Preserve	1989-1991	2002/2018
14. Peutz Valley Preserve	2022	
15. Ramona Grasslands Preserve ^b	2009, 2021	2013
16. Louis A. Stelzer Park	2008	2009
17. Santa Fe Valley Preserve (McCrink Property)	1995, 2000, 2025	2003 ^c
18. Skyline Preserve	2022	
19. Stoneridge Preserve	2012	2013
20. Sycamore Canyon and Goodan Ranch Preserve	2008, 2012, 2016, 2019, 2021	2013/2025
21. Tijuana River Valley Regional Park	2018	2007

NOTES:

- a Barnett Ranch, Holly Oaks, and Luelf Pond Preserves will be managed under a single RMP as Holly Oaks and Luelf Pond Preserves are part of Barnett Ranch Preserve.
- b Ramona Grasslands and Del Dios Highlands Preserves span the MSCP Subarea Plan Area and draft North County MSCP Plan Area. They are included here because they are managed as a single unit.
- c Helix Environmental Planning, Inc. 2003. McCrink Ranch Habitat Management Plan. Prepared for Harbrecht Development, LP. January.

SOURCE: County of San Diego Department of Parks and Recreation.

6.2 Preserve Management of County Preserves

Preserve management benefits the 49 MSCP covered species found across County Preserves and are listed in **Appendix N**. Stewardship and adaptive management activities performed in 2025 on County Preserves guided by TMPs, annual work plans, and RMPs are described below and summarized in **Appendix K**. For each park or preserve, its size (first in Assessor's acreage and then in GIS acreage) and MSCP segment are provided. Assessor's and GIS acreages are both reported as the County acquires all real estate transactions in Assessor's acreage, while HabiTrak, the tracking database used to track MSCP Preserve assemblage, only utilizes GIS acreage. The two acreages can differ as Assessor's records of the legal acreage of parcels are plotted on paper and then converted into GIS. For these reasons, acreage in the following section will be reported as Assessor's acreage and GIS acreage for each park or preserve.

All parks and preserves discussed in this section are located with the MSCP Subarea Plan Area or are in a partnering MSCP Subarea Plan Area and are counted towards the County's MSCP Preserve assemblage. All County Preserves that are owned or managed by DPR within the MSCP Subarea Plan are discussed in the following section of the report to record the management actions implemented to ensure that the preserve lands within the MSCP Subarea Plan are successfully managed and the MSCP habitats and covered species thrive. It will be noted if a property is not counted towards the MSCP Preserve. County Preserves spanning multiple MSCP Plan areas or ownerships are acknowledged. MSCP covered species, other sensitive species, and habitats benefited by preserve management activities are identified. The following categories are used to link management actions to TMPs, annual work plans, and RMPs.

- **Habitat restoration and management actions** are habitat or species-specific. These actions are guided by the documents outlining adaptive management strategies such as the preserve-specific RMPs and annual work plans as well as by survey information resulting from the implementation of the TMP, biodiversity inventory surveys, research partner surveys, and other environmental surveys performed on County Preserves. As a standard management practice, dead or dying trees in the County Preserves are replaced with habitat appropriate native tree species that include coast live oak, Engelmann oak, sycamore, cottonwood, and arroyo willow, among other species. Replacement of dead or dying trees benefits MSCP covered species by providing habitat for nesting birds and cover for foraging amphibians. Cause of death of the trees on County Preserves is most commonly attributed to drought conditions, old age or disease. Tree pests including goldspotted oak borer and invasive shot hole borer remain a threat to trees on County Preserves and affected trees are treated when infestation is observed. Native shrub species commonly used in restoration projects include native cacti, lemonade berry, laurel sumac, monkeyflower, and Mexican elderberry. However, specific tree and shrub species will not be listed for every County Preserve in this section.

- **Invasive, non-native plant and animal control** implements MD A.3. *Reduce, control, or where feasible eradicate invasive, non-native fauna known to be detrimental to native species and/or the local ecosystem*, B.2. *Reduce, control, or eradicate non-native flora known to be detrimental to native species and local ecosystem*, and B.3. *Manage and minimize the expansion of invasive, non-native flora within the Preserve*, and corresponding sub-directives. Invasive, non-native plant species treatment and removal is also conducted on County Preserves and the targeted plant species may not be specified but would most likely include mustard and non-native annual grasses, among other species.
- **Access control** implements MD C.1. *Limit types of public uses to those appropriate for the Preserve*, C.2. *Manage public access in sensitive biological and cultural resource areas within the Preserve*, C.5. *Install and maintain fencing and gates within the Preserve*, C.6. *Properly maintain access roads, staging areas and trails for user safety, to protect natural and cultural resources, and to provide high-quality user experiences*, C.7. *Install, and maintain appropriate signage to effectively communicate important information to Preserve visitors*, D.1. *Maintain a safe and healthy environment for Preserve users*, and D.2. *Publicize and enforce regulations regarding littering/dumping, and corresponding sub-directives*. The mission of the County is to enhance the quality of life in San Diego County by providing exceptional parks and recreation experiences and preserving significant natural resources. Activities that address unauthorized access or implement access control measures to protect sensitive resources are described under this heading.
- **Fire management** implements MD B.4. *Provide for fire management activities that are sensitive to natural and cultural resources* and corresponding sub-directives.
- **Environmental education** implements MD C.3. *Provide interpretive and educational materials* and corresponding sub-directives.

Barnett Ranch Preserve

Preserve Total Acreage: 708 Assessor's acres, 745 GIS acres
MSCP Subarea Plan: 690 Assessor's acres, 668 GIS acres
Segment: Metro-Lakeside-Jamul
Draft North County MSCP: 18 Assessor's acres, 77 GIS acres

Management benefits the ten MSCP covered species known to occur on or utilize the Preserve, which are Belding's orange-throated whiptail, Blainville's horned lizard, Cooper's hawk, tricolored blackbird, golden eagle, southern California rufous-crowned sparrow, Swainson's hawk, western bluebird, southern mule deer, and mountain lion. Management actions included the following.

- **Habitat restoration and management.** The two-acre dozer line associated with the Bunny Fire in August 2023 was restored in 2024 through reseeding with on-site native California buckwheat. The restoration efforts were successful with plant coverage in 2025 comparable to pre-fire conditions. A total of 4 coast live oaks were planted by County Park Rangers as part of the Comprehensive Tree Program and 34 dead and potentially hazardous coast live oaks were removed from the Preserve due to damage by gophers or lack of water. In addition, Rangers and the Ramona Boy Scouts planted

29 native shrubs, including 10 white sage, 4 Cleveland sage, 10 monkeyflower, and 5 buckwheat.

- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand-pulling and targeted herbicide application. Target species included tree tobacco, castor bean, Italian thistle, and mustard.
- **Access control.** County Park Rangers repaired one concrete split rail fence within the staging area to manage public access and protect sensitive resources. In addition, Rangers increased patrol presence and provided outreach to park visitors by interpreting and reinforcing applicable rules and regulations related to motorized vehicle use.
- **Fire management.** County Park Rangers maintained an existing firebreak along the residential access easement and staging area using mowers and string trimmers.
- **Environmental education.** County Park Rangers led a native planting event that attracted 12 visitors, providing hands-on experience in native habitat restoration and stewardship.

Boulder Oaks Preserve

Preserve Total Acreage: 1,964 Assessor's acres, 2,022 GIS acres

MSCP Subarea Plan: 1,964 Assessor's acres, 2,022 GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits the 13 MSCP covered species known to occur on the Preserve, which are Tecate cypress, felt-leaved monardella, Lakeside ceanothus, Orcutt's brodiaea, San Miguel savory, Blainville's horned lizard, Belding's orange-throated whiptail, coastal California gnatcatcher, Cooper's hawk, southern California rufous-crowned sparrow, western bluebird, mountain lion, and southern mule deer. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers planted 68 coast live oak trees and 7 Engelmann oak trees as part of the Comprehensive Tree Program. Rangers also removed three dead coast live oaks and one dead young Engelmann oak due to lack of water. Tecate cypress, an MSCP covered species, was discovered for the first time in the northwest portion of the Preserve. This observation provides important opportunities for targeted habitat management and monitoring to support species conservation.

As part of a *TransNet* EMP funded project, the County implemented a bullfrog eradication project within the Preserve to improve habitat to facilitate the translocation of southwestern pond turtle and red-legged frog. Installation of silt fencing and eradication efforts began in 2024, and eradication efforts continued in 2025. Detailed information regarding this project can be found in Section 6.4, *Grant Funded Management Projects*.

- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand-pulling and targeted herbicide application. Target species included mustard, Dyer's rocket, Italian thistle, stinkwort, and puncture vine. In addition, invasive, non-native plant species control efforts were performed in the northern portion of the

Preserve associated with 2025 TMP management efforts as described in Section 7.1, *Preserve Biological Monitoring of County Lands*.

- **Access control.** County Park Rangers installed one new sign along the Preserve's entry road. When occasional unauthorized access occurred, County Park Rangers successfully communicated that the Preserve is closed to the public, achieving compliance through education.
- **Fire management.** County Park Rangers maintained the existing firebreak along the shoulders of the Preserve's entry road. Fire management included mowing, string trimming, and herbicide application.

Cactus Park

Preserve Total Acreage: 61 Assessor's acres, 62 GIS acres

MSCP Subarea Plan: 61 Assessor's acres, 62 GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits the two MSCP covered species known to occur in the Park, which are Blainville's horned lizard and coastal California gnatcatcher. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers removed two impacted non-native pepper trees that were infected with a parasitic fungi that is not a threat to native plant species.
- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included mowing. Target species included castor bean.
- **Access control.** Access control measures were enhanced throughout the Park in 2025. Fencing around the sports fields was replaced, including installation of new backstops and gates, to improve site conditions. Instances of illegal dumping were effectively addressed by changing locks on trash bins and increasing supervision in these areas. Use of electric and gas-powered motorized bikes and vehicles was managed through increased patrols by County Park Rangers, coordinated with the Sheriff's Department, resulting in improved compliance and protection of Park resources.
- **Fire management.** County Park Rangers maintained an existing firebreak within the Park adjacent to the residences located along Casa Grande Avenue using mowers and string trimmers.

Christopher Hill Preserve

Preserve Total Acreage: 126 Assessor's acres, 133 GIS acres

MSCP Subarea Plan: 134 Assessor's acres, 134 GIS acres

Segment: Lake Hodges

Management benefits the three MSCP covered species known to occur on the Preserve, which are coastal California gnatcatcher, coastal cactus wren, and San Diego barrel cactus.

Management actions included the following.

- **Habitat restoration and management.** The San Diego Fire-Rescue Department removed three dead eucalyptus trees that burned in a fire. Management activities in 2025 included responding to a fire of unknown origin that affected chaparral habitat. County Park Rangers are proactively monitoring the burned area and removing non-native invasive species to support habitat recovery.
- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand-pulling, removal with hand tools, and string trimming. Target species included Russian thistle and black mustard.
- **Access control.** County Park Rangers documented illegal dumping along the Preserve boundary line. In response, Rangers and County staff are coordinating the installation of a fence in early 2026 to deter future dumping and protect Preserve resources.
- **Fire management.** County staff maintained a firebreak along an existing utility road at the Preserve boundary in coordination with the agencies that maintain powerlines adjacent to the Preserve. Maintenance activities were conducted using hand tools, power tools, and string trimmers.

Damon Lane Park

Park Total Acreage: 29 Assessor's acres, 29 GIS acres

MSCP Subarea Plan: 29 acres

Segment: Metro-Lakeside-Jamul

Management benefits the MSCP habitat known to occur in the Park, which are coastal sage scrub, grasslands, and riparian forest. Management actions include the following.

- **Habitat restoration and management.** County Park Rangers removed two eucalyptus trees that fell during a storm event.
- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand-pulling, removal with loppers, and string trimming within the Park, including the creek. Targeted species included black mustard, castor bean, Russian thistle, and giant reed. Removal of non-native and invasive species in the creek is an ongoing process to maintain an unrestricted stormwater flow.
- **Access control.** In response to reports of off-leash dogs, County Park Rangers installed five new signs prohibiting off-leash activity and added reflectors along the fence at the Park entrance to improve visibility and compliance. Rangers responded to off-road

activity by providing verbal warnings and visitor education to promote compliance with Park regulations and resource protection.

- **Fire management.** County Park Rangers maintained an existing firebreak using hand-pulling methods, loppers, and string trimmers. The firebreak follows the fence line around the northern boundary of the Park.

Del Dios Highlands Preserve

Preserve Total Acreage: 774 Assessor's acres, 782 GIS acres

MSCP Subarea Plan: 269 Assessor's acres, 269 GIS acres

Segment: Metro-Lakeside-Jamul

Draft North County MSCP: 505 Assessor's acres, 513 GIS acres

Management benefits the 15 MSCP covered species known to occur on or utilizing the Preserve, which are Encinitas baccharis, wart-stemmed ceanothus, Belding's orange-throated whiptail, Blainville's horned lizard, coastal California gnatcatcher, Cooper's hawk, golden eagle, northern harrier, peregrine falcon, southern California rufous-crowned sparrow, ferruginous hawk, white-faced ibis, western bluebird, mountain lion, and southern mule deer. Management actions included the following.

- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included string trimming and hand-pulling. Target species included tree tobacco, black mustard, and castor bean.
- **Access control.** County Park Rangers replaced a damaged watershed interpretive sign along the Del Dios Trail. A minor encroachment of adjacent private property was identified within a previously disturbed area off Mt. Israel Road. The adjacent landowner was contacted, and the encroaching property was promptly removed.
- **Fire management.** County Park Rangers maintained an existing firebreak along a San Diego Gas & Electric (SDGE) power pole trail using string trimmers, mowers, and hedgers. An existing firebreak along Mt. Israel Road was maintained with string trimmers and hedgers.



New watershed interpretive sign at Del Dios Highlands Preserve.

Dictionary Hill Preserve

Preserve Total Acreage: 180 Assessor's acres, 177 GIS acres

MSCP Subarea Plan: 180 Assessor's acres, 177 GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits the eight MSCP covered species known to occur on the Preserve, which are San Diego barrel cactus, San Diego goldenstar, variegated dudleya, Blainville's horned lizard, Belding's orange-throated whiptail, coastal California gnatcatcher, Cooper's hawk, and southern California rufous-crowned sparrow. Management actions included the following.

- **Habitat restoration and management.** A habitat restoration project benefiting California coastal gnatcatcher, Quino checkerspot butterfly, and monarch butterfly is ongoing across the Preserve. Initiated in 2021 as a Proposition 68 Grant-funded project, this habitat restoration effort aims to restore and enhance four acres of habitat on the Preserve. In 2025, habitat restoration activities included installation of 292 one-gallon container plantings and hand-seeding native seed mixes in bare areas to support establishment of native vegetation. Detailed information regarding this project can be found in Section 6.4, *Grant Funded Management Projects*.
- **Invasive, non-native plant control.** Invasive, non-native plant species control methods included hand-pulling and use of string trimmers. Target species included wild mustard, stinkwort, puncture vine, and fountain grass.
- **Access control.** County Park Rangers replaced one wood fence and installed one new wood fence and two new dog waste signs to improve visitor compliance and resource protection. Posts with chains were installed at the San Bernardino trailhead to deter

illegal activity, including off-road vehicle use, littering, off-leash dogs, graffiti, alcohol consumption, and smoking within the Preserve. Additional preventative and corrective actions include daily Ranger patrols, litter removal, and graffiti abatement.

- **Fire management.** County Park Rangers performed maintenance of the existing firebreaks using string trimmers. Existing firebreaks occur along the southern, western, northwestern, and southeastern Preserve boundaries.
- **Environmental education.** County Park Rangers led hikes and hosted events within the Preserve, attracting 133 visitors in total. Educational opportunities included an invasive plant removal workshop, a hike focused on identifying variegated dudleya, multiple Ranger-led hikes, and an interpretive talk about birds of prey. In addition, a high school intern participated in a job-shadowing experience with Rangers, and Rangers installed educational flyers throughout the Preserve to inform visitors about coyotes and their behaviors.



Ranger Led Hike at Dictionary Hill Preserve.

Dos Picos Park

Management actions included the following.

- **Habitat restoration and management.** County Park Rangers planted 67 coast live oak trees, 48 Engelmann oak trees, and 6 incense cedar trees to re-establish 63 dead coast live oaks, 25 dead Engelmann oaks, and 6 dead incense cedars that were removed due to heat damage and lack of water. Trees were planted for habitat restoration and biodiversity purposes. In addition, an aerator was deployed in the pond to control algae growth, improve water quality, and support a healthy aquatic ecosystem.

- **Invasive, non-native plant control.** Invasive, non-native plant species treatment and removal efforts included the use of string trimmers and targeted herbicide application. Non-native short-pod mustard was targeted for removal.
- **Access control.** County Park Rangers repaired seven directional signs and one chain-link fence to improve visitor guidance and support appropriate public access. Rangers documented instances of inappropriate visitor use, including littering, damage to trees, and unauthorized motorized and equestrian access. In response, Rangers and staff conducted regular patrols focused on education, enforcement of Park regulations, and achieving voluntary compliance.
- **Fire management.** County Park Rangers maintained a firebreak along a service road within the day use area using mowing and string trimming.
- **Environmental education.** County Park Rangers and volunteers held several educational activities in 2025, including a tree planting event, a scavenger hunt, and a snake interpretive event. These environmental education activities were attended by approximately 325 park visitors.



Tree planting event at Dos Picos County Park.

El Capitan Preserve

Preserve Total Acreage: 2,759 Assessor's acres, 2,324 GIS acres

MSCP Subarea Plan: 2,759 Assessor's acres, 2,324 GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits the 11 MSCP covered species known to occur on the Preserve, which are felt-leaved monardella, Lakeside ceanothus, Belding's orange-throated whiptail, Blainville's horned lizard, Cooper's hawk, golden eagle, southern California rufous-crowned sparrow, coastal cactus wren, western bluebird, mountain lion, and southern mule deer. Management actions included the following.

- **Habitat restoration and management.** In June 2025, management activities included responding to the Monte Fire, which burned over 1,000 acres and led to a one-week closure of the Preserve. Cause of the fire is unknown. Response efforts included coordination with local fire response teams and facilitating entry by opening Park gates and providing route options for quick access. County Park Rangers continue to proactively monitor the Preserve, and recovery efforts have focused on habitat protection and soil stabilization. Measures have included the application of composted "grower's mulch" in the parking area and along roadways to suppress weeds and retain soil moisture, supporting the Preserve's long-term ecological resilience.
- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand-pulling, weed whipping, targeted herbicide application, and mulching non-native grasses and weedy species in the Preserve's parking area.
- **Access control.** In response to incidents of illegal dumping and vehicle break-ins along the Preserve entry road, Rangers increased patrols and coordinated with appropriate authorities as needed. Rangers also enhanced access control and visitor safety through installation of one new regulatory sign and repair of one concrete fence within the Preserve parking lot.
- **Environmental education.** County Park Rangers led two "Warrior Hike" special events on Memorial Day and Veteran's Day, providing opportunities for active and retired military personnel and the public to engage with the Preserve. Approximately 600 community members participated, honoring military service while hiking El Cajon Mountain. These events encouraged outdoor recreation and increased awareness of the Preserve's natural resources.

El Monte Park

Park Total Acreage: 120 Assessor's acres, 117 GIS acres

MSCP Subarea Plan: 120 Assessor's acres, 117 GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits the three MSCP covered species known to occur on the Preserve, which are southern California rufous-crowned sparrow, western bluebird, and southern mule deer. Other notable wildlife species reported by park rangers in 2025 include golden eagle, bald eagle, and mountain lion. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers planted five Engelmann oaks. County Park Rangers removed three diseased carob trees that were potentially hazardous to visitors. Sixteen shrubs were also planted, including four toyon, four western redbuds, four lemonade berry, and four elderberry.
- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included targeted herbicide application, hand-pulling, and use of chainsaws. Target species included tamarisk, Mexican fan palm, and castor bean.
- **Access control.** County Park Rangers installed four new enforcement and safety signs and repaired for additional enforcement and safety signs throughout the Park, as well as repaired one concrete fence along the staging lot. In response to observed illegal activities, including unauthorized access, camping, graffiti, drug use, off-road activity, hunting, illegal dumping, and unauthorized aircraft use, Rangers increased patrol frequency, installed targeted signage, and implemented the use of trail cameras to support compliance and resource protection.
- **Fire management.** County Park Rangers used spin trimmers, mowers, and tractors to maintain a firebreak around the perimeter of the Park and adjoining property lines.
- **Environmental education.** County Park Rangers held a variety of interpretive programs, including birds of prey talks that featured live raptor ambassadors and provided education on the biology, behaviors, and ecological roles of hawks, owls, and other birds of prey, guided hikes along the historic flume trail, and early morning birding walks. Collectively, these programs engaged more than 6,200 Park visitors and promoted wildlife awareness and stewardship.

Flinn Springs Park

Park Total Acreage: 80 Assessor's acres, 73 GIS acres
MSCP Subarea Plan: 80 Assessor's acres, 73 GIS acres
Segment: Metro-Lakeside-Jamul

Management benefits the MSCP covered habitats known to occur in the Park, which are chaparral, coastal sage scrub/chaparral, and oak riparian forest. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers worked with volunteers to plant 40 coast live oak trees in support of the County's Climate Action Plan tree-planting initiatives. Rangers removed eight dead coast live oak trees, including one collapsed and potentially hazardous oak tree, as well as one pine tree that fell during a storm event. Rangers also planted 10 lavender shrubs within the Park's pollinator garden.
- **Invasive, non-native plant control.** Invasive, non-native plant species control efforts included hand-pulling, use of loppers, and use of string trimmers to remove giant reed, castor bean, stinkwort, Mexican fan palm, Russian thistle, tree tobacco, and black mustard within the creek and throughout the Park. The Park is adjacent to Crestridge Ecological Preserve, owned by CDFW. As such, treatment of invasive, non-native plant species within the Park benefits movement of animals through both properties and benefits native plant species.

- **Access control.** County Park Rangers enhanced visitor awareness and safety through installation of seven new safety and interpretive signs at Park entry kiosks, including signage focused on rattlesnake safety. Compliance issues including illegal dumping in Park dumpsters, off-leash dogs, and smoking were addressed through increased Ranger patrols, targeted visitor education, and lock installation, resulting in better protection of Park resources and visitor experiences.
- **Fire management.** County Park Rangers used hand-pulling, string trimmers, and loppers to maintain an existing firebreak along the northern and western Park boundaries.
- **Environmental education.** County Park Rangers held numerous educational outreach events in 2025, including an Earth Day tree planting, a rattlesnake safety workshop, a Howl-o-Ween Discovery Table, and monthly “early bird” birding walks. A total of 116 Park visitors attended these events.



Birding walk at Flinn Springs Park.

Furby-North Preserve

Property Total Acreage: 83 Assessor's acres, 79 GIS acres
City of San Diego MHPA: 83 Assessor's acres, 79 GIS acres

Management benefits the ten MSCP covered species known to occur on the Preserve, which are coast (San Diego barrel) cactus, Otay tarplant, snake cholla, Belding's orange-throated whiptail, Blainville's horned lizard, coastal cactus wren, coastal California gnatcatcher, least Bell's vireo, northern harrier, and southern California rufous-crowned sparrow. Management actions included the following.

- **Invasive, non-native plant control.** Invasive, non-native plant species control efforts were performed in the northern portion of the Preserve associated with 2025 Targeted Monitoring Plan management efforts as described in Section 7.1, *Preserve Biological Monitoring of County Lands*.
- **Access control.** Illegal trails and off-road activity continue to present management challenges throughout the Preserve in 2025. County Park Rangers implemented targeted access control measures, including installation of fencing, gates, and large boulders, to deter unauthorized access and protect sensitive resources. In addition, Rangers installed regulatory signs along Otay Mesa Road to discourage illegal trash dumping and improve compliance.

Holly Oaks Park

Preserve Total Acreage: 40 Assessor's acres, 42 GIS acres
MSCP Subarea Plan: 40 Assessor's acres, 42 GIS acres
Segment: Metro-Lakeside-Jamul

Management benefits the five MSCP covered species known to occur in the Park, which are Cooper's hawk, Swainson's hawk, tricolored blackbird, western bluebird, and Lakeside ceanothus. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers planted 11 coast live oak trees, five California sycamore trees, and two Fremont cottonwood trees and removed two dead incense cedar trees damaged by gophers.
- **Invasive, non-native plant control.** Invasive, non-native plant species control efforts included hand-pulling and targeted herbicide application. Target species included puncture vine, mustard, eucalyptus, and tree tobacco.
- **Access control.** County Park Rangers installed one new sign and repaired split rail fencing to deter unauthorized off-road motorized vehicle use and support visitor compliance with designated trail access. Rangers also promoted long-term compliance through on-site education, informing visitors of applicable Preserve rules and regulations.
- **Fire management.** County Park Rangers maintained an existing firebreak along the southern Preserve boundary. Fire management included string trimming.

- **Environmental education.** County Park Rangers hosted a tree planting event on Green Friday, the day after Thanksgiving, to encourage San Diegans to swap shopping plans for outdoor experiences. The event provided hands-on environmental education opportunities for five participants.



Tree Planting Event at Holly Oaks Park

Iron Mountain Preserve

Preserve Total Acreage: 160 Assessor's acres, 162 GIS acres

MSCP Subarea Plan: 160 Assessor's acres, 162 GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits the seven MSCP covered species known to occur on the Preserve, which are heart-leaved pitcher sage, Belding's orange-throated whiptail, Blainville's horned lizard, Cooper's hawk, southern California rufous-crowned sparrow, mountain lion, and southern mule deer. MSCP covered habitats known to occur in the Preserve, which include chaparral, also benefit from management. Management actions included the following.

- **Access control.** County Park Rangers conducted routine patrols to maintain appropriate access control throughout the Preserve. No evidence of unauthorized access or prohibited activities was observed during patrols.

Lakeside Linkage Preserve

Preserve Total Acreage: 210 Assessor's acres, 209 GIS acres

MSCP Subarea Plan: 210 Assessor's acres, GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits the eight MSCP covered species known to occur on the Preserve, which are Belding's orange-throated whiptail, Blainville's horned lizard, coastal cactus wren, coastal California gnatcatcher, Cooper's hawk, southern California rufous-crowned sparrow, western bluebird, and southern mule deer. Management actions included the following.

- **Habitat restoration and management.** A CDFW Natural Community Conservation Planning Local Assistance Grant-funded and County-funded project was implemented at the Preserve to support coastal cactus wren habitat within previously restored cactus patches. Activities included selectively thinning native vegetation and removing invasive non-native plants to reduce fuel loads and maintain open foraging habitat. Detailed information regarding this project can be found in Section 6.4, *Grant Funded Management Projects*.
- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand-pulling. Target species included tamarisk.
- **Access control.** County Park Rangers installed one new sign to deter illegal off-road activity. Rangers increased patrols to address unauthorized use of electric motorcycles and illegal dumping on the Preserve.
- **Fire management.** County Park Rangers maintained existing firebreaks throughout the Preserve. The firebreaks were maintained using weed whips, mowing, and hand-pulling.

Lawrence and Barbara Daley Preserve

Preserve Total Acreage: 604 Assessor's acres, 581 GIS acres

MSCP Subarea Plan: 604 Assessor's acres, 581 GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits the eight MSCP covered species known to occur on the Preserve, which are Palmer's goldenbush, Blainville's horned lizard, Belding's orange-throated whiptail, Cooper's hawk, northern harrier, southern California rufous-crowned sparrow, western bluebird, and southern mule deer. Additional species and habitats benefited are nesting habitat for great horned owl. Management actions included the following.

- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included the use of mowers and string trimmers. Target species included castor bean.
- **Access control.** In response to reports of unauthorized access and illegal dumping, County Park Rangers installed a metal gate near the Preserve entrance. The gate installation was coordinated in partnership with CDFW.

- **Fire management.** County Park Rangers maintained an existing firebreak along the Preserve boundary and Honey Springs Road. Fire management included mowing and use of string trimmers.

Los Peñasquitos Canyon Preserve

Preserve Total Acreage: 277 Assessor's acres, 266 GIS acres
City of San Diego MHPA: 277 Assessor's acres, 266 GIS acres

Management benefits the four MSCP covered species known to occur on the Preserve, which are San Diego goldenstar, Orcutt's brodiaea, San Diego button-celery, and least Bell's vireo. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers planted 43 trees, including 40 coast live oaks and three cottonwoods, near the Preserve's staging area. County Park Rangers also removed one dead coast live oak tree.
- **Invasive, non-native plant and animal control.** Invasive, non-native plant species removal efforts included hand-pulling and use of hand tools. Target species included black mustard, fennel, and Russian thistle.
- **Access control.** County Park Rangers installed 20 new directional and enforcement signs and installed and repaired five wooden and vinyl fences throughout the Preserve to improve visitor guidance and resource protection. In response to instances of illegal dumping in dumpsters near the ranch house, Rangers are evaluating options to secure dumpsters and prevent future misuse.
- **Fire management.** County Park Rangers maintained an existing firebreak on the south rim of the canyon along Capcano Road using hand tools and power tools. Rangers also maintained existing firebreaks around all standing structures within the Preserve using string trimmers and loppers.
- **Environmental education.** County Park Rangers and partnering organizations conducted a range of educational outreach activities in 2025, including regularly scheduled docent-led history tours that attracted 5 to 10 participants per event and recurring discovery school hikes serving approximately 30 students per event. In addition, as part of International Dark Sky Week, Rangers and partners hosted a *Festival of the Night Sky & Nocturnal Creatures* event for approximately 200 attendees, featuring telescope-based stargazing, night hikes, live owl and hawk flights, nocturnal wildlife exhibits, and education on light pollution. Collectively, these programs provided ongoing opportunities for visitors and students to learn about the Preserve's natural and cultural resources and fostered environmental awareness and stewardship.

Louis A. Stelzer Park

Park Total Acreage: 373 Assessor's acres, 368 GIS acres
MSCP Subarea Plan: 373 Assessor's acres, 368 GIS acres
Segment: Metro-Lakeside-Jamul

Management benefits the eight MSCP covered species known to occur on the Park, which are Lakeside ceanothus, San Diego goldenstar, Belding's orange-throated whiptail, Blainville's horned lizard, northern harrier, southern California rufous-crowned sparrow, coastal California gnatcatcher, and southern mule deer. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers removed three fallen coast live oak trees and planted 50 coast live oak trees and 50 Engelmann oak trees. Rangers also performed ongoing maintenance of the check dams in Stelzer Creek, which help control erosion, enhance water retention, and provide habitat for riparian species.
- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included string trimming, targeted herbicide application, and mulch application. Target species included various weeds.
- **Access control.** County Park Rangers installed four new parking payment and fee change signs at the Park's office and kiosks to improve visitor compliance. Rangers also monitored and addressed instances of unauthorized dumpster use.
- **Fire management.** County Park Rangers coordinated with SDGE to perform vegetation management meant for firebreak purposes along the dirt roadways.
- **Environmental education.** County Park Rangers hosted 18 Discovery Program events within the Park in 2025, covering a variety of nature topics such as birds, trees, and sustainability. The programs reached a total of 1,481 participants, including 268 adults and 1,213 children, providing hands-on learning opportunities, and fostering environmental awareness across all ages.

Luelf Pond Preserve

Preserve Total Acreage: 87 Assessor's acres, 87 GIS acres
MSCP Subarea Plan: 87 Assessor's acres, 87 GIS acres
Segment: Metro-Lakeside-Jamul

Management benefits the six MSCP covered species known to occur on or utilizing the Preserve, which are Blainville's horned lizard, Cooper's hawk, golden eagle, western bluebird, southern mule deer, and mountain lion. Management actions included the following.

- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand-pulling and targeted herbicide application. Target species included Italian thistle and mustard.

- **Access control.** County Park Rangers installed three new trail name signs at the Preserve trail connection with CDFW property to improve wayfinding and reinforce authorized trail use.
- **Fire management.** County Park Rangers maintained an existing firebreak along Duck Pond Lane.

Lusardi Creek Preserve

Preserve Total Acreage: 224 Assessor's acres, 226 GIS acres

MSCP Subarea Plan: 224 Assessor's acres, 226 GIS acres

Segment: Lake Hodges

Management benefits the 11 MSCP covered species known to occur on the Preserve, which are coast barrel cactus, Del Mar manzanita, variegated dudleya, Belding's orange-throated whiptail, Blainville's horned lizard, coastal California gnatcatcher, Cooper's hawk, least Bell's vireo, northern harrier, southern California rufous-crowned sparrow, and southern mule deer. Management actions included the following.

- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand-pulling and removal with shovels. Target species included black mustard, Russian thistle, and tree tobacco. In addition, invasive, non-native plant species control efforts were performed associated with 2025 Targeted Monitoring Plan management efforts as described in Section 7.1, *Preserve Biological Monitoring of County Lands*.
- **Access control.** County Park Rangers installed one new sign displaying a Preserve map and site information at the Preserve entrance to support wayfinding and guide visitors to authorized trails and areas.

Mission Trails Regional Park

Preserve Total Acreage: 1,557 Assessor's acres, 1,521 GIS acres

MSCP Subarea Plan: 1,516 Assessor's acres, 1,516 GIS acres

Segment: Eastern Area (Outside MSCP Subarea Plan Area)

Management benefits the two MSCP covered species known to occur on the Property, which are coastal California gnatcatcher and San Diego ambrosia. The County of San Diego and the City of San Diego entered into a Joint Powers Agreement (JPA) in 2021 for the operation of Mission Trails Regional Park. The County manages approximately 20 acres in the eastern portion of the Park, while the City of San Diego is responsible for the monitoring and management of the remainder of the 8,000-acre Park. City of San Diego reports on management activities within the Park in their MSCP Annual Report. Management actions included the following.

- **Access control.** County Park Rangers observed instances of illegal dumping at the parking lot at the end of Mesa Road. Rangers will continue monitoring the area to deter future activity and protect Preserve resources.
- **Fire management.** County Park Rangers used mowers and string trimmers to maintain an existing firebreak along the Park's western boundary near Big Rock Park.

Oakoasis Preserve

Preserve Total Acreage: 436 Assessor's acres, 442 GIS acres

MSCP Subarea Plan: 436 Assessor's acres, 442 GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits the six MSCP covered species known to occur on the Preserve, which are Lakeside ceanothus, Blainville's horned lizard, Cooper's hawk, southern California rufous-crowned sparrow, western bluebird, and southern mule deer. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers removed 50 coast live oak trees and 50 Engelmann oak trees that had been damaged by gophers. Rangers planted 25 coast live oaks and 25 Engelmann oaks.
- **Invasive, non-native plant control.** Invasive, non-native plant control included string trimming, targeted herbicide application, and mulch application. Various weed species were targeted.
- **Access control.** Rangers observed occasional unauthorized off-road vehicle and electric bicycle use and will continue monitoring the Preserve to deter future activity and protect natural resources.
- **Environmental education.** County Park Rangers hosted monthly star parties at the Preserve, featuring twilight hikes led by Rangers followed by telescope-based stargazing led by astronomers from the San Diego Astronomy Association. In October, the star party was combined with special Haunted Trail Hike event, where Girl Scouts a haunted trail hikes special event, where Girl Scouts became "Ghoul Scouts" and assisted Rangers in engaging participants. A total of 775 visitors attended these events, including 345 adults and 430 children, providing opportunities for hands-on learning about astronomy, nature, and community stewardship.

Old Ironsides Park

Park Total Acreage: 4 Assessor's acres, 4 GIS acres

MSCP Subarea Plan: 4 Assessor's acres, 4 GIS acres

Segment: Metro-Lakeside-Jamul and PAMA

Management benefits the MSCP covered habitat known to occur in the Park, which is oak riparian forest. Management actions included the following.

- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand pulling, use of string trimmers, and use of loppers along the creek and road. Target species included black mustard, giant reed, and castor bean.
- **Access control.** County Park Rangers installed a boulder barrier around new infrastructure and repaired fencing along the parking lot. Rangers increased patrols in response to off-road vehicle activity and provided on-site guidance to visitors, helping ensure compliance with Preserve rules.

- **Fire management.** County Park Rangers regularly clear all tall invasive non-native plants and grasses to reduce fire fuels throughout the Park.
- **Environmental education.** In partnership with the nonprofit group *I Love A Clean San Diego*, County Park Rangers hosted a park cleanup event that included trash removal and spreading native mulch to suppress weeds. The event engaged 30 community members in hands-on stewardship of the Park.



Clean up event with I Love a Clean San Diego at Old Ironsides Park

Otay Lakes Park

Park Total Acreage: 79 Assessor's acres, 87 GIS acres
MSCP Subarea Plan: 79 Assessor's acres, 87 GIS acres
Segment: South County

Management benefits the two MSCP covered species known to occur on the Park, which are variegated dudleya and Otay mesa mint. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers planted 15 coast live oak trees to restore native habitat and support local wildlife.
- **Invasive, non-native plant control.** Invasive, non-native plant control included use of string trimmers and targeted herbicide application. Various weed species were targeted.
- **Access control.** County Park Rangers installed four new trail marker signs, repaired two existing trail marker signs, and replaced split rail wood fencing along the staging area to improve visitor navigation, enhance safety, and protect natural resources.

- **Fire management.** County Park Rangers maintained existing firebreaks near the southwest corner of the Park.
- **Environmental education.** County Park Rangers hosted several hiking events at the Park in 2025, including interpretive hikes for the general public and a Women in the Wild hike, which is part of a countywide initiative designed to teach outdoor skills in a supportive, education, and community-building environment. In all, these hikes engaged 39 community members.

Otay Ranch Preserve (Otay Ranch POM)

Preserve Total Acreage: 3,973 Assessor's acres, 4,707 GIS acres

MSCP Subarea Plan: 3,973 Assessor's acres, 4,707 GIS acres

Segment: City of Chula Vista and South County

The County of San Diego and City of Chula Vista work jointly as the Otay Ranch POM and are responsible for implementing the Otay Ranch Phase 2 RMP Update (RECON Environmental, Inc. [RECON] 2018) management and monitoring strategies within the 4,640-acre Otay Ranch Preserve. The management and monitoring of the Otay Ranch Preserve is funded through the collection of assessments from Community Facility District 97-2, administered by the City of Chula Vista. In 2025, preserve monitoring and operations/maintenance tasks were implemented by the Preserve Steward/Biologist (RECON) in consultation with the Otay Ranch POM. Regular coordination meetings occurred during 2025 to track progress of MSCP management and monitoring. Habitat maintenance activities were performed to control non-native plant species, including stinkwort and false hawkbit, and to enhance habitat for sensitive species, including coastal cactus wren, Quino checkerspot butterfly, Otay tarplant habitat, and vernal pools. All work summarized in this report is detailed in the 2025 Annual Report for the Otay Ranch Preserve¹¹.

Management activities in the Preserve benefits the 32 MSCP covered species known to occur on the Preserve, which include 17 plant, two invertebrate, two reptile, nine bird, and two mammal species. The MSCP covered species on the Preserve are Otay manzanita, San Diego golden star, Orcutt's brodiaea, Dunn's mariposa lily, San Miguel savory, snake cholla, Otay tarplant, variegated dudleya, Palmer's goldenbush, San Diego button-celery, San Diego barrel cactus, Tecate cypress, heart-leaved pitcher sage, Gander's pitcher sage, felt-leaved monardella, willowy monardella, spreading navarretia, Otay mesa mint, San Diego fairy shrimp, Thorne's hairstreak butterfly, Belding's orange-throated whiptail, coast horned lizard, Cooper's hawk, southern California rufous-crowned sparrow, golden eagle, burrowing owl, coastal cactus wren, northern harrier, peregrine falcon, coastal California gnatcatcher, least Bell's vireo, mountain lion, and southern mule deer. Habitats, such as vernal pools, maritime succulent scrub, riparian habitat, and coastal sage scrub were restored and enhanced.

- **Habitat restoration and management.** In late January 2025, the Border 2 Fire burned approximately 1,118 acres within the Preserve. Post-fire recovery efforts in 2025 included seed collection and redistribution to support Quino checkerspot butterfly and coastal cactus wren habitats; installation of fencing and signage to protect occupied Quino checkerspot butterfly habitat; installation of native container plantings to provide access control and erosion control; treatment of invasive weeds to reduce resource competition during native plant re-establishment; and early detection and rapid response

¹¹ [Multiple Species Conservation Plan \(MSCP\)](#)

for non-native plant species not previously documented within the Preserve in areas disturbed during fire suppression activities.

Regularly scheduled site visits were conducted to document access issues, sensitive species, newly detected species, non-native plant species, and the overall health of the sites. Specifically, monitoring activities included focused rare plant surveys, Quino checkerspot butterfly surveys, photographic monitoring, shot hole borer tree health surveys and native shrub dieback surveys, gold-spotted oak borer monitoring, Hermes copper butterfly qualitative monitoring, western spadefoot surveys, golden eagle camera surveys, seed collection and redistribution, vegetation rapid assessment monitoring and baseline surveys consisting of vegetation mapping, general plant and wildlife surveys, and photographic monitoring at one of two parcels conveyed in 2025.

As part of a management project funded by a Wildlife Conservation Board (WCB) grant, County funding, and local agency matching, the County is completing a comprehensive planning document for 13 new trail alignments in the Preserve. Biological surveys were performed from 2021 to 2024, and technical studies and the Programmatic Environmental Impact Report (PEIR) were drafted in 2024. In 2025, the draft technical reports and PEIR were in the process of being reviewed. More information regarding these projects can be found in Section 6.4, *Grant Funded Management Projects*.

- **Invasive, non-native plant control and habitat enhancement.** Numerous non-native plant control efforts occurred during the reporting year, and were conducted using herbicides, string trimmers, and hand tools. The invasive, non-native plant species treated were shortpod mustard, tocalote, stinkwort, oats, bromes, filaree, fennel, black mustard, annual rye grass, crete weed, fescue, false hawkbit, annual beard grass, hyssop loosestrife, tree tobacco, prickly lettuce, tumbleweed, sourclover, yellow sweetclover, bristly ox-tongue, smooth cat's ear, horehound, Namaqualand daisy, and fascicled tarweed. In addition, shrubs were selectively thinned and removed from existing coast cholla patches to increase available coastal cactus wren habitat. The primary shrubs removed via hand tools and trimmers during shrub thinning activities were broom baccharis, California buckwheat, and California sagebrush. Otay tarplant and Quino checkerspot butterfly host and nectar plants were flagged for avoidance prior to applying herbicide.
- **Access control.** Access control within the Preserve continues to be one of the highest priority tasks. Sensitive habitat, plants, and wildlife have been impacted by unauthorized foot and bicycle traffic, off-highway vehicle, target-shooting activities, and unauthorized route creation. Access management efforts to prevent illegal access and block unauthorized trails in 2025 included the installation of vertical mulch and coast cholla, installation of bollards, installation of T-posts with concrete along fencing, installation of fencing, repair of fencing and gates, installation of 24 permanent signs and two temporary signs, repair of four signs, replacement of five signs, as well as coordinating with adjacent land managers, including CDFW and the City of San Diego. Access control off-site within adjacent CDFW property included installation of fencing. Fencing and gates were installed and/or repaired at Dulzura, Northern Salt Creek, Salt Creek, Millenia, San Ysidro, Northern San Ysidro, and Wolf Canyon parcels. Signs were installed, repaired, and/or replaced at Dulzura, Jamul Mountains, Millenia, Salt Creek, San Ysidro, and Wolf Canyon parcels. Vertical mulch and coast cholla were installed at Salt Creek parcels. Bollards were installed at Dulzura parcels. T-posts with concrete were installed at Northern Salt Creek parcels.

- **Fire management.** Control of invasive non-native plants and implementation of shrub thinning programs are typically implemented on the Preserve for habitat restoration or for the benefit of MSCP covered species and other wildlife. These activities also help reduce the amount of fuel available to carry fire within the Preserve. In addition, post-fire recovery activities conducted in response to the Border 2 Fire, including treatment of invasive non-native plants in disturbed areas and early detection and rapid response for newly documented non-native species, supported the re-establishment of native vegetation and helped limit the accumulation of fine fuels in fire-affected areas.

Additional management and monitoring efforts conducted on Otay Ranch Preserve are reported in the 2025 Otay Ranch Preserve Annual Report¹².

Otay Valley Regional Park

Park Total Acreage: 442 Assessor's acres, 432 GIS acres
MSCP Subarea Plan: 442 Assessor's acres, 432 GIS acres
Segment: South County

Management benefits the seven MSCP covered species known to occur on the Preserve, which are Otay tarplant, Orcutt's bird's-beak, variegated dudleya, San Diego button-celery, coastal cactus wren, coastal California gnatcatcher, and least Bell's vireo. Habitats, such as maritime succulent scrub, freshwater marsh, and coastal sage scrub were enhanced by removing non-native plant species. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers removed six dead eucalyptus trees from the Park to reduce hazards, improve safety, and support the health of native plant communities.
- **Invasive, non-native plant control.** Invasive, non-native plant removal efforts included mowing and targeted herbicide application to control a variety of common weed species.
- **Access control.** County Park Rangers installed one new directional trail sign and repaired one section of barbed-wire fencing at the southwest entry gate to help deter unauthorized vehicle and motor bike access. Rangers also coordinated with U.S. Customs and Border Protection, as needed, to conduct joint patrols and enhance resource protection at the Park.

Additional management and monitoring efforts conducted by the City of San Diego are reported in the City of San Diego MSCP Annual Report.

¹² [Multiple Species Conservation Plan \(MSCP\)](#)

Peutz Valley Preserve

Park Total Acreage: 240 Assessor's acres, 255 GIS acres
MSCP Subarea Plan: 240 Assessor's acres, 255 GIS acres
Segment: Metro-Lakeside-Jamul

Management benefits the seven MSCP covered species known to occur on the Preserve, which are Belding's orange throated whiptail, Blainville's horned lizard, American peregrine falcon, southern California rufous-crowned sparrow, western bluebird, southern mule deer, and mountain lion. Management also benefits the habitat found on the Preserve including southern riparian woodland, coastal sage scrub-chaparral transition, and southern mixed chaparral. The County of San Diego and the San Diego River Park Foundation (Foundation) entered into a Memorandum of Agreement (MOA) in 2018 for the operation of Peutz Valley Preserve. As outlined in the MOA, the Foundation will manage and maintain the Preserve in partnership with the County. Management actions included the following.

- **Invasive, non-native plant control.** Invasive, non-native plant control efforts included hand pulling and use of string trimmers. Target species included black mustard.
- **Access control.** County Park Rangers responded to illegal trash dumping at the Preserve entrance by removing debris, increasing patrols, and engaging with local residents to raise awareness of park rules and responsible use. In addition, minor property encroachments were identified along the southern and western Preserve boundaries. Rangers surveyed and clearly marked the property lines and communicated with the adjacent residents, taking steps to resolve the issue and protect Preserve resources.
- **Fire management.** County Park Rangers maintained an existing firebreak along the southern boundary of the Preserve. Fire management included mowing.

Ramona Grasslands Preserve

Preserve Total Acreage: 3,639 Assessor's acres, 3,635 GIS acres
MSCP Subarea Plan: 804 Assessor's acres, 558 GIS acres
Segment: Metro-Lakeside-Jamul
Draft North County MSCP: 2,835 Assessor's acres, 3,077 GIS acres

Management benefits the four MSCP covered species known to occur on the MSCP Subarea Plan Area portion of the Preserve, which are Belding's orange-throated whiptail, Blainville's horned lizard, golden eagle, and southern mule deer. Within the draft North County MSCP Plan Area on the Preserve, several MSCP Subarea Plan covered species can be found and include Engelmann oak, San Diego thornmint, San Diego fairy shrimp, arroyo toad, southwestern pond turtle, western spadefoot toad, western burrowing owl, grasshopper sparrow, tricolored blackbird, Cooper's hawk, Canada goose, ferruginous hawk, northern harrier, peregrine falcon, long-billed curlew, white-faced ibis, western bluebird, coastal California gnatcatcher, southern mule deer, pallid bat, and Townsend's big-eared bat. Spreading navarretia was observed on site in 1995, but has not been observed since. Other species and habitats targeted by management actions are Diegan coastal sage scrub, riparian, non-native grassland, and Stephens' kangaroo rat. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers planted six coast live oak trees and worked with a local Ramona Girl Scout troop to plant numerous native shrubs, including six monkeyflower, eight white sage, six Cleveland sage, eight sagebrush, and eight California buckwheat. These plantings were installed to discourage use of unauthorized spur trails and restore these disturbed areas. Additional restoration actions included the closure of the Old Survey Road 97 trail, which will allow for the passive restoration of a portion of the existing trail and the active construction of a new rerouted trail. Rangers continue to manage the cattle grazing lease, working closely with ranchers to target each management area to maintain soil health and reduce wildfire hazards. The grazing lease reduces invasive, non-native plant cover and ensures that suitable habitat is available to sensitive species, including the Stephens' kangaroo rat.

As part of a *TransNet* EMP funded project, the County implemented a bullfrog eradication project within the Preserve to benefit arroyo toad and southwestern pond turtle. In 2024, the County worked with the Ramona Municipal Water District (RMWD) to install silt fence on the western side of the southern effluent pond to prevent bullfrog movement into Santa Maria Creek. Eradication efforts continued in 2025. More information regarding this project can be found in Section 6.4, *Grant Funded Management Projects*.

- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand-pulling, mowing, and targeted herbicide application. Target species included mustard, tree tobacco, tamarisk, stinkwort, and artichoke thistle. Cattle grazing continued, allowing County Park Rangers to manage target plant species specific to each management unit.
- **Access control.** County Park Rangers installed three new access control signs, repaired two fences, and installed one new fence along the Old Survey Road 97 and Wildflower Loop trails within the Preserve. Signage and fencing were installed and repaired to support access control and keep park users on trails. Rangers also increased patrols and conducted targeted educational outreach to discourage unauthorized motor vehicle use, including implementation of the “if you see something, say something” approach to enhance public awareness and encourage responsible trail use.
- **Fire management.** County Park Rangers maintained existing firebreaks along the Preserve border with adjacent residences and along roads within the Highland Hills community.
- **Environmental education.** County Park Rangers partnered with a local Ramona Girl Scout troop to plant native shrubs as part of a hands-on habitat restoration project at the Preserve. Rangers provided environmental education on the importance of native plants, habitat restoration, and resource protection, giving the troop an opportunity to actively contribute to the long-term health of the Preserve.



Local Girl Scout Troop at Ramona Grasslands Preserve.

Santa Fe Valley Preserve

Preserve Total Acreage: 293 Assessor's acres, 299 GIS acres

MSCP Subarea Plan: 308 Assessor's acres, 308 GIS acres

Segment: Lake Hodges

Management benefits the eight MSCP covered species known to occur on the Preserve, which are tricolored blackbird, least Bell's vireo, coastal California gnatcatcher, wart-stemmed ceanothus, Encinitas baccharis, San Diego marsh-elder, San Diego barrel cactus, and variegated dudleya. Management actions included the following.

- **Invasive, non-native plant control.** Invasive, non-native plant species control included hand-pulling and use of shovels. Target species included tree tobacco, Russian thistle, and black mustard.
- **Fire management.** Count Park Rangers maintained firebreaks along the northwestern Preserve boundary and between the Preserve and the residential community to the west. Fire management included use of hand tools, mowers, and string trimmers.

Skyline Preserve

Preserve Total Acreage: 267 Assessor's acres, 261 GIS acres

MSCP Subarea Plan: 267 Assessor's acres, 261 GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits MSCP covered species known to occur on the Preserve, which are Belding's orange-throated whiptail, Blainville's horned lizard, Cooper's hawk, southern California rufous-crowned sparrow, northern harrier, and golden eagle. Habitats targeted by management actions are Diegan coastal sage scrub, southern mixed chaparral, chamise chaparral, and Engelmann oak woodland. The County of San Diego and Endangered Habitats Conservancy (EHC) entered into a Memorandum of Agreement (MOA) in 2019 for the operation of Skyline Preserve. As outlined in the MOA, EHC will manage and maintain the Preserve. No management actions were needed by EHC staff on the Preserve in 2025.

Stoneridge Preserve

Preserve Total Acreage: 245 Assessor's acres, 245 GIS acres

MSCP Subarea Plan: 245 Assessor's acres, 245 GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits the seven MSCP covered species known to occur on the Preserve, which are Belding's orange-throated whiptail, Blainville's horned lizard, coastal California gnatcatcher, Cooper's hawk, southern California rufous-crowned sparrow, western bluebird, and southern mule deer. Other species and habitats targeted by management actions are Diegan coastal sage scrub and southern mixed chaparral. Management actions included the following.

- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand pulling, use of string trimmers, and use of loppers. Target species included Russian thistle, giant reed, and black mustard.
- **Access control.** In response to illegal access and unauthorized trail use, County Park Rangers increased patrols and conducted inspections of gates and signage at potential access points to ensure Preserve boundaries are clearly marked and sensitive resources remain protected.
- **Fire management.** County Park Rangers maintained an existing firebreak along the southern boundary of the Preserve. Fire management included mowing, chipping, hand pulling, and use of loppers.

Sweetwater Regional Park

Park Total Acreage: 489 Assessor's acres, 490 GIS acres

MSCP Subarea Plan: 489 Assessor's acres, 490 GIS acres

Segment: South County

Management benefits the three MSCP covered species known to occur on the Park, which are coastal cactus wren, coastal California gnatcatcher, and least Bell's vireo. Other species and habitats targeted by management actions are riparian and aquatic. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers planted 20 California black walnuts and 20 California sycamores. Rangers also removed six dead coast live oak trees. A total of 329 individual shrub and herbs were planted, consisting of the following species: holly leaf cherry, California sagebrush, San Diego sunflower, white sage, purple sage, coyote brush, snapdragon, Cleveland sage, toyon, lemonade berry, and California buckthorn.

As part of a WCB grant, the County continued restoring coastal sage scrub and enhancing riparian and adjacent upland habitat around Morrison Pond. This habitat restoration project will also benefit sensitive wildlife species, including coastal California gnatcatcher, coastal cactus wren, and least Bell's vireo. The project entered its fourth year of implementation and monitoring. Detailed information regarding this project can be found in Section 6.4, *Grant Funded Management Projects*.

- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand pulling, cutting, and targeted herbicide use. Target species included giant reed, castor bean, Mexican fan palm, tree of heaven, stinkwort, Russian thistle, nightshade, and mustard.
- **Access control.** County Park Rangers conducted homeless encampment abatement, safely removing trash and biohazards to enhance visitor safety and protect Park resources.
- **Fire management.** County Park Rangers responded to multiple small fires within the Park through coordination with local fire response teams and facilitating entry by opening Park gates and providing route options for best access. Cause of fires is unknown. Fire-affected vegetation near multi-use trails and existing firebreaks were removed following standard firebreak procedure.
- **Environmental education.** County Park Rangers and partner organizations led a variety of events at the Park in 2025, including wildlife-focused programs such as a hawk talk, a rattlesnake interpretive and safety program, and a ranger talk with raptors; outdoor stewardship activities including park beautification events, native plant restoration, and invasive plant removal; recreational and educational hikes at Morrison Pond; and a career fair for Granite Hills High School students. Approximately 1,200 people attended these programs. Rangers also participated in outreach activities outside of Sweetwater Regional Park, including a Science, Technology, Engineering, and Mathematics fair, extending educational opportunities to the broader community.

Sycamore Canyon and Goodan Ranch Preserve

Preserve Total Acreage: 2,847 Assessor's acres, 2,931 GIS acres

MSCP Subarea Plan: 2,847 Assessor's acres, 2,931 GIS acres

Segment: Metro-Lakeside-Jamul

Management benefits the 15 MSCP covered species known to occur on the Preserve, which are San Diego thornmint, San Diego goldenstar, variegated dudleya, willowy monardella, Belding's orange-throated whiptail, Blainville's horned lizard, burrowing owl, coastal California gnatcatcher, Cooper's hawk, golden eagle, northern harrier, southern California rufous-crowned sparrow, western bluebird, mountain lion, and southern mule deer. Other habitats targeted by management actions are southern coast live oak riparian forest, coast live oak woodland, and southern mixed chaparral. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers removed 14 dead coast live oak trees and planted 120 coast live oak trees, 50 sycamore trees, and 23 Engelmann oak trees. These plantings were implemented as part of the County's Heritage Tree Preservation Program and are intended to enhance native tree cover, support long-term habitat resilience, and contribute to the preservation of regionally important tree species.
- **Invasive, non-native plant control.** Invasive, non-native plant species removal efforts included hand pulling and targeted herbicide application. Target species included mustard, artichoke thistle, white horehound, Dyer's rocket, and stinkwort. Invasive, non-native plant species control was also performed as part of the CDFW 30x30 Grant Program Sycamore Canyon and Goodan Ranch Preserve Covered Species Threat Reduction Project. Removal efforts included hand weeding, line trimming, and spot spraying invasive species in areas supporting San Diego thornmint, variegated dudleya, and willowy monardella populations, along Sycamore Canyon Creek, and in the northern portion of the Preserve. Native seed was also collected for future restoration efforts. Detailed information regarding this project can be found in Section 6.4, *Grant Funded Management Projects*.
- **Access control.** County Park Rangers installed one new front entrance sign at the Preserve's staging area and six new signs designating approved electric bicycle use at multiple trailheads. Rangers also repaired 15 directional trail signs throughout the Preserve, improving navigation, supporting compliance with Preserve regulations, and enhancing overall visitor safety and trail management.
- **Fire management.** The California Conservation Corps completed fuel reduction activities by clearing a firebreak surrounding the Goodan Ranch Visitor's Center. Fire management was conducted using hedgers, chainsaws, and string trimmers.
- **Environmental education.** County Park Rangers conducted a variety of environmental education and outreach activities designed to engage the public and promote stewardship of Preserve resources. Events included an Earth Day celebration, Ranger-guided hikes, tree planting events, and a community hike-a-thon. Rangers also partnered with the San Diego Astronomy Association to host star parties. These outreach efforts were attended by a total of 441 community members.

Tijuana River Valley Regional Park

Park Total Acreage: 1,592 Assessor's acres, 1,609 GIS acres

City of San Diego MHPA: 1,592 Assessor's acres, 1,609 GIS acres

Management benefits the 16 MSCP covered species known to occur on the Preserve, which are coast barrel cactus, Orcutt's bird's-beak, Torrey pine (planted), wart-stemmed ceanothus, Belding's orange-throated whiptail, Blainville's horned lizard, coastal cactus wren, coastal California gnatcatcher, Cooper's hawk, least Bell's vireo, light-footed Ridgway's rail, northern harrier, southern California rufous-crowned sparrow, southwestern willow flycatcher, American peregrine falcon, and tricolored blackbird. Riparian habitat was also targeted by management actions. Management actions included the following.

- **Habitat restoration and management.** County Park Rangers planted 10 coast live oak trees to provide shade along an open trail. Several ongoing and approved management projects within the Park are grant funded. These projects are summarized below, and detailed information regarding these projects can be found in Section 6.4, *Grant Funded Management Projects*.

As part of a grant from SWRCB, the County received funding to remove trash and accumulated sediments from Smuggler's Gulch. The project involved a full-scale dredging effort throughout the Smuggler's Gulch channel and portions of the Pilot Channel of the Tijuana River, along with disposal of the dredged material. Implementation benefits include enhancement of the hydrologic health and habitat of the Tijuana River Valley watershed. Implementation of the grant began in March 2024, project activities concluded in November 2024, and the grant was fully closed out in 2025.

As part of a grant from the State Coastal Conservancy, the County will design and implement improvements within Smuggler's Gulch to capture trash and sediment to prevent these materials from being transported downstream to important riparian habitat along the Tijuana River. The project will include a sedimentation basin, trash capture devices, and culvert improvements. As part of this project, the County conducted protocol surveys for several MSCP covered species in 2021 including California gnatcatcher, least Bell's vireo, and southwestern willow flycatcher. The County also conducted a habitat assessment of the area to identify and map habitat types to ensure maximum avoidance of native habitat. Least Bell's vireo protocol surveys were repeated in 2024. The County continued design for the project in 2025 and is planning to finalize the design and apply for environmental permits in 2026.

Another grant funded restoration project in the Tijuana River Valley Regional Park is the Brown Property Fill Removal/Restoration project, which will improve water quality by removing trash and invasive species and restore the Tijuana River and adjacent areas to its native habitat. Restoration planning and environmental review for this project was completed in 2023 using grant funds from CDFW; implementation is funded separately under a grant from the SWRCB. The project involves removal of invasive species and existing structures from the Brown property, as well as short-term maintenance and monitoring. In 2024, hazardous materials were removed and on-site structures were demolished. The site was graded and revegetated with native plants and seed. Over 1,800 plants and 500 pounds of seed were placed on the Brown Property and adjacent areas. In 2025, the County performed maintenance and monitoring at the restoration

site, as well as additional plantings and seedings. Implementation benefits will include restoration of disturbed land into native habitat for least Bell's vireo and other native wildlife. Native vegetation cover within the restored area was estimated to be around 60 percent, a significant improvement from the estimated 1 percent native vegetation coverage prior to restoration. As of November 2025, 45 native plant species were present within the restored area, an increase from only 6 native plant species present at the start of the restoration effort. Of these 45 native plant species, 14 were not installed as seeds or plants but colonized the site from the existing seed bank or adjacent habitats.

The County received grant funding in 2023 from the U.S. Navy to develop an adaptive work plan and implement restoration efforts within the Park, which will improve and enhance habitat for least Bell's vireo and coastal California gnatcatcher. In 2025, the County finalized revegetation plans, received County Board of Supervisors approval for the advertisement and award of the work, and prepared bid documents. Implementation is expected to begin in 2026.

- **Invasive, non-native plant and insect control.** Invasive, non-native plant species removal efforts included targeted herbicide application, hand-pulling, mowing, and use of string trimmers, loppers, shears, chainsaws, machetes, riding and tractor pulled deck mowers, and hand tools. Target species included Russian thistle, castor bean, tree tobacco, crown daisy, nasturtium, giant reed, and non-native grasses. In addition, invasive, non-native plant species control efforts were performed associated with 2025 Targeted Monitoring Plan management efforts as described in Section 7.1, *Preserve Biological Monitoring of County Lands*.
- **Access control.** County Park Rangers implemented a comprehensive access control and visitor education program to protect sensitive habitats and promote responsible recreation within the Preserve. Rangers installed and repaired a total of 30 informational and directional signs throughout the Park to encourage visitors to remain on designated trails, identify sensitive habitat areas, and deter illegal dumping. Rangers also repaired fencing, repaired a chain link gate, and installed a new chain link gate at the Wild Willow Farm & Education Center. Illegal dumping remains an ongoing issue and occurs most often along the northeast edge along Servando Road, on the east side of Dairy Mart Road, on Sunset Avenue, in the central staging area on Saturn Boulevard, along the edges of Hollister Street, and along the edges of Monument Road. To address this ongoing issue, County Park Rangers and staff conduct daily patrols throughout the Park. Patrols also discourage unauthorized trail use, a recurring issue that subjects native plants and wildlife to trampling and exacerbates erosion in sensitive areas. Reminders to stay on trails are also provided in brochures and on signage and kiosks throughout the Park. In addition, equestrian volunteers conduct monthly Park monitoring and provide valuable updates on illegal dumping and unauthorized trail use, further strengthening Park staff's ability to protect natural resources through community partnership and proactive management.
- **Fire management.** County Park Rangers maintained existing firebreaks using string trimmers, hand tools, chainsaws, and targeted herbicide application.
- **Environmental education.** County Park Rangers hosted a variety of environmental education events at the Preserve, including an Earth Day booth, Patriotic Picnic, Watershed Walk, Hawktober celebration, Snake Talk, and several "Meet Salsa! The

Rosy Boa” interactive workshops. Salsa, the Park’s official animal ambassador, interacted with visitors at these family-friendly workshops, allowing attendees to learn about local wildlife, touch animal pelts, and experience hands-on wildlife education in a fun and memorable way. Events were attended by a total of 310 visitors who deepened their understanding of native species, habitats, and environmental stewardship.

Comprehensive Tree Program

The County has always planted trees on County Preserves, and this was formalized in 2016 with the Comprehensive Tree Program. Dead or dying trees, along with trees that pose potential risks to County Preserve visitors, are removed and replaced. The replacement ratio is three new trees replaced for each tree that is removed. Native tree species are used in the preserve lands, while non-native, non-invasive trees may be planted near park facilities and active recreation areas to increase resilience, diversity, and beauty. Since 2016, over 40,000 trees have been installed on County properties. Over 2,000 trees were planted in 2025. The Tree Plotter Inventory web application augments the efforts of the Comprehensive Tree Program. Started in April 2021, this web-based program will ultimately result in a full inventory of all new and existing trees on every County Preserve and can be accessed by the public. Each tree has a GPS location, its species, health ranking, and other characteristics, including trunk diameter at 4.5 feet above ground, as well as photos of each tree through time. Reports can be generated by tree, or County Preserve, and can also show the ecosystem benefits of the trees. This application will assist in understanding when adaptive management strategies are needed to ensure that the trees are thriving. In 2025, all newly planted trees at County Parks and Preserves have been mapped.

DPR is currently investing in an oak genetic conservation program with the intent of preserving our local trees’ genetic material, especially in some more sensitive areas. The project is carried out in cooperation with the County of San Diego Sheriff’s Office via their CIVICS program. Seeds (acorns) are harvested by DPR staff and transported to the Sheriff’s East Mesa Reentry Facility greenhouse facility where under DPR supervision, they are propagated and then transferred in 5-gal size containers. When trees are ready, DPR staff relocate them in the park of origin to establish.

Also, in 2025 DPR continued to implement the Oak Advanced Regeneration Program, with the intent of enhancing tree’s natural succession capabilities. Some veteran oak tree specimens located in developed park’s areas are fenced out, the turf left unmown, so acorns are protected and allowed to germinate in an undisturbed soil and environment. In the future, some well-established saplings will be selected for replacing the older tree.

6.3 Private Mitigation Lands Management

Private RMPs are required as a condition of development entitlements when biological resources are impacted by the proposed development project and the acreage of required mitigation exceeds 50 acres, on- or off-site. Private 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. Area-specific management directives are identified in the Private RMPs which incorporate generally accepted practices and procedures for management of biological preserves. Directives are developed and implemented in a phased manner for logical and discrete areas, once conserved as part of the preserve.

Private RMPs are approved by PDS and require submission of annual monitoring reports that focus on the resource attributes of that specific site and detail the monitoring and habitat management activities conducted within the previous year. Annual reports also document any issues and the overall health of the Preserve, which allows the County to assess the biological integrity of the open space habitats protected by each Private RMP. Controlling and managing public access through fencing, signage, and patrolling is another component of the Private RMPs. Management and monitoring on private mitigation lands is funded through mechanisms established during the Private RMP approval process (i.e., special districts, endowments, or annual fees). The health of these endowments and use of these funds are reported in the RMP annual reports.

Private RMP annual reports are publicly available online through the PDS Document Library¹³ using the associated Record ID. **Appendix L** provides a general overview of the 26 Private RMPs located within the MSCP Subarea Plan including a description of the habitat conservation area, required surveys, and monitoring/maintenance status for each Private RMP. The following section is a summary of the RMP annual reports received in the 2024-2025 fiscal reporting period.

2025 Annual Report Private RMP Review

Twenty-three of the twenty-six (88%) Private RMPs submitted reports for the 2024-2025 fiscal reporting period. Each report was reviewed by County PDS staff to evaluate compliance with the RMP document terms. Review letters were sent to all 23 responsible habitat managers and/or property owners that submitted reports. Review letters notified managers of the need, if any, to address specific management topics. 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 correspondence from the County to the land managers regarding annual monitoring reports wherein greater detail of the report review results can be obtained. Stewardship and management activities on private mitigation lands are described below and summarized in **Appendix M**.

4S Ranch Ralphs Preserve

Record ID: PDS2008-3914-99-001
MSCP Subarea Plan: 1,065 acres
Segment: Lake Hodges
Resource Manager: Joaquin Meza

Management benefits the six MSCP covered species known to occur on or utilizing the preserve, which are southern California rufous-crowned sparrow, thread-leaved brodiaea, variegated dudleya, Belding's orange-throated whiptail, northern harrier, and coastal California gnatcatcher. Management actions included the following:

- **Invasive, non-native plant control:** Removal efforts included hand pulling of artichoke thistle covering less than 1 acre. After continuous efforts of removal, it was determined that there is a diminishing population, as only blown in or very old seeds can sprout.
- **Access control:** Resource managers patrolled weekly to ensure compliance with trespassing, illegal activity, dumping or vandalism. No significant activity occurred during

¹³ The PDS Document Library can be accessed at: <https://www.sandiegocounty.gov/content/sdc/pds/doclibrary.html>.

access control and no law enforcement was involved during the monitoring year. Small amounts of paper, plastic bags, and mylar balloons were removed from the preserve.

4S Ranch Specific Plan Preserve

Record ID: PDS2012-3914-99-002-02

MSCP Subarea Plan: 547 acres

Segment: Lake Hodges

Resource Manager: Dudek (formerly Habitat Restoration Sciences)

Management benefits the six MSCP covered species known to occur on or utilizing the preserve, which are southern California rufous-crowned sparrow, thread-leaved brodiaea, variegated dudleya, Belding's orange-throated whiptail, northern harrier, and coastal California gnatcatcher. Management actions included the following:

- **Invasive, non-native plant control:** Efforts included mowing of non-native grassland habitat that has resulted in a reduction of artichoke thistle. Non-native species treatment focused on artichoke thistle, tamarisk, stinkwort, pampas grass, black mustard, fennel, tree tobacco, eucalyptus, and castor bean.

Access control: Resource managers observed illegal off-road vehicle and trail access issues. A bike jump was observed on the trail in the eucalyptus woodland and its removal is a high priority action for next year. Damage to signage and fencing continues to be a persistent issue but are regularly maintained and replaced when needed. Trash and debris were removed during site visits. Instances of vandalism (graffiti) were reported along portions of fencing and on the culvert in the southern portion of the preserve.

Artesian Trail Preserve

Record ID: PDS2009-3914-06-005

MSCP Subarea Plan: 3.2 acres

Segment: Lake Hodges

Resource Manager: None (non-compliant)

Once the RMP is implemented, management could benefit the one MSCP covered species historically known to occur on or utilizing the preserve, thread-leaved brodiaea. No annual report summarizing management actions was submitted this reporting year. A summary of the County steps taken in 2025 towards bringing this RMP into compliance is provided in the next section.

Bernardo Lakes Preserve

Record ID: PDS2008-3914-98-001

MSCP Subarea Plan: 111 acres

Segment: Lake Hodges

Resource Manager: Mountainview Biological Consulting

Management benefits the five MSCP covered species historically known to occur on or utilizing the preserve, which are Orcutt's brodiaea, San Diego barrel cactus, coastal California gnatcatcher, southern California rufous-crowned sparrow, and southern mule deer.

Management actions included the following:

- **Invasive, non-native plant control:** An initial baseline biological survey was conducted to map the vegetation and document the native and invasive plant species within the preserve. Annual exotic plant management will begin next year, with a focus on areas that pose a potential threat to special-status species or their habitats.
- **Environmental education:** Due to the mid-year start, the public awareness tasks are delayed until next year. Updates on the installation of two signs and an electronic newsletter will be provided in next year's report.
- **Fire management:** A site walk was conducted with a Fire Prevention Specialist from the Rancho Santa Fe Fire Protection District and a landscaping contractor to formulate a plan for the required brush management zones. An update on brush management will be provided in next year's report.
- **Access control:** Small-scale trash was removed during monthly inspections. Coordination with the HOA will continue to occur as needed.

Blossom Valley Preserve

Record ID: PDS2008-3914-01-001

MSCP Subarea Plan: 285.9 acres

Segment: North Metro-Jamul-Lakeside

Resource Manager: Center for Natural Lands Management

Management benefits the seven MSCP covered species known to occur on or utilizing the preserve, which are southern California rufous-crowned sparrow, southern mule deer, San Diego horned lizard, Belding's orange-throated whiptail, bald eagle, mountain lion, and northern harrier. Management actions included the following:

- **Invasive, non-native plant control:** Resource managers treated with herbicide or manually removed about 125 tree tobacco, 1,000 Sahara mustard, 225 Russian thistle, 280 fountain grass, 200 stinkwort, and purple veldt grass across the preserve.
- **Access control:** Resource managers visit at least twice per month. Several off-leash dogs were observed during patrols and dog owners were issued a verbal reminder of the rules and asked to put their dog on leash. A wildlife camera was in operation and monitored the number of hikers and the presence of illegal trail usage, like off-leash

dogs and mountain bikers. Two images of a mountain lion were captured. Minimal trash was found and picked up during patrols and other management activities.

- **Environmental education:** The kiosk on the Flume Trail displays information on native and invasive species and provides a trail map to trail users. Efforts included providing educational outreach to trail users as they were encountered on trails.

East Otay Mesa Preserve

Record ID: PDS2014-RMPM-10-003

MSCP Subarea Plan: 92.23 acres

Segment: South County

Resource Manager: San Diego Open Space Management

Management benefits the six MSCP covered species known to occur on or utilizing the preserve, which are San Diego barrel cactus, coastal California gnatcatcher, southern California rufous-crowned sparrow, northern harrier, California horned lark, and southern mule deer.

Management actions included the following:

- **Invasive, non-native plant control:** Removal efforts included hand removal of highly invasive plants, including pampas grass, fennel, and artichoke thistle, during the monthly visits.
- **Access control:** Resource managers conducted 12 site visits throughout the year. Illegal trespass of offroad vehicles is an ongoing issue. The property owner has repaired/replaced fencing and installed a new sign to provide additional barriers to keep off-road vehicles off the property. Minimal trash was found and removed during site visits.
- **Environmental education:** The resource manager communicated with the adjacent property manager to ensure no encroachments occur into the open space area.

El Apajo Preserve

Record ID: PDS2008-3914-03-002

MSCP Subarea Plan: 25.6 acres

Segment: North Metro-Jamul-Lakeside

Resource Manager: None (non-compliant)

Once the RMP is implemented, management could benefit the two MSCP covered species historically known to occur on or utilizing the preserve, which are Blainville's horned lizard and northern harrier. No annual report summarizing management actions was submitted this reporting year. A summary of the County steps taken in 2025 towards bringing this RMP into compliance is provided in the next section.

Golem Preserve

Record ID: PDS2008-3914-99-003
MSCP Subarea Plan: 154 acres
Segment: Lake Hodges
Resource Manager: San Dieguito River Park

Management benefits the five MSCP covered species known to occur on or utilizing the preserve, which are wart stemmed ceanothus, Del Mar manzanita, coastal California gnatcatcher, California rufous-crowned sparrow, and mountain lion. Management actions included the following:

- **Habitat restoration:** Riparian areas are now predominantly native forests after the successful riparian weed control program and the resource managers have found evidence of least Bell's vireo breeding. Sticky dudleya grown at the San Dieguito River Park Nursery were possibly exposed to too much sun and did not produce a lot of seed, but any seed will be saved and returned to the area where the original seed was collected.
- **Invasive, non-native plant control:** Removal efforts included ongoing weed control in riparian areas and monitoring of targeted weed species. Weed control also occurred in the floodplain to control the fountain grass. Twelve tall slender eucalyptus trees were identified growing through the riparian forest and will be treated with herbicide.
- **Access control:** Resource managers patrolled almost daily and there is a security guard at the main entrance every day. Graffiti on signs continues to be an issue and the work to remove it is an ongoing effort. New unauthorized trails and access points are closed to protect coastal California gnatcatcher habitat. A noticeable increase in trash occurred along the trail/access road from the main entry point to the dam and Park rangers notified the nearby contractors working on the Lake Hodges dam.
- **Environmental education:** Five educational programs, engaging a total of 145 students, occurred at the preserve. The school groups explored the biodiversity of the area with interactive elements and learned about ongoing restoration efforts. New displays are planned for the park kiosks to highlight California gnatcatcher. Engagement with visitors occurred while on patrol, site visits, and during restoration projects.

Greenhills Ranch Preserve

Record ID: PDS2010-3914-05-004
MSCP Subarea Plan: 38.9 acres
Segment: North Metro-Jamul-Lakeside
Resource Manager: Dudek (formerly Habitat Restoration Sciences)

Management benefits the four MSCP covered species known to occur on or utilizing the preserve, which are coastal cactus wren, coastal California gnatcatcher, southern California rufous-crowned sparrow, and southern mule deer. Management actions included the following:

- **Invasive, non-native plant control:** Removal efforts included hand removal, weed whacking, and chemical treatments throughout the preserve. Targeted species included non-native annual grasses, mustard, and tocalote within and surrounding the cactus restoration area.
- **Access control:** Resource managers conducted at least quarterly patrols and conducted seven visits. Minimal trash was found and removed during regular maintenance and monitoring visits. Bike trail repairs were completed that included removal of unauthorized bike jumps using hand tools, the spread of native thatch along the trail, and trash and debris; the application of native Diegan coastal sage scrub seed mix and installing post-and-rope fencing at the trail entrances to deter access. Some instances of trespassing were reported and observed, however, no further damage to preserve property and native vegetation communities occurred as a result. The bike trail vandalism/trespassing area will continue to be monitored.
- **Environmental education:** Resource managers regularly communicated with the Homeowners Association (HOA) to report visits and activities. Coordination regarding the trespassing issue was the main focus, which resulted in the approval and implementation of signage design, purchase, and installation. The resource managers collaborated with the HOA manager to determine the first phase of adaptive management measures due to the unauthorized bike trails and jumps constructed.

Hawano Preserve

Record ID: PDS2022-RMP-22-004

MSCP Subarea Plan: 33.1 acres

Segment: South County

Resource Manager: San Diego Habitat Conservancy

Management benefits seven MSCP covered species known to occur on or potentially utilizing the preserve, which are Parry's tetracoccus, San Diego fairy shrimp, burrowing owl, southern California rufous-crowned sparrow, northern harrier, and Thorne's hairstreak. Management activities included the following:

- **Habitat restoration:** Resource managers performed maintenance on eight of the 12 artificial burrows, which had either collapsed entrances or had been filled with dirt by fossorial mammals, thus rendering these artificial burrows partially or completely inaccessible to burrowing owls for nesting. Mowing, line trimming, and herbicidal treatment were practiced on several occasions in the vicinity of artificial burrow entrances and surrounding habitat.
- **Invasive, non-native plant control:** Treatment efforts included the application of herbicides to black mustard and the removal (mechanically mowed) of invasive grasses, prickly lettuce, Italian thistle, and Russian thistle. Areas treated included an 80' radius surrounding artificial burrows, as well as corridors and open patches of habitat between artificial burrows.
- **Access Control:** The resource manager conducted monthly site visits. Illegal dumping occurred along the two roads along the preserve's boundary and will be continually monitored. No signs of trespassing or illegal entry were observed.

- **Environmental education:** The resource manager toured the preserve with the members of a Grazing Management Group comprised of public agency representatives interested in utilizing managed grazing by ruminants as a tool to manage native habitats. The resource manager also toured the preserve with SDGE and a California Department of Transportation biologist. Interns from University of California San Diego and San Diego State University accompanied patrol visits to remove invasive plants and trash from the preserve.

High Meadow Ranch (Trevi Hills) Preserve

Record ID: PDS2015-RMPM-12-003

MSCP Subarea Plan: 358 acres

Segment: North Metro-Lakeside-Jamul

Resource Manager: HELIX Environmental Planning

Management benefits the nine MSCP covered species known to occur on or utilizing the preserve, which are Lakeside ceanothus, coastal California gnatcatcher, northern harrier, golden eagle, southern California rufous-crowned sparrow, Blainville's horned lizard, Belding's orange-throated whiptail, southern mule deer, and Cooper's hawk. Management actions included the following:

- **Invasive, non-native plant control:** Only the first quarterly visit occurred due to a temporary interruption in funding, which has since been resolved. The challenges did not have to do with the funding not being available, but instead the funding wasn't being directed to the resource manager due to changes in the points of contact with the project proponent and messages not being received by the new, correct points of contact. Management will resume as scheduled.
- **Access control:** From the first quarterly visit, no vandalism or graffiti was observed. Minimal trash was found and removed.

Hillside Meadows Preserve

Record ID: PDS2021-RMP-21-003

MSCP Subarea Plan: 3.13 acres

Segment: South County

Resource Manager: Urban Corps of San Diego County

Management benefits four MSCP covered species known to occur on or utilizing the preserve, which are the cooper's hawk, California rufous-crowned sparrow, California gnatcatcher, and orange throated whiptail. Management activities included the following:

- **Invasive, non-native plant control:** Removal and treatment efforts were focused on several large patches of crown daisy.
- **Access Control:** The resource managers conducted eight total site visits to the preserve. Despite being clearly signed, evidence of off-road vehicle activity was noted during all four of the monitoring visits. The property transferred ownership and the new owners installed fencing around the entire preserve.

International Industrial Park Upland Resource Management Area

Record ID: PDS2021-RMP-21-005

MSCP Subarea Plan: 5 acres

Segment: South County

Resource Manager: Urban Corps of San Diego County

Management benefits two MSCP covered species with the potential to occur on or utilizing the preserve, the burrowing owl and northern harrier. Management activities included the following:

- **Invasive, non-native plant control:** Removal efforts consisted of annual mowing of non-native grasses to support burrowing owl habitat. Black mustard, artichoke thistle, shortpod mustard, Russian thistle, tree tobacco, and crown daisy were observed and removed.
- **Access Control:** The resource manager conducted monthly site visits. Permanent fencing and signage will be installed along the shared boundaries with the development as soon as the grading is complete. The other edges of the preserve will be fenced once the adjacent wetland restoration begins. Illegal dumping and garbage accumulation was a result of off-road trespassers. Trash was removed during the general site visits.

International Industrial Park Wetland Resource Management Area

Record ID: PDS2021-RMP-21-005

MSCP Subarea Plan: 8.4 acres

Segment: South County

Resource Manager: Urban Corps of San Diego County

Management benefits one MSCP covered species known to occur on or utilizing the preserve, the northern harrier. Management activities included the following:

- **Access Control:** The resource manager conducted quarterly site visits. Trash was found and removed.

Lonestar Preserve

Record ID: PDS2012-3914-11-002

MSCP Subarea Plan: 62.16 acres

Segment: South County

Resource Manager: San Diego Habitat Conservancy

Management benefits eight MSCP covered species known to occur on or utilizing the preserve including Otay tarplant, Otay mesa mint, variegated dudleya, burrowing owl, San Diego fairy shrimp, Riverside fairy shrimp, northern harrier, and coastal cactus wren. Management actions included the following:

- **Habitat restoration:** Coordination with the California Department of Forestry and Fire Protection is occurring to potentially perform a controlled burn, followed by select chemical and mechanical control of weeds in the historic Otay tarplant area. Otay tarplant seeds previously collected from an adjacent preserve would be utilized to

replant the historic Otay tarplant community. Mowing was performed to reduce non-native grasses growing around the historic Otay tarplant population at the western edge.

- **Invasive, non-native plant control:** Removal efforts included hand removal and treatment of thick patches of black mustard, milk thistle, tocalote, and fennel throughout the preserve.
- **Access control:** Resource managers conducted monthly monitoring visits and made repairs to two sections of the chain-link fences along the southern boundary. Minimal trash was found along the eastern edge of the preserve and was removed.
- **Environmental education:** Extensive coordination was conducted with the San Diego Zoo Wildlife Alliance to stay up to date on burrowing owl management. The resource manager attended the San Diego County Burrowing Owl Management meeting and conducted a site visit with the Caltrans biologist responsible for managing adjacent preserves for the purpose of discussing coordinated management, such as the planned controlled burn.

Maranatha Chapel Preserve

Record ID: PDS2008-3914-02-003

MSCP Subarea Plan: 87 acres

Segment: Lake Hodges

Resource Manager: None (non-compliant)

Once the RMP is implemented, management could benefit the five MSCP covered species historically known to occur on or utilizing the preserve, which are wart-stemmed lilac, coastal California gnatcatcher, Cooper's hawk, northern harrier, and southern mule deer. No annual report summarizing management actions was submitted this reporting year. A summary of the County steps taken in 2025 towards bringing this RMP into compliance is provided in the next section.

Oakmont Preserve

Record ID: PDS2023-RMP-23-004

MSCP Subarea Plan: 34.64 acres

Segment: North Metro-Lakeside-Jamul

Resource Manager: Urban Corps of San Diego County

Management benefits three MSCP species that have potential of occurring on the preserve including the California gnatcatcher, orange-throated whiptail, and variegated dudleya. Management activities included the following:

- **Invasive, non-native plant control:** Removal efforts occurred during quarterly visits and focused on tocalote, tamarisk, common sow thistle, fountain grass, shortpod mustard, and castor bean.
- **Access Control:** Fencing still needs to be installed. Some evidence of off-road trespass has been noted along the east-central edge of the preserve. Once the fencing is installed, this access point will be blocked and the trespass should stop. Signs on metal

posts were installed at various locations along the perimeter of the preserve, but these were not enough of a deterrent for the off roaders. One fence post was found bent over and was fixed. Minimal trash was removed.

OMC Resource Management Area

Record ID: PDS2019-RMP-19-004

MSCP Subarea Plan: 16.08 acres

Segment: South County

Resource Manager: Urban Corps of San Diego County

Management benefits three MSCP species that have potential of occurring on the preserve including the Otay tarplant, burrowing owl, and the northern harrier. Management activities included the following:

- **Invasive, non-native plant control:** Removal and treatment efforts focused on Australian saltbush, black mustard, artichoke thistle, fennel, shortpod mustard, Russian thistle, tree tobacco, stinkwort, and crown daisy.
- **Access Control:** Twelve general site visits were conducted throughout the year. There was evidence of unauthorized use by off-road vehicles. The resource manager coordinated with the San Diego County Sheriff's Off-Road Enforcement team to help reduce unauthorized use. Very old, deep piles of trash are being reduced each year with no new piles of trash found within the preserve.

Otay Crossings Commerce Park (On-site) Preserve

Record ID: PDS2016-RMP-16-004

MSCP Subarea Plan: 24.3 acres

Segment: South County

Resource Manager: San Diego Habitat Conservancy

Management benefits the seven MSCP covered species known to occur on or utilizing the preserve, which are Otay tarplant, San Diego barrel cactus, variegated dudleya, San Diego fairy shrimp, Riverside fairy shrimp, burrowing owl, and northern harrier. Management actions included the following:

- **Invasive, non-native plant control:** Weed control and removal efforts focused on Australian saltbush, black mustard, shortpod mustard, fennel, crown daisy, bristly ox-tongue, stinkwort, prickly lettuce, sow thistle, fountain grass, and Russian thistle. Crystalline ice plant was removed around the Quino checkerspot butterfly areas.
- **Access control:** Resource managers conducted monthly patrols. Trash was found and removed. Fencing repairs were made on the north parcel. Off-road vehicle tracks continue to be an issue, either from U.S. Border Patrol or recreational off-roaders. The resource managers will continue communicating with Border Patrol staff to reduce driving within the preserve and the need for additional barriers will be assessed.

Otay Crossings Off-Site (Lonestar Ridge) Preserve

Record ID: PDS2016-RMP-16-005

MSCP Subarea Plan: 82 acres

Segment: South County

Resource Manager: San Diego Habitat Conservancy

Management benefits three MSCP covered species known to occur on or utilizing the preserve, which are the San Diego fairy shrimp, burrowing owl, and Quino Checkerspot butterfly. Management activities included the following:

- **Habitat restoration:** About 25 acres were mowed, line trimmed, and chemically treated to benefit the burrowing owl and the 21 artificial burrows at the preserve. General weeding of the vernal pool area and vicinity was conducted.
- **Invasive, non-native plant control:** Removal and treatment efforts were focused on invasive grasses, tocalote, shortpod, black mustard, Russian thistle, stinkwort, tree tobacco, and fennel. Over 50 acres of habitat during several visits were line trimmed, hand-picked, and mowed in order to minimize coverage of each invasive species.
- **Access Control:** The resource manager conducted monthly visits to the preserve and removed trash. No coordination with U.S. Border Patrol was needed regarding property access. Perimeter fencing was repaired and kept in good condition after it was damaged by trespassers.

Pinnacles at Santa Fe Valley Preserve

Record ID: PDS2022-RMP-22-001

MSCP Subarea Plan: 26.04 acres

Segment: Lake Hodges

Resource Manager: Endangered Habitats Conservancy

Management benefits three MSCP covered species known to occur on or utilizing the preserve, which are wart-stemmed ceanothus, San Diego barrel cactus, and the coastal California gnatcatcher. Management activities included the following:

- **Invasive, non-native plant control:** Removal efforts were focused on artichoke thistle along the eastern border, as well as Russian thistle, tocalote, black mustard, scarlet pimpernel, and stinkwort. A variety of methods were used in these removal efforts, including backpack sprayers, line trimmers, chainsaws, and removal by hand.
- **Access Control:** Resource managers visit the site at least quarterly. Fencing was repaired and new signs were installed. Minimal trash was found and removed.

Quail Canyon Preserve

Record ID: PDS2023-RMP-23-001
MSCP Subarea Plan: 199.72 acres
Segment: North Metro-Lakeside-Jamul
Resource Manager: Dudek (formerly Habitat Restoration Sciences)

Management benefits five MSCP covered species known to occur on or utilizing the preserve, which are the rufous-crowned sparrow, Cooper's hawk, coast horned lizard, orange-throated whiptail, and the northern harrier. Management activities included the following:

- **Invasive, non-native plant control:** Removal efforts were focused on invasive and non-native plant species using manual, mechanical, and chemical methods.
- **Access Control:** Resource managers found evidence of ongoing unauthorized access, trail creation, and dumping.

Sloane Canyon Preserve

Record ID: PDS2015-RMPM-12-002
MSCP Subarea Plan: 39.18 acres
Segment: South Metro-Lakeside-Jamul
Resource Manager: San Diego Open Space Management

Management benefits the one MSCP covered species known to occur on or utilizing the preserve, Belding's orange-throated whiptail. Management actions included the following:

- **Invasive, non-native plant control:** No removal occurred, as minimal amounts of non-native vegetation were found within the open space.
- **Access control:** Resource managers conducted biannual patrols. Fences and gates were checked and in adequate condition. No trash was found.
- **Environmental education:** The resource managers communicated with nearby residents the sensitive nature of the preserve. No encroachment occurred on the property.

Starwood (Crosby) Preserve

Record ID: PDS2008-3914-99-004
MSCP Subarea Plan: 170 acres
Segment: Lake Hodges
Resource Manager: Rincon Consultants

Management benefits the 13 MSCP covered species known to occur on or utilizing the preserve, which are San Diego mesa mint, San Diego button celery, Orcutt's brodiaea, San Diego ambrosia, Del Mar manzanita, San Diego barrel cactus, wart-stemmed ceanothus, San Diego fairy shrimp, Belding's orange-throated whiptail, coastal California gnatcatcher, Cooper's hawk, northern harrier, and southern California rufous-crowned sparrow. Management actions included the following:

- **Habitat restoration:** Resource managers implemented on-going re-vegetation efforts as needed through the preserve. Several areas required targeted weeding efforts. Riparian areas have sycamores, coast live oaks, and prickly pear cacti. The native plant installation efforts from previous years in the chaparral area continued to thrive.
- **Invasive, non-native plant control:** Removal efforts included ongoing weed control to avoid perennial invasive plants as well as spot herbicide treatment to reduce plant outbreaks in non-infested areas. These efforts were assessed during monthly monitoring visits and prioritized based on their ecological impact.
- **Invasive, wildlife control:** Efforts included surveying for brown-headed cowbird and American bullfrog. No brown-headed cowbirds were observed. American bullfrogs were heard but not found over the course of a few site visits.
- **Access control:** Unauthorized trails, trampling of vegetation, and sign and fence vandalism continues to be an issue. Coordination will continue with the Encinitas and 4S Ranch Sheriff departments, as well as adjacent land managers, on unauthorized use. Trash was observed at common trespassing areas and removed during field visits.
- **Fire Management:** Resource managers conducted brush management in coordination with the San Diego County Fire Marshall. Brush management timing occurred after nesting bird season.
- **Environmental education:** The Crosby Open Space website was regularly managed and updated to provide community members with access to news and information about the preserve, as well as information on citizen science initiatives.

Sweetwater Vistas Resource Management Area

Record ID: PDS2018-RMP-18-002

MSCP Subarea Plan: 28.8 acres

Segment: South County

Resource Manager: San Diego Habitat Conservancy

Management benefits four MSCP covered species known to occur on or utilizing the preserve, which are the Cooper's hawk, coastal California gnatcatcher, least Bell's vireo, and the northern harrier. Management activities included the following:

- **Invasive, non-native plant control:** Removal and treatment efforts were conducted over 5 site visits and targeted mustard, tocalote, crown daisy, artichoke thistle, castor bean, Italian thistle, salt cedar, African asparagus fern, stinkwort, and tree tobacco.
- **Access Control:** The resource manager conducted monthly patrols and observed the consistent presence of trash, including food waste, clothing, and bedding material at an old and active encampment area. Volunteers helped to remove two truckloads of trash. The resource manager is coordinating with the property owner to complete sign installation after new fencing was installed.

Woodridge Preserve

Record ID: PDS2008-3914-99-005

MSCP Subarea Plan: 54.2 acres

Segment: North Metro-Jamul-Lakeside

Resource Manager: Center for Natural Lands Management

Management benefits the three MSCP covered species known to occur on or utilizing the preserve, which are coastal California gnatcatcher, southern California rufous-crowned sparrow, and Belding's orange-throated whiptail. Management actions included the following:

- **Habitat restoration:** Resource managers maintained the previous year's planting. About 190 1-gallon pots and 580 cuttings of a combination of coast cholla and prickly pear were planted. Planting sites were checked regularly and the cacti have been thriving. In addition to creating habitat for coastal cactus wren, the cactus patches also appear to be favored by orange-throated whiptails.
- **Invasive, non-native plant control:** Removal efforts included the hand removal and herbicide treatment of more than 1,000 shortpod mustard and brittlebush plants. Olive trees and tamarisk were found in various locations and treated with herbicides. Tocalote and stinkwort were also found and removed.
- **Fire Management:** Fuel zones were thinned or cleared to no more than 50 percent to help protect the surrounding residential community. Follow-up treatment was required to remove excess regrowth.
- **Access control:** Resource managers conducted weekly to bi-weekly patrols. Two additional signs for no motorcycle use were posted around the preserve and appear to have helped reduce the issue. Encroachment by a neighbor occurred that destroyed native habitat. The resource managers communicated with the neighbor, had the property lines surveyed and fenced, and restored the habitat. Minimal trash was found and picked up during patrols and the trash cans onsite were emptied weekly.
- **Environmental education:** The materials in the kiosk located at the Currant Court/Morning Glory trailhead were periodically updated with a site map, a brief narrative of the purpose of the site, various brochures, and wildlife pictures. Resource managers frequently interface with public trail users during patrols.

Non-Compliant Private RMP Reporting

Three of the 26 (12%) RMPs did not submit annual reports for the 2024-2025 fiscal reporting period. These three non-compliant RMPs include RMP 02-003 Maranatha Chapel, RMP 03-002 El Apajo, and RMP 06-005 Artesian Trail. These three RMPs have been out of compliance since the mid-2000s due to missing RMP implementation components (e.g., Resource Manager, funding mechanism, Open Space Maintenance Agreement, and/or easements). The County has and will continue to improve its processes and procedures, as necessary, to ensure additional compliance cases are not created. The County is also working towards bringing the three RMPs into compliance. Below summarizes the County steps taken in 2025 towards bringing these RMPs into compliance and their current status.

Maranatha Chapel Preserve (PDS2008-3914-02-003) – County staff continued to identify and assess the County’s options to achieve compliance, including correspondence with the point of contact for Maranatha Chapel. An RMP was approved for the 72-acre preserve in 2003. Additionally, an Open Space Easement was recorded over the five-acre southern portion of the RMP area in 2019. The County is identifying ways to put the entire RMP into long-term conservation and establish a funding mechanism for monitoring and management. County staff visited the five-acre parcel in October and conducted a visual assessment. Discussions on a path forward will continue into 2026 and a status update will be provided in the 2026 MSCP Annual Report.

El Apajo Preserve (PDS2008-3914-03-002) – County staff continued to identify and assess the County’s options to achieve compliance. An RMP was approved for the 25.6-acre preserve in 2003. Additionally, two Conservation Easements were recorded over the RMP area in 2003. The County is identifying ways to implement the RMP and establish a funding mechanism for monitoring and management. County staff visited the preserve in October and conducted a visual assessment. Staff observed a Cooper’s hawk, invasive plant species, and largely undisturbed habitat. Discussions on a path forward will continue into 2026 and a status update will be provided in the 2026 MSCP Annual Report.

Artesian Trail Preserve (PDS2009-3914-06-005) – County staff continued to identify and assess the County’s options to achieve compliance. An RMP was approved for the 3.2-acre preserve in 2007 and an Open Space Easement was recorded over the RMP area in 2006. The County is identifying ways to implement the RMP and establish a funding mechanism for monitoring and management. County staff visited the preserve in October and conducted a visual assessment. Staff observed soil disturbances, invasive plant species, and a newly installed fence along the road and southern parcel. Discussions on a path forward will continue into 2026 and a status update will be provided in the 2026 MSCP Annual Report.

6.4 Grant Funded Management Projects

The County implemented 11 grant funded management projects across eight County Preserves in the reporting year. See **Table 13, *Grant Funded Management Projects, Locations, and Species Benefited in Reporting Year***. These projects benefited thirteen MSCP covered species, which are San Diego thornmint, variegated dudleya, willowy monardella, coastal California gnatcatcher, least Bell’s vireo, coastal cactus wren, northern harrier, Cooper’s hawk, golden eagle, arroyo toad, southwestern pond turtle, southern mule deer, and mountain lion, and included habitat restoration, access control, invasive, non-native plant control, invasive non-native animal control, and trail alignment. Grant-funded projects occurred at Dictionary Hill Preserve, Sweetwater Regional Park, Ramona Grasslands Preserve, Tijuana River Valley Regional Park, Boulder Oaks Preserve, Sycamore Canyon and Goodan Ranch Preserve, Otay Ranch Preserve, and Lakeside Linkage Preserve. Grant funding totaled approximately \$24.4 million and was provided by 11 grants, County General Funds, and one local agency matching. Grant funding came from three WCB Proposition 68 grants, one CDFW Natural Community Conservation Planning (NCCP) Local Assistance grant, one State Coastal Conservancy Proposition 68 grant, one CDFW Proposition 1 grant, one TransNet Environmental Mitigation Program (EMP) grant, one U.S Navy Readiness and Environmental Protection Integration Program grant, two SWRCB Border Water Quality Infrastructure grants, and one CDFW NCCP 30x30 grant.

The County actively seeks grants to supplement stewardship activities in addition to those funded through County general funds. These activities meet the MSCP Subarea Plan'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 Subarea Plan's Biological Goal (Section 1.2.1) to help conserve both diversity and functionality of the southwestern county ecosystem through preservation and adaptive management. In 2025, the County applied for and was awarded one grant, a proposal for restoration of tricolored black blackbird habitat and restoration activities will begin in 2026.

TABLE 13. GRANT FUNDED MANAGEMENT PROJECTS, LOCATIONS, AND MSCP SPECIES BENEFITED IN REPORTING YEAR

Project	Preserve	MSCP Species Benefited
Coastal California Gnatcatcher Habitat Restoration	Dictionary Hill Preserve	Coastal California gnatcatcher, coastal cactus wren, Quino checkerspot butterfly ¹ , monarch butterfly ¹
Cactus Habitat Enhancement to Benefit Coastal Cactus Wren	Lakeside Linkage Preserve	Coastal cactus wren
East Otay Trail Alignment Study	Otay Ranch Preserve	Quino checkerspot butterfly ¹
Ramona Grasslands and Boulder Oaks Preserve Bullfrog Eradication	Ramona Grasslands, Boulder Oaks Preserve	Arroyo toad, southwestern pond turtle
Morrison Pond Restoration and Enhancement	Sweetwater Regional Park	Coastal California gnatcatcher, coastal cactus wren, least Bell's vireo
Sycamore Canyon and Goodan Ranch Preserve Covered Species Threat Reduction Project	Sycamore Canyon and Goodan Ranch Preserve	San Diego thornmint, variegated dudleya, willowy monardella, coastal California gnatcatcher, northern harrier, Cooper's hawk, golden eagle, southern mule deer and mountain lion.
Smuggler's Gulch Dredging	Tijuana River Valley Regional Park	Coastal California gnatcatcher, least Bell's vireo
Smuggler's Gulch Improvements	Tijuana River Valley Regional Park	Least Bell's vireo
Brown Property Fill Removal/Restoration	Tijuana River Valley Regional Park	Least Bell's vireo
Habitat Improvement, Restoration, and Erosion Control	Tijuana River Valley Regional Park	Least Bell's vireo and coastal California gnatcatcher
Brown Property Restoration Project	Tijuana River Valley Regional Park	Least Bell's vireo

¹ Species are not MSCP covered species; however, will benefit from habitat restoration.

Dictionary Hill Preserve Coastal California Gnatcatcher Habitat Restoration Project

Funding Source: WCB Proposition 68 Grant and County funding

Funding Amount: \$814,560 (Prop 68 funds \$790,000 and County funds \$24,560)

Project Timeline: June 2021 – December 2025

Target Species or Habitat: Coastal California gnatcatcher, coastal cactus wren, Quino checkerspot butterfly, monarch butterfly, and coastal sage scrub habitat

Management Action: Invasive plant treatment and native plant establishment

The *Dictionary Hill Preserve Coastal California Gnatcatcher Habitat Restoration Project* restored and enhanced habitat on Dictionary Hill Preserve to benefit coastal California gnatcatcher and other coastal sage scrub dependent species. This project was approved for funding at the May 2021 WCB hearing for the full project amount of \$551,535. A budget augmentation for \$263,000 was approved at the November 2023 WCB hearing.

Dictionary Hill Preserve is located within a stepping-stone linkage for coastal California gnatcatcher, providing suitable habitat patches between established breeding areas in proximity to the Preserve and between Core Resource Areas, and supports up to four territories. Starting in Winter 2021, the project initiated a four-year program for the treatment of large stands of invasive non-native plants identified throughout the Preserve to benefit the on-site coastal sage scrub and sensitive species that occur in this vegetation community, including MSCP covered San Diego goldenstar, variegated dudleya, San Diego barrel cactus, southern California rufous-crowned sparrow, Belding's orange-throated whiptail, and Cooper's hawk. The project installed 1,750 coastal sage scrub plants over four acres of disturbed coastal sage scrub to expand existing nesting and foraging habitat for coastal California gnatcatcher, 25 pounds of Quino checkerspot butterfly host plant/nectar species seed mix, 25 pounds of monarch butterfly host plant/nectar species seed mix, and 200 pounds of coastal sage scrub seed mix. In January 2024, 973 one-gallon container coastal sage scrub plants were installed, including California sagebrush, coast cholla, bush sunflower, chaparral yucca, coast prickly pear, spiny redberry, lemonade berry, white sage, and blue elderberry.

The second annual monitoring visit of the restoration and enhancement areas occurred in March 2024. Within the restoration areas, native plant cover was estimated at 30 percent while invasive non-native plant cover was estimated at three percent. Overall container plant survivorship was estimated at 86 percent. Within the enhancement area, native plant cover was estimated to be 60 percent and non-native plant cover was reduced from approximately three to less than one percent. During the second monitoring year, a total of 74 plant species and 70 animal species were observed or detected on the Preserve. These included five sensitive species: turkey vulture, Costa's hummingbird, Southern California rufous-crowned sparrow, coastal cactus wren and coastal California gnatcatcher.

In 2025, additional habitat restoration activities were conducted at Dictionary Hill, including the installation of 292 one-gallon container plants across the five coastal sage scrub restoration areas. These plantings included California sagebrush, San Diego sunflower, California buckwheat, Munz's sage, white sage, laurel sumac, spiny redberry, toyon, California brickelbush, sawtooth goldenbush, woolypod milkweed, narrow-leaf milkweed, and gumweed. The container plants were installed in June and July and were watered weekly through late November. In October and November, native seed mixes were also hand-seeded in bare areas to support further establishment of native vegetation.

The final year of monitoring for the Dictionary Hill Coastal California Gnatcatcher Habitat Restoration Project was completed in November 2025. Native plant cover within the 4.0-acre Diegan coastal sage scrub (DCSS) restoration areas increased to approximately 50 percent, up from 30 percent in 2024, with all five restoration areas meeting or exceeding performance goals for invasive species control. Non-native plant cover (excluding annual grasses) was estimated at less than one percent, and no target invasive perennial species were observed. One invasive annual species, tocalote, was detected in Area 1 and promptly treated. The upland enhancement area, totaling approximately 155 acres, maintained 60 percent native plant cover, with target invasive species cover reduced to less than one percent. A total of 74 plant species and 64 animal species were observed or detected during Year 4 monitoring, including eight sensitive wildlife species: Crotch's bumble bee, San Diegan tiger whiptail, Cooper's hawk, red-shouldered hawk, turkey vulture, Costa's hummingbird, Southern California rufous-crowned sparrow, and coastal California gnatcatcher. Despite below-average rainfall (46 percent of normal), restoration areas showed strong native plant establishment and flowering, with natural recruitment observed in both restoration and enhancement areas.

Lakeside Linkage Preserve Cactus Habitat Enhancement to Benefit Coastal Cactus Wren

Funding Source: CDFW Natural Community Conservation Planning Local Assistance Grant (\$50,000) and County funding (\$2,989)

Funding Amount: \$52,989

Project Timeline: March 1, 2025 – January 31, 2026

Target Species or Habitat: Coastal Cactus Wren

Management Action: Habitat enhancement

The Lakeside Linkage Preserve Cactus Habitat Enhancement to Benefit Coastal Cactus Wren Project will address the urgent need for the management of native and invasive non-native plant species within and adjacent to previously restored cactus patches within the central property of Lakeside Linkage Preserve (Preserve). The open areas created around the cactus patches will support the persistence and facilitate recruitment of the MSCP covered species coastal cactus wren. The objectives of the project include the following: coverage of native plant species will be reduced/thinned to less than 15% cover within and around existing cactus patches and coverage of invasive non-native plant species will be reduced to less than 10% throughout the existing cactus patches.

In October 2025, enhancement activities included determining photo points at the previously restored cactus patches, surveying previously restored cactus patches for special status species, and selectively trimming and thinning native plant species within and around previously restored cactus patches and removing invasive non-native plants around the previously restored cactus patches.

Within and immediately surrounding the previously restored cactus patches, native plants, specifically California sagebrush and California buckwheat, were selectively thinned through manual cutting using hand tools. All cut biomass were raked in piles and properly disposed of off-site. The selective thinning of native plants from within and around previously restored cactus patches reduced the presence and density of ladder plants and improved fire resilience.

Invasive non-native vegetation, including thatch and seed biomass from non-native grasses, tocalote, and shortpod mustard, was removed within a five-foot radius of each previously

restored cactus patch by hand or with line trimmers. All cut and removed biomass were raked, consolidated, and removed from the site to prevent reseeding and fuel buildup. Removal of invasive non-native plants ensured wildlife hardiness and created open spaces for cactus wren foraging.

The project was successful in achieving the objectives to selectively trim native plants to less than 15% cover and to reduce/thin invasive non-native plants within, and adjacent to, the previously restored cactus patches to less than 10% cover.

Otay Ranch Preserve East Otay Trail Alignment Study

Funding Source: WCB Proposition 68 Grant (\$450,000), County funding (\$150,000), and local agency match (\$50,000)

Funding Amount: \$650,000

Project Timeline: March 2021 – December 2027

Target Species or Habitat: Upland habitat surrounding trails

Management Action: Habitat Management

The *East Otay Trail Alignment Study (EOTAS)* project will complete a PEIR for the comprehensive planning document which identifies 13 new trail alignments totaling approximately 80.5 linear miles of hiking, biking, riding, and wheelchair accessible pathways and trails near and around the ecologically rich Otay Lakes Area. The project is a result of a multi-agency effort to identify a coordinated and sustainable trail system in southern San Diego County. The project will provide a comprehensive trail network while maintaining ecological diversity and preserving quality habitat in the Otay Ranch Preserve. As part of this project, biological surveys were performed in 2021 and 2022. Surveys included rare plant surveys, Quino checkerspot butterfly protocol surveys, Hermes copper butterfly protocol surveys, fairy shrimp/western spadefoot protocol surveys, burrowing owl protocol surveys, light-footed Ridgway's rail surveys, and aquatic resources delineation surveys. In 2024, technical studies and the PEIR were drafted. In 2025, the draft technical reports and PEIR were in process of being reviewed by the County DPR.

Ramona Grasslands and Boulder Oaks Preserve Bullfrog Eradication

Funding Source: TransNet Environmental Mitigation Program

Funding Amount: \$223,668

Project Timeline: March 2023 – September 2026

Target Species or Habitat: Arroyo toad and southwestern pond turtle

Management Action: Invasive, non-native animal control

The *Ramona Grasslands and Boulder Oaks Preserve Bullfrog Eradication* project was implemented to ensure southwestern pond turtle and red-legged frog persistence within conserved lands of San Diego County by enhancing unoccupied habitat that have potential to support these species and to enhance a MSCP Core Resource Area. Also, the project will ensure on-site arroyo toad persistence within conserved lands of San Diego County by enhancing occupied habitat. The project is funded by a *TransNet* EMP grant of \$223,668 awarded to the County in 2023. The objective of the project is to implement a bullfrog eradication program within Ramona Grasslands Preserve and the treatment ponds on adjacent RMWD property and within the four ponds of Boulder Oaks Preserve. Bullfrog eradication efforts within Boulder Oaks Preserve would improve habitat to facilitate the translocation of southwestern pond turtle and red-legged frog. Arroyo toad, a federally endangered species, has

been observed within Santa Maria Creek west of Rangeland Road within the western portions of Ramona Grasslands Preserve. Eradication efforts continued throughout 2025. The presence of adult and juvenile bullfrogs reduces the chances of a viable population of arroyo toads and southwestern pond turtles within the Preserve. Between August and December 2025, 133 bullfrogs (133 adults) were eradicated from Ramona Grasslands Preserve and 231 bullfrogs (122 adults, 108 juveniles, 1 tadpole) have been eradicated from Boulder Oaks Preserve. Since eradication efforts began in August 2024, 181 bullfrogs (161 adults, 20 juveniles) were eradicated from Ramona Grasslands and 363 bullfrogs (158 adults, 147 juveniles, 58 tadpoles) have been eradicated from Boulder Oaks.

Sweetwater Regional Park Morrison Pond Restoration and Enhancement

Funding Source: WCB Proposition 68 Grant and County funding

Funding Amount: \$509,110 (WCB Prop 68 funds \$397,185 and County funds \$111,925)

Project Timeline: November 2021 – June 2026

Target Species or Habitat: Vegetation surrounding riparian wetland and adjacent upland habitats

Management Action: Invasive plant treatment and native plant establishment

The *Sweetwater Regional Park Morrison Pond Restoration and Enhancement* project within Sweetwater Regional Park will restore 3.45 acres of coastal sage scrub habitat for coastal California gnatcatcher and coastal cactus wren. In addition, the project will enhance riparian and adjacent upland habitat around Morrison Pond within the 19.29-acre project area. The habitat restoration project will also benefit the least Bell's vireo. Funding for the project is provided by a WCB 2020 Proposition 68 grant awarded in November 2020 and with County matching funds. The project's objectives are: (1) initiate a three-year invasive, non-native plant control program throughout the 19.29 acres to enhance the existing habitat and benefit sensitive and listed species, including least Bell's vireo; (2) plant native trees provided by the County Tree Program; (3) install 3,450 coastal sage scrub species over approximately 3.45 acres to expand nesting and foraging habitat for coastal California gnatcatcher and coastal cactus wren; and (4) install 135 pounds of coastal sage scrub seed mix over approximately 3.45 acres to expand nesting and foraging habitat for coastal California gnatcatcher and coastal cactus wren. Implementation of the Restoration and Enhancement Plan began in 2022. Following installation of the coastal sage scrub species in 2022 and initial removal of invasive non-native plant species, monitoring and maintenance activities will continue to ensure successful installation of native plants and eradication of invasive, non-native plant species. In 2023, the project continued implementation and began maintenance, monitoring, and reporting.

The second annual monitoring visit of the upland restoration and enhancement areas occurred in April 2024. Native plant cover was estimated at 60 percent while non-native plant cover was estimated at two percent. Additional container plantings were installed in January 2024. Native recruitment was high within the upland restoration area. During the first monitoring year, a total of 79 animal species were observed or detected on the Preserve. Survivorship of planted coastal cholla and coastal prickly pear continued to be high (~99%) and recruitment was observed.

In 2025, the Morrison Pond Habitat Restoration Project entered its fourth year of implementation and monitoring. Maintenance activities continued across the Diegan coastal sage scrub restoration, upland enhancement, and riparian enhancement areas. Native plant cover within the 3.4-acre DCSS restoration area was estimated at 50 percent, a slight seasonal decrease from the 60 percent observed in spring 2024, attributed to summer dormancy and dry

conditions. Non-native plant cover remained low at approximately one percent, and no target invasive species were observed. The 3.1-acre upland enhancement area supported 40 percent native cover, with strong recruitment of California sagebrush, bush sunflower, black sage, white sage, and California buckwheat. Invasive species cover was less than one percent. Riparian enhancement activities began in September 2025, focusing on the removal of giant reed and tree tobacco; resprouts were observed and scheduled for retreatment. A total of 47 animal species were observed or detected during Year 4 monitoring, including seven sensitive species: least Bell's vireo, Belding's orange-throated whiptail, monarch butterfly, yellow warbler, great blue heron, double-crested cormorant, and red-shouldered hawk. Survivorship of planted coastal cholla and coastal prickly pear remained high (~99%), with continued recruitment observed. Maintenance and monitoring will continue into 2026 under the extended grant period.

Sycamore Canyon and Goodan Ranch Preserve Covered Species Threat Reduction Project

Funding Source: California Department of Fish and Wildlife 30x30 Grant Program

Funding Amount: \$888,054 (Grant Funds)

Project Timeline: April 2024 – March 2026

Target Species or Habitat: San Diego thornmint, variegated dudleya, and willow monardella, coastal California gnatcatcher, northern harrier, Cooper's hawk, golden eagle, southern mule deer and mountain lion.

Management Action: Invasive, non-native plant species removal and habitat restoration

The *Sycamore Canyon and Goodan Ranch Preserve Covered Species Threat Reduction Project* will address the urgent need for invasive non-native plant species removal and habitat restoration within Sycamore Canyon and Goodan Ranch Preserve (Preserve) that as a result will restore and enhance native and naturalized habitats on the Preserve to benefit MSCP covered species including San Diego thornmint (*Acanthomintha ilicifolia*), variegated dudleya (*Dudleya variegata*), willow monardella (*Monardella linoides* ssp. *viminea*), coastal California gnatcatcher (*Poliioptila californica californica*), northern harrier (*Circus cyaneus*), Cooper's hawk (*Accipiter cooperii*), golden eagle (*Aquila chrysaetos*), southern mule deer (*Odocoileus hemionus*), and mountain lion (*Puma concolor*). The objectives of this Project include treatment and removal of invasive non-native plants within approximately 290 acres of the 2,927-acre Preserve, restoration, and enhancement of chaparral and coastal sage scrub habitats, maintenance of San Diego thornmint, variegated dudleya, and willow monardella populations, fire risk reduction and resiliency, and promotion of native plant recruitment within the Preserve.

The fourth quarter of Year 1 (January 1 – March 31, 2025) was considered the Annual Report for Year 1. Work performed included enhancement activities and monitoring. In the northern portion of the Preserve a small amount of line trimming occurred to prepare the area for herbicide application in quarter 1 of Year 2.

In the first quarter of Year 2 (April 1 – June 30, 2025), work performed included enhancement activities and monitoring. Enhancement activities within the approximately 32 acres of riparian habitat along Sycamore Canyon Creek included spot spraying vegetative invasive non-native plant species such as Maltese starthistle, stinkwort, filaree, and non-native grasses within the dry creek bed and surrounding uplands as well as around the planted coast live oak saplings and other existing native vegetation. In the northern portion of Preserve treatment occurred within approximately 40 acres of chaparral, coastal sage scrub, and meadow. The African fountain grass that had been mapped throughout the northern parcels was observed to be actively growing and was treated with herbicide. Maltese starthistle and non-native grasses

were observed in the meadow habitat and managed through line trimming and herbicide application. Hand weeding occurred within the clay lens where San Diego thornmint and variegated dudleya were located. Line trimming and spot spraying occurred within the four western San Diego thornmint monitoring plots beyond the hand weeding buffers to treat non-native grasses and Maltese starthistle. Additionally, five days of invasive non-native plant treatment occurred within the two willowy monardella monitoring plots in Clark Canyon. Invasive non-native plant treatment consisted of hand weeding three feet around all willowy monardella; spot spraying African fountain grass, Maltese starthistle, and shortpod mustard (*Hirschfeldia incana*) beyond the hand weeding buffers; and line trimming surrounding uplands of non-native grass thatch.

In the second quarter of Year 2 (July 1 – September 30, 2025), work performed included enhancement activities, seed collection, and monitoring. Enhancement activities during this quarter consisted of treating African fountain grass in the northern parcels of the Preserve and in Clark Canyon within the willowy monardella monitoring plots; spot-spraying rattail fescue, red brome, riggut brome, soft chess, and wild oat, artichoke thistle, Maltese star-thistle, and other invasive non-native plant species surrounding San Diego thornmint, and variegated dudleya populations; hand-weeding stinkwort and African fountain grass in Clark Canyon; line trimming non-native grasses in meadow habitat in the northern parcels; and line trimming and treating non-native grasses in the riparian habitat of Sycamore Canyon Creek. All cut material of invasive non-native plants was bagged and disposed of at a landfill or mulched on-site. Seed from native plant species was collected on three occasions within the coastal sage scrub and chaparral habitat in the northern portion of the Preserve. Seeds were taken directly from the plants, labeled, and stored off-site. Seeds will be distributed after the second year of invasive plant species treatment and removal, particularly in areas that lack native vegetation.

Tijuana River Valley Regional Park Smuggler’s Gulch Dredging Project

Funding Source: SWRCB Border Water Quality Infrastructure Grant

Funding Amount: \$4,250,000

Project Timeline: October 2023 – December 2025

Target Species or Habitat: Riparian Wetland and adjacent upland habitats

Management Action: Habitat enhancement

The Smuggler’s Gulch Dredging Project improved water quality by removing trash and sediments that have accumulated within the Smuggler’s Gulch channel and Pilot Channel of the Tijuana River over years of transboundary flows coming from Mexico. The project involved a full-scale dredging effort throughout the Smuggler’s Gulch channel and portions of the Pilot Channel of the Tijuana River Along with disposal of the dredged material. This project complements the Smuggler’s Gulch Improvements Project discussed below. This project was funded by a SWRCB Border Water Quality Infrastructure Grant of \$4,250,000 the County successfully secured in late 2023 by leveraging existing County funding for the project. Implementation benefits include enhancement of the hydrologic health and habitat of the Tijuana River Valley watershed. Implementation of the grant began in March 2024 and project activities concluded in November 2024. All work associated with the grant has been completed and the grant was fully closed out in 2025.

Tijuana River Valley Regional Park Smuggler’s Gulch Improvements Project

Funding Source: State Coastal Conservancy Proposition 68 Grant (\$10,000,000) and County funding (\$323,000)

Funding Amount: \$10,323,000

Project Timeline: January 2021 – June 2028

Target Species or Habitat: Riparian, wetland and adjacent upland habitats

Management Action: Habitat Enhancement

The *Smuggler’s Gulch Improvements Project* is a Capital Improvements Project within Tijuana River Valley Regional Park that originated from the County’s *Tijuana River Valley Needs and Opportunities Assessment* completed in March 2020. The County secured a \$10M grant on May 27, 2021, to implement the *Smuggler’s Gulch Improvements Project*, which will capture additional trash and sediment where Smuggler’s Gulch enters the United States to avoid these materials from moving downstream where they can impact important riparian habitat in the main Tijuana River channel. This project includes design, environmental review, and construction of a sedimentation basin, trash capture devices, and culvert improvements at Smuggler’s Gulch and surrounding areas. As part of this project, the County conducted protocol surveys for several MSCP covered species in 2021 including California gnatcatcher, least Bell’s vireo, and southwestern willow flycatcher. The County also conducted a habitat assessment of the area to identify and map habitat types to ensure maximum avoidance to native habitat. Least Bell’s vireo protocol surveys were repeated in 2024. Once implemented, this project has the potential to protect native habitat downstream by capturing trash upstream. Due to the early 2024 storms which resulted in damages to existing stormwater infrastructure, additional analysis and design changes were necessary to ensure long-term project success. The County continued design for the Project in 2025. The County will finalize design and apply for environmental permits in 2026.

Tijuana River Valley Regional Park Brown Property Fill Removal/Restoration

Funding Source: CDFW Proposition 1 Grant

Funding Amount: \$1,328,000

Project Timeline: June 2018 – June 2025

Target Species or Habitat: Least Bell’s vireo

Management Action: Habitat restoration

The *Tijuana River Valley Regional Park Brown Property Fill Removal/Restoration* project completed planning for a restoration project for least Bell’s vireo in the Tijuana River Valley Regional Park. The project was funded by a CDFW Proposition 1 grant of \$1,328,000 awarded to the County in 2017. The County worked with regulatory agencies and stakeholders to revise this project in 2022. The revised project included preparation of a habitat restoration plan for the Brown Property, preparation of design plans and environmental analysis to allow for the future removal of accumulated sediment, debris, and vegetation from the Tijuana River Valley and the Smuggler’s Gulch channel to enhance the hydrologic health and habitat of the Tijuana River Valley watershed, as well as additional hydrologic studies.

Restoration planning for the Brown Property was completed in June 2023 and included technical studies, design, and environmental review and documentation. Implementation of the

restoration plan includes the removal of invasive species and existing structures from the Brown property in the Tijuana River Valley Regional Park. While the existing CDFW grant cannot be used for implementation of this restoration plan, the County successfully secured alternative grant funding in late 2023. Implementation began in February 2024 and will continue through early 2026. Implementation benefits will include restoration of disturbed land into native habitat for least Bell's vireo and other native wildlife. Native vegetation cover within the restored area was estimated to be around 60 percent, a significant improvement from the estimated 1 percent native vegetation coverage prior to restoration. As of November 2025, 45 native plant species were present within the restored area, an increase from only 6 native plant species present at the start of the restoration effort. Of these 45 native plant species, 14 were not installed as seeds or plants but colonized the site from the existing seed bank or adjacent habitats.

In Fall 2023, the County also completed environmental review and documentation for the future removal of accumulated sediment, debris, and vegetation from the Tijuana River Valley and the Smuggler's Gulch channel. While the existing CDFW grant cannot be used for implementation of the sediment removal, the County successfully secured alternative grant funding, and the sediment removal project implementation began in March 2024 and concluded in November 2024. Implementation benefits will include enhancement of the hydrologic health and habitat of the Tijuana River Valley watershed.

In 2025, the County finalized additional technical studies and analyses that will aid in the future hydrological improvements and restoration of native habitat within the Tijuana River Valley. All work associated with the grant has been completed and the grant was fully closed out in 2025.

Tijuana River Valley Regional Park Habitat Improvement, Restoration, and Erosion Control

Funding Source: U.S. Navy Readiness and Environmental Protection Integration (REPI) Program Funding

Funding Amount: \$3,350,000

Project Timeline: September 2023 – September 2028

Target Species or Habitat: Least Bell's vireo and coastal California gnatcatcher

Management Action: Habitat restoration

The Tijuana River Valley Regional Park Habitat Improvement, Restoration, and Erosion Control Project will develop an adaptive work plan and implement restoration efforts within the Park, which will improve and enhance habitat for least Bell's vireo and coastal California gnatcatcher. The adaptive work plan will detail habitat improvement and resilience efforts to benefit least Bell's vireo and coastal California gnatcatcher. The project is funded by a cooperative agreement with the Navy under the REPI Program, which was executed in Fall 2023 for an original agreement amount of \$1,500,000. In 2024, the agreement was amended to allow for additional restoration and \$850,000 was added. In 2025, the agreement was amended a second time to allow additional restoration and \$1,000,000 was added, for a new funding total of \$3,350,000.

Due to the early 2024 storms and flooding in the Tijuana River Valley, additional soil testing and revisions to the revegetation plans were necessary, which delayed implementation. During 2025, the County finalized revegetation plans, received County Board of Supervisors approval for the advertisement and award of the work, and prepared bid documents. The Project was advertised for bid in December 2025 and implementation will begin in 2026 once the contract is awarded.

Tijuana River Valley Regional Park Brown Property Restoration Project

Funding Source: SWRCB Border Water Quality Infrastructure Grant

Funding Amount: \$2,000,000

Project Timeline: October 2023 – February 2026

Target Species or Habitat: Upland Coastal Sage Scrub and Least Bell's vireo

Management Action: Habitat restoration

The Tijuana River Valley Regional Park Brown Property Restoration Project will improve water quality by removing trash and invasive species and restore the Tijuana River and adjacent areas to its native habitat. The project will include demolition of on-site structures, restoration of the approximately seven-acre property to native upland coastal sage scrub habitat, and short-term maintenance and monitoring of the restoration site. The project is funded by a SWRCB Border Water Quality Infrastructure Grant of \$2,000,000 awarded to the County in late 2023. In 2024, hazardous materials on the site were removed and on-site structures were demolished. The site was graded and revegetated with native plants and seed. Over 1,800 plants and 500 pounds of seed were placed on the Brown Property and adjacent areas. In 2025, the County performed maintenance and monitoring at the restoration site, as well as additional plantings and seeding. Implementation benefits will include restoration of disturbed land into native habitat for least Bell's vireo and other native wildlife.

6.5 Preserve Management Partnerships

Two County partners implemented two management projects across two County Preserves within the reporting year to benefit streams, channels, and wetland habitat. Stream gauge installation and monitoring were initiated at Santa Fe Valley Preserve to support water resource management, and natural resources restoration activities and channel and culvert maintenance continued at the Tijuana River Valley Regional Park. Partners included the City of San Diego (Public Utilities Department) and the City of San Diego (Stormwater Department).

The regular management, monitoring, and invasive, non-native species removal activities performed by County Rangers, staff, and contractors are augmented by other organizations and projects at various Parks and Preserves, including those detailed below. Through the right-of-entry (ROE) permit process, DPR assists with the habitat restoration and enhancement projects proposed by outside government agencies, municipalities, and environmental organizations that benefit the County's preserve lands. These projects not only support the County's management activities, but they also provide another source of stewardship to support the success of native and sensitive plant and animal species in County Preserves. For the individual projects detailed below, only County Preserves are mentioned, but many of the habitat management projects extend well outside of the County Preserves in the MSCP Subarea Plan.

Stream Gauge Monitoring/Santa Fe Valley Preserve

Lead Agency: City of San Diego (Public Utilities Department)

Project Timeline: September 2024 – September 2026

Target Species or Habitat: Stream habitat

Management Action: Installation and maintenance of a stream gauge

County Preserve: Santa Fe Valley Preserve

The City of San Diego Public Utilities Department installed a stream gauge at the Santa Fe Valley Preserve to monitor releases and spillway flows downstream of Hodges Dam. The data from the stream gauge will provide reliable, real-time information about the conditions and amount of water flowing downstream of Hodges Dam. The stream gauge is part of an existing monitoring network of stream gauges around the San Dieguito River Watershed that provide critical information for management of water resources. The site was visually surveyed in 2024, and the stream gauge was installed in 2025. Ongoing maintenance and data quality assurance will be carried out through September 2026, with long-term data made available to partners to support watershed stewardship, monitoring integration, and future planning efforts.

Channel Maintenance and Invasive Non-native Plant Treatment/Tijuana River Valley Regional Park

Lead Agency: City of San Diego (Stormwater Department)

Project Timeline: August 2023 – August 2027

Target Species or Habitat: Channels and wetland habitat

Management Action: Channel maintenance and invasive, non-native plant control, and restoration

County Preserve: Tijuana River Valley Regional Park

The Channel Maintenance and Invasive Non-native Plant Treatment/Tijuana River Valley Regional Park project will conduct channel maintenance, non-native invasive plant treatment, and native plant restoration within previous maintenance areas within Tijuana River Valley Regional Park over a multi-year period. In 2024, channel maintenance occurred within the Smuggler's Gulch drainage channel and Tijuana River Pilot Channel and consisted of removing soil, rock, and vegetation from the channel bottoms. Channel maintenance required some pumping of stagnant water downstream. In addition, in 2024 the City of San Diego repaired and rebuilt the berm breach on the western side of Smuggler's Gulch and the County of San Diego maintained existing culverts under Monument Road. No construction activities occurred in 2025.

The second component of this project involves invasive, non-native plant treatment for approximately 20 acres of previous maintenance areas within Smuggler's Gulch, Tijuana River Pilot Channel, and the Smythe-Bandola Mitigation Site. This treatment will focus on removal of giant reed, castor bean, tamarisk, and trash, and will be followed by wetlands rehabilitation and enhancement in the Smythe Channel and Via de la Bandola Channel. The second project component will mitigate for impacts to wetland waters of the U.S. and State. In 2024, the City of San Diego removed castor bean and other invasive species from Smuggler's Gulch. In 2025, the City of San Diego removed giant reed, castor bean, tamarisk, Brazilian pepper, and trash from the Smythe-Bandola Mitigation Site and began regular maintenance, including treating resprouts with herbicide, in preparation for container plantings and other restoration activities planned for the site in 2026.

The project includes various measures to protect environmental resources. Best Management Practices will continue to be present at designated staging areas for equipment and material staging, including temporary storage of spoils. This project also limits travel to designated access routes and includes restrictions on use of vehicles and equipment. Various measures are included for protection of nesting birds and preventing the spread of invasive shot hole borer. Implementation of this project provides flood protection to the surrounding properties, mitigates for impacts to jurisdictional features, and enhances the quality of wetland habitat in the Preserve, which supports MSCP covered species such as least Bell's vireo.

6.6 Education and Outreach



Hiking event at Sycamore Canyon and Goodan Ranch Preserve.

One of DPR's key missions is educating the public about the County's biological 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.

In 2025, DPR returned to offering a wide range of popular educational programs again and approximately 25,000 guests participated in over 750 programs. Highlights for 2025 include the following:

Hawtober and Hawk Talk continued to be one of DPR's most popular educational programs. In 2025, County Park Rangers hosted 16 live raptor events, drawing over 2,500 visitors. This program offers attendees the chance to learn about the importance of raptors in our ecosystem and the unique adaptations that make them such capable predators.



Hawk Talk at El Monte Preserve.

Hike-a-Thon encourages more people to spend quality time outside – wherever and whenever they can. For the third year, DPR partnered with Nature Unplugged to host ranger-led hikes during their October 2025 Hike-a-Thon. The event had a dual purpose: to encourage people to fully experience nature, and to raise funds to Nature Unplugged’s scholarship and subsidy program for organizations and communities in need. Mileage was calculated October 1–31, 2025 via a trail application. Participants had all month to log their travels for opportunities to collect prizes and earn matched dollars for charitable contributions. County Parks hosted a Kick-off event and four ranger-led hikes to promote the program, which drew 2,017 participants overall—642 from California and 372 from San Diego County—and logged 11,818 collective miles in San Diego County.

Discovery Program assists educators and elementary school students with exploring the wealth of nature at local parks and in their own backyards, at no cost to the participants. 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. The hands-on courses include a County Park Ranger visit to the school, activities for classroom use, a field trip and County Park Ranger-led hikes, and post-field trip activities for classroom, a field trip and County Park Ranger-led hikes, and post-field trip activities for classroom and home use. The program is found in eight parks throughout the County, including Guajome Regional Park, Felicita County Park, San Dieguito County Park, Los Peñasquitos Canyon County Preserve, Louis A. Stelzer County Park, El Monte County Park, Flinn Springs County Park, and Otay Lakes County Park. Five of these County properties are located within the MSCP Subarea Plan boundary. In 2025, the Discovery Program hosted 69 programs attended by over 5,000 students from various schools in San Diego County.

Green Friday is celebrated the day after Thanksgiving; it’s a day when County Parks encourages San Diegans to swap shopping plans for outdoor experiences via family-friendly activities in parks and preserves. In 2025, DPR hosted 15 volunteer park beautification and tree planting events through the three-day weekend, at numerous park locations. DPR also hosted several interpretive programs, including a nature hike at Dictionary Hill, Discovery Touch Table

at San Dieguito County Park, and a Hiking Stick Workshop at Sweetwater Summit Regional Park. DPR also continued a six-year Story Trails partnership with County Libraries to encourage reading in public spaces at 16 different parks. This program encourages families to spend quality time outside by displaying pages of children's books – in both English and Spanish – along popular hiking trails. Green Friday activities will continue in 2026. They are always free and designed for people of all ages and interests, in all parts of San Diego County.

TRACK Trails 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 the hikes offered. Children earn prizes by visiting the TRACK Trails website and tracking their adventures in their online nature journals. Seven DPR parks currently participate in the TRACK Trails program: Guajome Regional Park, Felicita Park, San Dieguito Park, San Elijo Park, Lake Morena Park, and Lindo Lake Park. In 2025, 48 participants submitted registrations for 68 adventures completed at DPR TRACK Trails over the course of the year. San Dieguito County Park and San Elijo Lagoon and Ecological Reserve received the most registrations.

Astronomy Programs: DPR continued the partnership with the San Diego Astronomy Association which hosted 16 monthly Star Party programs at parks such as Oakoasis County Park, William Heise County Park, and Sycamore Canyon County Preserve – weather permitting. These events continue to be popular with people of all ages and sizes and help to increase public awareness and enjoyment of astronomy and the physical sciences.

San Diego Festival of Science & Engineering is committed to providing experiential Science, Technology, Engineering, Art, and Math (STEAM) activities to diverse populations. Their Expo Day, held at Snapdragon Stadium, is the largest event of its kind in Southern California. It's a collective effort between industry, business leaders, government, community organizations, public outreach centers, academia, schools and school districts, and parents. Expo Day is a comprehensive San Diego County community event that celebrates the diverse cultures, communities and populace of San Diego, and works to inspire the curious young minds of our region to become tomorrow's STEAM leaders. In 2025, County Park Rangers participated by providing a nature discovery table featuring several live animals. This event is free and open to the public, attracts over 20,000 attendees each year, and hosts over 150 exhibitors.

Nature Explorers Program, in partnership with the Habitat Conservation Fund, is a five-year plan for increasing local awareness of resources and recreational opportunities through strategic intervention. Program curriculum is designed to inform and inspire San Diegans through awareness of environmental issues and provide participants with hands-on outdoor experiences that promote environmental stewardship and appreciation for San Diego County's diverse ecosystems. Program excursions leverage County-owned areas and community partners, such as local representatives from the BLM, to provide participants access to green space through safe and responsible recreation. The first stage, Junior Explorers, positions the County in partnership with local schools to increase environmental sensitivity by connecting school age children with their neighborhood parks. The second stage is the Nature Explorers group, which includes comprehensive pre- and post-trip evaluation of on-site learning to increase environmental literacy among teen participants. As teens continue to engage with the program, the program provides opportunities for participants to progress into leadership roles that exemplify stewardship among their peers. In 2025, the program included overnight camping adventures at Sweetwater Regional Park, Dos Picos County Park, and Joshua Tree National Park, along with guided hikes through scenic areas such as Mission Trails Regional Park, Flinn Springs County Park, El Monte County Park, Palomar Mountain State Park, the San

Elijo Lagoon Ecological Reserve, and Lindo Lake County Park. Participants also contributed to conservation through tree-planting efforts at William Heise County Park and Dos Picos, and by participating in beach cleanups at Mission Beach and Mission Bay. Additional recreational opportunities included mountain biking in Los Peñasquitos Canyon Preserve, paddleboarding and surfing at the Mission Bay Aquatic Center, kayaking and snorkeling at La Jolla Shores, and a memorable deep-sea fishing excursion departing from Point Loma. Together, these trips combine recreation, education, and conservation, helping participants build a lasting connection to the natural environments of the region.

Additional education and outreach activities include the following:

- Display center interpretation.
- Daily interpretation at County Preserves' nature centers, museums, and kiosks.
- MSCP and environmental presentations to community groups and service boards.
- County Ranger-led nature talks, slide shows, walks, and hikes.
- Community service projects which include tree planting, ongoing tree care and watering.
- Stormwater and watershed education.
- Leave No Trace Program

Social media is also a powerful tool that DPR utilizes to share information about park people, places, and programs. A multi-platform approach is used to ensure content is available in many formats, in the places where people choose to get their information. In addition to sdparcs.org and the department's e-newsletter, Facebook, Instagram, Twitter, YouTube, and Pinterest are used to relay important department information, such as land acquisitions, environmental reports, preserve updates, species highlights, habitat restoration projects and volunteer opportunities to grow San Diego's tree canopy.

Here are reports from DPR's online accounts from the end of 2025:

- DPR maintains 12 active Facebook pages, which cumulatively have more than about 74,000 followers. The main DPR Facebook page has nearly 29,000 followers. Other accounts have been set up for the community centers in Fallbrook, Lakeside and Spring Valley, Waterfront Park, Lindo Lake, 4S Ranch, El Monte, and Sweetwater Bike Park. Two program pages have also been built: Women in the Wild and Summer Movies in the Park.
- DPR's Twitter/X feed has over 13,000 followers.
- DPR maintains 10 active Instagram pages, which cumulatively have more than 33,000 followers. DPR's main Instagram account has over 19,000 followers. Additional Instagram Accounts exist for the Sweetwater Bike Park, SD Nights, the Spring Valley Gym, Spring Valley REC Club, Lakeside REC Club, Lindo Lake, Fallbrook Community Center, PQ Goats, and Summer Movies in the Park.
- DPR's YouTube channel has 827 subscribers and over 16,000 views equating to nearly 429 watch hours.
- DPR's Pinterest page has over 2,400 followers.
- DPR has an E-blast distribution list of 24,078 subscribers.

- DPR website receives an average of over 76,000 visits per month, that's almost a million visits per year.



San Diego Festival of Science and Engineering 2025.

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CHAPTER 7

Preserve Monitoring and Research

Preserve monitoring within the MSCP Subarea Plan Area assesses the success of the MSCP Subarea Plan. In conformance with IA Section 14.5, Biological Monitoring, the County is responsible for monitoring the land it owns or acquires as well as ensuring that other private mitigation lands dedicated to the County within the MSCP Preserve are monitored consistent with the MSCP Subarea Plan. This chapter summarizes the monitoring activities in 22 County Preserves and 23 private mitigation areas.

Of the 85 species covered by the MSCP, 53 MSCP covered species are expected within the MSCP Subarea Plan boundaries as originally anticipated in the MSCP Subarea Plan. A total of 49 MSCP covered species and one MSCP covered habitat are documented in County Preserves located within the MSCP Subarea Plan Area. The additional four MSCP Covered species are found on lands conserved through private development mitigation. MSCP monitoring on County Preserves includes TMP monitoring, biodiversity inventory surveys, research partnerships, and private mitigation lands monitoring. MSCP monitoring in the reporting year consisted of TMP monitoring, one biodiversity inventory survey, research partnerships, and private mitigation lands monitoring. County monitoring efforts also include the monitoring of sensitive species during and after park improvement projects. The 2025 monitoring results of park improvement projects are included in Section 7.1, *Preserve Biological Monitoring of County Lands*. Monitoring efforts conducted by County partners in 2025 can be found in Section 7.3, *Preserve Monitoring and Research Partnerships*. Surveys conducted on private mitigation areas consist of species-specific monitoring and general monitoring efforts throughout the year. MSCP monitoring surveys have resulted in monitoring or documentation of 49 MSCP covered species and one MSCP covered habitat in County Preserves and an additional six MSCP covered species on private mitigation lands (**Table 14, MSCP Covered Species or Habitats Documented by Program**). MSCP covered species detected within County Preserves are summarized in Appendix J.

TABLE 14. MSCP COVERED SPECIES OR HABITATS DOCUMENTED BY PROGRAM

Monitoring Program					
MSCP Covered Species and Habitats	TMP ^a	ROE ^a	Otay Ranch POM	Private Mitigation	Biodiversity Inventory Surveys
Plants					
1. Del Mar manzanita				✓	✓
2. Dunn's mariposa lily			✓		✓
3. Encinitas baccharis	✓ ^b	✓			✓
4. Felt-leaved monardella	✓ ^b		✓		✓
5. Gander's pitcher sage			✓		
6. Heart-leaved pitcher sage	✓		✓		✓

Monitoring Program					
MSCP Covered Species and Habitats	TMP ^a	ROE ^a	Otay Ranch POM	Private Mitigation	Biodiversity Inventory Surveys
7. Lakeside ceanothus	✓ ^b			✓	✓
8. Orcutt's bird's-beak	✓				✓
9. Orcutt's brodiaea	✓	✓	✓		✓
10. Otay manzanita			✓		✓
11. Otay mesa mint			✓	✓	
12. Otay tarplant	✓	✓	✓	✓	✓
13. Palmer's goldenbush			✓		✓
14. San Diego ambrosia				✓	
15. San Diego barrel cactus	✓ ^b		✓	✓	✓
16. San Diego button celery			✓	✓	✓
17. San Diego goldenstar			✓	✓	✓
18. San Diego thornmint	✓ ^b				✓
19. San Diego mesa mint	✓ ^b				
20. San Miguel savory	✓		✓		✓
21. Snake cholla			✓		✓
22. Spreading (prostrate) navarretia			✓		✓
23. Sticky dudleya				✓	
24. Tecate cypress	✓		✓		
25. Thread-leaved brodiaea				✓	
26. Torrey pine					✓
27. Variegated dudleya	✓ ^b		✓	✓	✓
28. Wart-stemmed ceanothus	✓ ^b			✓	✓
29. Willow monardella	✓ ^b	✓	✓		✓
Birds					
30. American peregrine falcon			✓		✓
31. Bald eagle	✓ ^b		✓		
32. Burrowing owl	✓		✓	✓	✓
33. Canada goose	✓ ^b				

Monitoring Program					
MSCP Covered Species and Habitats	TMP^a	ROE^a	Otay Ranch POM	Private Mitigation	Biodiversity Inventory Surveys
34. Coastal (San Diego) cactus wren	✓ ^b	✓	✓	✓	✓
35. Coastal California gnatcatcher	✓ ^b	✓	✓	✓	✓
36. Cooper's hawk	✓ ^b	✓ ^b	✓	✓	✓
37. Ferruginous hawk	✓ ^b				✓
38. Golden eagle	✓		✓		✓
39. Least Bell's vireo	✓ ^b	✓	✓	✓	✓
40. Light-footed Ridgway's rail					✓
41. Long-billed curlew	✓ ^b				
42. Northern harrier	✓ ^b		✓	✓	✓
43. Southern California rufous-crowned sparrow	✓ ^b	✓ ^b	✓	✓	✓
44. Southwestern willow flycatcher	✓	✓			✓
45. Swainson's hawk	✓				✓
46. Tricolored blackbird	✓	✓			✓
47. Western bluebird	✓ ^b	✓ ^b			✓
48. White-faced ibis					✓
Reptiles and Amphibians					
49. Arroyo toad	✓ ^c	✓ ^c			✓
50. Belding's orange-throated whiptail	✓ ^b		✓	✓	✓
51. Coast horned lizard	✓ ^b		✓	✓	✓
52. Southwestern pond turtle		✓			
Mammals					
53. American badger		✓			
54. Mountain lion	✓ ^b	✓	✓		✓
55. Southern mule deer	✓ ^b		✓	✓	✓
Invertebrates					
56. Riverside Fairy Shrimp				✓	

Monitoring Program					
MSCP Covered Species and Habitats	TMP ^a	ROE ^a	Otay Ranch POM	Private Mitigation	Biodiversity Inventory Surveys
57. San Diego fairy shrimp	✓ ^d		✓	✓	
58. Thorne's hairstreak butterfly			✓		
Habitats					
59. Vernal pool/alkali playa	✓		✓		✓

NOTES:

a TMP = Targeted Monitoring Plan; ROE = DPR issued Right-of-Entry (ROE) Permit

b These species were incidental observations during TMP monitoring surveys and ROE monitoring and research partnerships.

c Monitoring is conducted for this species, but it has not been observed in the South County MSCP Plan Area.

d This species was observed on the draft North County MSCP portion of a County Preserve and is presumed to utilize the South County MSCP portion of the same preserve.

SOURCES:

Environmental Science Associates. 2025a. Habitat Condition Assessment for the El Capitan, Lakeside Linkage, Oakoasis, Sycamore Canyon/Goodan Ranch County Preserves, Louis A. Stelzer County Park, and El Monte County Park. Prepared for County of San Diego. December.

Environmental Science Associates. 2026. Targeted Monitoring Plan Resource-Specific Monitoring 2025 Annual Report. Prepared for County of San Diego Department of Parks and Recreation. February.

Helix Environmental Planning. 2025. Targeted Monitoring Plan Resource-Specific Management 2025 Annual Report. December.

DUDEK. 2026. 2025 Targeted Monitoring Program, Habitat Condition Report, San Luis Rey River Park and Bottle Peak, Lusardi Creek, Del Dios Highlands, Boulder Oaks, and Ramona Grasslands County Preserves. Prepared for County of San Diego Department of Parks and Recreation. May.

DPR ROE database

PDS Private Mitigation RMP Annual Reports SanBios GIS data

7.1 Preserve Biological Monitoring of County Lands

The MSCP monitoring program on County Preserves includes biodiversity inventory surveys, TMP monitoring, park improvement special status species monitoring, and other resource-specific monitoring. One biodiversity inventory survey was completed in 2025. TMP monitoring for the reporting year started in early spring 2025 and was conducted at 22 County parks and preserves to monitor MSCP covered species and habitats in 14 County parks and preserves within the South County MSCP Subarea and eight preserves outside the South County MSCP Subarea. Annual RDM monitoring was performed on Ramona Grasslands Preserve. Biodiversity inventory surveys identify and map existing biological resources within a property. They are used to develop or update preserve-specific RMPs. In addition to informing management activities for individual areas, these surveys provide current statuses of MSCP covered species for future monitoring efforts. Following the transfer of the McCrink Ranch Property, now part of the Santa Fe Valley Preserve, to DPR in 2024, habitat mapping, incidental observations of special-status plant and animal species, and invasive non-native plant surveys were performed on the property in 2025. The TMP consists of a combination of surveillance-type monitoring (e.g., ongoing assessments of threats and habitat conditions; presence/absence surveys to confirm presence of targeted species), habitat condition assessments to determine population-specific threats and conditions, and monitoring to assess the response of a particular

species to specific management treatments. Rare plant monitoring follows the most current Management and Monitoring Strategic Plan Rare Plant Monitoring Protocol prepared by the SDMMMP, along with additional monitoring protocols as stated in the TMP. Habitats and species included in the TMP are listed in **Table 15**, *Targeted Monitoring Plan Species and Habitats by Location*. Monitoring frequency is provided in **Table 16**, *Targeted Monitoring Plan Species and Habitats Monitoring Frequency*.

The TMP goal is to collect high-quality data to inform trends in occurrences and populations, evaluate the current habitat conditions, assess threats, and provide adaptive management recommendations to ensure that the conservation goals of the MSCP are being met. 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 (ESA 2024). The County utilizes the TMP to implement the biological goals and objectives discussed in MSCP Subarea Plan Section 6.4.1 and Section 14.5.

The TMP was revised in 2024 to include three additional MSCP covered species and incorporate 11 new preserves (five MSCP Subarea Plan County Preserves and six draft North County MSCP County Preserves). The five Subarea Plan County Preserves added to the TMP update are Dictionary Hill Preserve, Iron Mountain Preserve, Los Peñasquitos Canyon Preserve, Peutz Valley Preserve, and Skyline Preserve¹⁴. The Wildlife Agencies participated in the review process for the 2024 TMP update. With these revisions, the TMP now addresses monitoring and adaptive management across a total of 31 parks and preserves. The sections below address monitoring of MSCP covered species conducted through implementation of the TMP.

¹⁴ Bottle Peak, Escondido Creek, Keys Creek, Mountain Meadow, and Sage Hill Preserves, and San Luis Rey River Park are also included in the TMP update and are located in the draft North County MSCP Plan Area.

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TABLE 15. TARGETED MONITORING PLAN SPECIES AND HABITATS BY LOCATION

Common Name ^a	Boulder Oaks	Lakeside Linkage	El Capitan	El Monte	Louis A. Stelzer	Oakoasis	Sycamore Canyon and Goodan Ranch	Ramona Grasslands ^b	Del Dios Highlands ^b	Lusardi Creek	Barnett Ranch	Tijuana River Valley Regional Park	Furby-North	Stoneridge	Dictionary Hill	Iron Mountain	Los Peñasquitos Canyon	Peutz Valley	Skyline
San Diego thornmint							✓												
Otay tarplant													✓						
Orcutt's bird's-beak												✓							
Orcutt's brodiaea	✓																		
Encinitas baccharis									✓										
Lakeside ceanothus	✓		✓		✓	✓													
Variegated dudleya							✓			✓					✓				
Willow monardella							✓												
Spreading (Prostrate) navarretia ^c								✓											
San Miguel savory	✓																		
Heart-leaved pitcher sage																✓			
San Diego fairy shrimp ^c								✓ ^b											
Arroyo toad								✓											
Tricolored blackbird								✓ ^b											
Golden eagle			✓					✓	✓		✓								
Burrowing owl								✓ ^b											
Northern harrier												✓							

Common Name ^a	Boulder Oaks	Lakeside Linkage	El Capitan	El Monte	Louis A. Stelzer	Oak oasis	Sycamore Canyon and Goodan Ranch	Ramona Grasslands ^b	Del Dios Highlands ^b	Lusardi Creek	Barnett Ranch	Tijuana River Valley Regional Park	Furby-North	Stoneridge	Dictionary Hill	Iron Mountain	Los Peñasquitos Canyon	Peutz Valley	Skyline
Coastal (San Diego) cactus wren		✓																	
Bald eagle								✓ ^b											
Least Bell's vireo												✓							
Vernal pool/alkali playa habitat	✓							✓ ^b									✓		
Habitat mapping	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

NOTES:

a Stephens' kangaroo rat (*Dipodomys stephensi*), Harbison's dun skipper (*Euphyes vestris harbisoni*), pallid bat (*Antrozous pallidus*), and Townsend's big-eared bat (*Corynorhinus townsendii*) are monitored as part of the TMP. These species are excluded here because they are not covered species under the MSCP Subarea Plan. Southwestern willow flycatcher (*Empidonax traillii extimus*) is monitored as part of the TMP. This species is excluded here because monitoring occurs only at San Luis Rey River Park, in draft North County MSCP.

b Portions of the Ramona Grasslands and Del Dios Highlands Preserves are located within the draft North County MSCP. This species was observed in the draft North County MSCP portion of the Preserves.

c Species monitoring occurs as part of vernal pool habitat monitoring

SOURCES:

Environmental Science Associates. 2024. Targeted Monitoring Plan. Prepared for Department of Parks and Recreation County of San Diego. August.

TABLE 16. TARGETED MONITORING PLAN SPECIES AND HABITATS MONITORING FREQUENCY

Species or Habitat^a	Monitoring Frequency^b	Monitored in Reporting Year
San Diego thornmint	Population quantified and threats assessed annually for 5 years	Yes
Otay tarplant	Population quantified and threats assessed annually for 5 years	Yes
Orcutt's bird's-beak	Population quantified and threats assessed every 2 years	Yes
Orcutt's brodiaea	Population quantified and threats assessed every 2 years	Yes
Encinitas baccharis	Population quantified and threats assessed every 2 years	Yes
Lakeside ceanothus	Population quantified and threats assessed every 5 years	No
Variiegated dudleya	Population quantified and threats assessed every 3 years	Yes
Willow monardella	Population quantified and threats assessed annually for 5 years	Yes
San Miguel savory	Population quantified and threats assessed every 3 years	Yes
Heart-leaved pitcher sage	Population quantified and threats assessed every 2 years	Yes
Arroyo toad	Population and habitat quantified, and threats assessed annually for 5 years	Yes
	RDM monitoring annually	Yes ^c
Tricolored blackbird	Presence/absence surveys and habitat and threats assessment every 2 years	Yes
Golden eagle	Habitat use and foraging study monthly for 3 years	Yes
Burrowing owl	Presence/absence surveys, and habitat and threats assessment every 3 years	Yes
	RDM monitoring annually	Yes ^c
Northern harrier	Monthly nesting surveys during breeding season and nest monitoring annually for 5 years	Yes
	Habitat and threats assessment annually for 5 years	Yes
Coastal (San Diego) cactus wren	Avian point counts monthly during breeding season, every 3 years	Yes
	Qualitative habitat and threats assessment, photo monitoring, and vegetation density estimates during breeding season, every 3 years	Yes
Bald eagle	Habitat use and foraging study monthly for 3 years	Yes
Least Bell's vireo	Presence/absence and nest monitoring surveys, habitat and threats assessments annually for 5 years	Yes ^d
	Monitor shot hole borer annually or based on DPR Emergent Tree Pests Plan recommendation	No

Species or Habitat ^a	Monitoring Frequency ^b	Monitored in Reporting Year
	Monitor habitat recovery (Tijuana River Valley Regional Park only), annually or based on DPR Emergent Tree Pests Plan recommendation	No
	Brown-headed cowbird trapping, as needed (April 1 – June 30)	Yes ^e
Vernal pool/alkali playa habitat	Quantitative vegetation monitoring every 3 years	No
	Qualitative monitoring early and late season, annually for 5 years	No
	RDM monitoring annually	Yes
	Hydrological monitoring every 5 years	No
	San Diego fairy shrimp (<i>Branchinecta sandiegonensis</i>) monitored as part of qualitative monitoring	No
Habitat mapping	Mapping every 10 years	Yes

NOTES:

- a Stephens' kangaroo rat (*Dipodomys stephensi*), Harbison's dun skipper (*Euphyes vestris harbisoni*), pallid bat (*Antrozous pallidus*), and Townsend's big-eared bat (*Corynorhinus townsendii*) are monitored as part of the TMP. These species are excluded here because they are not covered species under the MSCP Subarea Plan. Southwestern willow flycatcher (*Empidonax traillii extimus*) is monitored as part of the TMP. This species is excluded here because monitoring only occurs at San Luis Rey River Park, in draft North County MSCP.
- b Indicated monitoring frequency is after the baseline is established for the species or habitat
- c Residual Dry Matter (RDM) monitoring only occurring at Ramona Grasslands Preserve, in draft North County MSCP
- d Monitoring occurred only at San Luis Rey River Park, in draft North County MSCP
- e Brown-headed cowbird trapping occurred only at Santa Margarita Preserve, in draft North County MSCP

SOURCE:

Environmental Science Associates. 2024. Targeted Monitoring Plan. Prepared for Department of Parks and Recreation County of San Diego. August.

Biodiversity Inventory Surveys

Biodiversity inventory surveys are conducted on County Preserves to determine the biological and cultural resources present on-site. These surveys allow for the development of preserve-specific RMPs with adaptive management strategies to ensure the sustainable management and monitoring of the sensitive resources, as well as the RMPs' Vegetation Management Plans, Grazing Management Plans, and Public Access Plans. Biodiversity resource surveys include vegetation communities mapping, rare and sensitive plant species, invasive and non-native plant species, avian, herpetological, butterfly, bat, small mammal, medium mammal, and large mammal surveys. Biodiversity surveys take place over the course of one calendar year to maximize the potential to observe any late season flowering plant species or migratory animal species on the preserve land.

Targeted Monitoring Plan

Eighteen MSCP covered species and one habitat were monitored and managed across 22 County Parks and Preserves as part of the TMP monitoring efforts in the reporting year (**Table 17, Targeted Monitoring Plan Species Monitored in Previous Reporting Years: Year-to-Year**

*Comparison; Targeted Monitoring Plan Resource-Specific Monitoring 2025 Annual Report¹⁵, Targeted Monitoring Plan Resource-Specific Management 2025 Annual Report¹⁵; Habitat Condition Assessment for the El Capitan, Lakeside Linkage, Oakoasis, Sycamore Canyon/Goodan Ranch County Preserves, Louis A. Stelzer County Park, and El Monte County Park¹⁵; and Habitat Condition Report, San Luis Rey River Park and Bottle Peak, Lusardi Creek, Del Dios Highlands, Boulder Oaks, and Ramona Grasslands County Preserves¹⁵). Monitoring was conducted for three additional MSCP-covered species, including Orcutt's brodiaea, heart-leaved pitcher sage, and southwestern willow flycatcher. In addition, one previously unmonitored population of variegated dudleya was surveyed within Dictionary Hill County Preserve, and new permanent monitoring plots were established for Encinitas baccharis at Del Dios Highlands Preserve, Orcutt's bird's-beak at Tijuana River Valley Regional Park, variegated dudleya at Dictionary Hill County Preserve, and heart-leaved pitcher sage at Iron Mountain County Preserve. In all, six population estimates increased, including Encinitas baccharis at Del Dios Highlands, variegated dudleya at Lusardi Creek, and willowy monardella at Sycamore Canyon and Goodan Ranch. Monitoring followed the methods and key considerations as outlined in the TMP (ESA 2024) for each species and habitat type. An additional 19 MSCP covered species were incidentally observed during TMP monitoring (**Table 18, Incidental Observations of Other MSCP Covered Species During TMP Surveys in Reporting Year**).*

The TMP includes management objectives for target species and habitats. For example, for all TMP MSCP covered plant species, management objectives include maintaining invasive, non-native plant cover at less than 20% cover (ESA 2024). Monitoring completed in the previous reporting years includes an assessment of management needs for the following year. Implementation of management actions is documented in *Chapter 6, Preserve Management*.

¹⁵ [Multiple Species Conservation Plan \(MSCP\)](#)

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TABLE 17. TARGETED MONITORING PLAN SPECIES MONITORED IN PREVIOUS REPORTING YEARS: YEAR-TO-YEAR COMPARISON

Species ^b	Location/Measurements	2015	2016	2017	2018	2019	2021	2022	2023	2024	2025
San Diego thornmint	<u>Sycamore Canyon and Goodan Ranch</u> Population estimate, individuals	OY ^g	20,000-30,000	777,300	5,525	27,200	12,990	41,921	46,032	36,788	9,736
Orcutt's bird's-beak	<u>Tijuana River Valley Regional Park^a</u> Population estimate, individuals	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	123	315	9,668	O/Y ^g	610
Orcutt's brodiaea	<u>Boulder Oaks</u> Population estimate, individuals	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	1,026
Otay tarplant	<u>Furby-North^a</u> Population estimate, individuals	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	1	610	3,667	770 ^j	1,083 ^j
Lakeside ceanothus	<u>Boulder Oaks</u> Population estimate, individuals	600	O/Y ^g	O/Y ^g	O/Y ^g	O/Y ^g	1,100	O/Y ^g	O/Y ^g	O/Y ^g	O/Y ^g
	<u>El Capitan</u> Population estimate, individuals	400	O/Y ^g	O/Y ^g	O/Y ^g	O/Y ^g	450	O/Y ^g	O/Y ^g	O/Y ^g	O/Y ^g
	<u>Louis A. Stelzer</u> Population estimate, individuals	135	O/Y ^g	O/Y ^g	O/Y ^g	O/Y ^g	428	O/Y ^g	O/Y ^g	O/Y ^g	O/Y ^g
	<u>Oakoasis</u> Population estimate, individuals	225	O/Y ^g	O/Y ^g	O/Y ^g	O/Y ^g	573	O/Y ^g	O/Y ^g	O/Y ^g	O/Y ^g
Encinitas baccharis	<u>Del Dios Highlands</u> Population estimate, individuals	250	O/Y ^g	344	O/Y ^g	350	350	O/Y ^g	177	O/Y ^g	264
San Miguel savory	<u>Boulder Oaks</u> Population estimate, individuals	OY ^g	184	145	145	99	127	O/Y ^g	607	O/Y ^g	478
Variegated dudleya	<u>Lusardi Creek</u> Population estimate, individuals	OY ^g	199	199	199	33	0	O/Y ^g	9	O/Y ^g	15
	<u>Sycamore Canyon and Goodan Ranch</u> Population estimate, individuals	OY ^g	11	60	O/Y ^g	30	1,275	O/Y ^g	1,348	O/Y ^g	156
	<u>Dictionary Hill</u> Population estimates, individuals	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	4,756

Species ^b	Location/Measurements	2015	2016	2017	2018	2019	2021	2022	2023	2024	2025
Willoway monardella	<u>Sycamore Canyon and Goodan Ranch</u> Population estimate, individuals	441	238	284	283	364	305	33	444	444	474
Heart-leaved pitcher sage	<u>Iron Mountain</u> Population estimate, individuals	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	55
Golden eagle	<u>Ramona Grasslands</u> Species Observed	yes	yes	O/Y ^g	O/Y ^g	yes	yes	yes	yes	yes	yes
	Off-site Species Nesting	no	yes	O/Y ^g	O/Y ^g	yes	yes	yes	yes	yes	no
	<u>Barnett Ranch^a</u> Species Observed	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	yes	N/A ^h	N/A ^h	N/A ^h	N/A ^h
	<u>El Capitan Preserve</u> On-site Species Nesting	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	yes	no	O/Y ^g	no
Tricolored blackbird	<u>Ramona Grasslands</u> Species Observed	O/Y ^g	O/Y ^g	yes	yes	yes	No monitoring	no	yes ^e	no ^e	no ^e
	Species Nesting	O/Y ^g	O/Y ^g	no	no	no	No monitoring	no	no	no	no
Burrowing owl	<u>Ramona Grasslands</u> Species Observed	O/Y ^g	yes ^c	O/Y ^g	no	no	O/Y ^g	no	no ^f	O/Y ^g	no
	Species Nesting	O/Y ^g	no	O/Y ^g	no	no	O/Y ^g	no	no	O/Y ^g	no
Coastal (San Diego) cactus wren	<u>Lakeside Linkage</u> Species Observed	O/Y ^g	O/Y ^g	O/Y ^g	yes	yes	O/Y ^g	yes	O/Y ^g	O/Y ^g	yes
	Species Nesting	O/Y ^g	O/Y ^g	O/Y ^g	no	yes	O/Y ^g	yes	O/Y ^g	O/Y ^g	yes
Bald eagle	<u>Ramona Grasslands</u> Species Observed	yes	yes	OY ^g	OY ^g	yes	yes	yes	yes	yes	yes
	Species Nesting	yes	yes ^d	OY ^g	OY ^g	yes ^d	no	yes ^d	yes	yes	yes ^d
Northern harrier	<u>Tijuana River Valley Regional Park^a</u> Species Observed	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	yes	yes	yes	yes	yes
	Species Nesting	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	yes	yes	yes	yes	yes

Species ^b	Location/Measurements	2015	2016	2017	2018	2019	2021	2022	2023	2024	2025
Least Bell's vireo	Tijuana River Valley Regional Park ^a Species Observed	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	yes	OY ^g	OY ^g	O/Y ^g	OY ^g
	Species Nesting	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	yes	OY ^g	OY ^g	O/Y ^g	OY ^g
Arroyo toad (ARTO)	Ramona Grasslands # of occupied reaches	OY ^g	9	9	6	7	0 reaches occupied 2 juvenile ARTO detected in upland area	0 ARTO tadpoles detected	12 reaches occupied 8,565 ARTO tadpoles detected	5 reaches occupied 212 ARTO larvae detected	OY ^g (0 ARTO tadpoles detected ^d)
Vernal pool/alkali playa	Ramona Grasslands # of pools supporting at least one USACE indicator species	OY ^g	15	OY ^g	11	17	15	OY ^g	18	22	OY ^g
	# of pools supporting spreading (prostrate) navarretia	OY ^g	0	OY ^g	0	0	0	OY ^g	OY ^g	0	OY ^g
	Los Peñasquitos Canyon Preserve # of pools supporting at least one USACE indicator species	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	N/A ^a	45	OY ^g
	# of pools supporting San Diego fairy shrimp	OY ^g	14	OY ^g	OY ^g	7	OY ^g	4	OY ^g	OY ^g	OY ^g

NOTES:

a Tijuana River Valley Regional Park, Furby-North Preserve, Santa Margarita Preserve, and Barnett Ranch Preserve were added to the Targeted Monitoring Plan in 2019, monitoring began for each property in 2021. One monitoring plot within the San Diego thornmint population in Simon County Preserve was monitored by ESA in 2025. A biodiversity inventory survey was conducted at the Los Peñasquitos Canyon Preserve to map the current extent of vernal pools and establish a permanent photo-point for the vernal pools observed in 2024. Orcutt's brodiaea and heart-leaved pitcher sage were added to the Targeted Monitoring Plan in 2024, and monitoring began for each species in 2025. One permanent monitoring plot was established for variegated dudleya within Dictionary Hill County Preserve by ESA in 2025.

b Stephens' kangaroo rat (*Dipodomys stephensi*), Harbison's dun skipper (*Euphyes vestris harbisoni*), pallid bat (*Antrozous pallidus*), and Townsend's big-eared bat (*Corynorhinus townsendii*) are also monitored as part of the TMP.

c One burrowing owl was reported by DPR staff. None were observed during surveys.

d Bald eagle nest territory is located on Ramona Grasslands Preserve within the NC MSCP portion of the Preserve. Successful nesting was documented 2014-2016. Nesting was documented but not successful in 2019, 2021, 2022, and 2025.

e Tricolored blackbird monitoring was conducted by AECOM and the San Diego Natural History Museum as part of an ROE monitoring and research partnership; results are included in the 2023 TMP annual report. Monitoring occurred again in 2024 and 2025 as part of an ROE monitoring and research partnership with San Diego Natural History Museum; results are included in the 2024 and 2025 TMP annual reports, respectively.

- f Burrowing owl monitoring was conducted by San Diego Zoo Wildlife Alliance as part of an ROE monitoring and research partnership, results are included in the 2023 TMP annual report.
- g O/Y indicates that, per the monitoring frequency of the species/habitat; site conditions not appropriate for monitoring; or changes to monitoring frequency occurred to be consistent with regional monitoring efforts, no monitoring was conducted as it was an “Off Year”.
- h Initial monitoring efforts determined that additional surveys were not required as species was not currently utilizing property.
- i Arroyo toad monitoring was conducted by USGS as part of an ROE permit monitoring and research partnership, results are included in the 2025 TMP annual report.
- j Otay tarplant monitoring was conducted by SANDAG consultants as part of an ROE permit monitoring and research partnership, results are included in the 2024 and 2025 TMP annual report.

SOURCES:

- ICF International. 2017. CMP Resource-Specific Monitoring 2016 Annual Report. November. Prepared for: County of San Diego Department of Parks and Recreation.
 - ICF International. 2018. CMP Resource-Specific Monitoring 2017 Annual Report. January. Prepared for: County of San Diego Department of Parks and Recreation.
 - ICF. 2018. Targeted Monitoring Plan Resource-Specific Monitoring 2018 Annual Report. October. Prepared for: County of San Diego Department of Parks and Recreation.
 - Environmental Science Associates. 2022. Raptor Foraging Surveys & Nest Monitoring 2021-2022 Summary Report Ramona Grasslands Preserve & El Capitan Preserve for the County of San Diego Department of Parks and Recreation. Prepared for Department of Parks and Recreation San Diego County. December.
 - Environmental Science Associates. 2023a. Targeted Monitoring Plan Resource-Specific Monitoring 2022 Annual Report. Prepared for Department of Parks and Recreation County of San Diego. January.
 - Environmental Science Associates. 2023b. Ramona Grasslands Preserve 2022-2023 Raptor Surveys Summary Report. Prepared for the County of San Diego Department of Parks and Recreation. November.
 - Environmental Science Associates. 2024a. Targeted Monitoring Plan Resource-Specific Monitoring and Management 2023 Annual Report. Prepared for Department of Parks and Recreation County of San Diego. March.
 - Environmental Science Associates. 2025b. Targeted Monitoring Plan Resource-Specific Monitoring & Management 2024 Annual Report. February.
 - Environmental Science Associates. 2025c. Raptor Foraging Surveys & Nest Monitoring 2024-2025 Summary Report Ramona Grasslands, El Capitan, and Hellhole Canyon County Preserves. Prepared for the County of San Diego Department of Parks and Recreation. November.
 - Environmental Science Associates. 2025d. Residual Dry Matter Monitoring for the Ramona Grasslands County Preserve. Prepared for the County of San Diego Department of Parks and Recreation. December.
 - Environmental Science Associates. 2026. Targeted Monitoring Plan Resource-Specific Monitoring 2025 Annual Report. Prepared for County of San Diego Department of Parks and Recreation. February.
 - DUDEK. 2026. 2025 Targeted Monitoring Program, Habitat Condition Report, San Luis Rey River Park and Bottle Peak, Lusardi Creek, Del Dios Highlands, Boulder Oaks, and Ramona Grasslands County Preserves. Prepared for County of San Diego Department of Parks and Recreation. May.
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TABLE 18. INCIDENTAL OBSERVATIONS OF OTHER MSCP COVERED SPECIES DURING TMP SURVEYS IN REPORTING YEAR

Species	Ramona Grasslands	Sycamore Canyon and Goodan Ranch	Tijuana River Valley Regional Park	Lusardi Creek	Dictionary Hill	Del Dios Highlands	El Capitan	El Monte	Lakeside Linkage	Louis A. Stelzer	Oakosis	Boulder Oaks
1. Encinitas baccharis							✓					
2. Felt-leaved monardella							✓					
3. Lakeside ceanothus							✓			✓	✓	✓
4. San Diego barrel cactus			✓	✓	✓							
5. San Diego thornmint		✓										
6. San Miguel savory												✓
7. Tecate cypress												✓
8. Variegated dudleya		✓										
9. Wart-stemmed ceanothus						✓						
10. Willow monardella		✓										
11. Belding's orange-throated whiptail		✓							✓		✓	

Species	Ramona Grasslands	Sycamore Canyon and Goodan Ranch	Tijuana River Valley Regional Park	Lusardi Creek	Dictionary Hill	Del Dios Highlands	El Capitan	El Monte	Lakeside Linkage	Louis A. Stelzer	Oakosis	Boulder Oaks
12. Coast horned lizard		✓										
13. Cooper's hawk	✓	✓	✓				✓		✓		✓	✓
14. Bald eagle	✓						✓					
15. Western bluebird	✓							✓	✓		✓	
16. Long-billed curlew			✓									
17. Coastal California gnatcatcher			✓	✓					✓			
18. Coastal cactus wren									✓			
19. Least Bell's vireo			✓									
20. Northern harrier	✓		✓									
21. Southern California rufous-crowned sparrow	✓						✓		✓			✓
22. Southern mule deer	✓	✓									✓	✓
23. Mountain lion												✓

SOURCES:

DUDEK. 2026. 2025 Targeted Monitoring Plan Habitat Condition Report, San Luis Rey River County Park and Bottle Peak, Lusardi Creek, Del Dios Highlands, Boulder Oaks, and Ramona Grasslands County Preserves. March.

Environmental Science Associates. 2025a. Habitat Condition Assessment for the El Capitan, Lakeside Linkage, Oakoasis, Sycamore Canyon/Goodan Ranch County Preserves, Louis A. Stelzer County Park, and El Monte County Park. Prepared for County of San Diego. December.

Environmental Science Associates. 2025c. Raptor Foraging Surveys & Nest Monitoring 2024-2025 Summary Report Ramona Grasslands, El Capitan, and Hellhole Canyon County Preserves. Prepared for the County of San Diego Department of Parks and Recreation. November.

Environmental Science Associates. 2025d. Residual Dry Matter Monitoring for the Ramona Grasslands County Preserve. Prepared for the County of San Diego Department of Parks and Recreation. December.

Environmental Science Associates. 2026. Targeted Monitoring Plan Resource-Specific Monitoring 2025 Annual Report. Prepared for County of San Diego Department of Parks and Recreation. February.

Helix Environmental Planning. 2025. Targeted Monitoring Plan Resource-Specific Management 2025 Annual Report. December.

DUDEK. 2026. 2025 Targeted Monitoring Program, Habitat Condition Report, San Luis Rey River Park and Bottle Peak, Lusardi Creek, Del Dios Highlands, Boulder Oaks, and Ramona Grasslands County Preserves. Prepared for County of San Diego Department of Parks and Recreation. May.

San Diego Thornmint

Monitoring Location: Sycamore Canyon and Goodan Ranch Preserve

Plot Establishment Dates: April 22, May 4-5, 2016 (10 plots); May 4, 2017 (added 1 plot); in February 2024, SDMMP recommended reducing the monitoring effort from 11 to 5 plots

Reporting Year Monitoring Dates: May 14-15 and 19, 2025

Reporting Year Management Dates: May 23, 27-30; June 10-13, 18-20, 23-27; July 11, 23-25, 29-31; August 6, 7, 14, and 15; and December 16-19, 29, and 30, 2025

Number of Permanent Monitoring Plots: 5

Reporting Year Population Estimate: 9,736 plants

The San Diego thornmint population estimate was 9,736 individuals at Sycamore Canyon and Goodan Ranch Preserve in 2025, and a total of 5,321 San Diego thornmint were estimated within the monitoring plots. Incidentally observed special-status plant species included small-flowered bindweed at three of the five monitoring plots and Palmer's grappling hook at all five monitoring plots. Across the monitoring plots, San Diego thornmint habitat contained invasive, non-native plants including non-native grasses and herbs, particularly tocalote and purple false brome. The annual San Diego thornmint population fluctuates based on rainfall. In years prior to 2024, when monitoring efforts were reduced from 11 to 5 plots, high annual rainfall has been associated with a smaller population size due to increased competition from invasive, non-native plants (Preston 2019). Population estimates range between a low of 5,525 in 2018 to a high of 777,300 individuals in 2017 (**Table 17**).

Monitoring results indicate the importance of invasive, non-native plant control for this species. At Sycamore Canyon and Goodan Ranch Preserve, three of the five plots would benefit from invasive, non-native plant control (ESA 2025). The TMP recommends overall invasive, non-native plant cover be kept to less than 20% and cover of purple false brome be kept to less than 10% (ESA 2024). Non-native plant cover of plots 1, 5, 6, 8, and 10 were recorded at 41.4%, 18.8%, 9.8%, 23.4%, and 4%, respectively.

Focused management for San Diego thornmint occurred at Sycamore Canyon and Goodan Ranch Preserve in 2025, following the 2024 TMP recommendation to maintain less than 10 percent cover of purple false brome and less than 20 percent cover of other invasive non-native plants within management areas (ESA 2024). Focused management was funded through the CDFW 30x30 Grant Program. Management consisted of carefully hand-pulling target invasive non-native species within the clay lens where San Diego thornmint populations were previously detected. Management also included line trimming and spot spraying within the western plots

beyond the hand weeding buffers to treat non-native grasses and Maltese starthistle. All cut material of invasive non-native plants was bagged and disposed of at a landfill or mulched on-site. Detailed information regarding this project can be found in Section 6.4, *Grant Funded Management Projects*.

Encinitas Baccharis

Monitoring Location: Del Dios Highlands Preserve

Plot Establishment Dates: July 24 and 30, 2015 (3 plots); 2025 (added 1 plot)

Reporting Year Monitoring Dates: July 15, August 7, and August 27-28, 2025

Number of Permanent Monitoring Plots: 4

Reporting Year Population Estimate: 264 plants

The three previously established monitoring plots within the Encinitas baccharis population at Del Dios Highlands County Preserve were monitored in 2025. In addition, one new monitoring plot was established and monitored within the Preserve. A reconnaissance survey was conducted in the northern portion of the preserve to identify new occurrences and a new permanent monitoring plot and associated photo points were established. The Encinitas baccharis population estimate was 264 individuals at Del Dios Highlands Preserve in 2025. A total of 82 plants were estimated within the monitoring plots. Additional special-status plant species observed within the monitoring plots include wart-stemmed ceanothus. Invasive non-native plant species observed in the monitoring plots included compact brome and red brome. Total non-native plant cover within the monitoring plots was 0.4% in three plots and 0.0% in one plot. Continued monitoring of the population is recommended. Adaptive management recommendations include thinning dense native vegetation to reduce competition and improve access to the southern monitoring plots. Native shrub species recommended for trimming include chamise and woollyleaf ceanothus.



**Encinitas baccharis, a Targeted Monitoring Plan species
at Del Dios Highlands Preserve**

Orcutt's Bird's-beak

Monitoring Location: Tijuana River Valley Regional Park

Plot Establishment Dates: June 29, 2016, June 5, 2017, and June 11, 2021 (3 plots); June 10, 2025 (2 plots)

Reporting Year Monitoring Dates: May 27, June 5, and 10, 2025

Reporting Year Management Dates: June 30 and August 20, 2025

Number of Permanent Monitoring Plots: 5

Reporting Year Population Estimate: 610 plants

The three previously established monitoring plots within the Orcutt's bird's-beak population at Tijuana River Valley Regional Park were monitored in 2025. In addition, two new monitoring plots were established and monitored within the Park. A reconnaissance survey was conducted to identify new occurrences and to establish the new permanent monitoring plots and associated photo points. The Orcutt's bird's-beak population estimate was 610 individuals at Tijuana River Valley Regional Park in 2025. A total of 121 individuals were estimated within the monitoring plots. Special-status plant species detected within the plots included San Diego barrel cactus, western dichondra, torhleaf goldeneye, and mesa spikemoss, and incidental observations of special-status species outside of the monitoring plots included San Diego barrel cactus, cliff spurge, least Bell's vireo, northern harrier, turkey vulture, and yellow warbler. The Orcutt's bird's-beak habitat contained invasive non-native grasses and herbs, particularly red brome and shortpod mustard. Total non-native plant cover within each monitoring plot was 1.8%, 5.2%, 3.0%, 1.4%, and 5.2%. Continued monitoring of the population, along with monitoring gopher activity, is recommended to ensure persistence of Orcutt's bird's-beak within the Park.

In response to high thatch cover detected in 2024, focused management was conducted at Tijuana River Valley Regional Park in 2025. Two focused invasive, non-native plant management visits were conducted, the first June 30 and the second August 20, 2025. For both visits, native plants were flagged for avoidance prior to the start of invasive non-native plant removal activities. Management consisted of carefully hand-pulling invasive non-native grasses and herbs, primarily Russian thistle and Australian saltbush, adjacent to Orcutt's bird's-beak individuals within two monitoring plots. Focused management occurred within a total management area of 0.35 acre. All biomass was manually collected, bagged, and properly disposed of at an approved off-site facility. No herbicide was used during management visits.



**Orcutt's birds-beak, a Targeted Monitoring Plan species
at Tijuana River Valley Regional Park**

Orcutt's Brodiaea

Monitoring Location: Boulder Oaks Preserve

Plot Establishment Dates: May 10, 2018

Reporting Year Monitoring Dates: May 16 and 29, 2025

Number of Permanent Monitoring Plots: 1

Reporting Year Population Estimate: 1,026 plants

The Orcutt's brodiaea population estimate was 1,026 individuals at Boulder Oaks Preserve in 2025, and a total of 466 Orcutt's brodiaea were estimated within the monitoring plot. No additional special-status species were detected inside the monitoring plot. The Orcutt's brodiaea habitat contained invasive non-native grasses and herbs, particularly soft brome, stinkwort, longflowered veldtgrass, annual fescue, and smooth cat's ear. Total non-native plant cover within the monitoring plot was 16.0% below the 20.0% threshold for management. Continued monitoring of the population, along with monitoring invasive non-native plant cover within and around the Orcutt's brodiaea population, is recommended.



**Orcutt's brodiaea, a Targeted Monitoring Plan species
at Boulder Oaks Preserve**

Otay Tarplant

Monitoring Location: Furby-North Preserve

Plot Establishment Dates: June 29, 2016 and June 2, 2023 (added 1 plot)

Reporting Year Monitoring Dates: May 28 and 29, 2025

Reporting Year Management Dates: June 25 and August 19, 2025

Number of Permanent Monitoring Plots: 2

Reporting Year Population Estimate: 949

In 2025, the Otay tarplant population estimate was 1,083 plants at Furby-North Preserve, and a total of 733 individuals were estimated within the monitoring plots. The Otay tarplant habitat contained non-native grasses, forbs, and thatch. Total non-native plant cover within the monitoring plots was 15.0% and 8.0%.

In response to the high thatch and invasive non-native plant cover observed in 2024, focused management was conducted at Furby-North Preserve in 2025 in the northern monitoring plot. Two focused invasive, non-native plant management visits were conducted, the first on June 25 and the second on August 19. For both visits, native plants were flagged for avoidance prior to the start of invasive non-native plant removal activities. Management consisted of carefully hand-pulling invasive non-native grasses and herbs within approximately 18 inches of the Otay tarplant individuals including soft brome, pepperweed, and tocalote. Focused management occurred within a 0.30-acre management area. All cut biomass was manually collected, bagged, and properly disposed of at an approved off-site facility. No herbicide was used during management visits.

San Miguel Savory

Monitoring Location: Boulder Oaks Preserve

Plot Establishment Dates: April 6 and 16, 2016

Reporting Year Monitoring Dates: May 16, 2025

Reporting Year Management Dates: June 25, 2025

Number of Permanent Monitoring Plots: 2

Reporting Year Population Estimate: 478

The two monitoring plots within the San Miguel savory population in Boulder Oaks Preserve was monitored in 2025. A total of 197 individuals were estimated within the monitoring plots, and the entire population of San Miguel savory within Boulder Oaks Preserve is estimated at 478 plants. One special-status plant, Yucapia onion, was observed outside of both monitoring plots. Incidental special-status wildlife species detected included turkey vulture and red-diamond rattlesnake. The San Miguel savory habitat contained invasive non-native grasses and herbs, particularly annual fescue and smooth cat's ear. Total non-native plant cover within each monitoring plot was 0.8% and 3.3%. Although invasive non-native plant cover within the monitoring plots was low, it is recommended that invasive non-native plant control continue, with a focus on treatment of the high-priority invasive longflowered veldtgrass. Continued monitoring of the population is recommended to ensure persistence of San Miguel savory within the Preserve.

In response to the presence of invasive non-native plant species detected in 2024, focused management was conducted at Boulder Oaks Preserve in 2025. One focused invasive, non-native plant management visit was conducted June 25, 2025. Native plants were flagged

for avoidance prior to the start of invasive non-native plant removal activities Management consisted of carefully removing invasive non-native plants by hand within 18 inches of San Miguel savory individuals. Focused management occurred within a 0.55-acre management area consisting of the maximum extent of one of the two monitoring plots, as well as an additional area northwest of the plot's maximum extent. All cut biomass was manually collected, bagged, and properly disposed of at an approved off-site facility. No herbicide was used during the management visit.



**San Miguel savory, a Targeted Monitoring Plan species
at Boulder Oaks Preserve**

Variegated Dudleya

Monitoring Location: Lusardi Creek Preserve

Plot Establishment Dates: April 27, 2016

Reporting Year Monitoring Dates: May 8 and 21, 2025

Reporting Year Management Dates: July 1 and August 18, 2025

Number of Permanent Monitoring Plots: 1

Reporting Year Population Estimate: 15

The one monitoring plot within the variegated dudleya population in Lusardi Creek Preserve was monitored in 2025. The variegated dudleya population estimate was 15 individuals in 2025. A total of 1 individual was estimated within the monitoring plot. Special-status plant species detected within the plot included San Diego barrel cactus and mesa spikemoss, and incidental observations of special-status wildlife species outside of the monitoring plots included coastal California gnatcatcher. The variegated dudleya habitat contained invasive non-native plant species, including purple false brome, soft brome, red brome, foxtail brome, annual fescue, Italian rye grass, smooth cat's-ear, Russian thistle, and non-native plant species including longbeak stork's-bill. Total non-native plant cover within the monitoring plot was 5.0%. Continued monitoring of the population is recommended.

In response to the high thatch and invasive non-native cover observed in 2024, focused management occurred in 2025. Because maintenance occurred late in the season and was delayed to avoid the spread of dried non-native grass seed heads, efforts were prioritized within the herbivory fencing. Any maintenance conducted outside the fencing was limited to within 18 inches of any variegated dudleya. The fencing was largely intact but required minor repairs to reattach sections to posts and restore proper alignment. Fencing repairs were completed on August 18, 2025, and all fences were in good condition following the second maintenance event. Invasive non-native plant cover consisted primarily of purple false brome, tufted wallaby grass, artichoke thistle, and other non-native brome grasses. Focused management for variegated dudleya was conducted within a 0.75-acre management area. All cut biomass was manually collected, bagged, and properly disposed of at an approved off-site facility. No herbicide was used. To ensure the persistence of variegated dudleya at the Preserve, the TMP recommends additional and ongoing focused management, specifically invasive non-native plant removal and thatch removal. Purple false brome, artichoke thistle, and tufted wallaby grass, should continue to be targeted for removal and treatment to prevent future spread and encroachment into the variegated dudleya population.



**Variegated dudleya, a Targeted Monitoring Plan species
at Lusardi Creek Preserve**

Monitoring Location: Sycamore Canyon and Goodan Ranch Preserve

Plot Establishment Dates: June 23, 2017 and April 14, 2021

Reporting Year Monitoring Dates: May 8 and 20, 2025

Reporting Year Management Dates: May 23, 27-30; June 10-13, 18-20, 23-27; July 11, 23-25, 29-31; August 6, 7, 14, and 15; and December 16-19, 29, and 30, 2025

Number of Permanent Monitoring Plots: 2

Reporting Year Population Estimate: 156

The two monitoring plots within the variegated dudleya population at Sycamore Canyon and Goodan Ranch Preserve were monitored in 2025. The variegated dudleya population estimate was 156 individuals in 2025. A total of 88 individuals were estimated within the monitoring plots. Special-status plant species detected within the plot included San Diego thornmint, Palmer's grappling hook, and mesa spikemoss. The variegated dudleya habitat contained invasive non-native grasses and herbs, particularly purple false brome and soft brome. Total non-native plant cover within the monitoring plots was 36.6 and 31.2%. Continued monitoring of the population is recommended.

Focused management for variegated dudleya occurred at Sycamore Canyon and Goodan Ranch Preserve in 2025, following the 2024 TMP recommendation that percent cover of invasive non-native plant species be kept to less than 20% within the vicinity of variegated dudleya populations (ESA 2024). Focused management in 2025 was funded through the CDFW 30x30 Grant Program. Activities at Sycamore Canyon and Goodan Ranch Preserve included carefully hand-pulling target invasive non-native species within the clay lens where variegated dudleya populations were previously detected. Sycamore Canyon and Goodan Ranch Preserve management also included line trimming and spot spraying within the western plots beyond the

hand weeding buffers to treat non-native grasses and Maltese starthistle. All cut material of invasive non-native plants was bagged and disposed of at a landfill or mulched on-site. Detailed information regarding this project can be found in Section 6.4, *Grant Funded Management Projects*. To ensure the persistence of variegated dudleya at the Preserve, the TMP recommends additional and ongoing focused management, specifically invasive non-native plant removal and thatch removal.



**Variegated dudleya, a Targeted Monitoring Plan species
at Sycamore Canyon and Goodan Ranch Preserve**

Monitoring Location: Dictionary Hill Preserve
Plot Establishment Date: May 13, 2025
Reporting Year Monitoring Dates: May 8 and 13, 2025
Number of Permanent Monitoring Plots: 1
Reporting Year Population Estimate: 4,756

The one monitoring plot within the variegated dudleya population at Dictionary Hill Preserve was established and monitored in 2025. The variegated dudleya population estimate was 4,756 individuals at Dictionary Hill Preserve in 2025. A total of 1,590 individuals were estimated within the monitoring plot. Special-status plant species detected within the plot included mesa spikemoss, San Diego barrel cactus, and torhleaf goldeneye, and incidental observations of special-status species outside of the monitoring plots included San Diego barrel cactus and mesa spikemoss. The variegated dudleya habitat contained invasive non-native grasses and herbs, particularly common Mediterranean grass. Total non-native plant cover within the monitoring plot was 3.0%. Continued monitoring of the population is recommended. While the total non-native plant cover within the monitoring plot was below the 20 percent threshold in 2025, crimson fountain grass was observed on the rocky outcroppings within the variegated dudleya's maximum extent. To limit the expansion of crimson fountain grass and ensure the

persistence of variegated dudleya at Dictionary Hill Preserve, it is recommended that invasive non-native plant control, with a focus on crimson fountain grass be performed. In addition, an unauthorized trail used by hikers and bikers runs through the center of the monitoring plot. Installation of signage and exclusionary fencing are recommended to protect and ensure the persistence of variegated dudleya at Dictionary Hill Preserve.



Variegated dudleya, a Targeted Monitoring Plan species at Dictionary Hill Preserve

Willow Monardella

Monitoring Location: Sycamore Canyon and Goodan Ranch Preserve

Plot Establishment Dates: July 7, 2015, June 22, 2016 and June 9, 2021

Reporting Year Monitoring Dates: June 18 and July 29, 2025

Reporting Year Management Dates: April 17, June 16, 17, 19, and 20, September 9 and December 8 and 30, 2025

Number of Permanent Monitoring Plots: 3

Reporting Year Population Estimate: 474

The three willow monardella monitoring plots within Sycamore Canyon and Goodan Ranch Preserve were monitored in 2025. A total of 50 willow monardella plants were estimated within the monitoring plots. The entire population within the Preserve is estimated to be 474 individuals. The population estimates range from a low of 238 in 2016 to a high of 474 in 2025 (**Table 17**). Population variability may reflect differences in how surveyors count clumps of

plants rather than annual fluctuations in population size (ESA 2024). No additional special -status species were observed within the three monitoring plots, although monarch butterfly was incidentally observed. Across all monitoring plots, willowy monardella habitat contained invasive non-native grasses and herbs, particularly slender wild oat, purple false brome, annual fescue, tocalote, and brome grasses. Non-native plant cover was 1.6%, 2.6%, and 3.4% within the monitoring plots, which is below the 10 percent non-native plant cover TMP-recommended threshold for management (ESA 2024). Based on the results of the 2025 surveys, TMP management goals and objectives, and the adaptive management actions outlined in the TMP, no management is recommended for 2026. Continued monitoring is recommended.

Focused management occurred for willowy monardella at Sycamore Canyon and Goodan Ranch Preserve in 2025. The TMP recommends overall invasive non-native plant cover be kept to less than 10 percent (ESA 2024) around willowy monardella plants. Focused management in 2025 was funded through the CDFW 30x30 Grant Program. Activities at Sycamore Canyon and Goodan Ranch Preserve included carefully hand-pulling target invasive non-native species within three feet of all willowy monardella; spot spraying African fountain grass, Maltese starthistle, and shortpod mustard beyond the hand-pulling buffers, hand-pulling stinkwort to the north of the willowy monardella population in Clark Canyon, and line trimming the surrounding uplands of non-native grass thatch. All cut material of invasive non-native plants was bagged and disposed of at a landfill or mulched on-site. Detailed information regarding this project can be found in Section 6.4, *Grant Funded Management Projects*.



Willowy Monardella, a Targeted Monitoring Plan species at Sycamore Canyon and Goodan Ranch Preserve

Arroyo Toad

Monitoring Location: Ramona Grasslands Preserve

Stream Reaches: USGS-established monitoring reaches along Santa Maria Creek (18 stream reaches out of 23 total); stream reaches 22 and 23 are in the County MSCP Subarea Plan

Assessment: Visual surveys for life stages and threat and habitat assessment

Reporting Year Monitoring Dates: (May 12 and 13, and June 17, 2025)¹⁵

Reporting Year Species Observed: Not monitored (0)¹⁶

In 2025, arroyo toad monitoring surveys were not performed by DPR because low rainfall levels in 2025 did not provide suitable conditions to evaluate the status of arroyo toad populations within Santa Maria Creek.

Regional monitoring efforts in 2025 for arroyo toad included monitoring surveys performed by USGS through a DPR issued ROE permit. USGS monitors stream reaches 25, 29, 34, 39, and 44 in Santa Maria Creek located in the draft North County MSCP Plan Area. No arroyo toads were observed during surveys of these stream reaches. Two-striped garter snake, a special-status wildlife species, was incidentally observed in stream reach segments 25B and 44A. Four invasive non-native red swamp crayfish were recorded across stream reaches 29 and 44; and nine invasive non-native American bullfrogs were observed across stream reaches 29 and 34.

Northern Harrier

Monitoring Location: Tijuana River Valley Regional Park

Habitat surveyed: Suitable foraging and nesting habitat

Assessment: Visual surveys and habitat and threat assessment

Reporting Year Monitoring Dates: May 5, June 5, and July 1, 2025

Reporting Year Species Observed: Yes

Reporting Year Species Nesting: Yes (1 nesting territory observed)

Northern harriers were observed during all surveys with the highest observations during the month of May. Territorial behavior exhibited by northern harriers included prey carrying and observation of fledglings accompanied by an adult male. Nesting behavior was confirmed within Territory 1. While up to five northern harrier territories could be present within the Park, only one (Territory 1) appeared to be occupied, and the nest in this territory produced at least two fledglings. Two additional pairs were observed adjacent to Territory 1 during the May 5 survey, but those birds were not observed in that area on subsequent surveys. Northern harriers were seen carrying food in Territory 3 during the July 1 survey, but they flew west out of sight and may have been the birds from Territory 1, carrying food back to that nest. An adult female and a juvenile were seen together in Territory 5 during the July 1 survey. However, it is possible that this was the female and one of the young from Territory 1. Overall, there were a lower number of northern harrier observations in 2025 compared to previous survey years (2021-2024). It is possible that overall productivity was low due to below-average rainfall in 2024/2025. Overall, the Park provides high-quality suitable foraging and nesting habitat for northern harriers as demonstrated by a successful northern harrier nest in 2025.

¹⁶ Monitoring results from USGS provided in parentheses

Incidentally observed special-status species included coastal California gnatcatcher, Cooper's hawk, double-crested cormorant, gadwall, green heron, least Bell's vireo, long-billed curlew, merlin, olive-sided flycatcher, red-shouldered hawk, turkey vulture, Vaux's swift, white-tailed kite, yellow warbler, yellow-breasted chat, and San Diego black-tailed jackrabbit.



Northern Harrier, a Targeted Monitoring Plan species at Tijuana River Valley Regional Park

Burrowing Owl

Monitoring Location: Ramona Grasslands Preserve

Habitat surveyed: 9 monitoring polygons (revised based on 2022 monitoring results)

Assessment: Visual surveys

Reporting Year Monitoring Dates: May 14 and 15, June 11 and 12, and July 8 and 9, 2025

Reporting Year Species Observed: No (burrowing owl sign observed)

Reporting Year Species Nesting: No

Based on the 2022 breeding burrowing owl surveys, all nine monitoring polygons were modified to maximize the potential to detect and locate burrowing owls, their burrows, and/or their sign on the Preserve. No burrowing owls or active burrows were documented within Ramona Grasslands County Preserve during presence/absence breeding season surveys conducted in 2025. However, sign of burrowing owl activity consisting of extensive whitewash and at least one presumed burrowing owl pellet was found in monitoring polygon 6 during survey 1. There was no indication that a burrowing owl was actively using the burrow and the sign appeared old. The site may have been used by one burrowing owl as a wintering site in 2024/2025, but there were no signs of a breeding attempt. No new signs of activity were noted during subsequent surveys.

The TMP management goal for burrowing owl is to maintain suitable foraging and nesting habitat on Ramona Grasslands Preserve. Based on the 2025 habitat and threats assessment, four of the nine monitoring polygons are recommended to be modified to maximize the potential

to detect and locate burrowing owls, their burrows, and/or their sign on the Preserve during future surveys. Proposed revisions to monitoring polygons considered presence of rocky outcrops, more open grassland areas, increased squirrel activity, and higher density of burrows. In addition, reducing vegetation height around suitable burrows and within foraging areas is recommended to increase habitat suitability. Future monitoring for burrowing owl should be coordinated with the San Diego Zoo Wildlife Alliance (SDZWA) to determine their timing and type of monitoring surveys at Ramona Grasslands Preserve.

Coastal Cactus Wren

Monitoring Location: Lakeside Linkage Preserve

Habitat surveyed: 6 avian point count stations

Assessment: Avian point counts and habitat and threats assessment

Reporting Year Monitoring Dates: May 6, June 3, June 27, and July 21, 2025

Reporting Year Species Observed: Yes

Reporting Year Species Nesting: Yes

Three avian point count surveys were conducted at the six previously established point count locations in 2025. In past years, four surveys were conducted, with the first survey taking place in the early spring, but due to timing constraints, only three avian point count surveys were completed in 2025 at the six point count stations. Due to the presence of an agitated coastal cactus wrens within the previously restored cactus areas during the June 27, 2025, survey, an additional survey was conducted on July 21, 2025, to complete photo monitoring and vegetation density estimates for the previously restored cactus areas. Coastal cactus wrens were detected during all three surveys, with three adults observed in early May, two adults in early June, and one adult and one juvenile in late June. In addition, to point count detections, a pair was observed outside the Preserve boundary in between avian point count stations 1 and 2. A coastal cactus wren was observed visiting a possible nest in this area during survey 1, and a pair was detected at this location during survey 2.

Coastal cactus wren nesting behavior was documented in both previously restored cactus areas within the Lakeside Linkage Preserve in 2025 and two territories were observed. Multiple nests were found in both areas, and a nest in restoration area 2 produced at least one fledgling, observed during survey 3. Additional special-status species detected during avian point count surveys included Belding's orange-throated whiptail, coastal California gnatcatchers with an active nest, Cooper's hawk, red-shouldered hawk, Southern California rufous-crowned sparrow, turkey vulture, Vaux's swift, western bluebird, and yellow warbler.

The habitat and threats assessment evaluated vegetation as it pertains to the needs of the coastal cactus wren. Both previously restored cactus areas support structurally suitable cactus habitat with high cover and low non-native vegetation. Restoration area 1 was in fair to good condition, with widespread signs of cochineal scale and herbivory but new growth evident on coastal prickly pear cactus. Restoration area 2 was in good condition, showing consistent regeneration, low stress indicators, and healthy coast cholla with no cochineal scale. Observed threats included cochineal scale presence, dense cover of native thatch growing within or adjacent to the cactus stands that may facilitate predator movement into nesting areas, and unauthorized trails within the Preserve.

The TMP management goal for coastal cactus wren is to restore, enhance, and maintain suitable nesting habitat for San Diego cactus wren on the Lakeside Linkage Preserve (ESA 2024). The previous adaptive management recommendation to reduce native ladder plants and

treat invasive non-native plants within the established cacti patches at both previously restored cactus areas was funded by the CDFW Local Assistance Grant and implemented in October 2025. Detailed information regarding this project can be found in Section 6.4, *Grant Funded Management Projects*. Targeted biological or manual removal methods of cochineal scale on coastal prickly pear will be addressed.



**Coastal cactus wren nest in prickly pear cactus
at Lakeside Linkage Preserve**

Tricolored Blackbird

Monitoring Location: Ramona Grasslands Preserve

Habitat surveyed: Suitable foraging and nesting habitat

Assessment: Visual surveys

Reporting Year Monitoring Dates: April 18 and May 9, 2025

Reporting Year Species Observed: (No)¹⁷

Reporting Year Species Nesting: (No)¹⁶

Tricolored blackbird monitoring was conducted through a DPR-issued ROE, Section 7.4 *Preserve Monitoring and Research Partnerships*. No tricolored blackbird nesting colonies were observed within Ramona Grasslands Preserve. However, potentially suitable nesting and foraging habitat has been observed. In the past, tricolored blackbirds were documented foraging annually in Ramona Grasslands Preserve with nesting occurring on the adjacent RMWD property (**Table 17**).

¹⁷ Monitoring results from San Diego Natural History Museum provided in parentheses

Vegetation Community Mapping and Habitat Assessments

In 2025, vegetation mapping and habitat assessments were conducted on ten County parks and preserves, including the El Capitan, Lakeside Linkage, Oakoasis, Sycamore Canyon and Goodan Ranch, Lusardi Creek, Del Dios Highlands, Boulder Oaks, and Ramona Grasslands Preserves, and Louis A. Stelzer and El Monte Parks. The goal of vegetation community mapping and habitat assessments is to perform regular surveillance monitoring to ensure the integrity of the preserve systems and inform adaptive management decisions based on habitat condition assessments and invasive non-native plant species mapping.

Vegetation community mapping at El Monte County Park documented decreases in disturbed/developed and riparian habitats and increases in herbaceous, Diegan coastal sage scrub, and woodland communities between 2015 and 2025, with changes driven by improved mapping accuracy and vegetation reclassification.

Vegetation community mapping at El Capitan County Preserve showed an increase in disturbed/developed and herbaceous vegetation communities and a decrease in chaparral, riparian, scrub, and woodland communities between 2015 and 2025. The increase in disturbed habitat is largely attributable to classification of the 2025 Monte Fire burn scar, which heavily damaged approximately 17% of the preserve (about 425 acres), while reductions in other vegetation communities primarily reflect reclassification rather than widespread habitat loss.

Vegetation community mapping at Lakeside Linkage Preserve documented increases in herbaceous vegetation communities and disturbed/developed habitat and decreases in Diegan coastal sage scrub and woodland communities between 2015 and 2025 due to increased mapping accuracy and reclassification.

Vegetation community mapping at Louis A. Stelzer Park documented increases in chaparral, herbaceous, woodland, and disturbed/developed habitats and decreases in riparian and Diegan coastal sage scrub habitats. These changes primarily reflect improved mapping accuracy and reclassification of vegetation communities to more accurately represent existing site conditions and dominant species composition.

Vegetation community mapping at Oakoasis Preserve determined an increase in chaparral, woodland, Diegan coastal sage scrub, herbaceous, and disturbed/developed habitats and a decrease in riparian habitat from 2015 to 2025. Changes are due to increased mapping accuracy and methodology, along with mapping of a property in the northwest corner of the preserve that was acquired after the 2015 vegetation community mapping effort.

Vegetation community mapping at Sycamore Canyon and Goodan Ranch Preserve showed increases in chaparral, herbaceous, and disturbed/developed habitats and decreases in Diegan coastal sage scrub, riparian, and woodland habitats. The increase in chaparral habitats and the corresponding decrease in scrub habitats largely reflect the conversion of Diegan coastal sage scrub to chamise chaparral and coastal-sage chaparral transition communities, which was likely driven by post-fire succession following the 2003 Cedar Fire. Similarly, the increase in herbaceous communities may be attributed to post-fire establishment in unique soil types and open areas within shrublands within the preserve. Additional habitat was also mapped in 2025 that was not mapped in 2015, specifically in the southwestern corner of the preserve.

Vegetation community mapping at Lusardi Creek Preserve showed a slight increase in Diegan coastal sage scrub habitat from 2015 to 2025. The increase in Diegan coastal sage scrub

habitat was driven by a corresponding decrease in herbaceous and chaparral habitat mapping. This is mainly due to an approximately 17-acre area in the southwest portion of the preserve that was previously mapped as a herbaceous, clustered tarweed (*Deinandra fasciculata*)-dominated habitat type in 2015 that was dominated by California sagebrush and other scrub shrubs during 2025 mapping.

Vegetation community mapping at Del Dios Highlands Preserve showed a slight increase in chaparral habitat from 2015 to 2025. This change primarily reflects improved mapping accuracy and reclassification of vegetation communities to more accurately represent existing site conditions and dominant species composition.

Vegetation community mapping at Boulder Oaks Preserve showed increases in Diegan coastal sage scrub and woodland habitats. The increase in woodland is likely the result of more precise delineation of small oak woodland patches embedded within large expanses of chaparral, many of which were not mapped in 2015 but were captured during the 2025 effort. The increase in Diegan coastal sage scrub habitat may reflect continued natural expansion of scrub vegetation into former grassland areas. Expanding scrub and woodland cover is also consistent with ongoing post-fire recovery following the 2003 Cedar Fire, which burned the entire preserve.

Vegetation community mapping at Ramona Grasslands Preserve showed increases to chaparral and woodland communities between 2015 and 2025. Increases in mapped chaparral acreage are likely a result of more detailed differentiation of areas previously labeled as Diegan coastal sage scrub but, upon closer examination, contain significant patches of chamise-dominated chaparral. The increase in woodland habitat appears to be driven by more precise delineation of small oak woodland patches embedded within large expanses of scrub or chaparral—many of which were not captured in the 2015 mapping effort but were resolved in 2025.

Otay Ranch Preserve Monitoring

Otay Ranch Preserve is jointly owned by the County and City of Chula Vista (Otay Ranch POM) and is counted towards the assembled MSCP Preserve as dedicated private hardline mitigation. Monitoring of MSCP covered species and habitats ensures that the covered species are thriving and that any potential threats can be quickly addressed. The 2025 monitoring tasks were conducted in support of the Phase 1 and Phase 2 RMPs (County of San Diego 1993 and RECON 2018).

In 2025, monitoring efforts focused on biodiversity inventory surveys, vegetation rapid assessment, photographic monitoring, seed collection and redistribution, surveys for rare plant species, Quino checkerspot butterfly, Hermes copper butterfly and western spadefoot toad. Tree health surveys and native shrub dieback surveys were conducted to document the effects of the invasive Kuroshio shot hole borer within riparian habitat on multiple parcels of the Preserve. Gold-spotted oak borer monitoring was also conducted within the oak woodland at the Dulzura parcels. Golden eagle camera monitoring that was initiated in 2021 continued through 2025. Additionally, monitoring efforts included site visits to the various Otay Ranch parcels to respond to the Border 2 Fire and to document access issues, sensitive species, any newly detected species, non-native plant species, and the overall health of the sites. Site-specific monitoring took place from January 1 to December 31, 2025 and included site visits to cover most of the property that is currently included as part of the 4,640-acre Otay Ranch Preserve, including the Rock Top and Silver parcels, which were conveyed in 2025; no activities were performed on the 11.9-acre Piper Ranch parcels during 2025. Regular coordination meetings

between the Preserve Steward/Biologist and Otay Ranch POM occurred to track progress of management and monitoring activities. All 2025 management and monitoring activities are included in the 2025 Annual Report for Otay Ranch Preserve¹⁸.

Species Specific Adaptive Management Monitoring

Monitoring of special-status species not included in the TMP or supplemental to the TMP monitoring is also a component of the County's monitoring program. The information gathered during these surveys provides guidance on a species-specific level as to when, if any, adaptive management strategies need to be implemented on County Preserves. Species specific monitoring occurred in 2025 as described below.

Raptor Foraging Study at Ramona Grasslands Preserve

Raptor use and foraging behavior is monitored at the Ramona Grasslands Preserve to understand bald eagle, golden eagle, and raptor abundance and distribution; to inform adaptive management and public use; and to evaluate potential threats. The study also includes monitoring the year-to-year status of the off-site golden eagle territory adjacent to the Preserve. Study methodology includes raptor point count field surveys and golden eagle nest monitoring.

Fifteen raptor species were detected at both the northeast and northwest survey areas during the 2024-2025 raptor point count surveys (ESA 2025c). Seven of the 15 raptors were MSCP covered species, which are golden eagle, bald eagle, American peregrine falcon, northern harrier, Cooper's hawk, Swainson's hawk, and ferruginous hawk. Special-status species sharp-shinned hawk and white-tailed kite were also observed. Special-status raptor species that were observed and have potential to breed on the Preserve include golden eagle, bald eagle, Cooper's hawk, and white-tailed kite. Red-tailed hawk was the most frequently observed raptor species within and adjacent to the Preserve, followed by bald eagle. However, not all red-tailed hawk observations were recorded because, when special-status species were detected, additional focus was required for those observations. Raptor species richness was highest during the fall season at the new northwest survey area, but was highest during the winter at the northeast survey area. Raptor species richness was higher in the northeast survey than in the new northwest survey area during all seasons except the fall season (ESA 2025c).

An adult golden eagle individual or pair, assumed to be the Bandy Canyon pair, was observed during the 2024–2025 survey period within the Preserve. Three separate monitoring surveys were conducted by ESA to observe the golden eagle nest site in Bandy Canyon. The resident pair successfully fledged two young in 2019 and one young in 2020, 2021, 2022, and 2024. In 2025, no nesting behavior (nest building or incubation activity) was observed. Therefore, no nesting attempt was confirmed in 2025.

Golden eagles were detected in all seasons in both survey areas but were not detected during each survey within the Preserve. Monitoring results indicate Preserve use of the Ramona Grasslands Preserve by a minimum of one resident golden eagle throughout the survey period. The golden eagle sightings during the 2024–2025 survey period were of adult birds (often seen together) assumed to be the Bandy Canyon pair, a juvenile golden eagle that was seen accompanying the assumed Bandy Canyon pair during the fall season, and other individuals

¹⁸ [Multiple Species Conservation Plan \(MSCP\)](#)

that were not part of the Bandy Canyon pair but were not individually identifiable due to their lack of markers or unique plumage features.

The highest numbers of individual golden eagles were observed during the fall season: one juvenile, one subadult, and two adults. Two distinct adult individuals were observed using the Preserve in the winter season; additionally, there were numerous observations of an unknown-aged golden eagle. The number of distinct individuals using the preserve remained the same throughout the spring season (two adult individuals). In the summer, there were three distinct individuals using the Ramona Grasslands Preserve (two adults and the juvenile from the 2024 breeding season). Compared to 2023-2024, golden eagles exhibited reduced foraging activity across all seasons and survey areas within Ramona Grasslands Preserve. The cause of this shift is unknown but may be related to atypical weather conditions (low winter rainfall and an unusually cool summer) and an unsuccessful nesting attempt in the Bandy Canyon territory in 2025. While there were additional areas of high use within the NE survey area, those were of overlapping flight paths and not of foraging use within the Ramona Grasslands Preserve.

Bald eagles were detected in each season but were not detected during each survey or survey area within the Preserve. It is assumed that the pair of bald eagles that nested in 2024 was the same pair that nested in the Preserve during the 2025. During the fall season, there were three distinct individuals using the Ramona Grasslands Preserve (two adults and one subadult). During the winter season, the highest number of individual bald eagles were observed: three adults and one subadult. This is also typically the season when breeding behavior is observed regularly. In the spring season, the number of distinct individuals using the Ramona Grasslands Preserve was the same (two adults and one subadult). This was the season when the nest was documented to have failed for unknown reasons. There were multiple documentations of the adult pair perched together or singly throughout the survey areas. During the summer season, there were two distinct individual adults using the Ramona Grasslands Preserve.

The highest density and spatial use for bald eagles on the Preserve were observed in the area around the nest tree within the northeast survey area, where individuals were observed perched and actively hunting in the immediate area.

Throughout the survey period, the Preserve consistently supported one bald eagle territory. One bald eagle pair was observed nesting on the Preserve in the same nest tree as 2022 through 2024. The nest site was located wholly within the northeast portion of the Preserve in a eucalyptus grove. The adult pair were not successful; however, they did incubate eggs but failed (for unknown reasons) during this nesting phase.



**Bald eagle, a Targeted Monitoring Plan species
at Ramona Grasslands Preserve**

Golden Eagle Nest Monitoring at El Capitan Preserve

The El Capitan Preserve has an established golden eagle nesting territory on El Cajon Mountain (ESA 2025c). This is the second year DPR has conducted golden eagle nest monitoring at the Preserve. The purpose of the monitoring was to determine the location and status of the golden eagle nesting site.

Nest monitoring surveys were conducted between February and April 2025. The monitoring was conducted from an observation point located in El Monte County Park, approximately 6,234 feet from the closest cliff face on El Cajon Mountain and from a second observation point at a dirt pullout off El Monte Road to scan the opposite side of Cajon Mountain. The first observation point allowed a full view of El Cajon Mountain's south and west facing cliffs and on Silverdome's smaller cliff faces and rocky outcrops. The second observation point allowed for a full view of El Cajon Mountain's southwestern facing cliffs which were not visible from the first observation point.

Three separate monitoring surveys were conducted to determine golden eagle nest status and success. A pair of adult golden eagles were observed perching in the areas near the previous inactive nest sites over the course of the surveys. While the territory was occupied by golden eagles, there was no observed nesting behavior in 2025.

Residual Dry Matter Monitoring at Ramona Grasslands Preserve

Ramona Grasslands Preserve is divided into 12 management units, ten of which are grazed. The grazing program enhances rare plant and wildlife populations and reduces invasive, non-native plants. To measure success, species, and habitat-specific Residual Dry Matter (RDM) targets were established. RDM is the amount of dry grass remaining after the growing season and grazing. Typically, a lower RDM is desirable to prevent the build-up of thatch (e.g., dried grass) and to allow for greater visibility for native wildlife (e.g., shorter grass length). Target RDM values vary depending on the target plant or animal species management and range from 300 – 2,100 lbs./acre.

RDM monitoring was performed in September and October 2025. Monitoring results ranged from a low of 117 to a high of 5,367 lbs./acre (ESA 2025d). Of the ten grazed management units measured, two were within their target RDM ranges, six were above target RDM ranges, and two were below the target RDM ranges. Although most management units were above their target RDM levels, all management units but one showed a decrease in RDM values from 2024 to 2025. Results were likely influenced by reduced rainfall and ongoing cattle grazing activity. Extreme fluctuations in rainfall in recent years (e.g., drought conditions in 2018, above-average rainfall in 2019, below-average to average rainfall in 2020, drought conditions in 2021 and 2022, above-average rainfall in 2023 and 2024, and below-average rainfall in 2025) drive substantial variability in vegetative cover from year to year. The general decrease in RDM levels between 2024 and 2025 is likely due to continued active grazing on the Preserve and the reduction in rainfall compared to previous years.

Park Improvement MSCP Covered Species Monitoring

Monitoring of MSCP covered species during park improvement projects is a critical component to minimize impacts to MSCP covered species. These monitoring efforts are a priority for the County.

Smuggler's Gulch Dredging Project

The Smuggler's Gulch Dredging Project is a County project within the Tijuana River Valley Regional Park which includes removal of trash, sediment, debris, and non-native plant species within the Smuggler's Gulch flood control channel south of Monument Road. This work has historically been completed as part of the County of San Diego's Flood Control Maintenance efforts through Regional General Permit 53. In 2025, DPR worked on obtaining a \$3,452,972 grant from the Environmental Protection Agency (EPA) to implement a full-scale dredging effort in both the Smuggler's Gulch channel and the Pilot Channel of the Tijuana River. This larger effort included coordination with the City of San Diego to dredge the portion of Smuggler's Gulch north of Monument Road and the Pilot Channel, which have both been historically maintained by the City. No dredging activities occurred in 2025.

7.2 Private Mitigation Lands Monitoring

MSCP monitoring of Private Preserves is achieved through RMP annual monitoring reports that focus on the resource attributes of that specific site and detail the monitoring and habitat management activities conducted within the previous year. Annual reports document any issues and the overall health of the Preserve, which allows 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 Library¹⁹ using the associated Record ID. **Appendix L** provides a general overview of the 26 RMPs located within the MSCP Subarea Plan including a description of the habitat conservation area, required surveys, and monitoring/maintenance status for each RMP.

An accounting of RMP annual report submissions revealed that in 2025, twenty-three of the twenty-six (88%) RMPs submitted reports for the 2024-2025 fiscal reporting period. **Table 19, MSCP Covered Species Documented on Private Mitigation Lands In Reporting Year,**

¹⁹ The PDS Document Library can be accessed at: <https://www.sandiegocounty.gov/content/sdc/pds/doclibrary.html>.

summarizes the MSCP covered species documented in the 2024-2025 annual RMP monitoring reports.

General monitoring, aside from survey requirements, is conducted on Private Preserves. The frequency of these general monitoring visits varies, including annual, quarterly, or monthly visits. Species surveys are required for some Private Preserves, but not all. **Table 20, *MSCP Covered Species Surveys and General Monitoring Frequency on Private Mitigation Lands In Reporting Year***, summarizes the species surveys and general monitoring frequency for each preserve.

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TABLE 19. MSCP COVERED SPECIES DOCUMENTED ON PRIVATE MITIGATION LANDS IN REPORTING YEAR

	4S Ranch Ralphs	4S Ranch Specific Plan	Artesian Trail	Bernardo Lakes	Blossom Valley	East Otay Mesa	El Apajo	Golem	Greenhills Ranch	Hawano	High Meadow Ranch (Trevi Hills)	Hillside Meadows	International Industrial Park Upland	International Industrial Park Wetland	Lonestar	Maranatha Chapel	Oakmont	OMC	Otay Crossing Commerce Park (On-site)	Otay Crossings Off-Site (Lonestar Ridge)	Pinnacles at Santa Fe Valley	Quail Canyon	Sloane Canyon	Starwood (Crosby)	Sweetwater Vistas	Woodridge	
Plants																											
Del Mar manzanita																									✓		
Lakeside ceanothus											✓																
Otay mesa mint																					✓						
Otay tarplant																					✓						
San Diego ambrosia																									✓		
San Diego button-celery																					✓						
San Diego barrel cactus				✓		✓														✓	✓	✓			✓		
San Diego goldenstar		✓																									
Thread-leaf brodiaea		✓																									
Variegated dudleya																			✓								
Wart-stemmed ceanothus				✓																		✓					

	4S Ranch Ralphs	4S Ranch Specific Plan	Artesian Trail	Bernardo Lakes	Blossom Valley	East Otay Mesa	El Apajo	Golem	Greenhills Ranch	Hawano	High Meadow Ranch (Trevi Hills)	Hillside Meadows	International Industrial Park Upland	International Industrial Park Wetland	Lonestar	Maranatha Chapel	Oakmont	OMC	Otay Crossing Commerce Park (On-site)	Otay Crossings Off-Site (Lonestar Ridge)	Pinnacles at Santa Fe Valley	Quail Canyon	Sloane Canyon	Starwood (Crosby)	Sweetwater Vistas	Woodridge
Reptiles																										
Blainville's horned lizard (San Diego horned lizard)					✓																					
Orange-throated whiptail					✓																	✓				✓
Birds																										
Burrowing owl										✓									✓	✓						
California rufous-crowned sparrow				✓		✓		✓											✓			✓			✓	
Coastal (San Diego) cactus wren															✓					✓						
Coastal California gnatcatcher				✓		✓		✓	✓										✓	✓	✓	✓		✓	✓	✓
Cooper's hawk				✓	✓								✓							✓					✓	✓
Least Bell's vireo								✓																	✓	

	4S Ranch Ralphs	4S Ranch Specific Plan	Artesian Trail	Bernardo Lakes	Blossom Valley	East Otay Mesa	El Apajo	Golem	Greenhills Ranch	Hawano	High Meadow Ranch (Trevi Hills)	Hillside Meadows	International Industrial Park Upland	International Industrial Park Wetland	Lonestar	Maranatha Chapel	Oakmont	OMC	Otay Crossing Commerce Park (On-site)	Otay Crossings Off-Site (Lonestar Ridge)	Pinnacles at Santa Fe Valley	Quail Canyon	Sloane Canyon	Starwood (Crosby)	Sweetwater Vistas	Woodridge	
Northern harrier										✓								✓		✓		✓					
Invertebrates																											
Riverside fairy shrimp																				✓							
San Diego fairy shrimp																				✓							
Mammals																											
Southern mule deer				✓														✓	✓		✓	✓			✓		

TABLE 20. MSCP COVERED SPECIES SURVEYS AND GENERAL MONITORING FREQUENCY ON PRIVATE MITIGATION LANDS IN REPORTING YEAR

Private Preserve	Species Surveys ^a	Reporting Period Activities	General Monitoring ^b
4S Ranch Ralphs	None	None	Weekly
4S Ranch Specific Plan	None	None	Annually
Artesian Trail	Non-Complaint	Non-Compliant	N/A
Bernardo Lakes	Coastal California gnatcatcher (2 times a month during breeding season)	Six were observed on three different site visits between October and December.	Monthly
	Orcutt’s brodiaea (1 time a year during blooming period)	None were observed; however site visits were conducted outside of their blooming period (April-June). A focused survey will be conducted and reported in 2026.	
Blossom Valley	Coastal California gnatcatcher (every 3 years)	To be reported in 2026.	Monthly
East Otay Mesa	Coastal California gnatcatcher (every 3 years)	One gnatcatcher was observed onsite.	Monthly
El Apajo	Non-Complaint	Non-Compliant	N/A
Golem	Coastal California gnatcatcher (twice annually)	The presence/absence surveys occurred and one pair of gnatcatchers were detected.	Quarterly
Greenhills Ranch	Coastal California gnatcatcher (every 2 years)	To be reported in 2026.	Quarterly
	Coastal (San Diego) cactus wren (every 2 years)	To be reported in 2026.	
Hawano	Burrowing owl (3 times a year)	Leveraging the San Diego Zoo Wildlife Alliance’s continued burrowing owl (BUOW) population monitoring efforts at the site, the resource manager relied on SDZWA to provide population data, while the resource manager dedicated staff time and resources towards the extensive BUOW habitat management. A	Monthly

Private Preserve	Species Surveys ^a	Reporting Period Activities	General Monitoring ^b
		successful BUOW nesting season occurred, with six BUOW nests producing 44 eggs, hatching 35 BUOW chicks, and fledging 33 juveniles. This data will be presented in the SDZWA regional BUOW report documenting the conservation effort.	
High Meadow Ranch (Trevi Hills)	Lakeside ceanothus (every 5 years)	A temporary interruption in funding, which has since been resolved, occurred so monitoring will be conducted and reported in 2026 following the SDMMP Management Strategic Plan Monitoring Protocol for Rare Plant Occurrences.	Quarterly
Hillside Meadows	None	None	Quarterly
International Industrial Park Upland	Burrowing owl (annually)	The preserve was assessed for burrowing owl habitat. No suitable burrows or individuals were observed.	Monthly
International Industrial Park Wetland	None	None	Monthly
Lonestar	Burrowing owl (annually)	One burrowing owl was observed foraging on the preserve.	Quarterly
	Otay tarplant (annually)	No individuals were detected. Coordination with the California Department of Forestry and Fire Protection (Cal Fire) is occurring to potentially perform a controlled burn, followed by select chemical and mechanical control of weeds in the historic Otay tarplant area. Otay tarplant seeds previously collected from an adjacent preserve would be utilized to replant the historic Otay tarplant community.	
Maranatha Chapel	Non-Compliant	Non-Compliant	N/A
Oakmont	Coastal California gnatcatcher (every 5 years)	To be conducted in 2028.	Quarterly
	Variegated dudleya (every 5 years)	To be conducted in 2028.	
	Orange-throated whiptail (every 5 years)	To be conducted in 2028.	
	Other Sensitive Species (every 5 years)	To be conducted in 2028.	

Private Preserve	Species Surveys ^a	Reporting Period Activities	General Monitoring ^b
OMC	Burrowing owl (annually)	The preserve was assessed for burrowing owl habitat. No suitable burrows or individuals were observed.	Quarterly
Otay Crossing Commerce Park (On-site)	Burrowing owl (annually)	Two burrowing owls were observed.	Quarterly
	Otay tarplant (annually)	Otay tarplant was not detected and another survey will be carried out and reported in 2026.	
	San Diego/Riverside fairy shrimp (2 out of every 5 years)	No San Diego fairy shrimp or Riverside fairy shrimp were detected within the vernal pools; however, versatile fairy shrimp were detected.	
	Variegated dudleya (every 2 years)	To be conducted in 2026	
	San Diego barrel cactus (every 5 years)	The next survey for San Diego barrel cactus will be conducted in 2028.	
Otay Crossings Off-Site (Lonestar Ridge)	Burrowing owl (annually)	Three surveys were conducted by the San Diego Zoo Wildlife Alliance for the burrowing owl. Five nests at the artificial burrows were found to contain a total of 31 eggs, 12 of which hatched. 11 chicks survived to become fledglings. Up to eight individual adult burrowing owls were observed utilizing the site at one time.	Monthly
	Otay tarplant (annually)	Eight individuals were identified and mapped.	
	San Diego/Riverside fairy shrimp (annually)	All 11 vernal pools were observed to contain San Diego fairy shrimp, with two pools also containing Riverside fairy shrimp.	
	Variegated dudleya (every 2 years)	To be reported in 2026.	
	San Diego barrel cactus (every 5 years)	To be conducted in 2029.	
	San Diego button-celery (every 2 years)	To be reported in 2026.	
Pinnacles at Santa Fe Valley	Coastal California gnatcatcher (every 5 years)	To be conducted by 2028.	Quarterly
Quail Canyon	None	None	Monthly

Private Preserve	Species Surveys^a	Reporting Period Activities	General Monitoring^b
Sloane Canyon	None	None	Annually
Starwood (Crosby)	None	None	Monthly
Sweetwater Vistas	Coastal California gnatcatcher (every 5 years)	To be conducted in 2027.	Monthly
	Least Bell's vireo (every 5 years)	To be conducted in 2027.	
Woodridge	Coastal California Gnatcatcher (every 3 years)	To be conducted in 2026.	N/A

^a Species Surveys indicates the specific surveys and frequency at which they are required to occur for the RMP. Survey requirements vary and RMPs have species-specific survey requirements.

^b General Monitoring indicates how often the preserve managers visit the preserve for monitoring aside from species-specific survey requirements.

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7.3 Grant Funded Monitoring Projects

There were no grant-funded monitoring projects in the reporting year.

7.4 Preserve Monitoring and Research Partnerships

Nineteen monitoring and research partnerships occurred in 2025 on County Preserves through the County's ROE permit process (**Table 21**, *Preserve Monitoring and Research Partnerships Projects, Monitoring Targets, and Locations in Reporting Year*). ROEs were requested by federal and state agencies, universities, the San Diego Zoo, the San Diego Natural History Museum, environmental organizations, a wildlife rehabilitation organization, a community science organization, and a public utility company. In 2025, as in years prior, the County continued to issue ROEs free of charge; however, due to the extensive review these permits require to ensure compliance with the MSCP and County rules, a fee to recover a portion of the processing cost may be implemented for ROEs in the future. ROEs issued in 2025 included studies focused on MSCP covered species such as arroyo toad, southwestern pond turtle, coastal California gnatcatcher, least Bell's vireo, coastal cactus wren, southwestern willow flycatcher, tricolored blackbird, American badger, mountain lion, Orcutt's brodiaea, Encinitas baccharis, and willowy monardella, as well as other species inside and outside of the MSCP Subarea Plan Area. Only those studies that include properties within the MSCP Subarea Plan Area are summarized below. Reports and research findings obtained through the ROE permit process are shared with the County to further supplement monitoring efforts and to inform management recommendations.

TABLE 21. PRESERVE MONITORING AND RESEARCH PARTNERSHIPS PROJECTS, MONITORING TARGETS, AND LOCATIONS IN REPORTING YEAR

Project Name	Project Lead	Monitoring/ Research Target	County Preserves Within MSCP Subarea Plan Area	County Parks and Preserves Outside MSCP Subarea Plan Area
1. Native Plant Seed Bank	San Diego Zoo	Rare, native plants	<ul style="list-style-type: none"> • Boulder Oaks Preserve • Del Dios Highlands Preserve • El Capitan Preserve • Louis A. Stelzer Park • Oakoasis Preserve • Ramona Grasslands Preserve • Sycamore Canyon and Goodan Ranch Preserve • Tijuana River Valley Regional Park 	<ul style="list-style-type: none"> • Mt. Olympus Preserve • San Elijo Lagoon Ecological Reserve • Santa Margarita Preserve • Santa Ysabel Preserve • Volcan Mountain Wilderness Preserve • Wilderness Gardens Preserve • William Heise Park
2. Spider Diversity Study	San Diego Natural History Museum	Terrestrial arthropod diversity, specifically Arachnida	<ul style="list-style-type: none"> • Oakoasis Preserve 	<ul style="list-style-type: none"> • None
3. Bumble Bee Study	Xerces Society	Bumble bees	<ul style="list-style-type: none"> • Dictionary Hill Preserve • Stoneridge Preserve • Dos Picos Park • Louis A. Stelzer Park 	<ul style="list-style-type: none"> • Agua Caliente Park • San Dieguito Park
4. Rare Plant Monitoring and Discovery Surveys	AECOM	Rare plants included in the San Diego Management and Monitoring Program's Management Strategic Plan for Western San Diego County	<ul style="list-style-type: none"> • Tijuana River Valley Regional Park • Ramona Grasslands Preserve • Boulder Oaks Preserve • Furby-North Preserve • Otay Valley Regional Park • Sycamore Canyon and Goodan Ranch Preserve 	<ul style="list-style-type: none"> • Simon Preserve • Escondido Creek Preserve • Mt. Olympus Preserve

Project Name	Project Lead	Monitoring/ Research Target	County Preserves Within MSCP Subarea Plan Area	County Parks and Preserves Outside MSCP Subarea Plan Area
5. Release of Rehabilitated Wildlife	San Diego Humane Society/ Project Wildlife	Rehabilitated native wildlife	<ul style="list-style-type: none"> • Barnett Ranch Preserve • Boulder Oaks Preserve • Del Dios Highlands Preserve • Dictionary Hill Preserve • Dos Picos Park • El Capitan Preserve • El Monte Park • Flinn Springs Park • Holly Oaks County Park • Lakeside Linkage Preserve • Lawrence & Barbara Daley Preserve • Los Peñasquitos Canyon Preserve • Louis A. Seltzer Park • Luelf Pond Preserve • Lusardi Creek Preserve • Oakoasis Preserve • Otay Lakes Park • Ramona Grasslands Preserve • Sycamore Canyon and Goodan Ranch Preserve • Tijuana River Valley Regional Park 	<ul style="list-style-type: none"> • Agua Caliente Park • Hellhole Canyon Preserve • In-Ko-Pah Park • Lake Morena Park • Mt. Gower Preserve • Palomar Mountain Park • Potrero Park • San Elijo Lagoon Ecological Reserve • Santa Margarita Preserve • Santa Ysabel Preserve • Simon Preserve • Volcan Mountain Wilderness Preserve • Wilderness Gardens Preserve • William Heise Park
6. Coastal California Gnatcatcher Surveys	California State Parks	Coastal California gnatcatcher	<ul style="list-style-type: none"> • Tijuana River Valley Regional Park (Goat Canyon and eastern Spooner's Mesa) 	<ul style="list-style-type: none"> • None
7. Feral Pig Eradication and Control Project and Monitoring	San Diego State University and CDFW	Feral pigs	<ul style="list-style-type: none"> • Boulder Oaks Preserve • Ramona Grasslands Preserve 	<ul style="list-style-type: none"> • Santa Ysabel Preserve • William Heise Park • Lake Morena Park • Volcan Mountain Wilderness Preserve

Project Name	Project Lead	Monitoring/ Research Target	County Preserves Within MSCP Subarea Plan Area	County Parks and Preserves Outside MSCP Subarea Plan Area
				<ul style="list-style-type: none"> • Mt. Gower Preserve
8. Mushroom Identification Excursions	San Diego Mycological Society	Various mushroom species	<ul style="list-style-type: none"> • Dos Picos Park • Flinn Springs Park • Los Peñasquitos Canyon Preserve • Louis A. Stelzer Park • Oakoasis Preserve 	<ul style="list-style-type: none"> • Felicita Park • Potrero Park
9. Engelmann Oak Monitoring and Maintenance	Global Conservation Consortium for Oak, San Diego Botanic Garden	Engelmann oaks	<ul style="list-style-type: none"> • Boulder Oaks Preserve 	<ul style="list-style-type: none"> • None
10. Tijuana River Valley Contamination Study	San Diego State University	Chemical and microbiological contamination	<ul style="list-style-type: none"> • Tijuana River Valley Regional Park 	<ul style="list-style-type: none"> • None
11. Wildlife Movement Ecology Study	University of San Diego	Various wildlife species	<ul style="list-style-type: none"> • Los Peñasquitos Canyon Preserve 	<ul style="list-style-type: none"> • None
12. Biological Monitoring, Surveys, and Assessments for the SDMMP Management Strategic Plan	San Diego Association of Governments (SANDAG)	Arroyo toad, western spadefoot, southwestern pond turtle, American badger, mountain lion, tricolored blackbird, least Bell's vireo, cactus wren, coastal California gnatcatcher, southwestern willow flycatcher, Hermes copper butterfly, Harbinson's dun skipper, multiple pollinators, and rare plant species	<ul style="list-style-type: none"> • Barnett Ranch Preserve • Boulder Oaks Preserve • Cactus Park • Christopher Hill Preserve • Damon Lane Park • Del Dios Highlands Preserve • Dictionary Hill Preserve • Dos Picos Park • El Capitan Preserve • El Monte Park • Flinn Springs Park • Furby-North Preserve • Historic Flume Trail • Iron Mountain Preserve • Lakeside Linkage Preserve • Lawrence and Barbara Daley Preserve 	<ul style="list-style-type: none"> • Blue Sky Ranch Ecological Reserve • Bottle Peak Preserve • Diamond Trail • Escondido Creek Preserve • Guajome Regional Park • William Heise Park • Hellhole Canyon Preserve • Hidden Meadows Preserve • In-Ko-Pah Park • Keys Creek Preserve • Knollwood Preserve • Lake Morena Park • Lakeside Sports Park • Live Oak Park • Mason Preserve • Mt. Gower Preserve • Mt. Olympus Preserve • Mountain Meadow Preserve

Project Name	Project Lead	Monitoring/ Research Target	County Preserves Within MSCP Subarea Plan Area	County Parks and Preserves Outside MSCP Subarea Plan Area
			<ul style="list-style-type: none"> • Los Peñasquitos Canyon Preserve • Louis A. Stelzer Park • Lusardi Creek Preserve • Oakoasis Preserve • Old Ironsides County Park • Otay Lakes Park • Otay Ranch Preserve • Otay Valley Regional Park • Peutz Valley Preserve • Ramona Grasslands Preserve • Santa Fe Valley Preserve • Stoneridge Preserve • Sweetwater Regional Park • Sycamore Canyon and Goodan Ranch Preserve • Tijuana River Valley Regional Park 	<ul style="list-style-type: none"> • Pala Mesa Mitigation Property • Palomar Park • Paradise Mountain Preserve • Pine Valley Park • Potrero Park • Sage Hill Preserve • San Dieguito Park • San Elijo Lagoon Ecological Reserve • San Luis Rey River Park • Santa Margarita Preserve • Santa Ysabel Preserve • Simon Preserve • Star Ranch Preserve • Volcan Mountain Wilderness Preserve • Wilderness Gardens Preserve
13. Invasive Dung Beetle Study	University of California, San Diego	Dung beetles	<ul style="list-style-type: none"> • Ramona Grasslands Preserve 	<ul style="list-style-type: none"> • Santa Ysabel West Preserve
14. Tricolored Blackbird Surveys	San Diego Natural History Museum	Tricolored blackbird	<ul style="list-style-type: none"> • Boulder Oaks Preserve • Ramona Grasslands Preserve • Sweetwater Regional Park • Tijuana River Valley Regional Park 	<ul style="list-style-type: none"> • Pine Valley Park • Santa Ysabel Preserve • Star Ranch Preserve • Wilderness Gardens Preserve
15. Orcutt's Brodiaea Population Genetics Study	Mulligan Biological Consulting	Orcutt's brodiaea	<ul style="list-style-type: none"> • Boulder Oaks Preserve 	<ul style="list-style-type: none"> • Simon Preserve • Mt. Gower Preserve • Mt. Olympus Preserve • Escondido Creek Preserve
16. Groundwater Level	California Department of	Groundwater	<ul style="list-style-type: none"> • Ramona Grasslands 	<ul style="list-style-type: none"> • None

Project Name	Project Lead	Monitoring/ Research Target	County Preserves Within MSCP Subarea Plan Area	County Parks and Preserves Outside MSCP Subarea Plan Area
Monitoring	Water Resources		Preserve	
17. San Diego County Plant Atlas	San Diego Natural History Museum	Various	<ul style="list-style-type: none"> • Barnett Ranch Preserve • Boulder Oaks Preserve • Del Dios Highlands Preserve • Dos Picos Park • El Capitan Preserve • El Monte Park • Flinn Springs Park • Lakeside Linkage Preserve • Los Peñasquitos Canyon Preserve • Louis A. Stelzer Park • Luelf Pond Preserve • Oakoasis Preserve • Otay Lakes Park • Otay Valley Regional Park • Ramona Grasslands Preserve • Sweetwater Summit Regional Park • Sycamore Canyon and Goodan Ranch Preserve • Tijuana River Valley Regional Park 	<ul style="list-style-type: none"> • Agua Caliente Park • Escondido Creek Preserve • Felicita Park • Rancho Guajome Adobe Park • Guajome Regional Park • Hellhole Canyon Preserve • Lake Morena Park • Lindo Lake Preserve • Live Oak Park • Mt. Gower Preserve • Mountain Meadow 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 • William Heise Park
18. Encinitas Baccharis Survey	SDGE	Encinitas baccharis	<ul style="list-style-type: none"> • Del Dios Highlands Preserve 	<ul style="list-style-type: none"> • None
19. Willowy Monardella Monitoring	California Native Plant Society	Willowy monardella	<ul style="list-style-type: none"> • Sycamore Canyon and Goodan Ranch Preserve 	<ul style="list-style-type: none"> • None

Source: County of San Diego Department of Parks and Recreation

Native Plant Seed Bank

Project Lead: Zoological Society of San Diego, dba San Diego Zoo Global

Project Timeline: May 2021 – May 2026

Target Species or Habitat: Rare, native plants

County Preserves within MSCP Subarea Plan Area: Boulder Oaks Preserve, Del Dios Highlands Preserve, El Capitan Preserve, Louis A. Stelzer Park, Oakoasis Preserve, Ramona Grasslands Preserve, Sycamore Canyon and Goodan Ranch Preserve, Tijuana River Valley Regional Park

County Preserves Outside MSCP Subarea Plan Area: Mt. Olympus Preserve, San Elijo Lagoon Ecological Reserve, Santa Margarita Preserve, Santa Ysabel Preserve, Volcan Mountain Wilderness Preserve, Wilderness Gardens Preserve, William Heise Park

The Native Plant Seed Bank project is spearheaded by the San Diego Zoo with a goal to conserve San Diego County's rare, threatened, and endangered plants as recognized by the California Native Plant Society's rare plant inventory. The San Diego Zoo is a regional partner in the California Plant Rescue project, which is a statewide effort to conserve the most at-risk plant species in California. Surveys are conducted to locate sensitive plant species. Once identified, San Diego Zoo staff collect an herbarium voucher, if available, and will monitor the population until it senesces. After senescence, ripe seeds are collected from the documented populations for long term seed banking. Collected seeds are processed, counted, and weighed prior to storage and 40% of the collection is sent to the USDA-ARS National Laboratory for Genetic Resources Preservation in Fort Collins, Colorado for backup storage. Seeds are tested for viability and herbarium vouchers are deposited at the San Diego Natural History Museum. Seed banks are maintained for long-term conservation and to provide sufficient plant material for the establishment of new populations or to augment existing populations in southern California. MSCP covered species that have been conserved by the Native Plant Seed Bank include Orcutt's brodiaea, Lakeside lilac, and felt-leaved monardella, among others. Surveys were conducted within 15 County parks and preserves to locate sensitive plant species between 2021 and 2025 and seed banking efforts are ongoing.

Spider Diversity Study

Project Lead: San Diego Natural History Museum

Project Timeline: June 2023 – June 2025

Target Species or Habitat: Terrestrial arthropod diversity, particularly class Arachnida.

County Preserves within MSCP Subarea Plan Area: Oakoasis Preserve

County Preserves Outside MSCP Subarea Plan Area: None

The spider diversity study examined terrestrial arthropod diversity within Oakoasis Preserve, focusing on members of the class Arachnida. Twelve surveys took place over the course of the project, during which the San Diego Natural History Museum (SDNHM) staff recorded visual observations, took photographs, and collected specimens for identification. Surveys were conducted by inspecting leaf litter, overturning rocks and wood debris, and occasionally flooding burrows with small amounts of water. Surveys were conducted primarily along and adjacent to established trails, although surveyors were able to travel off-trail to investigate rock piles and plant communities that would be otherwise inaccessible. All overturned rocks, wood, and other debris were returned to original conditions after the inspection was complete. In order to sample arthropod diversity in all vegetation communities present within Oakoasis Preserve, seven study locations were proposed based on surrounding plant communities. In addition to specimens

collected for identification, four voucher specimens could also be collected, representing two males and two females of a known species to allow for morphological comparison between individuals of the same sex. Collected specimens were submitted to the SDNHM collection to serve as vouchers for the diversity study. Data retrieved during this study will be used to update the Checklist of Spiders of San Diego County, which is maintained by the SDNHM. The spider diversity study at Oakoasis Preserve was completed in 2025.

Bumble Bee Study

Project Lead: Xerces Society

Project Timeline: May 2023 – May 2025

Target Species or Habitat: Bumble Bees

County Preserves within MSCP Subarea Plan Area: Dictionary Hill Preserve, Stoneridge Preserve, Dos Picos Park, Louis A. Stelzer Park

County Preserves Outside MSCP Subarea Plan Area: Agua Caliente Park, San Dieguito Park

The Bumble Bee Study project was initiated in 2023 to collect data for inclusion in the Bumble Bee Atlas, a state-wide community science partnership between the Xerces Society for Invertebrate Conservation and CDFW. Volunteers collect, photograph, and release bumble bees following Xerces Society survey methodology. Photographs of bumble bees are then submitted for identification, along with ecological data including plant species the bees were collected on, vegetation communities present within the survey area, and weather conditions. Data collected during these surveys is compiled into the Bumble Bee Atlas, a community science project that collects data from volunteers surveying in all regions of the state, with the aim of providing updated range and population estimates of bumble bee species throughout California. The Xerces Society was issued a Scientific Collecting Permit authorizing take or possession of Crotch's bumble bee, Franklin's bumble bee, western bumble bee, and/or Suckley's cuckoo bumble bee for scientific, educational, or propagation purposes. The Bumble Bee Study project was completed, and no data was collected in 2025 because Permittee was unable to provide insurance coverage to be able to collect data on DPR properties.

Rare Plant Monitoring and Discovery Surveys

Project Lead: AECOM

Project Timeline: May 2023 – May 2025

Target Species or Habitat: Various sensitive plant species

County Preserves within MSCP Subarea Plan Area: Tijuana River Valley Regional Park, Ramona Grasslands Preserve, Boulder Oaks Preserve, Sycamore Canyon and Goodan Ranch Preserve, Otay Valley Regional Park, Furby-North County Preserve

County Preserves Outside MSCP Subarea Plan Area: Escondido Creek Preserve, Simon Preserve, Mt. Olympus Preserve

The Rare Plant Surveys project performs monitoring (Inspect and Manage) and discovery surveys of rare plants included in the SDMMP Management Strategic Plan for Western San Diego County. Survey results assist the County regarding rare plant populations on County property. A total of nine County preserves are included in this ROE permit. Results from these surveys are still being analyzed.

Release of Rehabilitated Wildlife

Project Lead: San Diego Humane Society / Project Wildlife

Project Timeline: March 2023 – December 2025

Target Species or Habitat: Rehabilitated native wildlife

County Preserves within MSCP Subarea Plan Area: Barnett Ranch Preserve, Boulder Oaks Preserve, Del Dios Highlands Preserve, Dictionary Hill Preserve, Dos Picos Park, El Capitan Preserve, El Monte Park, Flinn Springs Park, Holly Oaks County Park, Lakeside Linkage Preserve, Lawrence & Barbara Daley Preserve, Los Peñasquitos Canyon Preserve, Louis A. Seltzer Park, Luelf Pond Preserve, Lusardi Creek Preserve, Oakoasis Preserve, Otay Lakes Park, Ramona Grasslands Preserve, Sycamore Canyon and Goodan Ranch Preserve, Tijuana River Valley Regional Park

County Preserves Outside MSCP Subarea Plan Area: Agua Caliente Park, Hellhole Canyon Preserve, In-Ko-Pah County Park, Lake Morena Park, Mt. Gower Preserve, Palomar Mountain Park, Potrero Park, San Elijo Lagoon Ecological Reserve, Santa Margarita Preserve, Santa Ysabel Preserve, Simon Preserve, Volcan Mt. Wilderness Preserve, Wilderness Gardens Preserve, William Heise Park

The Release of Rehabilitated Wildlife project was initiated in 2023 to facilitate the release of rehabilitated wildlife into native habitats within County parks and preserves. Project Wildlife, an affiliate organization of the San Diego Humane Society (SDHS), rehabilitates injured, sick, and displaced animals recovered by members of the public within San Diego County. Under the terms of SDHS partnership with the County, SDHS staff identified potential release locations based on the species' native habitats. SDHS coordinated the release of rehabilitated wildlife with DPR to determine if the species, number of animals to be released, and release date were suitable for the proposed release location. DPR was able to deny release requests or select alternate dates for release. The San Elijo Ecological Reserve, unlike other parks and preserves participating in this project, could only serve as a release location if the rehabilitated wildlife had been originally recovered from the reserve. In 2025, 49 rehabilitated individuals of nine common animal species, including coyote, northern raccoon, Virginia opossum, desert cottontail, California myotis, rock pigeon, white-throated swift, lesser nighthawk, and great horned owl, were released into the following three County Preserves within the MSCP Subarea Plan: Boulder Oaks Preserve, Mission Trails Regional Park, and Ramona Grasslands Preserve.

Coastal California Gnatcatcher Surveys

Project Lead: California State Parks

Project Timeline: February 2023 – August 2025

Target Species or Habitat: Coastal California Gnatcatcher

County Preserves within MSCP Subarea Plan Area: Tijuana River Valley Regional Park

County Preserves Outside MSCP Subarea Plan Area: None

This project implements presence/absence surveys for coastal California gnatcatcher in the Goat Canyon area and the eastern portion of Spooner's Mesa in Tijuana River Valley Regional Park. Surveys are conducted to fulfill environmental compliance requirements for the annual maintenance of the Goat Canyon sediment basins. The primary goal is to document presence/absence of coastal California gnatcatcher; however, if this species is detected during surveys, attempts are made to document breeding status, including nest locations and nest. In 2025, fourteen coastal California gnatcatcher pairs were detected within the survey area,

including two pairs in the eastern portion of Spooner's Mesa in Tijuana River Valley Regional Park.

Feral Pig Eradication and Control Project and Monitoring

Project Lead: San Diego State University and CDFW

Project Timeline: September 2023 – September 2027

Target Species or Habitat: All habitats and species

County Parks and Preserves Within the MSCP Subarea Plan Area: Boulder Oaks Preserve and Ramona Grasslands Preserve

County Parks and Preserve Outside the MSCP Subarea Plan Area: Santa Ysabel Preserve, William Heise Park, Lake Morena Park, Volcan Mountain Wilderness Preserve, Mt. Gower Preserve

The *Feral Pig Eradication and Control Project and Monitoring* encompasses a multi-agency effort involving the County, City of San Diego, CDFW, USFWS, United States Forest Service, BLM, United States Department of Agriculture-Wildlife Services, California Department of Parks and Recreation, Vista Irrigation District, and Helix Water District to eradicate and prevent future occurrences of feral pigs in San Diego County. Feral pigs are a non-native species in San Diego County and are the result of escaped domestic stock, introduced European wild boar, or a hybrid of both and are considered an invasive species in California. Feral pigs pose a serious threat to native ecosystems due to their foraging behavior called rooting, which involves physically disturbing soils and uprooting plants to search for food which can destroy stands of native vegetation. In 2015, the implementation phase of the project was initiated, and eradication efforts began. Active trapping and removal efforts ended in Summer 2020. In Fall 2020, CDFW in partnership with San Diego State University obtained a ROE to initiate the monitoring phase of the project to determine the success of eradication efforts. Wildlife cameras and visual surveys are utilized to monitor for feral pig occurrences in places where they have previously been known to occur. Since the monitoring phase was initiated, no feral pigs have been sighted on County property. Monitoring continued through 2025 and will continue until September 2027.

Mushroom Identification Excursions

Project Lead: San Diego Mycological Society

Project Timeline: March 2023 – May 2027

Target Species or Habitat: Varied species of mushrooms

County Preserves within MSCP Subarea Plan Area: Dos Picos Preserve, Flinn Springs Park, Los Peñasquitos Canyon Preserve, Louis A. Stelzer Park, Oakoasis Preserve

County Preserves Outside MSCP Subarea Plan Area: Felicita Park, Potrero Park

This ROE permit allowed members of the San Diego Mycological Society (SDMS) to search for mushrooms in the noted preserves and gather specimens for identification. Samples of mushrooms are collected by hand and members of SDMS do not disturb the soil or take all specimens of any type of mushroom. Samples of mushrooms are brought to a central location, usually a picnic table in the property, and the samples are identified and discussed. After discussion of mushroom samples is complete, the samples are returned to the field. Some of the mushroom specimens gathered during excursions are vouchered in the herbarium at the SDNHM with the goal of cataloging mushrooms in San Diego County. All off-trail access avoids and minimizes impacts to flora and fauna to the maximum extent possible. The permit was

initially issued in March 2023 and was extended until May 2027. In 2025, survey efforts under this permit occurred at Flinn Springs Park, Louis A. Stelzer Park, and Oakoasis Preserve, as well as other County preserves outside the MSCP Subarea Plan Area.

Engelmann Oak Monitoring and Maintenance

Project Lead: Global Conservation Consortium for Oak, San Diego Botanic Garden

Project Timeline: November 2024 – November 2026

Target Species or Habitat: Engelmann oak

County Preserves within MSCP Subarea Plan Area: Boulder Oaks Preserve

County Preserves Outside MSCP Subarea Plan Area: None

This ROE permit allows the Global Conservation Consortium for Oak and the San Diego Botanic Garden to monitor and maintain 22 Engelmann oak saplings that have been transplanted to the Boulder Oaks County Preserve. Specifically, survival and growth data will be collected on a quarterly basis by San Diego Botanic Garden staff as part of the Global Conservation Consortium for Oak’s metacollection partnership program. A core component of the Global Conservation Consortium for Oak is coordinating a strategic, scientifically informed network of living collections of threatened oak species across multiple sites, known as a “metacollection,” as well as supporting and building capacity for organizations conserving threatened species in the wild. The planting of Engelmann oak saplings at Boulder Oaks Preserve is considered “semi-experimental” as seedlings were given an initial watering on the day of the planting, but were left to rely on winter rains as they establish to test the suitability of the site for this species. Unfortunately, none of the planted saplings survived through 2025 due to extensive damage from herbivory and there are currently no additional planting efforts planned.

Tijuana River Valley Contamination Study

Project Lead: San Diego State University

Project Timeline: December 2024 – December 2026

Target Species or Habitat: All habitats

County Preserves within MSCP Subarea Plan Area: Tijuana River Valley Regional Park

County Preserves Outside MSCP Subarea Plan Area: None

The Tijuana River Valley contamination study consists of the collection of water, air, and sediment samples within Tijuana River Valley Regional Park to document potential chemical and microbiological contamination in the Tijuana River Valley. This study builds upon previous studies documenting complex chemical and microbiological contamination in the Tijuana River Valley and investigates water to air transfer of pollutants impacting environmental justice in the Imperial Beach and San Ysidro communities. Microorganisms and chemicals will be sampled at six locations throughout the Tijuana River and estuary over a two-year period. Specifically, San Diego State University staff will collect and analyze paired air, water, and sediment samples in the Tijuana River and estuary. Staff will also collect and analyze outdoor air samples from sites operated by their community partner, Casa Familiar. This study will address critical gaps in understanding and monitoring of contaminants and their impacts on community health in Imperial Beach, San Ysidro, and other South Bay communities.

Wildlife Movement Ecology Study

Project Lead: University of San Diego

Project Timeline: August 2024 – December 2025

Target Species or Habitat: Various wildlife species

County Preserves within MSCP Subarea Plan Area: Los Peñasquitos Canyon Preserve

County Preserves Outside MSCP Subarea Plan Area: None

This ROE permit allows the University of San Diego to conduct a research project on movement ecology of local wildlife. This project is carried out as part of a University of San Diego course in Animal Behavioral Ecology, which course examines the evolution of animal behavior in an ecological context and includes an inquiry-based lab. The lab introduces methods commonly used in behavioral ecology and allows students to test their own hypotheses within the framework of prescribed field and laboratory exercises. For this project, the course instructor and the students set out camera traps in areas that indicate the presence of wildlife. Cameras are attached to trees near Los Peñasquitos Creek using straps. The traps are retrieved after two months, and have shown a wide variety of species, including bobcats, mule deer, pack rats, rabbits, coyotes, and various bird species, demonstrating the ecological value of the Preserve as a wildlife corridor. This study was repeated over multiple semesters with different student cohorts.

Biological Monitoring, Surveys, and Assessments for the SDMMMP Management Strategic Plan

Project Lead: San Diego Association of Governments (SANDAG)

Project Timeline: May 2024 – May 2026

Target Species or Habitat: Arroyo toad, western spadefoot toad, southwestern pond turtle, American badger, mountain lion, tricolored blackbird, Hermes copper butterfly, Harbinson's dun skipper, least Bell's vireo, cactus wren, coastal California gnatcatcher, southwestern willow flycatcher, vegetation types and rare plants

County Preserves within MSCP Subarea Plan Area: Barnett Ranch Preserve, Boulder Oaks Preserve, Cactus Park, Christopher Hill Preserve, Damon Lane Park, Del Dios Highlands Preserve, Dictionary Hill Preserve, Dos Picos Park, El Capital Preserve, El Monte Park, Flinn Springs Park, Furby-North Preserve, Historic Flume Trail, Iron Mountain Preserve, Lakeside Linkage Preserve, Lawrence and Barbara Daley Preserve, Los Peñasquitos Canyon Preserve, Louis A. Stelzer Park, Lusardi Creek Preserve, Oakoasis Preserve, Old Ironsides County Park, Otay Lakes Park, Otay Ranch Preserve, Otay Valley Regional Park, Peutz Valley Preserve, Ramona Grasslands Preserve, Santa Fe Valley Preserve, Stoneridge Preserve, Sweetwater Regional Park, Sycamore Canyon and Goodan Ranch Preserve, and Tijuana River Valley Regional Park

County Preserves Outside MSCP Subarea Plan Area: Blue Sky Ranch Ecological Preserve, Bottle Peak Preserve, Diamond Trail, Escondido Creek Preserve, Guajome Regional Park, William Heise Park, Hellhole Canyon Preserve, Hidden Meadows Preserve, In-Ko-Pah Park, Keys Creek Preserve, Knollwood Preserve, Lake Morena Regional Park, Lakeside Sports Park, Live Oak Park, Mason Preserve, Mt. Gower Preserve, Mt. Olympus Preserve, Mountain Meadow Preserve, Pala Mesa Mitigation Property, Palomar Park, Paradise Mountain Preserve, Pine Valley Park, Potrero Park, Sage Hill Preserve, San Dieguito Regional Park, San Elijo Lagoon Ecological Reserve, San Luis Rey River Park, Santa Margarita Preserve, Santa Ysabel

Preserve, Simon Preserve, Star Ranch Preserve, Volcan Mountain Wilderness Preserve, Wilderness Gardens Preserve

This project implements biological monitoring, surveys, and assessments in support of SDMMMP's Management Strategic Plan. As part of this effort, SANDAG monitors a range of herptile, bird, mammal, insect, and plant species. Data generated through these monitoring activities support regional conservation strategies, management decision-making, and funding priorities for species and vegetation communities on conserved lands throughout western San Diego County. A total of 31 County Preserves within the MSCP Subarea Plan Area and 33 County Preserves outside of the MSCP Subarea Plan Area are included under this ROE permit. Monitoring conducted in 2025 included surveys for coastal cactus wren, coastal California gnatcatcher, and least Bell's vireo. Coastal cactus wrens were not detected at Cactus Park or Furby-North Preserve; however, detections occurred at two plots at Lakeside Linkage Preserve, five plots at Otay Ranch Preserve, and three plots at Sweetwater Regional Park. During coastal cactus wren surveys, incidental observations of coastal California gnatcatcher individuals were documented at Cactus Park, Furby-North Preserve, Otay Ranch Preserve, Otay Valley Regional Park, and Sweetwater Regional Park. Incidental observations of least Bell's vireo individuals were also documented at Otay Ranch Preserve and Otay Valley Regional Park. Results for other species surveyed under this ROE in 2025 are pending completion of survey reports.

Invasive Dung Beetle Study

Project Lead: University of California, San Diego

Project Timeline: October 2024 – June 2025

Target Species or Habitat: Dung beetles

County Preserves within MSCP Subarea Plan Area: Ramona Grasslands Preserve

County Preserves Outside MSCP Subarea Plan Area: Santa Ysabel West Preserve

This ROE permit allowed collection of invasive dung beetles (*Onthophagus* sp.) at the Ramona Grasslands and Santa Ysabel West Preserves for lab rearing to study the development, ecology, and evolution of dung beetles, with a focus on the bull-headed beetle. Samples collected for this project will be used to study a wide range of different aspects of dung beetle biology. This includes the function of genes involved in insulin signaling, how the microbiome of dung beetles affects performance and ecology, and how veterinary antibiotics given to cattle affect the survival and ecosystem function of dung beetles. At Ramona Grasslands Preserve, sampling of dung pads occurred on and adjacent to the eastern portions of the Meadow Loop and Wildflower Loop trails that pass through grassland habitat. At Santa Ysabel West Preserve, sampling of dung pads occurred within or adjacent to the Lower Creek Trail footprint. Sampling took place at both Preserves from October 2024 to June 2025.

Tricolored Blackbird Surveys

Project Lead: San Diego Natural History Museum

Project Timeline: April 2024 – August 2025

Target Species or Habitat: Tricolored Blackbird

County Preserves within MSCP Subarea Plan Area: Boulder Oaks Preserve, Ramona Grasslands Preserve, Sweetwater Regional Park, Tijuana River Valley Regional Park

County Preserves Outside MSCP Subarea Plan Area: Pine Valley Park, Santa Ysabel Preserve, Star Ranch Preserve, Wilderness Gardens Preserve

This project was implemented by the San Diego Natural History Museum's ornithology team to identify tricolored blackbird colony locations on conserved lands. Surveyors also conducted habitat assessments of survey areas, using GIS to map the location and extent of suitable habitat. No tricolored blackbird nesting colonies were observed at Boulder Oaks Preserve or Ramona Grasslands Preserve in 2025; however, both sites contained potentially suitable nesting and foraging habitat. In 2024 and 2025, one tricolored blackbird nesting colony was confirmed at Star Ranch Preserve, which is outside the MSCP Subarea Plan Area. Results from this monitoring effort will help inform the proposed management of conserved lands for tricolored blackbird.

Orcutt's Brodiaea Population Genetics Study

Project Lead: Mulligan Biological Consulting

Project Timeline: February 2024 – July 2025

Target Species or Habitat: Orcutt's brodiaea

County Preserves within MSCP Subarea Plan Area: Boulder Oaks Preserve

County Preserves Outside MSCP Subarea Plan Area: Simon Preserve, Mt. Gower Preserve, Mt. Olympus Preserve, Escondido Creek Preserve

This population genetics study includes targeted field surveys and genomic analysis to support adaptive management and recovery of Orcutt's brodiaea on County preserves. Genetic studies will be used to help clarify the phylogenetic relationships among Orcutt's brodiaea, thread-leaved brodiaea, and other Brodiaea taxa to determine the level of hybridization present, assess the genetics of natural and translocated populations, identify genetically compatible source populations for translocations, and help inform appropriate management strategies. Project activities include tissue sampling, voucher collection, and DNA extraction and analysis. Mulligan Biological Consulting visited known locations at five County Preserves and sampled up to 10 individual plants of Orcutt's brodiaea from each preserve. Genetic tissue sampling was non-destructive. Additionally, one voucher specimen was collected from each site visit. Vouchers were curated and databased at the San Diego Natural History Museum and made available for cytological, genetic, and morphological research. The field survey component of this project was completed in 2025, and genetic analyses are currently underway.

Groundwater Level Monitoring

Project Lead: California Department of Water Resources

Project Timeline: April 2024 – April 2026

Target Species or Habitat: Groundwater

County Preserves within MSCP Subarea Plan Area: Ramona Grasslands Preserve

County Preserves Outside MSCP Subarea Plan Area: None

This groundwater level monitoring project is being implemented as part of the California Department of Water Resources' Groundwater Monitoring Enhancement Project. A pressure transducer will be installed and maintained in an existing onsite well at Ramona Grasslands Preserve to monitor groundwater levels. Data collected for this project will help improve understanding of local groundwater conditions, track groundwater levels during droughts, and provide information to guide management and resource planning.

San Diego County Plant Atlas Project

Project Lead: San Diego Natural History Museum

Project Timeline: June 2016 – December 2026

Target Species or Habitat: Various

County Preserves within MSCP Subarea Plan Area: Barnett Ranch Preserve, Boulder Oaks Preserve, Del Dios Highlands Preserve, Dos Picos Park, El Capitan Preserve, El Monte Park, Flinn Springs Park, Lakeside Linkage Preserve, Los Peñasquitos Canyon Preserve, Louis A. Stelzer Park, Luelf Pond Preserve, Oakoasis Preserve, Otay Lakes Park, Otay Valley Regional Park, Ramona Grasslands Preserve, Sweetwater Summit Regional Park, Sycamore Canyon and Goodan Ranch Preserve, Tijuana River Valley Regional Park

County Parks and Preserves Outside MSCP Subarea Plan Area: Agua Caliente Park, Escondido Creek Preserve, Felicita Park, Rancho Guajome Adobe Park, Guajome Regional Park, Hellhole Canyon Preserve, Lake Morena Park, Lindo Lake Park, Live Oak Park, Mt. Gower Preserve, Mountain Meadow 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

The *San Diego County Plant Atlas Project* documents and collects non-listed plants in 39 County Preserves. Throughout County parks and preserves, the San Diego Natural History Museum continued the Plant Atlas Project, which focuses on the documentation and collection of non-threatened plant specimens. Since the project began in 2005, over 3,600 specimens have been collected and added to the Plant Atlas for the County (L. Aerne-Hains pers comm). Trained volunteers continued their collection of museum-quality voucher plant specimens through 2025. Collected specimens are stored and cared for at the San Diego Herbarium and will eventually be included in the *San Diego County Plant Atlas Project* database.

Encinitas Baccharis Survey

Project Lead: San Diego Gas and Electric (SDG&E)

Project Timeline: September 2025 – October 2025

Target Species or Habitat: Encinitas baccharis

County Preserves within MSCP Subarea Plan Area: Del Dios Highlands Preserve

County Preserves Outside MSCP Subarea Plan Area: None

This ROE permit allowed for a survey of Encinitas baccharis on Del Dios Highlands Preserve in support of an SDGE infrastructure development project. On October 6, 2025, AECOM biologists conducted a focused survey within the preserve. The survey area included two sites proposed for work and the footpaths connecting them, encompassing a 15-foot-wide corridor along each path. Habitat in the survey area consisted of dense chaparral and rocky outcrops with high connectivity to surrounding open space. Biologists conducted a systematic visual survey using GPS mapping and ArcGIS to document the presence of Encinitas baccharis. No individuals were observed during the survey.

Willow Monardella Monitoring

Project Lead: California Native Plant Society

Project Timeline: May 2025 – May 2027

Target Species or Habitat: Willowy monardella

County Preserves within MSCP Subarea Plan Area: Sycamore Canyon and Goodan Ranch Preserve

County Preserves Outside MSCP Subarea Plan Area: None

This ROE permit allows the California Native Plant Society to monitor willowy monardella plant populations in Clark Canyon at Sycamore Canyon and Goodan Ranch Preserve to determine a population census and where willowy monardella seedlings occur. Monitoring aligns with the Preserve RMP's goals and objectives, which call for annual surveys and habitat assessments under SDMMP rare plant protocols to inform adaptive management and guide targeted invasive species control around willowy monardella populations. A total of 20 site visits will be conducted between May 2025 and May 2027.

CHAPTER 8

Financial Summary



Scenic view from hiking trail at El Capitan Preserve.

The County is responsible for funding acquisition, management, and monitoring of lands within the MSCP 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 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* EMP.

8.1 County Contribution

The Board of Supervisors allocates funding for ongoing management and monitoring efforts on 47,992 acres within the MSCP Subarea, draft North County MSCP, and proposed East County MSCP Plan Areas, approximately 28,872 acres of which were acquired since the MSCP Subarea Plan was adopted. Acreage discussed in this section is reported as Assessor's acreage and not GIS acreage to provide consistency of reporting acreage across all three MSCP Plan Areas. The acreage of preserve lands within the three MSCP Plan Areas include approximately:

- 8,832 acres acquired, managed, or funded within the MSCP Subarea Plan Area since 1998.

- 17,220 acres acquired and managed in the draft North County MSCP Plan Area since 2001.
- 2,820 acres acquired and managed in the proposed East County MSCP Plan Areas since 2001.
- Of the original, baseline 19,000 acres of preserve lands owned and managed by the County across the three MSCP Plan Areas prior to the MSCP Subarea Plan adoption, approximately 5,500 acres are in the MSCP Subarea Plan Area.

The County's Capital Improvement Needs Assessment for the next five years (Fiscal Year 2025-2026 to Fiscal Year 2029-2030) continues to plan for future investments in MSCP adopted South County Subarea, draft North County MSCP, and proposed East County MSCP Plan Areas. During Fiscal Year 2024-2025, over \$13.3 million was spent to successfully manage and maintain the County's MSCP preserve lands across the three MSCP Plan Areas with approximately \$6.5 million, \$5.4 million and \$1.4 million spent in the South County, draft North County, and future East County MSCP Plan Areas, respectively. Over 120 full time staff as well as additional part-time staff and 3,000 volunteers assisted with implementing management and monitoring activities on County Preserves in 2025. Stewardship activities include those tasks detailed in Chapter 6, *Preserve Management*. MSCP monitoring activities included those tasks detailed in Chapter 7, *Preserve Monitoring and Research*.

In the MSCP Subarea Plan, since 1998, the County has invested over \$56 million which leveraged over \$35 million of other funding to acquire 8,832 acres including 556 acres owned by County partners. In 2025, County acquired 1 acre of preserve land in the MSCP Subarea Plan funded by \$18,000 of County funds.

In the draft North County MSCP Plan Area, since 1998, the County has invested over \$88 million with over \$60 million of other funding to acquire 17,223 acres. During the reporting period, 623 acres were acquired in the draft North County MSCP Plan Area funded by over \$5.4 million of County funds.

In the proposed East County MSCP, since 1998, the County has invested approximately \$10 million which leveraged over \$1.3 million of other funding to acquire 2,817 acres Plan Area. No acquisitions occurred in the proposed East County MSCP Plan Area in 2025.

In addition to the 47,992 acres of County-owned preserve lands, the County and the City of Chula Vista jointly own and manage Otay Ranch Preserve.

8.2 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 Fiscal Year 2024-2025 was \$680,000 for preserve monitoring, operations, and maintenance. Preserve monitoring includes scheduled surveys for various species by parcel, focused rare plant surveys, biodiversity inventory surveys for newly acquired properties, updating vegetation mapping, land stewardship, meetings and on-going coordination, and reporting. Operations and maintenance include access control and invasive species treatment activities.

8.3 *TransNet* Funding

SANDAG is a regional transportation agency responsible for administering *TransNet* EMP 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. Since 2004, the \$850 million *TransNet* EMP has supported the acquisition or restoration of over 40 properties throughout the region, totaling more than 9,215 acres.²⁰ To date, SANDAG invested more than \$64.3million to manage and monitor the regional habitat preserve system.²¹ The County has received almost \$2.7 million of management and monitoring *TransNet* EMP funds from 2006 through 2025. In addition to grants, SANDAG funded the SDMMP lead regional monitoring efforts for the Management & Monitoring Strategic Plan, with some of the monitoring activities on County Preserves described in Section 7.4, *Preserve Monitoring and Research Partnerships*.

The County did not receive new grant funding from SANDAG in 2025; however, in 2025, continued management occurred at Ramona Grasslands and Boulder Oaks Preserves funded through SANDAG *TransNet* EMP grant funding discussed in Section 6.4, *Grant Funded Management Projects*. Bullfrog eradication efforts occurred at Ramona Grasslands Preserve to ensure southwestern pond turtle and arroyo toad persistence by enhancing occupied habitat and eradication efforts at Boulder Oaks enhance unoccupied habitat that have potential to support southwestern pond turtle and red-legged frog.

²⁰ <https://www.sandag.org/emp>

²¹ <https://www.sandag.org/projects-and-programs/environment/natural-resources/regional-habitat-conservation/transnet-environmental-mitigation-program/regional-management-and-monitoring>

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CHAPTER 9

Program Administration



Restored cactus patches at Lakeside Linkage Preserve.

9.1 MSCP COORDINATION EFFORTS

MSCP Subarea Plan IA Section 14.0 requires coordination with the 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 SANDAG Regional Habitat Conservation Taskforce, 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 and Steering Committee, 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 POM Executive/Policy Committees and Joint Staff, the Otay Valley Regional Park Executive Management Team/Policy Committees and Joint Staff, the Otay Valley Regional Park Citizens Advisory Committee, California HCP Coalition, National HCP Coalition, County of San Diego Sustainability Task Force, and the United States Border Management

Task Force Group. The various MSCP group meetings consist of members from USFWS, CDFW, 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. The DPR, PDS, DPW, and DGS MSCP staff meet regularly to discuss issues and exchange ideas.

9.2 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.

MSCP Amendments

The County finalizes amendments upon concurrence from the Wildlife Agencies and when amendment conditions are satisfied. In 2025, there was one proposed Minor Amendment to the MSCP Subarea Plan discussed with the Wildlife Agencies: RTX Truck Parking and Storage Facility Project.

Concurrence for the RTX Truck Parking and Storage Facility Project was granted by the Wildlife Agencies on March 6, 2025. The applicant has fulfilled their conditions of approval and the MSCP Subarea Plan map has been updated to reflect the Minor Amendment.

MSCP Map Update

The maps associated with the MSCP Subarea Plan were 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.

The MSCP Subarea Plan map was updated to reflect a Major Amendment granted by the Wildlife Agencies on March 1, 2023, designating 77 acres as hardline preserve. Additionally, the map was updated to reflect the 2025 Minor Amendment, designating 18 acres as take authorized.

CHAPTER 10

References

- County of San Diego Land Use and Environmental Group (LUEG)-GIS. 2023. SanBIOS. Occurrences points and polygons documenting species sightings from 1998 to present included for MSCP species occurrences.
- County of San Diego Department of Parks and Recreation. 2025. *Sycamore Canyon and Goodan Ranch Preserve Resource Management Plan*. January.
2018. *Draft Boulder Oaks Resource Management Plan*. March.
2013. *Stoneridge Preserve Resource Management Plan*. April.
2012. *Furby-North Property Resource Management Plan*. June.
2011. *Del Dios Highlands Preserve Resource Management Plan*. June.
2011. *Lawrence and Barbara Daley Preserve Resource Management Plan*. June.
2010. *Lakeside Linkage Preserve Resource Management Plan*. August.
2009. *Final El Capitan Preserve Resource Management Plan*. June.
2009. *El Monte County Park Resource Management Plan*. June.
2009. *Lusardi Creek Preserve Resource Management Plan*. June.
2009. *Oakoasis Preserve Resource Management Plan*. June.
2009. *Louis A. Stelzer County Park Resource Management Plan*. April.
2007. *Tijuana River Valley Regional Park Area Specific Management Objectives*. June.
2001. *Framework Management Plan*. Subarea Plan.
- County of San Diego and City of Chula Vista. 1993. *Otay Ranch Resource Management Plan*. October.
- DUDEK. 2026. *2025 Targeted Monitoring Program, Habitat Condition Report, San Luis Rey River Park and Bottle Peak, Lusardi Creek, Del Dios Highlands, Boulder Oaks, and Ramona Grasslands County Preserves*. Prepared for County of San Diego Department of Parks and Recreation. May.

Environmental Science Associates (ESA). 2026. *Targeted Monitoring Plan Resource-Specific Monitoring 2025 Annual Report*. Prepared for County of San Diego Department of Parks and Recreation. February.

2025a. *Habitat Condition Assessment for the El Capitan, Lakeside Linkage, Oakoasis, Sycamore Canyon/Goodan Ranch County Preserves, Louis A. Stelzer County Park, and El Monte County Park*. Prepared for County of San Diego. December.

2025b. *Targeted Monitoring Plan Resource-Specific Monitoring & Management 2024 Annual Report*. Prepared for County of San Diego Department of Parks and Recreation. February.

2025c. *Raptor Foraging Surveys & Nest Monitoring 2024-2025 Summary Report Ramona Grasslands, El Capitan, and Hellhole Canyon County Preserves*. Prepared for the County of San Diego Department of Parks and Recreation. November.

2025d. *Residual Dry Matter Monitoring for the Ramona Grasslands County Preserve*. Prepared for the County of San Diego Department of Parks and Recreation. December.

2024. *Targeted Monitoring Plan*. Prepared for Department of Parks and Recreation County of San Diego. August.

2023a. *Targeted Monitoring Plan Resource-Specific Monitoring 2022 Annual Report*. Prepared for County of San Diego Department of Parks and Recreation. January.

2023b. *Ramona Grasslands Preserve 2022-2023 Raptor Surveys Summary Report*. Prepared for the County of San Diego Department of Parks and Recreation. November.

2022. *Raptor Foraging Surveys & Nest Monitoring 2021-2022 Summary Report Ramona Grasslands Preserve & El Capitan Preserve for the County of San Diego Department of Parks and Recreation*. Prepared for Department of Parks and Recreation San Diego County. December.

2015. *Comprehensive Monitoring Plan*. Prepared for Department of Parks and Recreation County of San Diego. July.

Helix Environmental Planning. 2025. *Targeted Monitoring Plan Resource-Specific Management 2025 Annual Report*. December.

ICF International. 2018. *CMP Resource-Specific Monitoring 2017 Annual Report*. Final. Prepared for County of San Diego Department of Parks and Recreation. January.

Targeted Monitoring Plan Resource-Specific Monitoring 2018 Annual Report. Final. Prepared for County of San Diego Department of Parks and Recreation. October.

2017. *CMP Resource-Specific Monitoring 2016 Annual Report*. Final. Prepared for County of San Diego Department of Parks and Recreation. November.

Preston, K. 2019. *San Diego Rare Plant Management and Monitoring Program* [PowerPoint Presentation]. San Diego Management and Monitoring Program Meeting, October 23, 2019.

RECON Environmental, Inc. 2018. *Otay Ranch Phase 2 Resource Management Plan Update*. Prepared for County of San Diego and City of Chula Vista. September.

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APPENDIX A-1

County Tracked Acquisitions Since 1998

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Acquisition Year Area and Property Name	Acres Acquired					Cost		Funding		
	Owned By Local/Non Profits	Preserve/ Hardline Owned By County	MHPA & Chula Vista	Total Counted Toward MSCP Preserve (HabiTrak or Audit)	Total Counted toward MSCP Preserve (Manual)	Total Acreage of Acquisition	Land Cost	County Funds	Non County Funds	Funding Source
1998										
Tijuana River Valley, Arietta			39	39		39	\$ 478,000		\$ 478,000	State
Tijuana River Valley, Calmat Option I			164	164		164	\$ 1,225,272		\$ 1,225,272	State, City of San Diego
Tijuana River Valley, West/Dymott			40	40		40	\$ 410,000		\$ 410,000	State
1999										
Tijuana River Valley, Calmat Option Final			28	28		28	\$ 208,837		\$ 208,837	State
Lakeside, Arabo		9		9		9	\$ 160,000	\$ 80,000	\$ 80,000	County, State, Federal
Lakeside, Ham		48		48		48	\$ 800,000	\$ 400,000	\$ 400,000	County, State, Federal
Lakeside, HJMD		33		33		33	\$ 490,000	\$ 245,000	\$ 245,000	County, State, Federal
Lakeside, Yunis		13		13		13	\$ 270,000	\$ 135,000	\$ 135,000	County, State, Federal
Lusardi Creek, Rancho Vista		98		98		98	\$ 1,845,500	\$ 922,750	\$ 922,750	County, State, Federal
2000										
Lusardi Creek, Santa Fe Views		97		97		97	\$ 1,976,000	\$ 988,000	\$ 988,000	County, State
Hollenbeck Canyon, L&B Daley Pres, Ph I		290		290		290	\$ 1,000,000	\$ 1,000,000		County
Hollenbeck Canyon, L&B Daley Pres, Ph II		291		291		291	\$ 1,000,000	\$ 1,000,000		County
Lakeside, United Brokers		8		8		8	\$ 153,000	\$ 76,500	\$ 76,500	County, State

Acquisition Year Area and Property Name	Acres Acquired					Cost		Funding		
	Owned By Local/Non Profits	Preserve/ Hardline Owned By County	MHPA & Chula Vista	Total Counted Toward MSCP Preserve (HabiTrak or Audit)	Total Counted toward MSCP Preserve (Manual)	Total Acreage of Acquisition	Land Cost	County Funds	Non County Funds	Funding Source
Tijuana River Valley, Piper/Shelton			142	142		142	\$ 1,752,750	\$ 500,000	\$ 1,252,750	County, State
Wright's Field, Alpine School District	41	0		41		41	\$ 425,000	\$ 175,000	\$ 250,000	County, State, Federal
Wright's Field, Union Bank	40	0		40		40	\$ 356,633	\$ 148,196	\$ 208,437	County, State
2001										
Lakeside, Pavel		11		11		11	\$ 200,000	\$ 100,000	\$ 100,000	County, State
Otay River Valley Park, Malcolm			1	1		1	\$ 46,000		\$ 46,000	County, Developer
Otay River Valley Park, O Brien			8	8		8	\$ 205,500	\$ 102,776	\$ 102,724	Developer negotiated by County
2002										
Lakeside, Shuler		59		59		59	\$ 425,000		\$ 425,000	State, Federal
Tijuana River Valley, Hanson			74	74		74	\$ 1,387,500	\$ 1,387,500		County
Tijuana River Valley, Skibbe			10	10		10	\$ 485,000		\$ 485,000	State, City (Federal)
Wright's Field, Findel Ranch	29			29		29	\$ 500,000	\$ 500,000		County
Iron Mountain, Ramona Serena/ Barnett Ranch		665		665		665	\$ 4,440,000	\$ 2,440,000	\$ 2,000,000	County, State, Federal
2003										
Otay River Valley Park, Hirlinger- Baker		0	8	8		8	\$ 95,000	\$ 95,000		State, Federal
Iron Mountain, Berkeley Hering		59		59		59	\$ 457,200	\$ 62,200	\$ 395,000	County, State, Federal

Acquisition Year Area and Property Name	Acres Acquired					Cost		Funding		
	Owned By Local/Non Profits	Preserve/ Hardline Owned By County	MHPA & Chula Vista	Total Counted Toward MSCP Preserve (HabiTrak or Audit)	Total Counted toward MSCP Preserve (Manual)	Total Acreage of Acquisition	Land Cost	County Funds	Non County Funds	Funding Source
Iron Mountain, Boulder Oaks		1,271		1,271		1,271	\$ 4,410,000	\$ 1,102,500	\$ 3,307,500	County, State, Federal
Iron Mountain, Reams Thomsen		46		46		46	\$ 180,000		\$ 180,000	County, State, Federal
Sycamore Canyon Preserve (I-122)		28		28		28				County, I-122
East Otay Mesa, Furby North			79	79		79	\$ 1,296,600	\$ 1,296,600		County
Otay River Valley Park, Munson Otay			19	19		19	\$ 13,300		\$ 13,300	State
Tijuana River Valley, Horwin			21	21		21	\$ 365,000		\$ 365,000	State
Tijuana River Valley, Nelson Sloan			73	73		73	\$ 699,782		\$ 699,782	State
Wright's Field, Apollo 120 acres	120			120		120	\$ 1,800,000	\$ 800,000	\$ 1,000,000	County, State
2004										
Escondido Creek, Polo (110 acres, but 4 acres in NC)		106		106		106	\$ 1,700,000	\$ 1,374,000	\$ 326,000	County, I-122 (8 acres), State
Sycamore Canyon Preserve (I-122)		63		63		63				County, I-122
Otay River Valley Park, Georgiana Smith		89		89		89	\$ 2,611,000		\$ 2,611,000	State
Otay River Valley Park, Greg Smith		98		98		98	\$ 3,243,000		\$ 3,243,000	State

Acquisition Year Area and Property Name	Acres Acquired					Cost		Funding		
	Owned By Local/Non Profits	Preserve/ Hardline Owned By County	MHPA & Chula Vista	Total Counted Toward MSCP Preserve (HabiTrak or Audit)	Total Counted toward MSCP Preserve (Manual)	Total Acreage of Acquisition	Land Cost	County Funds	Non County Funds	Funding Source
2005										
Stoneridge (FKA Harbison), Bahde Donation		20		20		20				County acquired donation (interdept) post MSCP creation
Otay River Valley Park, Grindle		8		8		8	\$ 138,000	\$ 46,800	\$ 91,200	County, State
Otay River Valley Park, Kimball		13		13		13	\$ 196,000		\$ 196,000	State
Otay River Valley Park, Lanzetta			6	6		6	\$ 125,000		\$ 125,000	State
Tijuana River Valley, Dairy Mart Ponds			60	60		60				County had managed for State, State formalized by transfer
2006										
Otay River Valley Park, Sandoval (1 & 2)			13	13		13	\$ 700,000		\$ 700,000	State
Otay River Valley Park, Otay Land Company			114	114		114	\$ 1,490,000		\$ 1,490,000	State
Pitchford (MLJ at Stelzer)		3		3		3	\$ 75,000	\$ 75,000		County
Sheriff's East Mesa Buffer		9		9		9	\$ 45,000	\$ 45,000		County
2007										
Greenfield Transfer Mitig 17 acres	17			17		17	\$1	\$1		Olivenhain Water Mitigation Mgt

Acquisition Year Area and Property Name	Acres Acquired					Cost		Funding		
	Owned By Local/Non Profits	Preserve/ Hardline Owned By County	MHPA & Chula Vista	Total Counted Toward MSCP Preserve (HabiTrak or Audit)	Total Counted toward MSCP Preserve (Manual)	Total Acreage of Acquisition	Land Cost	County Funds	Non County Funds	Funding Source
2008										
Del Dios Highlands (Greer)		10		10		10	\$ 675,000	\$ 675,000		County
Sycamore Canyon/Goodan Ranch (Armstrong)		20		20		20	\$ 160,000	\$ 160,000		County
Ramona Grasslands (Gildred Portion in SC MSCP)		463		463		463	\$ 3,630,000	\$ 412,500	\$ 3,217,500	County, State, Federal
2009										
Christopher Hill TET dedication - Dedication was 69 acres in 2009 with all but 5 acres baseline then; Now 5 acres approved as Preserve										County accepted in bankruptcy settlement
2010										
Del Dios Highlands (Helix-Lambron)		153		153		153	\$ 4,000,000	\$ 1,400,000	\$ 2,600,000	County, Federal
Sycamore Canyon southern additions		150		150		150	\$ 1,310,000	\$ 1,310,000		County
Lakeside Hansen Pond (Endangered Habitats Conservancy)	141			141		141	\$ 4,000,000	\$ 1,000,000	\$ 3,000,000	County, State, EHC
2011										
Stoneridge Preserve - Worley		227		227		227	\$ 2,650,000	\$ 2,650,000		County
Sycamore Canyon/Goodan Ranch		112		112		112	\$ 2,820,000	\$ 2,620,000	\$ 200,000	County, State
Mit Land Policy Deduction-Stelzer, Lakeside Linkage		-1		-1		-1				
2012										

Acquisition Year Area and Property Name	Acres Acquired					Cost		Funding		
	Owned By Local/Non Profits	Preserve/ Hardline Owned By County	MHPA & Chula Vista	Total Counted Toward MSCP Preserve (HabiTrak or Audit)	Total Counted toward MSCP Preserve (Manual)	Total Acreage of Acquisition	Land Cost	County Funds	Non County Funds	Funding Source
San Diego River Foundation El Capitan	158			158		158	\$ 205,000	\$ 200,000	\$ 5,000	County, Non-Profit
Boulder Oaks -Salvation Army		748		748		748	\$ 6,555,000	\$ 6,555,000		County
Mit Land Policy Deduction - L B Daley		-2		-2		-2				
2013										
Oakosis-Sophisticated Investments		37		37		37	\$ 72,000	\$72,000		County
Sycamore Canyon/Goodan Ranch (South-Barratt American)		18		18		18	\$ 180,000	\$ 180,000		County
Otay River Valley Park, Reed/Paintball City MHPA	8			8		8	\$ 262,500	\$ 262,500		General Fund
Lusardi Creek, Fingal		31		31		31	\$ 1,360,000	\$ 1,160,000	\$ 200,000	County, State
Mit Land Policy Deduction - Tijuana River Valley			-3	-3		-3				
2014										
Stoneridge Preserve (tax default)		1		1		1	\$ 9,563	\$ 9,563		County
Mit Land Policy Deduction - L B Daley		0		-0.37		-0.37				
2015										
Flinn Springs MSCP		33		33		33	\$ 400,000	\$ 400,000		County
Sycamore Canyon/Goodan		100		100		100	\$ 810,000	\$ 610,000	\$ 200,000	County, State
Sycamore Canyon/Goodan		40		40		40	\$ 541,000	\$ 541,000		County
Mit Land Policy Deduction - L B Daley		-8		-8		-8				

Acquisition Year Area and Property Name	Acres Acquired					Cost		Funding		
	Owned By Local/Non Profits	Preserve/ Hardline Owned By County	MHPA & Chula Vista	Total Counted Toward MSCP Preserve (HabiTrak or Audit)	Total Counted toward MSCP Preserve (Manual)	Total Acreage of Acquisition	Land Cost	County Funds	Non County Funds	Funding Source
2016										
S. Vicente Connection (Navarro)		23		23		23	\$ 224,000	\$ 224,000		County
Mit Land Policy Deduction - Tijuana River Valley			-10	-10		-10				
2017										
S. Vicente Connection (Moore- Moffet)		69		69		69	\$ 627,670	\$ 627,670		County
Dictionary Hill		173			173	173	\$ 5,467,000	\$ 5,467,000		County
2018										
S. Vicente (Uridel)		19		19		19	\$ 223,000	\$111,500	\$ 111,500	County/State
Lakeside Linkage (Centex)		75		70	5	75	\$ 2,250,000	\$ 2,250,000		County
Peutz Valley Preserve (Helix Land)		255		178	77	255	\$ 1,651,000	\$ 1,451,000	\$ 200,000	County/State
2019										
Ramona Grasslands (Carroll)		121		119	2	121	\$ 950,000	\$ 950,000		County
Skyline Preserve		262		122	140	262	\$ 1,068,000	\$ 602,080	\$ 465,920	County/SANDAG
Sycamore Goodan (Miera)		20		20		20	\$ 220,000	\$ 220,000		County
Iron Mountain Preserve		162		162		162	\$ 1,280,000	\$ 1,080,000	\$ 200,000	County/State
Dictionary Hill (North)		1			1	1	\$ 40,000	\$ 40,000		County
Dictionary Hill (Inholding)		1			1	1	\$ 30,000	\$ 30,000		County

Acquisition Year Area and Property Name	Acres Acquired					Cost		Funding		
	Owned By Local/Non Profits	Preserve/ Hardline Owned By County	MHPA & Chula Vista	Total Counted Toward MSCP Preserve (HabiTrak or Audit)	Total Counted toward MSCP Preserve (Manual)	Total Acreage of Acquisition	Land Cost	County Funds	Non County Funds	Funding Source
2020										
Sycamore Goodan (Miera II)		10		10		10	\$ 110,000	\$ 110,000		County
Sycamore Goodan (Miera III)		30		30		30	\$ 330,000	\$ 330,000		County
Ramona Grasslands (Trussells)		5		5	20	25	\$ 950,000	\$ 950,000		County
Dictionary Hill (Ouidiani)					1	1	\$ 40,000	\$ 40,000		County
2021										
No SC MSCP acquisitions in 2021										
2022										
Ramona Grasslands (Metzler)		217		217	9	217	\$640,000	\$640,000		County
2023										
No SC MSCP acquisitions in 2023										
2024										
Santa Fe Valley (Del Sur – McCrink Developer Dedication)		82		82	0.04	82	Dedication			Dedication
Sweetwater Regional Park - Pointe		195		129	66	195	\$5,350,000	\$5,350,000		County
El Capitan (Digenan)		69		69		69	Donation			Donation
2025										
Dictionary Hill (Tax Defaulted Additions)		1		1		1	\$18,851	\$18,851		County
Total	556	7,354	885	8,732	495	8,482	\$ 90,393,459	\$ 55,211,487	\$ 35,181,972	--

APPENDIX A-2

DPR Outside Preserve Acquisitions Post-2016

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DPR Outside Preserve Acquisitions Post 2016						Non-PAMA, Non-Hardline Preserve (HP) Acres					
Acquisition Information						Vegetation		Core/Linkage		Habitat Evaluation Model	
Acquisition Name	APNs	Total Acreage	Hardline Preserve Acres	PAMA Acres	Non-PAMA Acres	Vegetation Type	Acres	BCLA Type	Acres	Habitat Quality	Acres
2018											
LAKESIDE LINKAGE PRESERVE - (CENTEX)	397-180-1300	74.94		70.21	4.73	Coastal Sage Scrub	0.00	HABITAT LINKAGES	3.89	Developed	3.52
										Moderate	0.41
										Very High	0.81
PEUTZ VALLEY PRESERVE	402-160-1800, 402-160-1900,	254.63	177.60	0.17	76.86	Chaparral	71.67			Developed	0.10
	402-160-2000, 402-261-0100					Coastal Sage Scrub	3.36			High	25.68
						Coastal Sage-Chaparral Scrub	0.50			Low	5.02
						Oak Riparian Forest	0.56			Moderate	15.04
						Urban/Developed	0.77			Very High	31.02
2019											
RAMONA GRASSLANDS PRESERVE - (CARROLL)	276-050-29	121.33		119.17	2.16	Chaparral	0.00	CORE RESOURCES AREA	2.16	Developed	2.09
						Coastal Sage Scrub	0.00			Very High	0.06
						Urban/Developed	2.16				
SKYLINE PRESERVE	599-042-06, 599-051-19,	261.60		122.01	139.59	Chaparral	133.62	HABITAT LINKAGES	0.01	High	0.56
	599-100-16					Coastal Sage Scrub	0.08			Low	124.42
						Oak Woodland	5.89			Moderate	14.61
2020											
RAMONA GRASSLANDS PRESERVE - (TRUSSELL)	276-050-16	24.85		5.36	19.48	Chaparral	19.27	CORE RESOURCES AREA	19.48	Developed	0.20
										High	0.46
										Low	3.64
						Urban/Developed	0.21			Moderate	15.19

DPR Outside Preserve Acquisitions Post 2016

Non-PAMA, Non-Hardline Preserve (HP) Acres

Acquisition Information						Vegetation		Core/Linkage		Habitat Evaluation Model	
Acquisition Name	APNs	Total Acreage	Hardline Preserve Acres	PAMA Acres	Non-PAMA Acres	Vegetation Type	Acres	BCLA Type	Acres	Habitat Quality	Acres
2024											
SWEETWATER REGIONAL PARK - (POINTE)	580-220-07, 582-220-08,	195.00 ^a	9.73	1.24	66.14	Coastal Sage Scrub	14.59	CORE RESOURCES AREA	66.14	High	9.10
	580-010-48, 580-010-49, 580-010-50					Grassland	51.26			Low	0.36
	505-672-11, 505-672-12, 505-523-28					Riparian Scrub	0.18			Moderate	0.42
						Disturbed Land	0.11			Very High	56.25
2025											
DICTIONARY HILL	579-021-04, 579-034-25, 579-035-16	0.54			0.54	Coastal Sage Scrub	0.19				
						Urban/Developed	0.40				
TOTAL					309.5						

^a Of the entire 195-acre acquisition for Pointe, 117.89 acres were previously entered into HabiTrak as private mitigation and 77.11 acres were added to the MSCP Preserve in 2024. Only the 77.11 acres are reflected in the Hardline, PAMA, Non-PAMA, Vegetation Type, Core/Linkage, and Habitat Evaluation Model acreages in the table.

APPENDIX B

Wildlife Agency Tracked Acquisitions

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TABLE B-1. WILDLIFE AGENCY TRACKED ACQUISITIONS – U.S. FISH AND WILDLIFE SERVICE

USFWS Acquisitions ^a				State of California Funded				Federal Government Funded							
Track No	Property Name	Total Acres	Total Acres in MSCP MHPA	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Total Donated Value (000s)	Total Property Cost (000s)	Year	Funding Source
10	FDIC (Rancho San Diego)	1167	1144	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1996	None
10a	FDIC (Rancho San Diego)	475	468	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1996	None
10b	FDIC (Rancho San Diego)	28	28	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1996	None
10c	FDIC (Rancho San Diego)	129	129	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1996	None
10d	FDIC (Rancho San Diego)	26	0	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1996	None
240	National Fish and Wildlife Foundation (Smith "V parcel")	278	278	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1997	None
101	Emerald Properties Corp (N. San Miguel)	500	499	217	216	43%	\$1,300	283	283	57%	\$1,700	\$850	\$3,000	1997	Prop 117 and LWCF
101a	Emerald Properties Corp (N. San Miguel)	1188	1176	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1997	None
200	TPL (Las Montanas I)	276	112	0	0	0%	\$0	276	112	100%	\$1,800	\$0	\$1,800	1998	LWCF
222	Singing Hills (Duncan)	79	76	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1998	None
137	Hamel (I)	45	2	0	0	0%	\$0	45	2	100%	\$211	\$0	\$211	1998	LWCF
237a	Mozaffarian	10	10	0	0	0%	\$0	10	10	100%	\$40	\$0	\$40	1998	LWCF

TABLE B-1. WILDLIFE AGENCY TRACKED ACQUISITIONS – U.S. FISH AND WILDLIFE SERVICE

USFWS Acquisitions ^a				State of California Funded				Federal Government Funded							
Track No	Property Name	Total Acres	Total Acres in MSCP MHPA	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Total Donated Value (000s)	Total Property Cost (000s)	Year	Funding Source
237b	Mozaffarian	5	5	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1998	LWCF
92	Doenges, Robert S. & William S.	87	85	0	0	0%	\$0	87	85	100%	\$446	\$0	\$446	1998	LWCF
199	Liker	8	8	0	0	0%	\$0	8	8	100%	\$150	\$0	\$150	1998	LWCF
200a	TPL (Las Montanas II)	661	279	0	0	0%	\$0	661	279	100%	\$1,500	\$0	\$1,500	1998	LWCF
200b	TPL (McGinty Ranch I)	582	582	0	0	0%	\$0	582	582	100%	\$1,675	\$0	\$1,675	1999	LWCF
137a	Hamel (II)	79	0	0	0	0%	\$0	79	0	100%	\$319	\$0	\$319	1999	LWCF
1	Department of Treasury (Gomez)	88	26	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1999	None
200c	TPL (McGinty Ranch II)	112	112	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	1999	None
89	Desert Pacific Council/Boy Scouts	83	0	0	0	0%	\$0	83	0	100%	\$393	\$0	\$393	1999	LWCF
23	Beitmann	5	5	0	0	0%	\$0	5	5	100%	\$28	\$0	\$28	1999	LWCF
86	DeGuzman	37	0	0	0	0%	\$0	37	0	100%	\$180	\$0	\$180	1999	LWCF
84	DeGuzman	34	0	0	0	0%	\$0	34	0	100%	\$153	\$0	\$153	1999	LWCF
85	DeGuzman	41	0	0	0	0%	\$0	41	0	100%	\$180	\$0	\$180	1999	LWCF
132	Grant, Kenneth Carlton	14	10	0	0	0%	\$0	14	10	100%	\$140	\$0	\$140	2000	LWCF
164	Immenschuh	641	640	0	0	0%	\$0	641	640	100%	\$1,760	\$0	\$1,760	2000	LWCF
288	Rice	253	0	0	0	0%	\$0	253	0	100%	\$1,140	\$0	\$1,140	2000	LWCF

TABLE B-1. WILDLIFE AGENCY TRACKED ACQUISITIONS – U.S. FISH AND WILDLIFE SERVICE

USFWS Acquisitions ^a				State of California Funded				Federal Government Funded							
Track No	Property Name	Total Acres	Total Acres in MSCP MHPA	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Total Donated Value (000s)	Total Property Cost (000s)	Year	Funding Source
288a	Rice	1	0	0	0	0%	\$0	1	0	100%	\$3	\$0	\$3	2000	LWCF
200f	TPL (Shinohara I)	85	78	0	0	0%	\$0	85	78	100%	\$2,700	\$0	\$2,700	2001	LWCF
288b	Rice	286	6	0	0	0%	\$0	286	6	100%	\$1,332	\$0	\$1,332	2001	LWCF
15	Clarke	38	38	0	0	0%	\$0	38	38	100%	\$170	\$0	\$170	2001	LWCF
200g	TPL (Shinohara II)	40	34	0	0	0%	\$0	40	34	100%	\$1,381	\$0	\$1,381	2002	LWCF
12	Sampo	69	18	0	0	0%	\$0	69	18	100%	\$280	\$0	\$280	2002	LWCF
14	Mills	19	19	0	0	0%	\$0	19	19	100%	\$115	\$0	\$115	2002	LWCF
200h	TPL (Shinohara III)	369	368	0	0	0%	\$0	369	368	100%	\$4,540	\$0	\$4,540	2004	LWCF
16	Baker Trust	19	0	0	0	0%	\$0	19	0	100%	\$100	\$0	\$100	2004	LWCF
16a	Baker Trust	1	1	0	0	0%	\$0	1	1	100%	\$5	\$0	\$5	2004	LWCF
13	Asistoisdmr Holdings	37	0	0	0	0%	\$0	37	0	100%	\$260	\$0	\$260	2004	LWCF
315	Chula Vista 186 LLC	185	0	0	0	0%	\$0	185	0	100%	\$1,302	\$0	\$1,302	2004	LWCF
180	King	5	0	0	0	0%	\$0	5	0	100%	\$175	\$0	\$175	2005	LWCF
295	Roberts	10	0	0	0	0%	\$0	10	0	100%	\$225	\$0	\$225	2005	LWCF
230	Mitchell	3	0	0	0	0%	\$0	3	0	100%	\$250	\$0	\$250	2005	LWCF
3a	County of San Diego	22	22	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2005	None
296	Robinson	10	0	0	0	0%	\$0	10	0	100%	\$55	\$0	\$55	2005	LWCF
175	Kelly, etal	5	0	0	0	0%	\$0	5	0	100%	\$205	\$0	\$205	2006	LWCF
103h	TET	53	0	0	0	0%	\$0	53	0	100%	\$225	\$0	\$225	2006	LWCF

TABLE B-1. WILDLIFE AGENCY TRACKED ACQUISITIONS – U.S. FISH AND WILDLIFE SERVICE

USFWS Acquisitions ^a				State of California Funded				Federal Government Funded							
Track No	Property Name	Total Acres	Total Acres in MSCP MHPA	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Total Donated Value (000s)	Total Property Cost (000s)	Year	Funding Source
363	Brown	41	41	0	0	0%	\$0	41	41	100%	\$50	\$0	\$50	2007	LWCF
396	Wilhite	41	41	0	0	0%	\$0	41	41	100%	\$480	\$0	\$480	2007	LWCF
297	Catholic Diocese	27	0	0	0	0%	\$0	27	0	100%	\$150	\$0	\$150	2009	LWCF
103a	TET	338	338	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2009	None
357	Jones	20	0	0	0	0%	\$0	20	0	100%	\$230	\$0	\$230	2010	LWCF
272	TET	261	260	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2010	None
176	Kennerly	10	0	0	0	0%	\$0	10	0	100%	\$80	\$0	\$80	2011	LWCF
302	Salerno	10	0	0	0	0%	\$0	10	0	100%	\$80	\$0	\$80	2011	LWCF
251	Nauman	2	0	0	0	0%	\$0	2	0	100%	\$78	\$0	\$78	2011	LWCF
319	Sevel	1	0	0	0	0%	\$0	1	0	100%	\$33	\$0	\$33	2011	LWCF
104	Evans	2	1	0	0	0%	\$0	2	1	100%	\$87	\$0	\$87	2011	LWCF
411	Lauss	2	0	0	0	0%	\$0	2	0	100%	\$52	\$0	\$52	2011	LWCF
266	Peppard	10	0	0	0	0%	\$0	0	0	0%	\$0	\$0	\$250	2012	Other
71	The Nature Conservancy	1858	1309	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2012	None
127	Cuevas	10	0	0	0	0%	\$0	10	0	100%	\$235	\$0	\$235	2012	LWCF
102b	Trimark	167	167	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2013	None
149	Heuschele	6	0	0	0	0%	\$0	6	0	100%	\$35	\$0	\$35	2013	LWCF
194	Lee	6	0	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2013	None
388a	Bella Lago	10	10	0	0	0%	\$0	0	0	100%	\$0	\$0	\$0	2014	None
326	Bols	41	9	0	0	0%	\$0	0	0	0%	\$0	\$0	\$220	2014	Other
238	Spring Valley Ranch	43	0	0	0	0%	\$0	43	0	100%	\$435	\$0	\$435	2015	LWCF

TABLE B-1. WILDLIFE AGENCY TRACKED ACQUISITIONS – U.S. FISH AND WILDLIFE SERVICE

USFWS Acquisitions ^a				State of California Funded				Federal Government Funded							
Track No	Property Name	Total Acres	Total Acres in MSCP MHPA	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Total Donated Value (000s)	Total Property Cost (000s)	Year	Funding Source
503	Pio Pico	82	0	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2016	None
98	Beaver Hollow	120	0	0	0	0%	\$0	120	0	100%	\$975	\$0	\$975	2016	LWCF
367	Trachtenberg	4	0	0	0	0%	\$0	4	0	100%	\$70	\$0	\$70	2016	LWCF
290	Riedman	41	0	0	0	0%	\$0	41	0	100%	\$285	\$0	\$285	2016	LWCF
312	TNC Schooler	4	4	0	0	0%	\$0	4	4	100%	\$45	\$0	\$45	2016	LWCF
2a	CALTRANS (River Splinter)	21	20	0	0	0%	\$0	0	0	0%	\$0	\$185	\$0	2017	None
2	CALTRANS (Go-Cart)	2	1	0	0	0%	\$0	0	0	0%	\$0	\$375	\$0	2017	None
327	Sickles	10	1	0	0	0%	\$0	10	1	100%	\$235	\$0	\$235	2017	LWCF
114	North	1	0	0	0	0%	\$0	1.00	0	100%	\$7	\$0	\$7	2017	LWCF
2e	CALTRANS (Millar Ranch Rd)	19	0	0	0	0%	\$0	0	0	0%	\$0	\$190	\$0	2018	None
192	Alshadhir	19	8	0	0	0%	\$0	19	8	100%	\$188	\$0	\$188	2018	LWCF
55	Chow	22	3	0	0	0%	\$0	22	3	100%	\$155	\$0	\$155	2018	LWCF
2b	CALTRANS (Bonita Meadows)	107	6	0	0	0%	\$0	0	0	0%	\$0	\$1,140	\$0	2018	None
2c	CALTRANS (Bonita Meadows)	127	119	0	0	0%	\$0	0	0	0%	\$0	\$1,140	\$0	2018	None
2d	CALTRANS (94/54 Corridor)	52	1	0	0	0%	\$0	0	0	0%	\$0	\$510	\$0	2018	None

TABLE B-1. WILDLIFE AGENCY TRACKED ACQUISITIONS – U.S. FISH AND WILDLIFE SERVICE

USFWS Acquisitions ^a				State of California Funded				Federal Government Funded							
Track No	Property Name	Total Acres	Total Acres in MSCP MHPA	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Prorated Acres Purchased	Prorated Acres in MSCP MHPA	% Contribution	Cost (000s)	Total Donated Value (000s)	Total Property Cost (000s)	Year	Funding Source
505, 505a	Journey Partners	58	47	0	0	0%	\$0	55	44	100%	\$1,730	\$0	\$1,730	2019	LWCF
249	Offutt	1	0	0	0	0%	\$0	1	1	100%	\$10	\$0	\$10	2019	TSDf
Otay-Sweet-water	TNC Lyons Valley Partners	121	72	0	0	0%	\$0	121	72	100%	650	\$0	\$650	2020	LWCF
51	Castro	6	6	0	0	0%	\$0	6	6	100%	\$115	\$0	\$115	2023	LWCF
95	Dy	11	11	0	0	0%	\$0	11	11	100%	\$336	\$0	\$336	2023	LWCF
231	Mohlay	10	10	0	0	0%	\$0	10	10	100%	\$284	\$0	\$284	2023	LWCF
336	Ocampo	10	10	0	0	0%	\$0	10	10	100%	\$260	\$0	\$260	2024	LWCF
164	Campbell Trust Immenschuh	96	87	0	0	0%	\$0	96	87	100%	\$1,970	\$0	\$1,970	2024	LWCF
	Total	12,037	8,840	217	216	--	\$1,300	5,122	2,919	--	\$34,476	\$4,390	\$36,246	--	--

^a All acquisitions are part of the San Diego National Wildlife Refuge. USFWS is the land manager and fee title owner of all acquisitions in table.

TABLE B-2. WILDLIFE AGENCY TRACKED ACQUISITIONS – BUREAU OF LAND MANAGEMENT

CaseNum	Property Name	Total Acres	Agency's Prorated Acres Purchased	Acres in MHPA only	Prorated acres in MHPA only	Acres in MHPA Amendment Area	Prorated acres in MHPA Amendment Area	Acres in MSCP MHPA (both)	Prorated Acres in MSCP MHPA (both)	Agency % Contribution	Agency's Cost (000s)	Total Cost of Property (000s)	Fund Authority	Year Acquired
CACA037104	Helix/Lambron	381	381	381	381	0	0	381	381	100%	\$1,090.0	\$1,090.0	LWCF	1997
CACA039258	TPL (Sycamore Canyon)	354	354	167	167	23	23	190	190	100%	\$750.0	\$750.0	LWCF	1998
CACA040203	Anderson	126	126	1	1	0	0	1	1	100%	\$250.0	\$250.0	LWCF	2000
CACA040237	TPL (Rancho Jamul)	1,093	1093	253	253	7	7	260	260	100%	\$2,000.0	\$2,000.0	LWCF	1999
CACA040314	TET (Marron Valley)	332	332	332	332	0	0	332	332	100%	\$1,021.0	\$1,021.0	LWCF	1999
CACA041430	Anderson/Hendron	31	31	0	0	0	0	0	0	100%	\$60.0	\$60.0	LWCF	2000
CACA041516	TET	33	33	33	33	0	0	33	33	100%	\$80.0	\$80.0	LWCF	2000
CACA042687	TPL (Clark Ranch)	947	947	4	4	0	0	4	4	100%	\$3,867.0	\$3,867.0	LWCF	2001
CACA043168	Fetters	162	162	0	0	162	162	162	162	100%	\$325.1	\$325.1	LWCF	2002
CACA044234	Cain	461	461	23	23	437	437	461	461	100%	\$1,320.0	\$1,320.0	LWCF	2002
CACA045193	Brailsford/Keller	42	42	1	1	0	0	1	1	100%	\$140.0	\$140.0	LWCF	2004
CACA045308	Klein	118	118	1	1	0	0	1	1	100%	\$470.0	\$470.0	LWCF	2004
CACA046156	TPL	359	359	4	4	0	0	4	4	100%	\$1,436.0	\$1,436.0	LWCF	2004
CACA050366	TET (O'Neal Cnyn) Donation	167	0	0	0	167	0	167	0	0.00%	\$0.0	\$0.0	None	2009
		4,606	4,439	1,200	1,200	796	629	1,997	1,830		\$12,809.1	\$12,809.1		

TABLE B-3. WILDLIFE AGENCY TRACKED ACQUISITIONS – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

CDFW Acquisitions in County Subarea Since 1998 ^a				State of California Funded				Federal Government Funded							
Parcel History #	Parcel Name	Total Acres	Total Acres in MSCP	Prorated Acres Purchased	Prorated Acres in MSCP	% Contribution	Cost (000s)	Prorated Acres Purchased	Prorated Acres in MSCP	% Contribution	Cost (000s)	Total Donated Value (000s)	Total Property Cost (000s)	Year	Funding Source
Boden Canyon Ecological Reserve															
821737	Boden Canyon (Phase I)	572	506	524	463	92%	\$2,172	0	0	0%	\$0	\$442	\$2,372	1998	Prop 117
821826	Boden Canyon (Expansion #1)	604	548	558	506	92%	\$2,180	0	0	0%	\$0	\$430	\$2,360	1999	Prop 117
821858	Boden Canyon (Expansion #2)	67	64	67	64	100%	\$210	0	0	0%	\$0	\$105	\$210	1999	Prop 117
Canada de San Vicente															
822300	Monte Vista Ranch (Iron Mountain, Expansion #3)	392	390	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2008	Mitigation
822399	Monte Vista Ranch	4,026	1,558	2,453	949	61%	\$9,700	1,573	609	39%	\$6,221	\$0	\$15,921	2009	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	Section 6
822883	Bonfils	266	9	93	3	35%	\$158	173	6	65%	\$293	\$0	\$450	2014	Prop 117 and Section 6
Crestridge Ecological Reserve															
821774	Crestridge	2,372	1,958	857	707	36%	\$3,506	0	0	0%	\$0	\$1,889	\$3,506	1999	Prop 117
821964	Crestridge Expansion #1	256	256	0	0	0%	\$0	0	0	0%	\$0	\$0	\$2,258	2002	Mitigation
822003	Rancho Montana Unit Pilgrim Mitigation Bank (CALTRANS)	125	125	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2002	N/A
Hollenbeck Canyon Wildlife Area															
821913	Hollenbeck Canyon (Expansion #1 - Original)	3241	945	3,170	925	98%	\$10,997	0	0	0%	\$0	\$0	\$11,240	2001	General Fund & Prop12

TABLE B-3. WILDLIFE AGENCY TRACKED ACQUISITIONS – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

CDFW Acquisitions in County Subarea Since 1998 ^a				State of California Funded				Federal Government Funded							
Parcel History #	Parcel Name	Total Acres	Total Acres in MSCP	Prorated Acres Purchased	Prorated Acres in MSCP	% Contribution	Cost (000s)	Prorated Acres Purchased	Prorated Acres in MSCP	% Contribution	Cost (000s)	Total Donated Value (000s)	Total Property Cost (000s)	Year	Funding Source
	CDFG Segment)														
822132	Hollenbeck Canyon (Expansion #2 - Honey Springs Ranch)	2012	82	2,012	82	100%	\$7,420	0	0	0%	\$0	\$0	\$7,420	2004	Prop 12
822257	Hollenbeck Canyon (Expansion #3)	304	0	50	0	17%	\$205	254	0	83%	\$1,031	\$0	\$1,235	2006	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	Prop 40 and Section 6
822907	Hollenbeck Canyon Wildlife Area, Expansion #5	381	79	88	18	23%	\$361	0	0	0%	\$0	\$0	\$1,564	2015	Prop 117
822908	Hollenbeck Canyon Wildlife Area, Expansion #6	187	166	66	58	35%	\$253	121	108	65%	\$467	\$0	\$720	2016	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	Prop 117
HabiTrak 17-124; Hist# 822923	Hollenbeck Canyon Wildlife Area APNs 59710009, 59710011, 59710012 11/7/2016	113													

TABLE B-3. WILDLIFE AGENCY TRACKED ACQUISITIONS – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

CDFW Acquisitions in County Subarea Since 1998 ^a				State of California Funded				Federal Government Funded							
Parcel History #	Parcel Name	Total Acres	Total Acres in MSCP	Prorated Acres Purchased	Prorated Acres in MSCP	% Contribution	Cost (000s)	Prorated Acres Purchased	Prorated Acres in MSCP	% Contribution	Cost (000s)	Total Donated Value (000s)	Total Property Cost (000s)	Year	Funding Source
Lake Hodges Ecological Reserve															
821996	Pilgrim Mitigation Parcels (CALTRANS)	19	19	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2002	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	Prop 70
HabiTrak 20-012	McGinty Mountain APN 51909104	86	86											2020	
Otay Mountain Ecological Reserve															
821509	Otay Mt North	211	211	211	211	100%	\$2,880	0	0	0%	\$0	\$0	\$2,880	1996	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	Prop 12 and Section 6
Rancho Jamul Ecological Reserve															
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	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	Natural Resources Infrastructure Fund and Prop 117
821962	Rancho Jamul ER (Expansion #2 - HQ)	40	4	40	4	100%	\$2,000	0	0	0%	\$0	\$0	\$2,000	2001	Prop 12
822037	Rancho Jamul Proctor Valley Unit (Villages 14 and 16) ^b	1,463	811	421	233	29%	\$6,475	1,042	577	71%	\$16,025	\$0	\$22,500	2003	Prop 12 and Section 6
	Expansion 4	3	1	0	0	0%	\$0	0	0	0%	\$0	\$0	\$0	2018	Mitigation

TABLE B-3. WILDLIFE AGENCY TRACKED ACQUISITIONS – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

CDFW Acquisitions in County Subarea Since 1998 ^a				State of California Funded				Federal Government Funded							
Parcel History #	Parcel Name	Total Acres	Total Acres in MSCP	Prorated Acres Purchased	Prorated Acres in MSCP	% Contribution	Cost (000s)	Prorated Acres Purchased	Prorated Acres in MSCP	% Contribution	Cost (000s)	Total Donated Value (000s)	Total Property Cost (000s)	Year	Funding Source
822074	Rancho Jamul Expansion #3 (CalMat Quarry)	551	551	551	551	100%	\$6,450	0	0	\$0	\$0	\$0	\$6,450	2004	Prop 12
San Vicente Highlands															
821881	Iron Mountain Wildlife Area - Boys & Girls Club	240	240	0	0	0%	\$0	0	0	\$0	\$0	\$803	\$0	2000	N/A
		1,181	1,181	1,181	1,181	100%	\$3,800	0	0	\$0	\$0	\$0	\$3,800	2000	Prop 12
	Briles	7	7	7	7	100%	\$115	0	0	\$0	\$0	\$0	\$115	2018	Prop 117
822584	Environmental Trust Bankruptcy (San Vicente)	0	0	0	0	0%	\$0	0	0	\$0	\$0	\$2,160	\$0	2009	Mitigation
Sycuan Peak Ecological Reserve															
821488	Sycuan Peak (Expansion #1)	122	122	122	122	100%	\$413	0	0	\$0	\$0	\$0	\$413	1996	EEMP
821554	Sycuan Peak (Expansion #2)	297	297	78	78	26%	\$250	0	0	\$0	\$0	\$0	\$950	1997	Prop 117, ISTE, EEMP
821740	Sycuan Peak (Expansion #3)	253	252	253	252	100%	\$700	0	0	\$0	\$0	\$123	\$700	1998	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	Prop 12 and Section 6
822900	Sycuan Peak (Expansion #5)	76	69	27	24	35%	\$53	49	45	65%	\$97	\$0	\$150	2015	Prop 117
822909	Sycuan Peak (Expansion #6)	2	2	1	1	35%	\$11	1	1	65%	\$19	\$0	\$30	2016	Prop 117
822914	Sycuan Peak (Expansion #7) HabiTrak 17-121	10	0	4	0	35%	\$11	7	0	65%	\$21	\$0	\$32	2016	Prop 117
17-122; Hist# 822920	Sycuan Peak Ecological Reserve APN	40													

TABLE B-3. WILDLIFE AGENCY TRACKED ACQUISITIONS – CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

CDFW Acquisitions in County Subarea Since 1998 ^a				State of California Funded				Federal Government Funded							
Parcel History #	Parcel Name	Total Acres	Total Acres in MSCP	Prorated Acres Purchased	Prorated Acres in MSCP	% Contribution	Cost (000s)	Prorated Acres Purchased	Prorated Acres in MSCP	% Contribution	Cost (000s)	Total Donated Value (000s)	Total Property Cost (000s)	Year	Funding Source
	52109008 10/25/2016														
HabiTrak 20-013	Sycuan Peak Ecological Reserve APNs 52101005, 52108004	172	42											2020	
	Rancho Jamul Ecological Reserve, Expansion #6	1,291	1,291	646	646	50%	\$30,000	54	54	4%	\$2,500	\$27,500	\$60,000	2024	Section 6, General Fund
		27,406	15,849	15,412	8,396		\$101,044	7,460	3,768		\$44,113	\$35,223	\$181,680		

NOTES:
^a All acquisitions are owned in fee title and managed by California Department of Fish and Wildlife unless otherwise noted.
^b U.S. Fish and Wildlife Service is the land manager

APPENDIX C

Summary of MSCP Gains

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Summary of Project Gains

MSCP South San Diego County



From 1/1/2025 To 12/31/2025

County of San Diego

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
25-042	Dictionary Hill	None	County of San Diego	579-021-04 579-034-25 579-035-16	4/29/2025	Gain	Local	Acquisition	0.00	0.54	0.00	0.54
25-047	El Cajon Mountain 6/11/2013	None	San Diego River Park Foundation	330-110-08	6/11/2025	Gain	Non-Profit	Acquisition	0.00	19.88	0.00	19.88
25-034	OS Brailsford Robin Trust	None	Brailsford Robin Trust 10-18-13	649-120-10	1/3/2025	Gain	Private	Easement	0.00	12.08	0.00	12.08
25-032	OS Candy L Gabardi	None	Candy L Gabardi	402-060-35	5/28/2025	Gain	Private	Easement	0.00	0.90	0.00	0.90
25-035	OS Degero	None	DEGERO GAY E FAMILY TRUST 07-17-96 & JAMES LINDEEN	404-430-27 404-430-28	3/3/2025	Gain	Private	Easement	0.00	2.05	0.00	2.05
25-036	OS HURRELL	None	JAMES C & YVONNE D HURRELL	392-070-11 392-070-15	3/6/2025	Gain	Private	Easement	0.00	6.68	0.05	6.73
25-037	OS Hurrell	None	JAMES C & YVONNE D HURRELL	392-070-15	3/6/2025	Gain	Private	Easement	0.00	1.13	0.01	1.14
25-041	OS International Industrial Park	None	International Industrial Park Inc	646-080-39	10/17/2025	Gain	Private	Easement	0.00	2.82	0.00	2.82
25-033	OS SEBAALY	None	SEBAALY JOELLE REVOCABLE TRUST 07-25-22	324-010-68	10/6/2025	Gain	Private	Easement	0.00	0.00	3.52	3.52
25-039	OS SKYLINE	None	SKYLINE LAND PARTNERS LLC	522-121-25	3/8/2025	Gain	Private	Easement	0.00	19.94	9.97	29.91
25-040	OS SKYLINE	None	SKYLINE LAND PARTNERS LLC	599-041-02	3/8/2025	Gain	Private	Easement	0.00	123.10	0.00	123.10
25-038	OS SKYLINE	None	SKYLINE LAND PARTNERS LLC	522-121-14 522-121-24	3/8/2025	Gain	Private	Easement	0.00	43.98	1.67	45.65
25-045	Peutz Creek Preserve 7/2011	None	San Diego River Park Foundation	402-221-02	7/8/2025	Gain	Non-Profit	Acquisition	0.00	2.45	28.20	30.65
25-043	Peutz Creek Preserve 8/2011	None	San Diego River Park Foundation	402-150-03 402-150-04	8/25/2025	Gain	Non-Profit	Acquisition	0.00	23.45	87.38	110.82
25-044	Peutz Creek Preserve 9/2013	None	San Diego River Park Foundation	402-150-01 402-150-05	9/20/2025	Gain	Non-Profit	Acquisition	0.00	6.51	150.22	156.73

County of San Diego

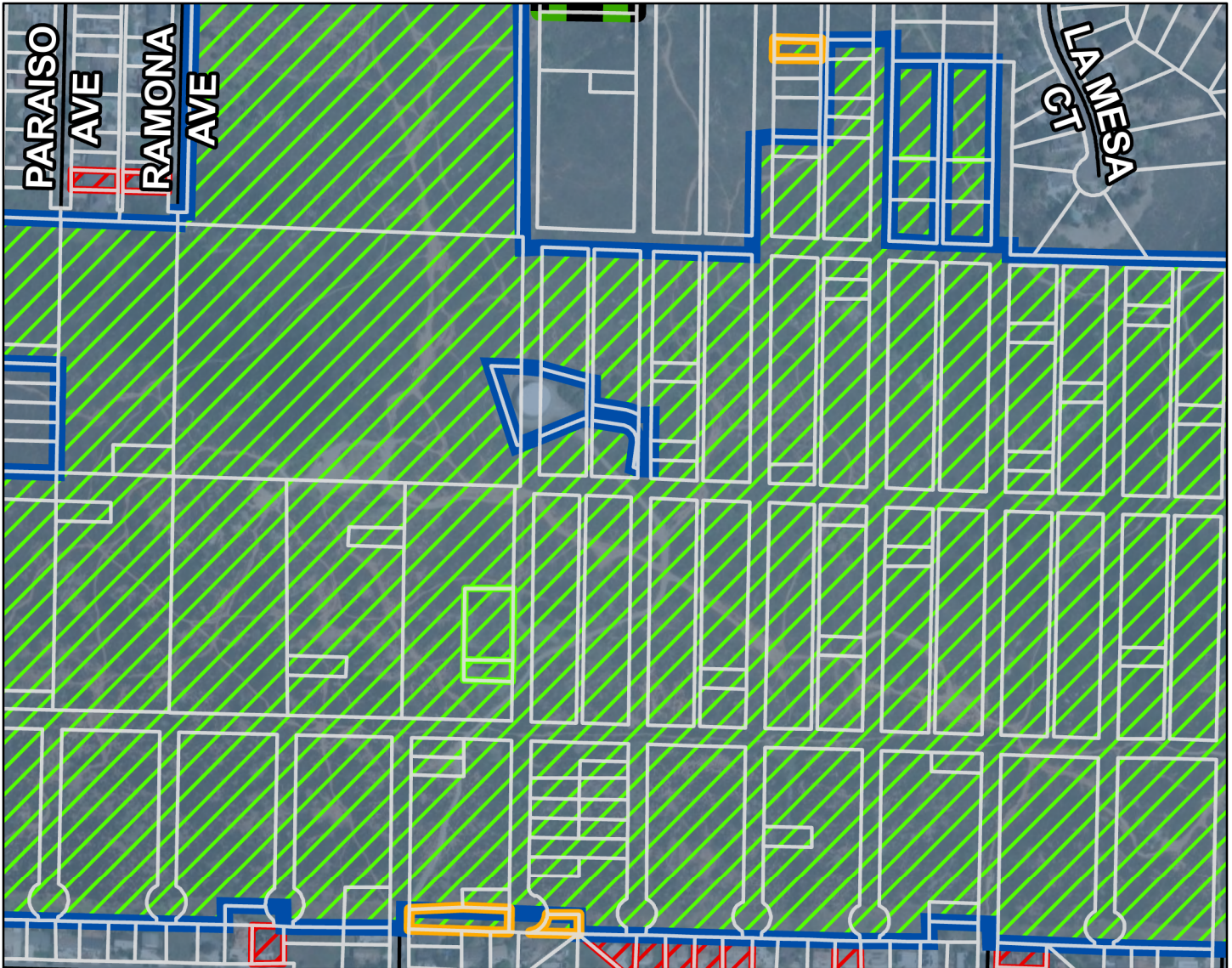
Project Tracking #	Project Name	Location	Applicant	APN	Date Cons.	Status	Mgmt Resp.	Conservation Type	Mit. Bank Credits Used	Acres Outside Habitat Preserve	Acres Inside Habitat Preserve	Total Acres
25-049	SC MSCP Amendment 3/1/2023	None	CH REALTY X-ELC 1 OTAY MESA BUSINES PARK LP	283-055-28 283-055-29 283-055-30 283-055-31	3/1/2025	Gain	Private	Easement	0.00	0.00	56.92	56.92
25-046	Skyline North	None	Endangered Habitat Conservancy	522-042-33 522-042-34 522-042-37 522-050-69 522-130-13 522-130-19 522-130-47 522-130-49 522-130-56 522-130-57 522-130-58 522-130-59 522-140-34 522-140-35 522-140-36 522-140-37 522-141-04 522-141-05 522-141-06 522-190-07	1/24/2025	Gain	Non-Profit	Acquisition	0.00	170.72	0.00	170.72
25-048	Wildcat 10/20/2022	None	San Diego River Park Foundation	391-060-59	10/20/2025	Gain	Non-Profit	Acquisition	0.00	0.00	9.62	9.62
Total for Agency: County of San Diego									0.00	436.22	347.57	783.80

APPENDIX D

MSCP Acquisitions by County of San Diego and
Local Non-Profit Partners in Reporting Year

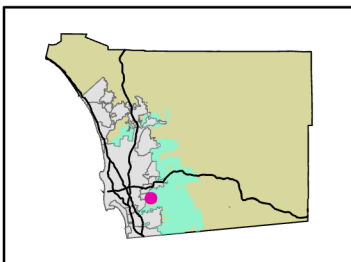
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County of San Diego Dictionary Hill



Acquisition Name:	Dictionary Hill
Owner:	County of San Diego
Management Agency:	Local
Acquisition GIS Acres:	0.59
Habitrak Acres (New Gain):	0.54
HabiTrak Acres (Existing Gain):	0.05
Acquisition Date:	4/29/2025
Habitrak Tracking Number:	25-042
MSCP Segment:	South Metro-Lakeside Jamul

Vegetation	Acres
Coastal Sage Scrub	0.19
Urban/Developed	0.40



Legend

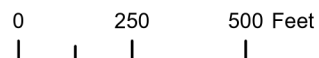
- Acquisition
- County Preserve Prior to Acquisition
- Parcel Boundary
- Road

- MSCP Gain
- MSCP Loss
- MSCP (South County) Designation**
 - Unincorporated Land in Metro-Lakeside-Jamul Segment

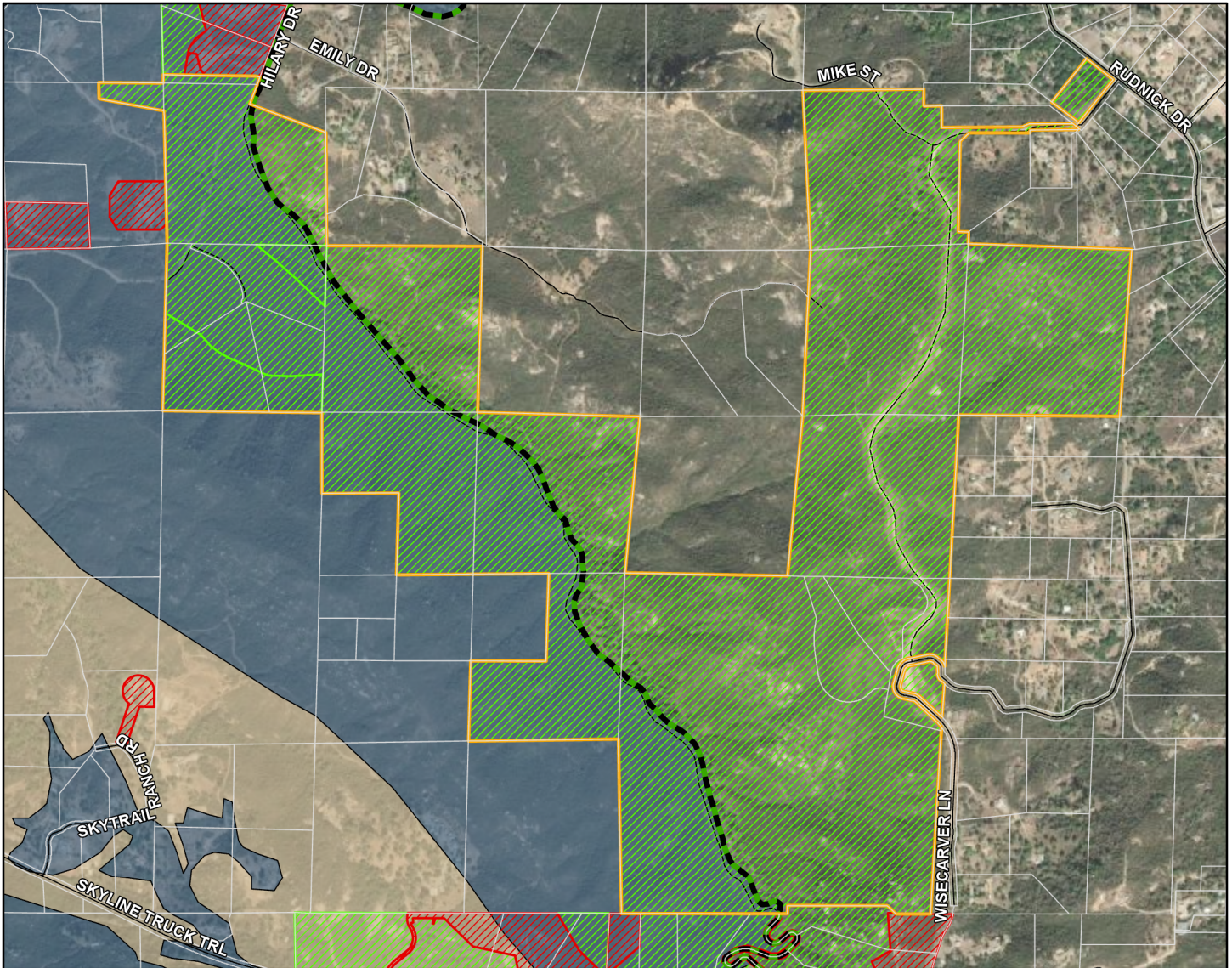
- South Plan Boundary
- Segments

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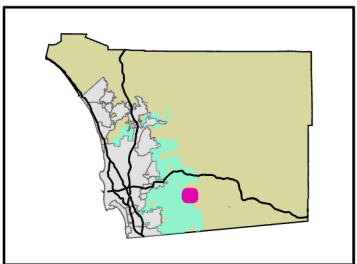


Endangered Habitats Conservancy Skyline North



Acquisition Name:	Skyline North
Owner:	Endangered Habitats Conservancy
Management Agency:	Non-Profit
Acquisition GIS Acres:	554.99
Habitrak Acres (New Gain):	537.95
Habitrak Acres (Existing Gain):	17.05
Acquisition Date:	1/24/2025
Habitrak Tracking Number:	25-046
MSCP Segment:	South Metro-Lakeside Jamul

Vegetation	Acres
Oak Woodland	0.85
Oak Riparian Forest	17.95
Chaparral	168.76



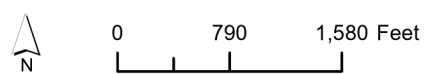
Legend

- Acquisition
- Parcel Boundary
- Road

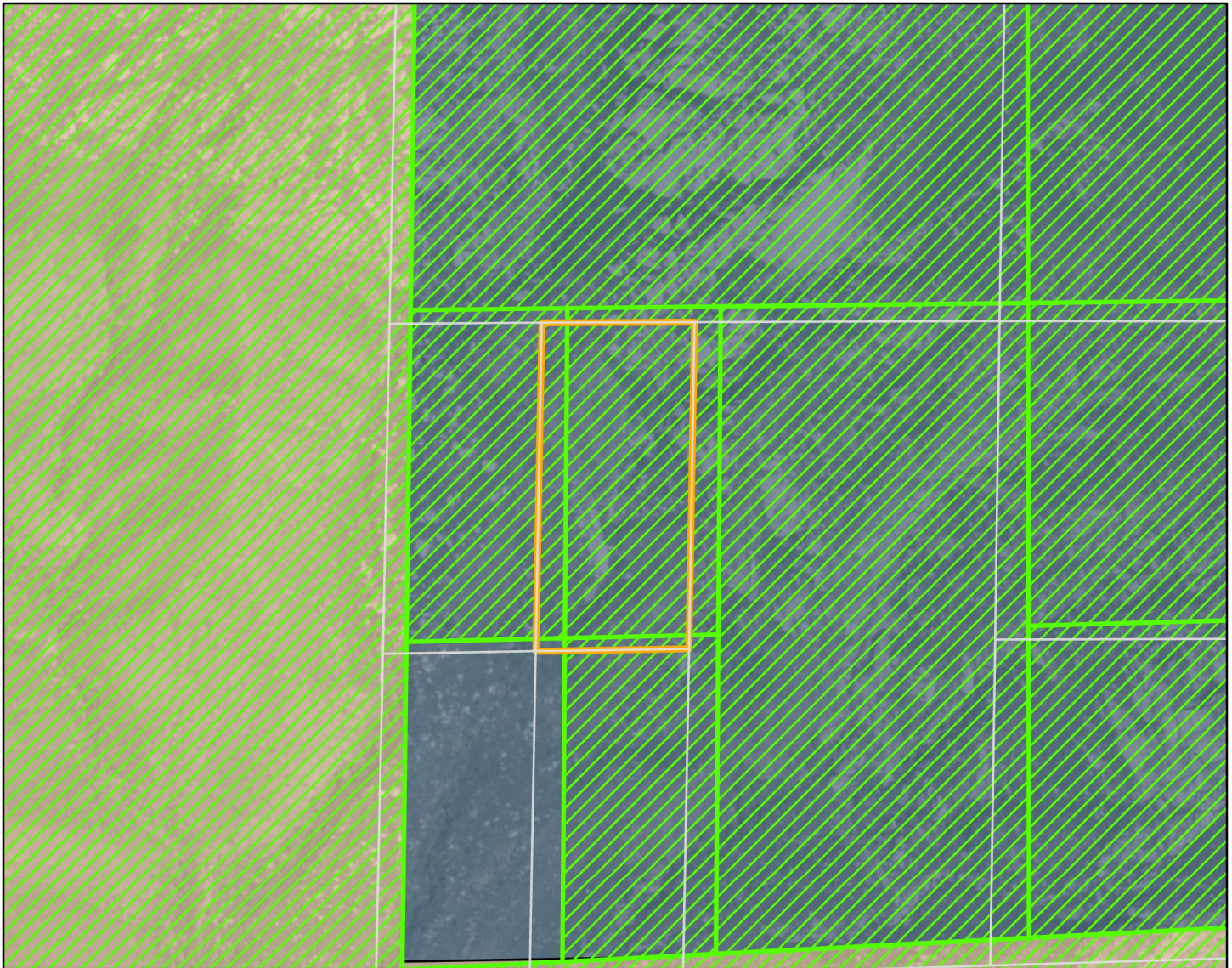
- MSCP Gain
- MSCP Loss
- MSCP (South County) Designation**
- Pre-Approved Mitigation Area

- Unincorporated Land in Metro-Lakeside-Jamul Segment
- South Plan Boundary
- Segments

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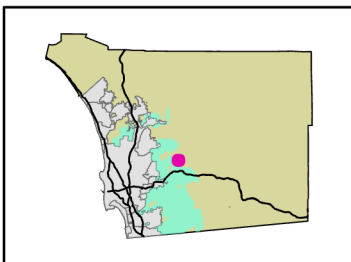


San Diego River Park Foundation El Cajon Mountain



Acquisition Name:	El Cajon Mountain
Owner:	San Diego River Park Foundation
Management Agency:	Non-Profit
Acquisition GIS Acres:	19.72
Habitrak Acres (New Gain):	19.88
Habitrak Acres (Existing Gain):	4.04
Acquisition Date:	6/11/2013
Habitrak Tracking Number:	25-047
MSCP Segment:	North Metro-Lakeside Jamul

Vegetation	Acres
Oak Woodland	3.69
Chaparral	16.03



Legend

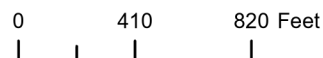
- Acquisition
- Parcel Boundary

- MSCP Gain
- MSCP (South County) Designation**
- Pre-Approved Mitigation Area

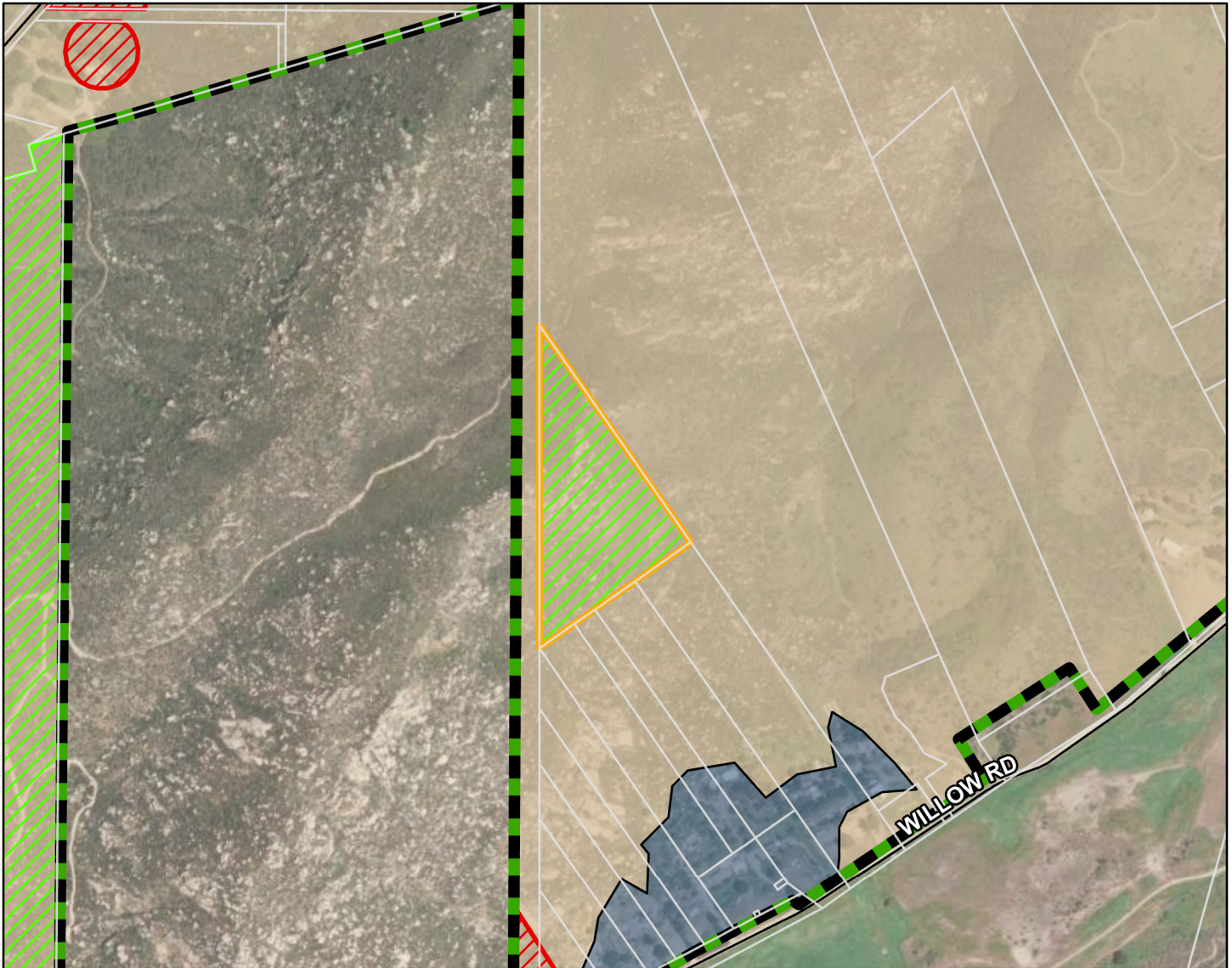
- Unincorporated
- Land in Metro-Lakeside-Jamul Segment
- South Plan Boundary
- Segments

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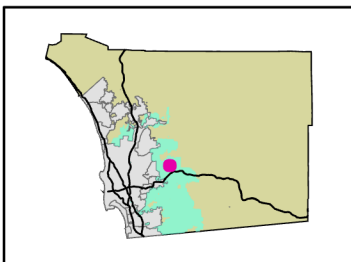


San Diego River Park Foundation Wildcat



Acquisition Name:	Wildcat
Owner:	San Diego River Park Foundation
Management Agency:	Non-Profit
Acquisition GIS Acres:	9.62
Habitrak Acres (New Gain):	9.62
Habitrak Acres (Existing Gain):	0.00
Acquisition Date:	10/20/2022
Habitrak Tracking Number:	25-048
MSCP Segment:	North Metro-Lakeside Jamul

Vegetation	Acres
Chaparral	1.60
Coastal Sage Scrub	8.02



Legend

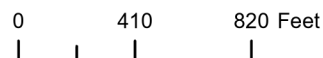
- Acquisition
- Parcel Boundary
- Road

- MSCP Gain
- MSCP Loss
- MSCP (South County) Designation**
- Pre-Approved Mitigation Area

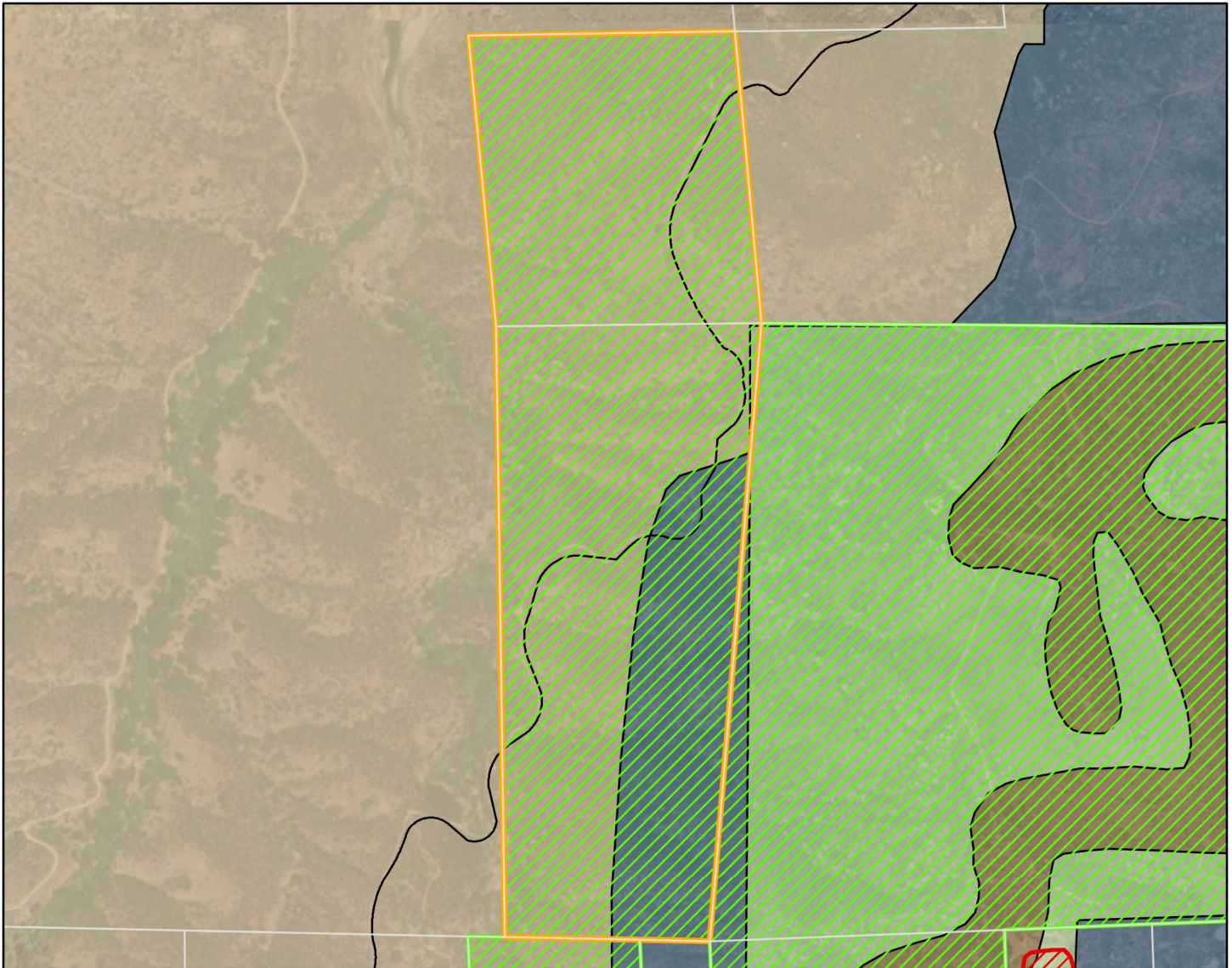
- Unincorporated
- Land in Metro-Lakeside-Jamul Segment
- South Plan Boundary
- Segments

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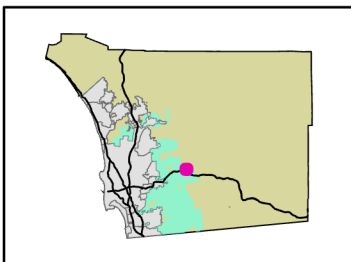


San Diego River Park Foundation Peutz Creek Preserve 8/2011



Acquisition Name:	Peutz Creek Preserve 8/2011
Owner:	San Diego River Park Foundation
Management Agency:	Non-Profit
Acquisition GIS Acres:	110.82
Habitrak Acres (New Gain):	110.82
Habitrak Acres (Existing Gain):	0.00
Acquisition Date:	8/25/2011
Habitrak Tracking Number:	25-043
MSCP Segment:	North Metro-Lakeside Jamul

Vegetation	Acres
Natural Floodchannel/Streambed	0.17
Oak Woodland	1.67
Oak Riparian Forest	4.42
Coastal Sage-Chaparral Scrub	15.44
Coastal Sage Scrub	33.50
Chaparral	55.62



Legend

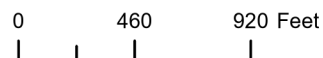
- Acquisition
- Parcel Boundary
- Road

- MSCP Gain
- MSCP Loss
- MSCP (South County) Designation**
- Pre-Approved Mitigation Area
- Hardline Preserve

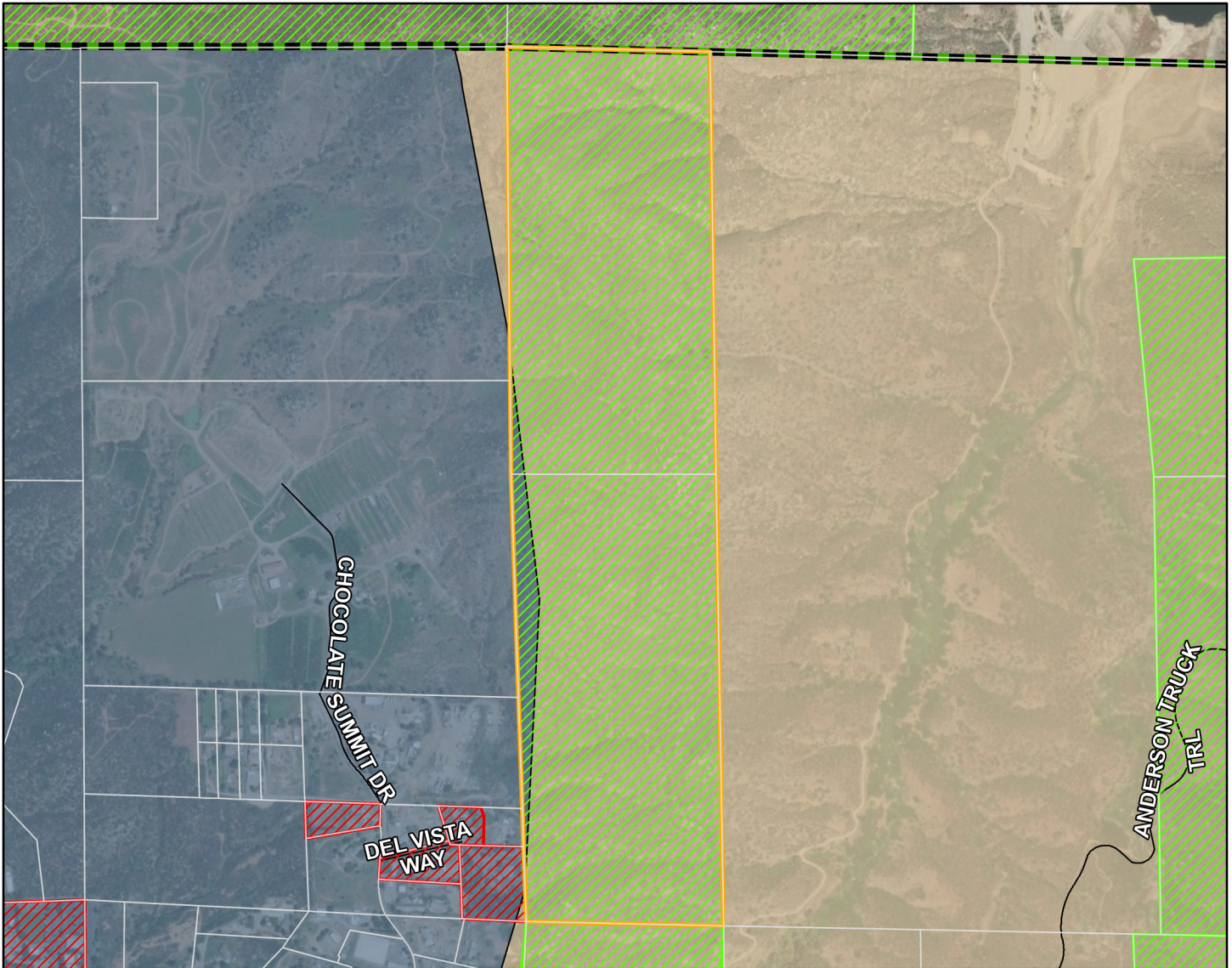
- Take Authorized Area
- Land in Unincorporated Metro-Lakeside-Jamul Segment
- South Plan Boundary
- Segments

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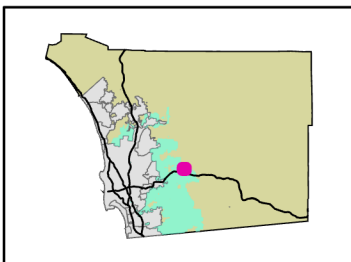


San Diego River Park Foundation Peutz Creek Preserve 9/2013



Acquisition Name:	Peutz Creek Preserve 9/2013
Owner:	San Diego River Park Foundation
Management Agency:	Non-Profit
Acquisition GIS Acres:	157.21
Habitrak Acres (New Gain):	157.21
Habitrak Acres (Existing Gain):	0.00
Acquisition Date:	9/20/2013
Habitrak Tracking Number:	25-044
MSCP Segment:	North Metro-Lakeside Jamul

Vegetation	Acres
Urban/Developed	0.12
Coastal Sage Scrub	33.25
Chaparral	123.35



Legend

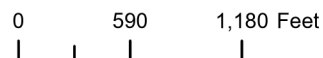
- Acquisition
- Parcel Boundary
- Road

- MSCP Gain
- MSCP Loss
- MSCP (South County) Designation**
- Pre-Approved Mitigation Area

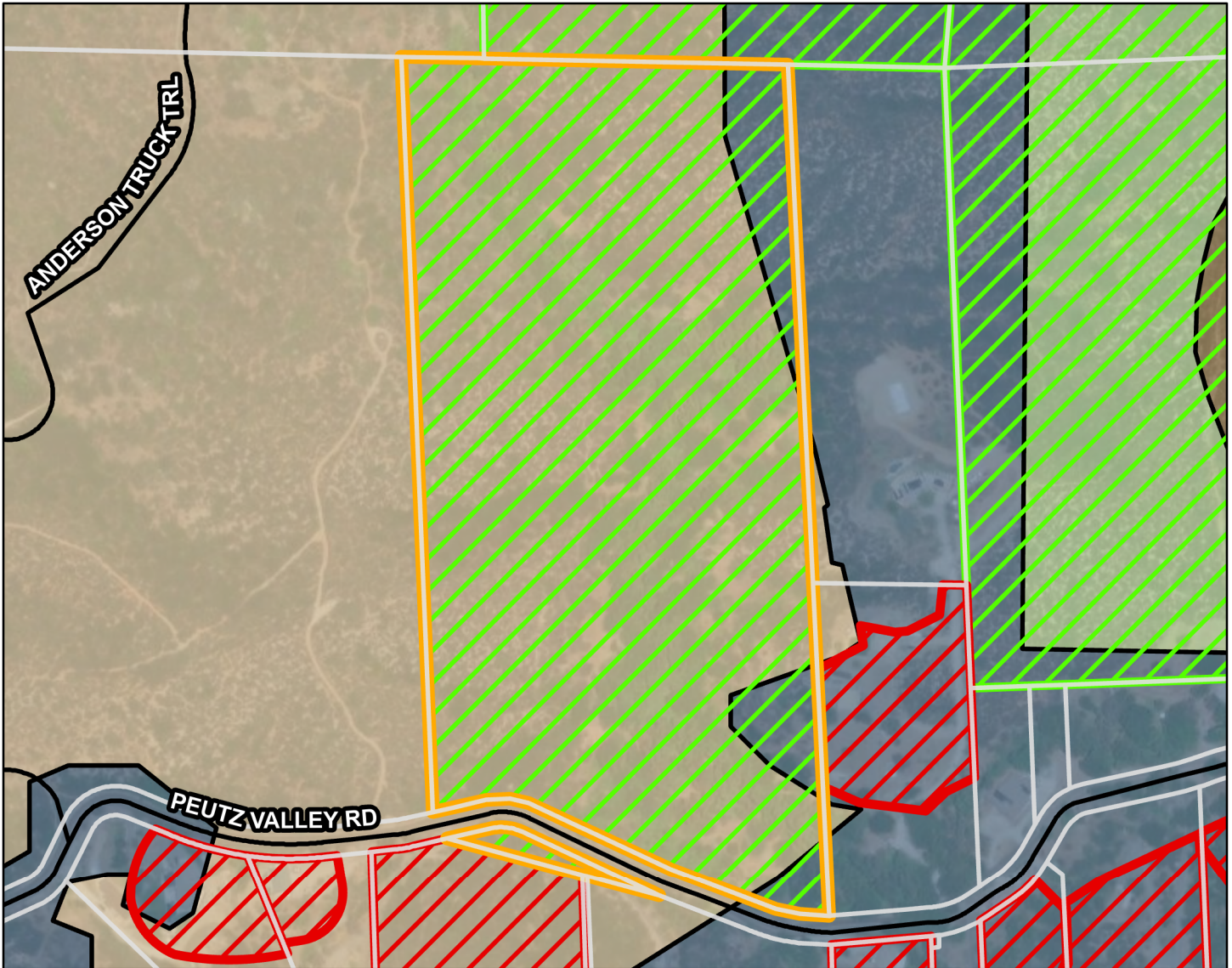
- Unincorporated
- Land in Metro-Lakeside-Jamul Segment
- South Plan Boundary
- Segments

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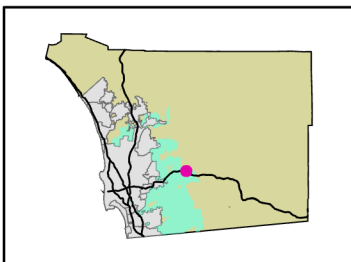


San Diego River Park Foundation Peutz Creek Preserve 7/2011



Acquisition Name:	Peutz Creek Preserve 7/2011
Owner:	San Diego River Park Foundation
Management Agency:	Non-Profit
Acquisition GIS Acres:	30.65
Habitrak Acres (New Gain):	30.65
Habitrak Acres (Existing Gain):	0.00
Acquisition Date:	7/8/2011
Habitrak Tracking Number:	25-045
MSCP Segment:	North Metro-Lakeside Jamul

Vegetation	Acres
Urban/Developed	0.48
Disturbed Land	0.54
Chaparral	8.18
Oak Riparian Forest	9.49
Coastal Sage Scrub	11.95



Legend

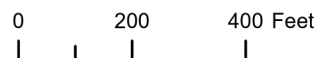
- Acquisition
- Parcel Boundary
- Road

- MSCP Gain
- MSCP Loss
- MSCP (South County) Designation**
- Pre-Approved Mitigation Area
- Hardline Preserve

- Take Authorized Area
- Unincorporated Land in Metro-Lakeside-Jamul Segment
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APPENDIX E

Summary of MSCP Losses

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Summary of Project Losses

MSCP South San Diego County



From 1/1/2025 To 12/31/2025

County of San Diego

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
25-006	BP Alpert	None	David & Yael Alpert	393-021-06	3/28/2025	Loss	None	Single-Family Residential	0.28	0.00	0.28
25-018	BP Blythe	None	JOSEPH & TRACY BLYTHE 2025 LIVING TRUST 03-18-25	393-152-15	6/27/2025	Loss	None	Single-Family Residential	0.26	0.00	0.26
25-008	BP Bolton	None	Lindsay Bolton	303-090-22	5/8/2025	Loss	None	Single-Family Residential	0.71	0.00	0.71
25-014	BP Clemetson	None	Jeffrey G & Stacy Clemetson	501-033-17	7/30/2025	Loss	None	Single-Family Residential	0.09	0.00	0.09
25-009	BP Ehman	None	Michael P and Deborah Ehman	517-250-11	5/8/2025	Loss	None	Single-Family Residential	0.63	0.01	0.65
25-023	BP ESPARZA	None	STEVEN A & KATHARINE M ESPARZA	599-042-09	10/27/2025	Loss	None	Single-Family Residential	1.36	0.00	1.36
25-017	BP Garcia	None	Garcia Oscar L and Liliana	518-111-55	9/3/2025	Loss	None	Single-Family Residential	0.16	0.12	0.28
25-010	BP HAMCO IMMOBILIARE LLC	None	HAMCO IMMOBILIARE LLC	600-100-07	5/20/2025	Loss	None	Rural Residential	3.25	0.00	3.25
25-007	BP Herrera	None	Luis J and Yolanda R Herrera	285-110-04	4/17/2025	Loss	None	Single-Family Residential	0.51	0.00	0.51
25-025	BP LAKESIDE LAND CO	None	LAKESIDE LAND CO INC	379-142-01 379-143-06 379-143-12 379-143-13 379-143-14 379-143-15	11/18/2025	Loss	None	Industrial	10.66	27.15	37.81
25-003	BP Lakeview at Highlands Ranch HOA	None	Lakeview at Highlands Ranch Homeowners Assn	580-232-04	1/29/2025	Loss	None	Commercial	0.07	0.00	0.07
25-024	BP Lane	None	GARY W & JEAN M LANE	649-150-17	10/31/2025	Loss	None	Single-Family Residential	1.09	0.00	1.09
25-004	BP Lopez	None	Rosaria Lopez	401-101-02	1/31/2025	Loss	None	Single-Family Residential	1.20	0.00	1.20
25-022	BP MCM SD Properties	None	MCM SD PROPERTIES I LLC	596-172-08	10/24/2025	Loss	None	Single-Family Residential	0.54	0.00	0.54
25-019	BP Mejia	None	MEJIA RICARDO L & MARISSA P	514-340-27	9/18/2025	Loss	None	Single-Family Residential	0.07	0.00	0.07
25-011	BP Moradi	None	Farid Moradi	269-183-27	6/25/2025	Loss	None	Single-Family Residential	0.26	0.00	0.26

County of San Diego

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
25-020	BP Nasby	None	NASBY FAMILY LIVING TRUST 03-27-18	596-270-22	9/19/2025	Loss	None	Single-Family Residential	0.91	0.00	0.91
25-027	BP NEBI	None	NEBI KHALID S & ABDAL SEREN M	379-102-59	12/26/2025	Loss	None	Single-Family Residential	0.94	0.00	0.94
25-005	BP Newkirk	None	Richard A & Erin Newkirk	579-396-47	3/13/2025	Loss	None	Single-Family Residential	0.16	0.00	0.16
25-015	BP Osuna	None	OSUNA RICARDO 2024 FAMILY TRUST	404-410-08	8/29/2025	Loss	None	Single-Family Residential	0.81	0.00	0.81
25-012	BP SAMS TRUST	None	SAMS TRUST 03-28-17	401-090-36	7/1/2025	Loss	None	Single-Family Residential	1.14	0.00	1.14
25-021	BP Sebaaly	None	SEBAALY JOELLE REVOCABLE TRUST 07-25-22	324-010-68	10/6/2025	Loss	None	Single-Family Residential	0.00	1.03	1.03
25-026	BP Sky Terrace	None	SKY TERRACE LP	493-400-93	12/15/2025	Loss	None	Single-Family Residential	1.41	0.00	1.41
25-002	BP Snider Family Trust	None	Snider Family Trust 02-13-96	324-070-33	1/10/2025	Loss	None	Single-Family Residential	0.00	0.39	0.39
25-001	BP SRNIGERI VIDYA BHARATI FOUNDATION INC USA	None	BP SRNIGERI VIDYA BHARATI FOUNDATION INC USA	241-080-47	1/7/2025	Loss	None	Mixed Use	7.83	0.00	7.83
25-016	BP TC CONSTRUCTION COMPANY	None	TC CONSTRUCTION COMPANY INC	649-070-12	9/3/2025	Loss	None	Single-Family Residential	1.48	0.00	1.48
25-013	BP Williams	None	KENNETH & ADRIANA WILLIAMS	519-210-18	7/2/2025	Loss	None	Rural Residential	0.28	0.00	0.28
25-028	COI Evans	None	EDGAR B EVANS III & JACQUELINE E GARCIA-EDWARDS	270-362-50	7/7/2025	Loss	None		0.32	0.01	0.33
25-029	COI Orozco	None	Judith Orozco	404-262-44	12/2/2025	Loss	None		1.46	0.12	1.58
25-050	Minor Amendment RTX Truck Parking & Storage Facili	None	SIGMA ENTERPRISES LLCC	648-070-23 648-070-25	3/6/2025	Loss	None	Transportation, Communication, Utilities	18.07	0.00	18.07
25-031	PM 16655 International Industrial Park	None	INTERNATIONAL INDUSTRIAL PARK LLC	646-080-37 646-080-38 646-080-39 646-080-40 646-080-41	9/12/2025	Loss	None	Commercial	90.00	0.00	90.00
25-030	PM 22154 12/31/2024	None	JAMES C AND YVONNE D HURRELL	392-070-11 392-070-12 392-070-13 392-070-14 392-070-15	1/1/2025	Loss	None	Single-Family Residential	3.31	0.48	3.79
Total for Agency: County of San Diego									149.28	29.31	178.59

APPENDIX F

Summary of Habitat Losses and Gains

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Summary of Habitat Losses and Gains



Plan: MSCP South San Diego County

Project Gain Status: Gain

Date Range: 1/1/2025 - 12/31/2025

Project Loss Status: Loss

County of San Diego

Habitat Type	Target Cons.	Acres Inside the Habitat Preserve Planning Area					Acres Outside the Habitat Preserve				Total Acres			
		Habitat Loss		Habitat Gain			Habitat Loss		Habitat Gain		Habitat Loss		Habitat Gain	
		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	0.66	784.49	86.35	31,239.64	72.87 %	5.31	1,477.55	17.83	8,443.48	5.97	2,262.04	104.18	39,683.12
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	0.11	328.23	177.26	35,006.91	87.80 %	1.03	3,026.17	374.91	10,755.61	1.14	3,354.40	552.17	45,762.52
Southern Maritime Chaparral	5	0.00	1.95	0.00	5.82	116.31 %	0.00	11.36	0.00	22.66	0.00	13.31	0.00	28.47
Coastal Sage-Chaparral Scrub	1,325	0.00	12.40	9.31	1,018.23	76.85 %	0.92	145.47	6.74	1,121.35	0.92	157.87	16.05	2,139.57
Grassland	3,171	0.48	62.70	53.96	2,083.25	65.70 %	10.10	1,294.33	1.55	1,033.66	10.58	1,357.04	55.51	3,116.91
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	0.29	3.02	186.36	79.98 %	0.00	4.56	0.00	80.14	0.00	4.84	3.02	266.50
Riparian Forest	348	0.00	0.45	0.00	311.80	89.60 %	0.00	2.88	0.00	76.45	0.00	3.33	0.00	388.25
Oak Riparian Forest	2,192	0.00	33.99	15.52	1,052.55	48.02 %	0.57	52.06	16.88	493.44	0.57	86.05	32.40	1,545.99
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	4.18	11.75	0.00	123.66	32.29 %	0.00	17.08	0.00	78.66	4.18	28.84	0.00	202.32
Oak Woodland	2,211	0.00	52.80	1.26	1,166.25	52.75 %	0.22	174.10	12.23	555.40	0.22	226.91	13.49	1,721.65
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	5,605.24	100.29 %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5,605.24
Eucalyptus Woodland	105	0.00	9.06	0.00	46.03	43.84 %	0.26	417.00	0.00	68.10	0.26	426.06	0.00	114.14
Open Water	149	0.00	0.50	0.00	39.60	26.58 %	1.93	8.34	0.00	38.30	1.93	8.84	0.00	77.90
Disturbed Wetland	90	0.00	1.99	0.00	78.99	87.77 %	0.55	16.93	0.00	26.00	0.55	18.93	0.00	104.99
Natural Floodchannel	225	0.00	0.45	0.17	34.23	15.22 %	0.00	0.00	0.00	4.83	0.00	0.45	0.17	39.06
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
Disturbed Land	0	23.88	143.03	0.66	477.61		6.27	758.35	0.30	391.84	30.15	901.38	0.96	869.45
Agriculture	0	0.00	120.50	0.00	555.38		111.07	1,992.20	4.36	2,362.25	111.07	2,112.70	4.36	2,917.63
Urban/Developed	0	0.01	45.08	0.07	77.76		11.04	2,185.33	1.43	636.82	11.05	2,230.41	1.50	714.57
Agency Total:		29.31	1,609.65	347.57	79,124.05		149.28	11,583.72	436.22	26,203.68	178.59	13,193.38	783.80	105,327.74

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

APPENDIX G

Habitat Conservation Accounting Model

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Habitat Conservation Accounting Model

MSCP South San Diego County



From 1/1/2025 To 12/31/2025

Project Gain Status: Gain

Project Loss Status: Loss

<i>County of San Diego</i>	Total Subarea Habitat Preserve	Conservation Target	Estimated 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
Beach	0	0	0	0.00	0.00	0.00	0.00	n/a
Saltpan	0	0	0	0.00	0.00	0.00	0.00	n/a
Southern Foredunes	0	0	0	0.00	0.00	0.00	0.00	n/a
Southern Coastal Bluff Scrub	0	0	0	0.00	0.00	0.00	0.00	n/a
Coastal Sage Scrub	23,569	18,717	4,852	3.86	12,983.61	3,514.36	5.90	-
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	14,671.10	2,840.10	1.14	-
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	833.58	160.76	0.92	-
Grassland	2,145	1,741	404	4.31	1,086.62	267.33	4.46	-
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	979.40	0.53	0.57	+
Riparian Woodland	6	6	0	0.00	4.24	0.00	0.00	n/a
Riparian Scrub	298	298	0	0.00	56.85	0.00	4.18	+
Oak Woodland	2,355	1,912	443	4.32	1,050.83	263.42	0.22	-
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	13.52	4.76	0.26	-
Open Water	124	124	0	0.00	18.39	0.00	1.93	+
Disturbed Wetland	52	52	0	0.00	47.10	0.00	0.55	+
Natural Floodchannel	197	197	0	0.00	13.09	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	254.44	0.00	30.15	+
Agriculture	1,608	0	1,608	0.00	485.16	0.00	9.12	+

County of San Diego	Total Subarea Habitat Preserve	Conservation Target	Estimated 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	33.45	0.00	11.05	+
Total Acres for Agency: County of San Diego					32,624.22		70.45	

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 H

Mitigation Bank Status

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	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 Canyon											
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
Rancho San Diego											
Total	4.8	226.2	80.3	0	2.4	19.6	3.4	80.3	0	72.5	409.2
Used	2.85	126.59	6.215	0	0.35	7.63	0.51	6.215	0	16.72	160.865
Remaining	1.95	99.61	74.085	0	2.05	11.97	2.89	74.09	0	55.78	248.34
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	19.14	0	0	0	0	0	19.14
Remaining	0	0	0	0	5.19	0	0	0	0	0	5.19
Total Remaining	1.95	168.615	74.085	0	7.24	26.87	2.99	74.77	0	55.78	338.215

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APPENDIX I

COIs Issued for Agricultural Clearing

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	Date Issued	APN	Permit Number	Site Name	Acres
1	12/11/00	399-020-17	AE301	Gibson	28.60
2	03/16/01	513-080-23	AE01-005	Boney	2.00
3	01/14/04	285-030-10	AD03-051	Royden	9.86
4	01/14/04	327-011-03	AD03-051	Royden	42.72
5	08/09/04	375-171-03	AD 04-048	Shank	1.00
6	08/09/04	375-171-04	AD 04-048	Shank	1.00
7	3/31/2011	Portions of 389-091-05, -06, -25	None	High Meadow Ranch	6.55
8	8/10/2011	240-270-58, 242-010-71, -72, 242-030-37, -38, 242-031-03, 242-080-01, -07, 243-110-01, -04, 243-150-05, 244-020-04	AD 11-017	Rancho Guejito	763.00
9	10/13/2011	242-070-07	AD 09-058	Rockwood Ranch	29.30
10	2/12/2015	242-070-07	None	Rancho Guejito	13.77
11	7/2/2015	243-020-05, -07, -10, 243-030-02, 243-070-01,-08	PDS2015-LDGRMN-20025	Vineyard Ranch	35.9
12	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
13	1/14/2016	585-113-22	PDS2015-AD-15-013	Nencini	10.9
Total					1,223.7

APPENDIX J

Species and Habitat Conservation in County Preserves

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List of Tables

Table J-1. MSCP Covered Species Documented in County Preserves 2
Table J-2. MSCP Covered Species Documented by County Preserve 12

Table J-1. MSCP Covered Species Documented in County Preserves

MSCP Covered Species	Documented in County Preserves		County Preserve or Park
	GIS source	Other Source	
Plants			
Aphanisma			
California Orcutt grass			
Coast (San Diego) barrel cactus <i>6 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Dictionary Hill Preserve^a • Furby-North Preserve • Lusardi Creek Preserve • Otay Ranch Preserve • Tijuana River Valley Regional Park • Los Peñasquitos Canyon Preserve
Coast wallflower			
Coastal (Shaw's) agave			
Coastal Dunes Milkvetch			
Dehesa beargrass			
Del Mar manzanita <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Lusardi Creek Preserve
Del Mar Mesa sandaster			
Dunn's mariposa lily <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Otay Ranch Preserve
Encinitas Baccharis <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Del Dios Highlands Preserve
Felt-leaved monardella <i>3 County Preserves</i>	✓		<ul style="list-style-type: none"> • Boulder Oaks Preserve • El Capitan Preserve • Otay Ranch Preserve
Fire (Dense) redgrass			
Gander's butterweed			
Gander's pitcher sage <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Otay Ranch Preserve
Heart-leaf pitcher sage <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Iron Mountain Preserve^a
Lakeside ceanothus <i>4 County Preserves</i>	✓		<ul style="list-style-type: none"> • Boulder Oaks Preserve • El Capitan Preserve • Louis A. Stelzer Park • Oakoasis Preserve
Nevin's barberry			
Orcutt's bird's beak <i>2 County Preserves</i>	✓		<ul style="list-style-type: none"> • Otay Valley Regional Park • Tijuana River Valley Regional Park

MSCP Covered Species	Documented in County Preserves		County Preserve or Park
	GIS source	Other Source	
Orcutt's brodiaea <i>4 County Preserves</i>	✓		<ul style="list-style-type: none"> • Boulder Oaks Preserve • Los Peñasquitos Canyon Preserve • Otay Ranch Preserve • Santa Fe Valley Preserve
Otay manzanita <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Otay Ranch Preserve
Otay mesa mint <i>2 County Preserves</i>	✓		<ul style="list-style-type: none"> • Otay Lakes County Park • Otay Ranch Preserve
Otay tarplant <i>3 County Preserves</i>	✓		<ul style="list-style-type: none"> • Furby-North Preserve • Otay Ranch Preserve • Otay Valley Regional Park
Palmer's goldenbush (Palmer's ericameria) <i>2 County Preserves</i>	✓		<ul style="list-style-type: none"> • Lawrence and Barbara Daley Preserve • Otay Ranch Preserve
Parry's tetracoccus			
Prostrate/Nuttall's lotus			
Purple (Narrow-leaved) nightshade			
Salt marsh bird's beak			
San Diego ambrosia			
San Diego button-celery <i>3 County Preserves</i>	✓		<ul style="list-style-type: none"> • Louis A. Stelzer Park • Otay Ranch Preserve • Otay Valley Regional Park • Los Peñasquitos Canyon Preserve
San Diego goldenstar <i>5 County Preserves</i>	✓		<ul style="list-style-type: none"> • Dictionary Hill Preserve • Los Peñasquitos Canyon Preserve • Louis A. Stelzer Park • Otay Ranch Preserve • Sycamore Canyon and Goodan Ranch Preserve
San Diego mesa mint <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Los Peñasquitos Canyon Preserve
San Diego thornmint <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Sycamore Canyon and Goodan Ranch Preserve
San Miguel savory <i>2 County Preserves</i>	✓		<ul style="list-style-type: none"> • Boulder Oaks Preserve • Otay Ranch Preserve
Short-leaf dudleya			
Slender-pod jewelflower (California mustard)			

MSCP Covered Species	Documented in County Preserves		County Preserve or Park
	GIS source	Other Source	
Small-leaved rose			
Snake cholla <i>2 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Furby-North Preserve^a • Otay Ranch Preserve
Spreading (Prostrate) navarretia <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Otay Ranch Preserve
Sticky dudleya			
Tecate cypress <i>2 County Preserves</i>	✓		<ul style="list-style-type: none"> • Otay Ranch Preserve • Boulder Oaks Preserve (planted)
Thread-leaved brodiaea			
Torrey pine <i>1 County Preserve</i>		✓	<ul style="list-style-type: none"> • Tijuana River Valley Regional Park^a (planted)
Variegated dudleya <i>6 County Preserves</i>	✓		<ul style="list-style-type: none"> • Dictionary Hill Preserve • Lusardi Creek Preserve • Otay Lakes Regional Park • Otay Ranch Preserve • Otay Valley Regional Park • Sycamore Canyon / Goodan Ranch Preserve
Wart-stemmed ceanothus <i>2 County Preserves</i>	✓		<ul style="list-style-type: none"> • Del Dios Highlands Preserve • Tijuana River Valley Regional Park
Willow monardella <i>2 County Preserves</i>	✓		<ul style="list-style-type: none"> • Otay Ranch Preserve • Sycamore Canyon and Goodan Ranch Preserve
Invertebrates			
Riverside fairy shrimp			
San Diego fairy shrimp <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Otay Ranch Preserve
Thorne's hairstreak butterfly <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Otay Ranch Preserve
Wandering skipper			

MSCP Covered Species	Documented in County Preserves		County Preserve or Park
	GIS source	Other Source	
Amphibians and Reptiles			
Arroyo toad			
Belding’s orange-throated whiptail <i>15 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Barnett Ranch Preserve • Boulder Oaks Preserve^a • Del Dios Highlands Preserve^a • Dictionary Hill Preserve^a • El Capitan Preserve • Furby-North Preserve • Lakeside Linkage Preserve • Lawrence and Barbara Daley Preserve • Louis A Stelzer Park^a • Lusardi Creek Preserve • Otay Ranch Preserve • Ramona Grasslands Preserve • Stoneridge Preserve • Sycamore Canyon and Goodan Ranch Preserve • Tijuana River Valley Preserve
California red-legged frog			
Blainville’s (Coast, San Diego) horned lizard <i>16 County Preserve</i>	✓	✓	<ul style="list-style-type: none"> • Barnett Ranch Preserve • Boulder Oaks Preserve ^a • Del Dios Highlands Preserve ^a • Dictionary Hill Preserve • El Capitan Preserve ^a • Furby-North Preserve^a • Lakeside Linkage Preserve • Lawrence and Barbara Daley Preserve • Louis A. Stelzer Park • Lusardi Creek Preserve • Oakoasis Preserve ^a • Otay Ranch Preserve • Ramona Grasslands Preserve • Stoneridge Preserve • Sycamore Canyon and Goodan Ranch Preserve • Tijuana River Valley Preserve ^a
Southwestern pond turtle			

MSCP Covered Species	Documented in County Preserves		County Preserve or Park
	GIS source	Other Source	
Birds			
Bald eagle			
Belding's savannah sparrow			
Burrowing owl <i>2 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Otay Ranch Preserve • Sycamore Canyon and Goodan Ranch Preserve^a
California brown pelican			
California least tern			
Canada goose <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Tijuana River Valley Regional Park
Coastal (San Diego) Cactus wren <i>7 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • El Capitan Preserve^a • Furby-North Preserve • Lakeside Linkage Preserve • Otay Ranch Preserve • Otay Valley Regional Park • Sweetwater Regional Park • Tijuana River Valley Regional Park
Coastal California gnatcatcher <i>15 County Preserves</i>	✓		<ul style="list-style-type: none"> • Boulder Oaks Preserve • Del Dios Highlands Preserve • Dictionary Hill Preserve • Furby-North Preserve • Lakeside Linkage Preserve • Louis A. Stelzer Park • Lusardi Creek Preserve • Otay Lakes Regional Park • Otay Ranch Preserve • Otay Valley Regional Park • Santa Fe Valley Preserve • Stoneridge Preserve • Sweetwater Regional Park • Sycamore Canyon and Goodan Ranch Preserve • Tijuana River Valley Regional Park

MSCP Covered Species	Documented in County Preserves		County Preserve or Park
	GIS source	Other Source	
Cooper's hawk <i>15 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Barnett Ranch Preserve^a • Boulder Oaks Preserve^a • Del Dios Highlands Preserve • Dictionary Hill Preserve^a • El Capitan Preserve^a • Iron Mountain Preserve • Lakeside Linkage Preserve^a • Lawrence and Barbara Daley Preserve^a • Lusardi Creek Preserve • Oakoasis Preserve^a • Otay Ranch Preserve • Skyline Preserve • Stoneridge Preserve • Sycamore Canyon and Goodan Ranch Preserve^a • Tijuana River Valley Regional Park
Elegant tern			
Ferruginous hawk <i>1 County Preserve</i>		✓	<ul style="list-style-type: none"> • Del Dios Highlands Preserve^a
Golden eagle <i>6 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Barnett Ranch Preserve^a • Del Dios Highlands Preserve • El Capitan Preserve • Otay Ranch Preserve • Ramona Grasslands Preserve • Sycamore Canyon and Goodan Ranch Preserve^a
Large-billed savannah sparrow			
Least Bell's vireo <i>8 County Preserves</i>	✓		<ul style="list-style-type: none"> • Furby-North Preserve • Los Peñasquitos Canyon Preserve • Lusardi Creek Preserve • Otay Lakes Regional Park • Otay Ranch Preserve • Otay Valley Regional Park • Sweetwater Regional Park • Tijuana River Valley Regional Park
Light-footed Ridgway's rail <i>1 County Park</i>	✓		<ul style="list-style-type: none"> • Tijuana River Valley Regional Park
Long-billed curlew			
Mountain plover			

MSCP Covered Species	Documented in County Preserves		County Preserve or Park
	GIS source	Other Source	
Northern harrier <i>8 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Del Dios Highlands Preserve • Furby-North Preserve^a • Lawrence and Barbara Daley Preserve^a • Louis A. Stelzer Preserve • Lusardi Creek Preserve^a • Otay Ranch Preserve • Sycamore Canyon and Goodan Ranch Preserve^a • Tijuana River Valley Regional Park
Peregrine falcon <i>4 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Del Dios Highlands • Peutz Valley Preserve • Otay Ranch Preserve • Tijuana River Valley^a
Reddish egret			
Southern California rufous-crowned sparrow <i>16 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Barnett Ranch Preserve^a • Boulder Oaks Preserve^a • Del Dios Highlands Preserve^a • Dictionary Hill Preserve^a • El Capitan Preserve^a • El Monte Park^a • Furby-North Preserve^a • Lakeside Linkage Preserve^a • Lawrence and Barbara Daley Preserve^a • Louis A. Stelzer Park^a • Lusardi Creek Preserve^a • Oakoasis Preserve^a • Otay Ranch Preserve • Stoneridge Preserve^a • Sycamore Canyon and Goodan Ranch Preserve^a • Tijuana River Valley Regional Park^a
Southwestern willow flycatcher <i>1 County Preserve</i>	✓		<ul style="list-style-type: none"> • Tijuana River Valley Regional Park
Swainson's hawk <i>1 County Preserve</i>		✓	<ul style="list-style-type: none"> • Barnett Ranch Preserve^a
Tricolored blackbird <i>2 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Barnett Ranch Preserve^a • Tijuana River Valley Regional Park

MSCP Covered Species	Documented in County Preserves		County Preserve or Park
	GIS source	Other Source	
Western bluebird <i>10 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Barnett Ranch Preserve^a • Boulder Oaks Preserve^a • Del Dios Highlands Preserve^a • El Capitan Preserve^a • El Monte Park^a • Lakeside Linkage Preserve^a • Lawrence and Barbara Daley Preserve • Oakoasis Preserve^aStoneridge Preserve • Sycamore Canyon and Goodan Ranch Preserve
Western snowy plover			<ul style="list-style-type: none"> •
White-faced ibis <i>2 County Preserve</i>	✓	✓	<ul style="list-style-type: none"> • Del Dios Highlands Preserve^a • Tijuana River Valley Regional Park
Mammals			
American badger			
Mountain lion <i>6 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Barnett Ranch Preserve^a • Boulder Oaks Preserve^a • Del Dios Highlands Preserve • El Capitan Preserve • Otay Ranch Preserve • Sycamore Canyon and Goodan Ranch Preserve^a
Southern mule deer <i>14 County Preserves</i>	✓	✓	<ul style="list-style-type: none"> • Barnett Ranch Preserve^a • Boulder Oaks Preserve • Del Dios Highlands Preserve • El Capitan Preserve • El Monte Park^a • Lakeside Linkage Preserve^a • Lawrence and Barbara Daley Preserve^a • Louis A. Stelzer Preserve • Lusardi Creek Preserve • Oakoasis Preserve • Otay Ranch Preserve^a • Ramona Grasslands Preserve^a • Stoneridge Preserve • Sycamore Canyon and Goodan Ranch Preserve

NOTES:

^a Species documented in County Preserve in a report rather than in GIS. Reports are referenced in the sources below.

SOURCES:

- AECOM. 2019. Baseline Biodiversity Survey Report for the Holly Oaks County Park, Luelf Pond Preserve, and Barnett Ranch Preserve Properties County of San Diego Department of Parks and Recreation. Prepared for Department of Parks and Recreation County of San Diego. June.
- California Natural Diversity Database. 2020. Occurrences points and polygons documenting species sightings from 1998 to present included for MSCP species occurrences.
- County of San Diego Land Use and Environmental Group-GIS. 2020. SanBIOS. Occurrences points and polygons documenting species sightings from 1998 to present included for MSCP species occurrences.
- County of San Diego Department of Parks and Recreation. 2018. Draft Boulder Oaks Resource Management Plan. March.
- County of San Diego Department of Parks and Recreation. 2011. Del Dios Highlands Preserve Resource Management Plan. June.
- County of San Diego Department of Parks and Recreation. 2009. Final El Capitan Preserve Resource Management Plan. June.
- County of San Diego Department of Parks and Recreation. 2009. El Monte County Park Resource Management Plan. June.
- County of San Diego Department of Parks and Recreation. 2012. Furby-North Property Resource Management Plan. June.
- County of San Diego Department of Parks and Recreation. 2010. Lakeside Linkage Preserve Resource Management Plan. August.
- County of San Diego Department of Parks and Recreation. 2011. Lawrence and Barbra Daley Preserve Resource Management Plan. June.
- County of San Diego Department of Parks and Recreation. 2009. Lusardi Creek Preserve Resource Management Plan. June.
- County of San Diego Department of Parks and Recreation. 2009. Oakoasis Preserve Resource Management Plan. June.
- County of San Diego Department of Parks and Recreation. 2018. Draft Sycamore Canyon and Goodan Ranch Preserve Resource Management Plan. April.
- County of San Diego Department of Parks and Recreation. 2009. Louis A. Stelzer County Park Resource Management Plan. April
- County of San Diego Department of Parks and Recreation. 2013. Stoneridge Preserve Resource Management Plan. April.
- County of San Diego Department of Parks and Recreation. 2007. Tijuana River Valley Regional Park Area Specific Management Objectives. June.
- DUDEK. 2026. 2025 Targeted Monitoring Plan Habitat Condition Report, San Luis Rey River County Park and Bottle Peak, Lusardi Creek, Del Dios Highlands, Boulder Oaks, and Ramona Grasslands County Preserves. March.
- Environmental Science Associates. 2019. Baseline Biodiversity Report for the Dictionary Hill Preserve County of San Diego Department of Parks and Recreation. Prepared for Department of Parks and Recreation County of San Diego. October
- Environmental Science Associates. 2025. Targeted Monitoring Plan Resource-Specific Monitoring & Management. Annual Report. February.

Helix. 2019. Baseline Biodiversity Survey Report Tijuana River Valley Regional Park. Prepared for Department of Parks and Recreation County of San Diego. August.

San Diego Management and Monitoring Program. 2020. MSP Species Master Occurrence Matrix databases. Occurrences points documenting species sightings from 1998 to present included for MSCP species occurrences.

U.S. Fish and Wildlife Service. 2020. Regss Locations of Sensitive Species Sightings database. Occurrences points documenting species sightings from 1998 to present included for MSCP species occurrences.

U.S. Fish and Wildlife Service. 2020. Sensitive Species (polygons). Occurrence polygons documenting species sightings from 1998 to present included for MSCP species occurrences.

Table J-2. MSCP Covered Species Documented by County Preserve

County Preserves	MSCP Covered Species Documented
Barnett Ranch County Preserve	<i>10 MSCP covered species</i>
Reptiles	Belding's orange-throated whiptail Blainville's (Coast, San Diego) horned lizard
Birds	Cooper's hawk ^a Golden eagle ^a Southern California rufous-crowned sparrow ^a Swainson's hawk ^a Tricolored blackbird ^a Western bluebird ^a
Mammals	Mountain lion ^a Southern mule deer ^a
Boulder Oaks County Preserve	<i>12 MSCP covered species</i>
Plants	Felt-leaved monardella Lakeside ceanothus Orcutt's brodiaea San Miguel savory Tecate cypress
Reptiles	Belding's orange-throated whiptail ^a Blainville's (Coast, San Diego) horned lizard ^a
Birds	Coastal California gnatcatcher Cooper's hawk ^a Southern California rufous-crowned sparrow ^a Western bluebird ^a
Mammals	Mountain lion Southern mule deer
Del Dios Highlands County Preserve	<i>15 MSCP covered species</i>
Plants	Encinitas baccharis Wart-stemmed ceanothus
Reptiles	Belding's orange-throated whiptail ^a Blainville's (Coast, San Diego) horned lizard ^a
Birds	Coastal California gnatcatcher Cooper's hawk Golden eagle Northern harrier Peregrine falcon Southern California rufous-crowned sparrow ^a

County Preserves	MSCP Covered Species Documented
	Ferruginous hawk ^a
Birds (cont.)	White-faced Ibis ^a
	Western bluebird
Mammals	Mountain lion
	Southern mule deer
Dictionary Hill County Preserve	8 MSCP covered species
Plants	Coast (San Diego) barrel cactus ^a
	San Diego goldenstar
	Variegated dudleya
Reptiles	Blainville's (Coast, San Diego) horned lizard
	Belding's orange-throated whiptail ^a
Birds	Coastal California gnatcatcher
	Cooper's Hawk ^a
	Southern California Rufous-crowned sparrow ^a
El Capitan County Preserve	11 MSCP covered species
Plants	Felt-leaved monardella
	Lakeside ceanothus
Reptiles	Belding's orange-throated whiptail
	Blainville's (Coast, San Diego) horned lizard ^a
Birds	Coastal (San Diego) cactus wren
	Cooper's hawk ^a
	Golden eagle
	Southern California rufous-crowned sparrow ^a
	Western bluebird ^a
Mammals	Mountain lion
	Southern mule deer
El Monte County Park	3 MSCP covered species
Birds	Southern California rufous-crowned sparrow ^a
	Western bluebird ^a
Mammals	Southern mule deer ^a
Furby-North Preserve	10 MSCP covered species
Plants	Coast (San Diego) barrel cactus
	Otay tarplant
	Snake cholla ^a
Reptiles	Belding's orange-throated whiptail
	Blainville's (Coast, San Diego) horned lizard ^a

County Preserves	MSCP Covered Species Documented
Birds	Coastal (San Diego) cactus wren
	Coastal California gnatcatcher
	Least Bell's vireo
	Northern harrier ^a
	Southern California rufous-crowned sparrow ^a
Lakeside Linkage County Preserve	<i>8 MSCP Covered Species</i>
Reptiles	Belding's orange-throated whiptail
	Blainville's (Coast, San Diego) horned lizard
Birds	Coastal cactus wren
	Coastal (San Diego) California gnatcatcher
	Cooper's hawk ^a
	Southern California rufous-crowned sparrow ^a
	Western bluebird ^a
Mammals	Southern mule deer ^a
Lawrence and Barbara Daley County Preserve	<i>8 MSCP covered species</i>
Plants	Palmer's goldenbush
Reptiles	Blainville's (Coast, San Diego) horned lizard
	Belding's orange-throated whiptail
Birds	Cooper's hawk
	Northern harrier
	Southern California rufous-crowned sparrow ^a
	Western bluebird
Mammals	Southern mule deer ^a
Los Peñasquitos Canyon County Preserve	<i>4 MSCP covered species</i>
Plants	Orcutt's brodiaea
	San Diego button-celery
	San Diego goldenstar
	San Diego mesa mint
Birds	Least Bell's vireo
Louis A. Stelzer County Park	<i>8 MSCP covered species</i>
Plants	Lakeside ceanothus
	San Diego goldenstar
Reptiles	Belding's orange-throated whiptail ^a
	Blainville's (Coast, San Diego) horned lizard ^a
Birds	Coastal California gnatcatcher
	Northern harrier ^a
	Southern California rufous-crowned sparrow ^a

County Preserves	MSCP Covered Species Documented
Mammals	Southern mule deer
Lusardi Creek County Preserve	<i>11 MSCP covered species</i>
Plants	Coast (San Diego) barrel cactus
	Del Mar manzanita
	Variegated dudleya
Reptiles	Belding's orange-throated whiptail
	Blainville's (Coast, San Diego) horned lizard
Birds	Coastal California gnatcatcher
	Cooper's hawk
	Least Bell's vireo
	Northern harrier
	Southern California rufous-crowned sparrow
Mammals	Southern mule deer ^a
Oakooasis County Preserve	<i>6 MSCP covered species</i>
Plants	Lakeside ceanothus
Reptiles	Blainville's (Coast, San Diego) horned lizard ^a
Birds	Cooper's hawk ^a
	Southern California rufous-crowned sparrow ^a
	Western bluebird ^a
Mammals	Southern mule deer
Otay Lakes County Park	<i>2 MSCP covered species</i>
Plants	Otay mesa mint
	Variegated dudleya
Otay Lakes Regional Park	<i>2 MSCP covered species</i>
Birds	Costal California gnatcatcher
	Least Bell's vireo
Otay Ranch Preserve	<i>32 MSCP covered species</i>
Plants	Coast (San Diego) barrel cactus
	Dunn's mariposa lily
	Felt-leaf monardella
	Gander's pitcher sage
	Orcutt's brodiaea
	Otay manzanita
	Otay mesa mint
	Otay tarplant
	Palmer's goldenbush
	San Diego button-celery

County Preserves	MSCP Covered Species Documented
	San Diego goldenstar
Plants (cont.)	San Miguel savory
	Snake cholla
	Spreading (prostrate) navarretia
	Tecate cypress
Invertebrates	San Diego fairy shrimp
	Thorne's hairstreak butterfly
	Variegated dudleya
Reptiles	Belding's orange-throated whiptail
	Blainville's (Coast, San Diego) horned lizard
	Willow monardella
Birds	Burrowing owl
	Coastal (San Diego) cactus wren
	Coastal California gnatcatcher
	Cooper's hawk
	Golden eagle
	Least Bell's vireo
	Northern harrier
	Peregrine falcon
	Southern California rufous-crowned sparrow
Mammals	Mountain lion
	Southern mule deer
Otay Valley Regional Park	<i>7 MSCP covered species</i>
Plants	San Diego button-celery
	Orcutt's bird's beak
	Otay tarplant
	Variegated dudleya
Birds	Coastal (San Diego) cactus wren
	Coastal California gnatcatcher
	Least Bell's vireo
Ramona Grasslands County Preserve	<i>4 MSCP covered species</i>
Reptiles	Belding's orange-throated whiptail
	Blainville's (Coast, San Diego) horned lizard
Birds	Golden eagle
Mammals	Southern mule deer
Santa Fe Valley Preserve	<i>2 MSCP covered species</i>
Plants	Orcutt's brodiaea

County Preserves	MSCP Covered Species Documented
Birds	Coastal California gnatcatcher
Stoneridge County Preserve	<i>7 MSCP covered species</i>
Reptiles	Belding's orange-throated whiptail
	Blainville's (Coast, San Diego) horned lizard
Birds	Coastal California gnatcatcher
	Cooper's hawk
	Southern California rufous-crowned sparrow
	Western bluebird
Mammals	Southern mule deer
Sweetwater Regional Park	<i>3 MSCP covered species</i>
Birds	Coastal (San Diego) cactus wren
	Coastal California gnatcatcher
	Least Bell's vireo
Sycamore Canyon and Goodan Ranch County Preserve	<i>15 MSCP covered species</i>
Plants	San Diego goldenstar
	San Diego thornmint
	Variegated dudleya
	Willow monardella
Reptiles	Belding's orange-throated whiptail
	Blainville's (Coast, San Diego) horned lizard
Birds	Burrowing owl ^a
	Coastal California gnatcatcher
	Cooper's hawk ^a
	Golden eagle ^a
	Northern harrier ^a
	Southern California rufous-crowned sparrow ^a
	Western bluebird
Mammals	Mountain lion ^a
	Southern mule deer
Tijuana River Valley Regional Park	<i>17 MSCP covered species</i>
Plants	Coast (San Diego) barrel cactus
	Orcutt's bird's-beak
	Torrey pine ^a (planted)
	Wart-stemmed ceanothus
Reptiles	Belding's orange-throated whiptail
	Blainville's horned lizard ^a

County Preserves	MSCP Covered Species Documented
Birds	Canada goose
	Coastal (San Diego) cactus wren
	Coastal California gnatcatcher
	Cooper's hawk
	Least Bell's vireo
	Light-footed Ridgway's rail
	Northern harrier
	Peregrine falcon
	Southern California rufous-crowned sparrow ^a
	Southwestern willow flycatcher

NOTES:

^a Species documented in County Preserve in a report rather than in GIS. Reports are referenced in the sources below.

SOURCES:

AECOM. 2019. Baseline Biodiversity Survey Report for the Holly Oaks County Park, Luelf Pond Preserve, and Barnett Ranch Preserve Properties County of San Diego Department of Parks and Recreation. Prepared for Department of Parks and Recreation County of San Diego. June.

California Natural Diversity Database. 2020. Occurrences points and polygons documenting species sightings from 1998 to present included for MSCP species occurrences.

County of San Diego Land Use and Environmental Group-GIS. 2020. SanBIOS. Occurrences points and polygons documenting species sightings from 1998 to present included for MSCP species occurrences.

County of San Diego Department of Parks and Recreation. 2018. Draft Boulder Oaks Resource Management Plan. March.

County of San Diego Department of Parks and Recreation. 2011. Del Dios Highlands Preserve Resource Management Plan. June.

County of San Diego Department of Parks and Recreation. 2009. Final El Capitan Preserve Resource Management Plan. June.

County of San Diego Department of Parks and Recreation. 2009. El Monte County Park Resource Management Plan. June.

County of San Diego Department of Parks and Recreation. 2012. Furby-North Property Resource Management Plan. June.

County of San Diego Department of Parks and Recreation. 2010. Lakeside Linkage Preserve Resource Management Plan. August.

County of San Diego Department of Parks and Recreation. 2011. Lawrence and Barbra Daley Preserve Resource Management Plan. June.

County of San Diego Department of Parks and Recreation. 2009. Lusardi Creek Preserve Resource Management Plan. June.

- County of San Diego Department of Parks and Recreation. 2009. Oakoasis Preserve Resource Management Plan. June.
- County of San Diego Department of Parks and Recreation. 2018. Draft Sycamore Canyon and Goodan Ranch Preserve Resource Management Plan. April.
- County of San Diego Department of Parks and Recreation. 2009. Louis A. Stelzer County Park Resource Management Plan. April
- County of San Diego Department of Parks and Recreation. 2013. Stoneridge Preserve Resource Management Plan. April.
- County of San Diego Department of Parks and Recreation. 2007. Tijuana River Valley Regional Park Area Specific Management Objectives. June.
- DUDEK. 2026. 2025 Targeted Monitoring Plan Habitat Condition Report, San Luis Rey River County Park and Bottle Peak, Lusardi Creek, Del Dios Highlands, Boulder Oaks, and Ramona Grasslands County Preserves. March.
- Environmental Science Associates. 2019. Baseline Biodiversity Report for the Dictionary Hill Preserve County of San Diego Department of Parks and Recreation. Prepared for Department of Parks and Recreation County of San Diego. October
- Environmental Science Associates. 2025. Targeted Monitoring Plan Resource-Specific Monitoring & Management. Annual Report. February.
- Helix. 2019. Baseline Biodiversity Survey Report Tijuana River Valley Regional Park. Prepared for Department of Parks and Recreation County of San Diego. August.
- San Diego Management and Monitoring Program. 2020. MSP Species Master Occurrence Matrix databases. Occurrences points documenting species sightings from 1998 to present included for MSCP species occurrences.
- U.S. Fish and Wildlife Service. 2020. Regss Locations of Sensitive Species Sightings database. Occurrences points documenting species sightings from 1998 to present included for MSCP species occurrences.
- U.S. Fish and Wildlife Service. 2020. Sensitive Species (polygons). Occurrence polygons documenting species sightings from 1998 to present included for MSCP species occurrences.
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APPENDIX K

Stewardship and Adaptive Management in County
Parks and Preserves in Reporting Year

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Preserve	Status	Habitat Restoration	Hazardous or Non-Native Tree Removal	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
Barnett Ranch Preserve	Open	4 trees planted <ul style="list-style-type: none"> coast live oak 29 shrubs planted <ul style="list-style-type: none"> white sage Cleveland sage monkeyflower buckwheat 	34 dead trees removed <ul style="list-style-type: none"> coast live oak 	<ul style="list-style-type: none"> tree tobacco castor bean Italian thistle mustard 	Repaired one concrete split rail fence within the staging area to protect sensitive resources, increased patrol presence, and provided outreach to park visitors by interpreting and reinforcing motorized vehicle use rules and regulations.	Maintained existing firebreak along residential access easement and staging area.	Native planting event (12 visitors).
Boulder Oaks Preserve	Closed	75 trees planted <ul style="list-style-type: none"> coast live oak Engelmann oak 	4 dead trees removed <ul style="list-style-type: none"> coast live oak Englemann oak 	<ul style="list-style-type: none"> mustard Dyer's rocket Italian thistle stinkwort puncture vine 	Installed one new sign along Preserve's entry road. Trespassers informed of Preserve's closure and achieved compliance through education.	Maintained existing firebreak along Preserve's entry road.	--
Cactus Park	Open	--	2 diseased trees removed <ul style="list-style-type: none"> pepper tree 	<ul style="list-style-type: none"> castor bean 	Replaced fencing around sports fields, new backstops and gates were installed. Locks were added to trash bins and increased supervision in the area effectively addressed instances of illegal dumping. Increased Ranger patrols, in coordination with the Sheriff's Department, addressed illegal access by motorized bikes.	Maintained existing firebreak adjacent to nearby residences.	--
Christopher Hill Preserve	Open	Maintenance needed in response to fire on Preserve.	3 dead trees removed <ul style="list-style-type: none"> Eucalyptus 	<ul style="list-style-type: none"> Russian thistle Black mustard 	Illegal dumping occurs on Preserve boundary line so fence installation is being planned to deter future incidences.	Maintained existing firebreak along utility road.	--

Preserve	Status	Habitat Restoration	Hazardous or Non-Native Tree Removal	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
Damon Lane Park	Open	--	2 trees removed <ul style="list-style-type: none"> Eucalyptus 	<ul style="list-style-type: none"> castor bean Russian thistle giant reed black mustard 	Five new signs installed prohibiting off-leash dogs, added reflectors along fence at Park entrance to improve visibility, off-road activity was deterred by verbal warning from Rangers and compliance achieved through education of Park regulations.	Maintained existing firebreak along norther Park boundary.	--
Del Dios Highlands Preserve	Open	--	--	<ul style="list-style-type: none"> black mustard castor bean tree tobacco 	Replaced a damaged interpretive sign along the Del Dios Trail, minor encroachment was discovered and rectified with adjacent landowner.	Maintained existing firebreak along SDGE trail and Mt. Israel Road.	--
Dictionary Hill Preserve	Open	Ongoing habitat restoration across four acres to benefit California coastal gnatcatcher, Quino checkerspot butterfly, and monarch butterfly	--	<ul style="list-style-type: none"> wild mustard stinkwort fountain grass puncture vine 	Replaced one wood fence and installed two more wood fences, installed two new dog waste signs, posts were installed at San Bernadino trailhead to deter illegal activities. Preventative and corrective actions included daily ranger patrols, litter removal, and graffiti abatement.	Maintained existing firebreaks along Preserve boundaries.	Ranger-led hikes and events (133 visitors in total). Installation of educational flyers throughout the Preserve informing visitors about coyote behavior.
Dos Picos Park	Open	167 trees planted <ul style="list-style-type: none"> coast live oak Engelmann oak incense cedar Aerator deployed in pond	94 dead trees removed <ul style="list-style-type: none"> coast live oak Engelmann oak Insence cedar 	<ul style="list-style-type: none"> Short-pod mustard 	Seven directional signs and one chain-link fence were repaired, reports of inappropriate visitor behavior resulted in regular ranger patrols focusing on visitor education and enforcement of Park regulations.	Maintained existing firebreak within day use area.	Multiple events brought in 325 visitors, including, a tree planting event, a scavenger hunt, and a snake interpretive event.

Preserve	Status	Habitat Restoration	Hazardous or Non-Native Tree Removal	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
El Capitan Preserve	Open	Habitat protection and soil stabilization efforts in response to the Monte Fire.	--	<ul style="list-style-type: none"> Non-native grasses 	Installed one new regulatory sign and repaired one concrete fence in parking lot, increased Ranger patrols in response to illegal dumping and vehicle break-ins along Preserve entry road.	--	County Park Rangers guided two "Warrior Hikes" on Memorial Day and Veteran's Day (600 visitors).
El Monte Park	Open	5 trees planted <ul style="list-style-type: none"> Engelmann oak 16 shrubs planted <ul style="list-style-type: none"> Toyon Western redbud elderberry lemonade berry 	3 diseased and hazardous trees removed <ul style="list-style-type: none"> carob 	<ul style="list-style-type: none"> Mexican fan palm tree tobacco tamarisk 	Four new enforcement and safety signs were installed and one was repaired; one concrete fence was repaired; Ranger patrols were increased and targeted signs were installed in response to unauthorized access, graffiti, illegal dumping, unauthorized aircraft use, and other unauthorized activities.	Maintained existing firebreak around perimeter of park.	Birds of prey talks, guided flume hikes, and morning bird walks brought in more than 6,500 visitors.
Flinn Springs Park	Open	40 trees planted <ul style="list-style-type: none"> coast live oak 10 shrubs planted <ul style="list-style-type: none"> lavender 	9 dead trees removed <ul style="list-style-type: none"> coast live oak unknown pine species 	<ul style="list-style-type: none"> giant reed black mustard castor bean stinkwort Russian thistle Mexican fan palm Tree tobacco 	Seven new safety and interpretive signs installed; increased Ranger patrols and lock installation on dumpsters in response to reported instances of illegal dumping, off-leash dogs, and smoking.	Maintained existing firebreak along Park boundaries.	Multiple events brought in 116 visitors, including, an Earth Day tree planting, rattlesnake safety workshop, Howl-O-Ween Discovery Table, and monthly "early bird" birding walks.
Furby-North Property	Closed	--	--	--	Fencing, gates, and large boulders installed to deter illegal trails and off-road activity, installation of regulatory "no dumping" signs to discourage illegal dumping along Otay Mesa Road.	--	--

Preserve	Status	Habitat Restoration	Hazardous or Non-Native Tree Removal	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
Holly Oaks County Park	Open	18 trees planted <ul style="list-style-type: none"> coast live oak California sycamore Fremont cottonwood 	4 dead trees removed <ul style="list-style-type: none"> incense cedar 	<ul style="list-style-type: none"> mustard puncture vine eucalyptus tree tobacco 	One sign was installed, split rail fencing repaired to deter unauthorized off-road use, Rangers educated visitors of Preserve rules and regulations.	Maintained existing firebreak along Preserve's southern boundary.	--
Iron Mountain Preserve	Closed	--	--	--	No observations of illegal activities during patrols.	--	--
Lakeside Linkage Preserve	Open	Native vegetation thinning and invasive non-native plant removal within coastal cactus wren habitat.	--	<ul style="list-style-type: none"> tamarisk 	One new sign installed to deter illegal off-road activity, Ranger presence increased in response to unauthorized vehicle activity and illegal dumping.	Maintained existing firebreaks throughout Preserve.	--
Lawrence and Barbara Daley Preserve	Closed	--	--	<ul style="list-style-type: none"> castor bean 	Installed a metal gate near Preserve entrance in response to unauthorized access and illegal dumping.	Maintained existing firebreak along Preserve boundary	--
Los Peñasquitos Canyon Preserve	Open	43 trees planted <ul style="list-style-type: none"> coast live oak cottonwood 	1 dead tree removed <ul style="list-style-type: none"> coast live oak 	<ul style="list-style-type: none"> fennel Russian thistle black mustard 	Installed 20 directional and enforcement signs, installed and repaired 5 fences, Ranger patrols continued to prevent unauthorized use of motor vehicles.	Maintained existing firebreaks around all standing structures.	Numerous events, including a tree planting event, Ranger-led hikes, history tours, and a <i>Festival of the Night Sky & Nocturnal Creatures</i> event (over 1,000 visitors).
Louis A. Stelzer Park	Open	100 trees planted <ul style="list-style-type: none"> coast live oak Engelmann oak Ongoing maintenance of the check dams	3 dead trees removed <ul style="list-style-type: none"> coast live oak 	<ul style="list-style-type: none"> various weeds 	Installed four parking payment and fee change signs and kiosks, rangers addressed instances of unauthorized dumpster use.	SDGE maintained existing firebreak.	Multiple Discovery Program events brought in 1,481 visitors.
Luelf Pond Preserve	Open	--	--	<ul style="list-style-type: none"> poison oak mustard Italian thistle 	Three new trail signs installed.	Maintained existing firebreak.	--

Preserve	Status	Habitat Restoration	Hazardous or Non-Native Tree Removal	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
Lusardi Creek Preserve	Open	--	--	<ul style="list-style-type: none"> black mustard Russian thistle tree tobacco 	One new Preserve information sign installed.	--	--
Mission Trails Park	Open	--	--	--	Increased Ranger monitoring in response to illegal dumping in parking lot.	Maintained existing firebreak along Park's western boundary.	--
Oakoasis Preserve	Open	50 trees planted <ul style="list-style-type: none"> coast live oak Engelmann oak 	100 dead trees removed <ul style="list-style-type: none"> coast live oak Engelmann oak 	<ul style="list-style-type: none"> Various weed species 	Installed 24 "non-potable water" signs throughout the Preserve, Ranger monitoring in response to unauthorized motorcycle use.	--	Monthly star parties brought in 775 visitors.
Old Ironsides County Park	Open	--	--	<ul style="list-style-type: none"> black mustard castor bean giant reed 	Installed a boulder barrier around new infrastructure, repaired fencing along parking lot, increased Ranger patrols in response to off-road vehicle activity.	Fire fuels reduction throughout Park.	In partnership with <i>I Love A Clean San Diego</i> , Rangers hosted a park cleanup event, attended by 30 visitors.
Otay Lakes Park	Open	15 trees planted <ul style="list-style-type: none"> coast live oak 	--	<ul style="list-style-type: none"> various weed species 	Installed four new trail marker signs, repaired two trail marker signs, replaced a split rail wood fence along staging area.	Maintained existing firebreak near southwest corner of Preserve.	Several Ranger-led hiking events, attended by 39 visitors.
Otay Ranch Preserve	Open	Monitoring activities: <ul style="list-style-type: none"> focused rare plant surveys Quino checkerspot butterfly surveys vegetation mapping and photographic monitoring coastal cactus wren surveys 	--	<ul style="list-style-type: none"> short-pod mustard tocalote stinkwort oats bromes filaree fennel black mustard 	Installation of vertical mulch and coast cholla. Installation of T-posts with concrete along fencing. Installation of fencing, repair of fencing, rock barrier installation, installation of 14 signs, repair of 2 signs, and replacement of 3 signs. Off-site access control within adjacent City of San Diego and CDFW property.	Weed control and implementation of shrub thinning to help reduce the amount of fuel available to carry fire within the Preserve.	--

Preserve	Status	Habitat Restoration	Hazardous or Non-Native Tree Removal	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
		<ul style="list-style-type: none"> • least Bell's vireo and yellow-billed cuckoo surveys • shot hole borer tree health surveys • gold-spotted oak borer monitoring • Hermes copper butterfly surveys • western spadefoot surveys • golden eagle camera surveys • vernal pool plant monitoring • wet season fairy shrimp surveys • seed collection and redistribution • vegetation rapid assessment monitoring <p>Grant-funded management projects</p>		<ul style="list-style-type: none"> • prickly sow-thistle • annual rye grass • crete weed • fescue • false hawkbit • annual beard grass • hyssop loosestrife • tree tobacco • golden-top • prickly lettuce • gum tree • Peruvian pepper tree • Selective thinning/removal of shrubs from existing coast cholla patches 			

Preserve	Status	Habitat Restoration	Hazardous or Non-Native Tree Removal	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
Otay Valley Regional Park	Open	--	6 dead trees removed <ul style="list-style-type: none"> Eucalyptus 	<ul style="list-style-type: none"> various weed species 	Installed one new directional trail sign, repaired section of barbed-wire fencing, coordinated with Customs and Border Patrol for joint patrols in response to unauthorized off-road vehicle use.	--	--
Peutz Valley Preserve	Closed	--	--	<ul style="list-style-type: none"> black mustard 	Rangers removed illegally dumped debris from Preserve entrance, rectified a minor encroachment with the adjacent landowner, and clearly marked boundary lines to deter future encroachment.	Maintained existing firebreak along southern boundary of Preserve.	--
Ramona Grasslands Preserve	Open	6 trees planted <ul style="list-style-type: none"> coast live oak 36 shrubs planted <ul style="list-style-type: none"> monkeyflower white sage Cleveland sage sagebrush California buckwheat Closure of Old Survey Road 97 and active construction of a new reroute trail. Grazing lease management to reduce non-native plant cover and improve habitat for sensitive wildlife species. Bullfrog eradication implementation.	--	<ul style="list-style-type: none"> mustard tree tobacco tamarisk stinkwort artichoke thistle 	Installed three new access control signs, repaired two fences, installed 1 new fence along Old Survey Road 97 and Wildflower loop trails, and increased patrols and education to discourage unauthorized motor vehicle use.	Maintained existing firebreaks along Preserve borders adjacent to residences and along roads.	Partnered with a local Girl Scout troop to plant native shrubs within the Preserve.

Preserve	Status	Habitat Restoration	Hazardous or Non-Native Tree Removal	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
Santa Fe Valley Preserve	N/A	--	--	<ul style="list-style-type: none"> • black mustard • tree tobacco • Russian thistle 	--	Maintained existing firebreaks along northwestern boundary and residential community to the west.	--
Skyline Preserve	Closed	--	--	--	--	--	--
Stoneridge Preserve	Closed	--	--	<ul style="list-style-type: none"> • Russian thistle • giant reed • mustard 	Rangers inspected gates and signage at potential access points to ensure Preserve boundaries are clearly marked as well as increased patrols in response to illegal access and unauthorized trail use.	Maintained existing firebreak along southern Preserve boundary.	--

Preserve	Status	Habitat Restoration	Hazardous or Non-Native Tree Removal	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
Sweetwater Regional Park	Open	40 trees planted <ul style="list-style-type: none"> • California black walnut • California sycamore 329 native shrubs planted <ul style="list-style-type: none"> • holly leaf cherry • California sagebrush • San Diego snapdragon • San Diego Sunflower • white sage • purple sage • coyote brush • Cleveland sage • Toyon • Lemonade berry • California buckthorn Grant-funded restoration of coastal sage scrub, riparian, and upland habitat around Morrison Pond.	6 dead trees removed <ul style="list-style-type: none"> • coast live oak 	<ul style="list-style-type: none"> • giant reed • castor bean • Mexican fan palm • tree of heaven • stinkwort • Russian thistle • Nightshade • mustard 	Rangers conducted homeless encampment abatement, safely removing trash and biohazards.	Rangers responded to Area 52 fires by removing fire-affected vegetation.	Wildlife focused programs such as Hawk Talk, rattlesnake interpretive and safety program, raptor talk; Outdoor stewardship activities such as park beautification events, native plant restoration, and invasive plant removal; Nature hikes; a career fair; and a STEM fair brought in over 1,200 visitors.

Preserve	Status	Habitat Restoration	Hazardous or Non-Native Tree Removal	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
Sycamore Canyon/ Goodan Ranch Preserve	Open	193 trees planted <ul style="list-style-type: none"> coast live oak sycamore Engelmann oak Restoration in various locations to support San Diego thornmint, variegated dudleya, and willow monardella.	14 dead trees removed <ul style="list-style-type: none"> coast live oak 	<ul style="list-style-type: none"> mustard artichoke thistle white horehound Dyer's rocket stinkwort 	Rangers installed one new sign at Preserve's front entrance, six new signs at trailheads designating approved e-bike use, and repaired 15 directional signs at trailheads throughout the Preserve.	California Conservation Core maintained an existing firebreak surrounding the Goodan Ranch Visitor's Center.	Multiple events, including an Earth Day celebration, ranger-led hikes, tree planting events, star parties, and a community hike-a-ton were attended by 441 visitors.
Tijuana River Valley Regional Park	Open	10 trees planted <ul style="list-style-type: none"> coast live oak Several grant-funded management projects, including the Smuggler's Gulch Dredging and Improvement Projects, and the Brown Property Fill Removal/ Restoration Project.	--	<ul style="list-style-type: none"> Russian thistle castor bean tree tobacco nasturtium crown daisy giant reed non-native grasses 	Installation and repair of 30 informational and directional signs to prevent off-trail activity and illegal dumping, installation and repair of chain-link fences, increased patrols by Rangers in response to illegal dumping and unauthorized trail use, and volunteer equestrians who report back to Rangers regarding unauthorized Park use.	Maintained existing firebreaks near residences along northeast border and around the structures along Monument Road.	Multiple programs, including an Earth Day booth, Patriotic Picnic, Hawktober, and snake talks and interpretive events attended by 310 visitors.

APPENDIX L

Private Mitigation Land Monitoring and Maintenance in Reporting Year

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	RMP Number	RMP Name	RMP Date	Habitat Manager	Annual Report Due	Surveys ¹	Project Status	Monitoring/Maintenance Status
1	PDS2008-3914-99-001	4S Ranch Ralphs	Sep-1999	Joaquin Meza	July	Report new invasive plants population	Built-out	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 678-031-02, -03, -04, -05, -06, -07, -08, -09, Portions of 678-031-10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -20</p> <p>Habitat Conservation Area Description: Approximately 1,065 acres immediately south of Lake Hodges, including coastal sage scrub, southern mixed chaparral, native and non-native grassland.</p>								
2	PDS2012-3914-99-002-02	4S Ranch Specific Plan	Sep-1999	Habitat Restoration Sciences	July	Report new invasive plants populations	Built-out	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: <i>Lusardi Creek Portion</i> (south) 312-284-01, 312-285-01, 312-150-04; <i>North</i> 678-050-49, 678-030-08, 678-050-51</p> <p>Habitat Conservation Area Description: 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.</p>								
3	PDS2009-3914-06-005	Artesian Trail	Apr-2007	San Dieguito River Park Conservancy	September	Spring vegetation survey with a focus on thread-leaf brodiaea	Built-out	Discussions with County Counsel regarding enforcement options will continue in 2026.
<p>APNs: 267-142-33, -34, -35, -36</p> <p>Habitat Conservation Area Description: 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 0.6-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>).</p>								
4	PDS2008-3914-98-001	Bernardo Lakes	Feb-1998	None	December	CAGN (2 times a month during breeding season) Orcutt's brodiaea (1 time a year during blooming period)	Built-out	Partial 2024-2025 report was submitted due to mid-year start to management.
<p>APNs: 678-070-30, -31, 678-420-26, -27, 678-421-01, 678-422-01, -02, -04, 678-430-25, 678-432-01, 678-070-35</p> <p>Habitat Conservation Area Description: 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 west of Four Gee Road. The property consists mostly of coastal sage scrub with some freshwater marsh, southern willow scrub, and non-native grassland.</p>								
5	PDS2008-3914-01-001	Blossom Valley	Updated-2012	Center for Natural Lands Management	December	DCSS and SMC (1 out of 5 years) Oak Tree for GSOB (annually) CAGN (Every 3 years) Rush-like bristleweed and Englemann Oak (1 out of 5 years)	Built-out	2024-2025 report was submitted and reviewed by County staff, no major concerns.

	RMP Number	RMP Name	RMP Date	Habitat Manager	Annual Report Due	Surveys ¹	Project Status	Monitoring/Maintenance Status
<p>APNs: 390-061-03, -04</p> <p>Habitat Conservation Area Description: 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.</p>								
6	PDS2014-RMPM-10-003	East Otay Mesa	Feb-2012	Open Space Management, Inc.	January	CAGN (every 3 years) BUOW (annually) Raptor (annually) QCB (every 3 years) Sensitive Plant (every 3 years)	Built-out	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 648-050-20, 648-011-06, Portions 648-040-31, 648-040-55, 648-040-57</p> <p>Habitat Conservation Area Description: The East Otay Mesa biological open space is comprised of 92 acres located on the west and east sides of Alta Road north of Calzada de la Fuente in East Otay Mesa. It includes 55 acres of Diegan coastal sage scrub, 23 acres of non-native grassland, as well as chaparral and some disturbed habitat. The open space supports the San Diego barrel cactus, coastal California gnatcatcher, southern California rufous-crowned sparrow, northern harrier, California horned lark, and southern mule deer.</p>								
7	PDS2008-3914-03-002	El Apajo	Jun-2003	None	December	Floral Inventory (every 5 years)	Built-out	Discussions with County Counsel regarding enforcement options will continue in 2026.
<p>APN: 268-360-15</p> <p>Habitat Conservation Area Description: 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.</p>								
8	PDS2008-3914-99-003	Golem	Jan-2000	San Dieguito River Valley Joint Powers Authority	December	CAGN (twice annually)	Built-out	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 678-020-02, -03, 678-021-02, -03, 265-320-03</p> <p>Habitat Conservation Area Description: 154 acres of open space was set aside to preserve California adolphia, southwestern spiny rush, San Diego marsh elder, Del Mar manzanita, wart-stemmed ceanothus, California gnatcatcher, southern California rufous-crowned sparrow, coastal western whiptail, and mountain lion. The site consists of mostly of southern mixed chaparral.</p>								
9	PDS2010-3914-05-004	Greenhills Ranch	Sep-2006	Habitat Restoration Sciences (now Dudek)	January	CAGN (every 2 years) San Diego Cactus wren (every 2 years)	Built-out	2024-2025 report was submitted and reviewed by County staff, no major concerns.

	RMP Number	RMP Name	RMP Date	Habitat Manager	Annual Report Due	Surveys ¹	Project Status	Monitoring/Maintenance Status
APN: 395-452-01 Habitat Conservation Area Description: The 44.04-acre open space is located south of Lake Jennings Road and west of Interstate 8. The majority of the site is Diegan coastal sage scrub habitat. The Preserve supports the San Diego cactus wren, California gnatcatcher, southern California rufous-crowned sparrow, and southern mule deer.								
10	PDS2022-RMP-22-004	Hawano	Dec-2022	San Diego Habitat Conservancy	January	BUOW (3 times annually)	In Process	2024-2025 report was submitted and reviewed by County staff, no major concerns.
APNs: 646-080-20, -21 Habitat Conservation Area Description: The biological open space is 33.1 acres and is located on Otay Mesa, east of State Route 125 and north of Otay Mesa Road. It includes 32.3 acres of non-native grassland and 0.8 acres of disturbed habitat. The site supports Parry's tetracoccus, San Diego fairy shrimp, burrowing owl, San Diego ringneck snake, southern California rufous-crowned sparrow, northern harrier, and Thorne's hairstreak.								
11	PDS2015-RMP-12-003	High Meadow Ranch (Trevi Hills)	Feb-2013	Open Space Management, Inc.	February	Lakeside Ceanothus (every 5 years)	In process	2024-2025 report was submitted and reviewed by County staff, no major concerns.
APNs: 389-071-17, 389-101-01, -02, -03, 389-072-03, 389-102-01, -02, 389-020-12 Habitat Conservation Area Description: The open space is approximately 350 acres off Muth Valley Road and High Meadow Road. It consists of 166.4 acres of Diegan coastal sage scrub, 162 acres of southern mixed chaparral, 2.3 acres of scrub oak chaparral, 25 acres of coast live oak woodland, 1.3 acres of oak riparian forest, and 0.5 acres of disturbed/developed habitat. The open space provides for the long-term conservation of intact southern mixed chaparral habitat and the Lakeside ceanothus or Lakeside wild lilac (<i>Ceanothus cyaneus</i>), as well as the coastal California gnatcatcher, northern harrier, golden eagle, southern California rufous-crowned sparrow, San Diego horned lizard, orange-throated whiptail, southern mule deer, and Cooper's hawk.								
12	PDS2021-RMP-21-003	Hillside Meadows	Sept-2022	Urban Corps of San Diego County	January	None	In Process	2024-2025 report was submitted and reviewed by County staff, no major concerns.
APNs: 379-030-31 (partial) Habitat Conservation Area Description: The biological open space is 3.13 acres and is located in Lakeside. It consists of 1.35 acres of southern willow scrub/mulefat scrub, 0.75 acres of wet meadow, 0.66 native upland buffer, and 0.18 acres of freshwater marsh habitat. The site supports the Cooper's hawk, California rufous-crowned sparrow, California gnatcatcher, and orange throated whiptail.								
13	PDS2021-RMP-21-005	International Industrial Park Upland	Jul-2022	Urban Corps of San Diego County	December	BUOW (annually)	In Process	2024-2025 report was submitted and reviewed by County staff, no major concerns.
APNs: 648-040-20, -25, 646-080-34, -35 Habitat Conservation Area Description: The biological open space is 5 acres and is located north of Otay Mesa Road and west of Alta Road. It is dominated by non-native grassland habitat with remnant trails and scattered patches of exotic forbs present. The site has the potential to support the burrowing owl and northern harrier.								

	RMP Number	RMP Name	RMP Date	Habitat Manager	Annual Report Due	Surveys ¹	Project Status	Monitoring/Maintenance Status
14	PDS2021-RMP-21-005	International Industrial Park Wetland	Jul-2022	Urban Corps of San Diego County	January	None	In Process	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 648-040-20, -25, 646-080-34, -35</p> <p>Habitat Conservation Area Description: The biological open space is 8.4 acres and is located north of Otay Mesa Road and west of Alta Road. It consists of unvegetated streambed/channel, non-native tamarisk scrub habitat, non-native grassland, and disturbed habitat areas. This site has the potential to support the northern harrier.</p>								
15	PDS2012-3914-11-002	Lonestar	Dec-2011	San Diego Habitat Conservancy	February	Otay tarplant (annually) BUOW (annually)	Built-out	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 646-030-21-00, 646-070-36-00, 646-070-37-00</p> <p>Habitat Conservation Area Description: The Lonestar biological open space is comprised of approximately 62 acres and is located in the northwest corner of the intersection at Lonestar Road and Harvest Road, just east of State Route 125 in Otay Mesa. It consists of about 59 acres of non-native grassland and 3 acres of Diegan coastal sage scrub in East Otay Mesa. The open space supports the Otay tarplant and the burrowing owl.</p>								
16	PDS2008-3914-02-003	Maranatha Chapel	Oct-2002	None	December	CAGN (every 2 years) Southwestern pond turtle (every 2 years) Rare Plant (every 2 years)	Built-out	Discussions with the Maranatha Chapel will continue in 2026.
<p>APN: 267-060-37, Portion of 267-060-38</p> <p>Habitat Conservation Area Description: The preserve is located at the western terminus of Rancho Bernardo Road, between Artesian Road and Del Dios Highway. Approximately 82 acres of open space is located in two sections (Open Space 1 North and Open Space 1 South). Nearly half of the property is Diegan coastal sage scrub habitat, with the remaining habitat as non-native grassland, chaparral, oak woodland, freshwater marsh, eucalyptus woodland, disturbed (roads), and developed land.</p>								
17	PDS2023-RMP-23-004	Oakmont	Sept-2023	Urban Corps of San Diego County	January	CAGN (every 5 years) Variegated dudleya (every 5 years) Orange-throated whiptail (every 5 years) Other sensitive species (every 5 years)	In Process	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 396-020-13-00</p> <p>Habitat Conservation Area Description: This 34.6 acre open space preserve is located in Blossom Valley, north of Old Highway 80, east of Flinn Springs Rd, and south and west of Oak Creek Road. It consists of Diegan coastal sage scrub, native and non-native grassland habitat. The site supports variegated dudleya, California gnatcatcher, and orange-throated whiptail.</p>								
18	PDS2019-RMP-19-004	OMC	Mar-2019	Urban Corps of San Diego County	January	BUOW (annually)	Graded	2024-2025 report was submitted and reviewed by County staff, no major concerns.

	RMP Number	RMP Name	RMP Date	Habitat Manager	Annual Report Due	Surveys ¹	Project Status	Monitoring/Maintenance Status
<p>APNs: 646-080-34</p> <p>Habitat Conservation Area Description: This preserve is comprised of 16.08 acres and is located north of Otay Mesa Road and west of Alta Road. It consists of non-native grassland and supports the Otay tarplant.</p>								
19	PDS2016-RMP-16-004	Otay Crossings Commerce Park (on-site)	Aug-2017	San Diego Habitat Conservancy	January	BUOW (annually) QCB (every 3 years) San Diego/Riverside fairy shrimp (2 out of every 5 years) Otay tarplant (annually) Variegated dudleya (every 2 years) California adolphia (every 5 years) San Diego sunflower (every 5 years) San Diego barrel cactus (every 5 years)	In process	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 648-071-15, 648-080-31, 648-080-32</p> <p>Habitat Conservation Area Description: The Otay Crossing Commerce Park on-site biological open space is comprised of 24.3 acres and is located southeast of the intersection of Otay Mesa and Alta Road, just north of the U.S./Mexico border. It includes 0.03 acres of wetland, 6.8 acres of coastal sage scrub, 16.2 acres of non-native grassland, and 1.2 acres of disturbed habitat. The open space supports the Otay tarplant, San Diego barrel cactus, variegated dudleya, San Diego fairy shrimp, Riverside fairy shrimp, burrowing owl, and norther harrier.</p>								

	RMP Number	RMP Name	RMP Date	Habitat Manager	Annual Report Due	Surveys ¹	Project Status	Monitoring/Maintenance Status
20	PDS2016-RMP-16-005	Otay Crossings Off-Site (Lonestar Ridge)	Aug-2017	San Diego Habitat Conservancy	December	QCB (1 out of every 3 years) QCB Host Plant (1 out of every 3 years) BUOW (annually) San Diego/Riverside fairy shrimp (annually) Otay tarplant (annually) Variegated dudleya (every 2 years) San Diego button-celery (every 2 years) Decumbent goldenbush (every 5 years) Graceful tarplant (every 5 years) San Diego barrel cactus (every 5 years)	Built-out	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 646-030-26, 646-070-38</p> <p>Habitat Conservation Area Description: The biological open space is 82 acres and is located in the northern portion of Otay Mesa. It consists of 74.5 acres of non-native grassland, 7.2 acres of coastal sage scrub, 0.24 acres of vernal pools, and 0.07 acres pond. The site supports San Diego button-celery, Otay tarplant, variegated dudleya, San Diego barrel cactus, San Diego fairy shrimp, burrowing owl, and Quino checkerspot butterfly.</p>								
21	PDS2022-RMP-22-001	Pinnacles at Santa Fe Valley	Jan-2023	Endangered Habitats Conservancy	January	CAGN (every 5 years)	In Process	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 678-020-25, 678-060-41, -42</p> <p>Habitat Conservation Area Description: The biological open space is 26.04 acres and is located on unincorporated lands within the Lake Hodges area. It includes 20.93 acres of Diegan coastal sage scrub, 2.63 acres of chamise chaparral, 2.14 acres of southern mixed chaparral, 0.13 acres of mulefat scrub, 0.11 acres of freshwater marsh, and 0.09 acres of disturbed habitat. The site supports the wart-stemmed ceanothus, San Diego barrel cactus, and the California gnatcatcher.</p>								
22	PDS2023-RMP-23-001	Quail Canyon	Feb-2023	Habitat Restoration Sciences (now Dudek)	January	None	In Process	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 393-022-15</p> <p>Habitat Conservation Area Description: The Quail Canyon biological open space is comprised of 171.64 acres and is located on the north side of a low ridge that forms the south side of the San Diego River Valley. It includes 171.64 acres of Diegan coastal sage scrub, 0.90 acres of coastal sage-chaparral scrub, 4.13 acres of Southern coastal live oak riparian forest, 5.02 coast live oak woodland, and 18.03 other and blue line stream. The site supports rufous-crowned sparrow, Cooper's hawk, coast horned lizard, orange-throated whiptail, and northern harrier.</p>								

	RMP Number	RMP Name	RMP Date	Habitat Manager	Annual Report Due	Surveys ¹	Project Status	Monitoring/Maintenance Status
23	PDS2015-RMPM-12-002	Sloane Canyon	Nov-2013	Open Space Management, Inc.	February	Plant and Animal Species (every 3 years)	Built-out	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APN: 521-080-11</p> <p>Habitat Conservation Area Description: The Sloane Canyon open space is comprised of 39.18 acres on Sloane Canyon Road in Jamul. It includes approximately 5 acres of riparian woodland, 5 acres of Diegan coastal sage scrub, 10 acres of Diegan coastal sage scrub/chaparral, 17 acres of southern mixed chaparral, and 1 acre of disturbed habitat. The open space supports the orange-throated whiptail.</p>								
24	PDS2008-3914-99-004	Starwood (Crosby)	Jun-2004	Rincon Consultants	January	Sensitive Species (annually)	Built-out	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: <i>Open Space I</i> 265-320-18, -22, -30, 265-291-21, -23, -25, -26, -27, 265-290-41, -43, 267-050-42, -44, -46, 267-190-01, 267-132-18, 267-050-57, 267-132-11, 267-051-05, 30, Portion of 267-190-02, <i>Open Space II</i> Portions of 267-190-32, 267-290-35, 267-180-72, 267-191-01, -02, -11</p> <p>Habitat Conservation Area Description: 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, wart-stemmed ceanothus, San Diego fairy shrimp, orange-throated 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. The open space consists of mostly Diegan coastal sage scrub with some southern mixed chaparral, chamise chaparral, coast live oak woodland, freshwater marsh, non-native grassland, and eucalyptus woodland.</p>								
25	PDS2018-RMP-18-002	Sweetwater Vistas	May-2021	San Diego Habitat Conservancy	January	CAGN (every 5 years) LBV (every 5 years)	Time Extension – In Review	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 505-672-07, 09, 10 and partial of 505-672-03,23,37</p> <p>Habitat Conservation Area Description: The Sweetwater Vistas biological open space is comprised of 28.8 acres and is located north of Sweetwater Reservoir. It includes 0.02 acres of disturbed wetland, 1.17 acres of cismontane alkali marsh, 0.03 acres of freshwater marsh, 0.33 acres of mule fat scrub, 3.75 acres of southern willow scrub, 0.22 acres of tamarisk scrub, 0.31 acres of non-native riparian, 0.49 acres of Arundo-dominated riparian, 16.8 acres of Diegan coastal sage scrub, 2.7 acres of non-native grassland, 0.8 acres of disturbed, 0.6 acres of eucalyptus woodland, 1.4 acres of non-native vegetation, and <0.1 acres of urban/developed habitat. The open space supports the Copper's hawk, California gnatcatcher, least Bell's vireo, and the northern harrier.</p>								
26	PDS2008-3914-99-005	Woodridge	Updated-2016	Center For Natural Lands Management	December	CSS (2 out of 5 years) CAGN (Every 3 years) Delicate Clarkia (1 out of 5 years)	Built-out	2024-2025 report was submitted and reviewed by County staff, no major concerns.
<p>APNs: 395-151-69, -70, 395-432-23, -24, -30, -31</p> <p>Habitat Conservation Area Description: Located south of Pino Drive and west of Lakeview Drive in Lakeside, about 1/2 mile west of Lake Jennings. The site has approximately 50 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 December 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.</p>								

	RMP Number	RMP Name	RMP Date	Habitat Manager	Annual Report Due	Surveys¹	Project Status	Monitoring/Maintenance Status
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NOTES:

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

- APN – Assessor Parcel Number
- CAGN – coastal California gnatcatcher
- CSS – Coastal Sage Scrub
- DCSS – Diegan Coastal Sage Scrub
- GSOB – gold-spotted oak borer
- HOA – Homeowners Association
- HM – habitat manager
- QCB – Quino checkerspot butterfly
- RMP – Resource Management Plan
- SMC – Southern Maritime Chaparral
- TET – The Environmental Trust, Inc.

SOURCE:

County of San Diego Department of Planning & Development Services

APPENDIX M

Stewardship and Management on Private Mitigation Lands

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Preserve	Status	Habitat Restoration	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
4S Ranch Ralphs	Reporting	--	<ul style="list-style-type: none"> Less than 1 acre of artichoke thistle 	<ul style="list-style-type: none"> Weekly patrolling Minimal trash removal 	--	--
4S Ranch Specific Plan	Reporting	--	<ul style="list-style-type: none"> Fennel Artichoke thistle Tamarisk Stinkwort Pampas grass Black mustard Tree tobacco Eucalyptus Castor bean 	<ul style="list-style-type: none"> Regular trash removal Repaired/replaced damaged signs and fencing as needed Monitoring of illegal off-road vehicle and trail access Vandalism was reported 	--	--
Artesian Trail	Non-compliant	--	--	--	--	--
Bernardo Lakes	Reporting	--	<ul style="list-style-type: none"> Baseline biological surveys occurred and management of invasives will begin next year 	<ul style="list-style-type: none"> Minimal trash removal 	<ul style="list-style-type: none"> Site walk with Rancho Santa Fe Fire Protection District 	<ul style="list-style-type: none"> Electronic newsletter will begin next year
Blossom Valley	Reporting	--	<ul style="list-style-type: none"> 125 tree tobacco 1,000 Sahara mustard 225 Russian thistle 280 fountain grass 200 stinkwort And purple veldt grass 	<ul style="list-style-type: none"> Twice per month Wildlife camera in operation Minimal trash removed 	--	<ul style="list-style-type: none"> Outreach with trail users Kiosk at Flume Trail
East Otay Mesa	Reporting	--	<ul style="list-style-type: none"> Pampas grass Fennel Artichoke thistle 	<ul style="list-style-type: none"> 12 site visits Fencing was repaired/replaced and new signage was added Minimal trash removed 	--	<ul style="list-style-type: none"> Communication with adjacent property owner regarding encroachments
El Apajo	Non-compliant	--	--	--	--	--
Golem	Reporting	<ul style="list-style-type: none"> Native forests in riparian areas 	<ul style="list-style-type: none"> Coastal Sage/Riparian 	<ul style="list-style-type: none"> Almost daily patrols 	--	<ul style="list-style-type: none"> Five educational programs, engaging 145 students

Preserve	Status	Habitat Restoration	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
		<ul style="list-style-type: none"> Sticky dudleya seed will be collected 	<ul style="list-style-type: none"> Weed control and monitoring of Floodplain Fountain grass 12 eucalyptus trees treated 	<ul style="list-style-type: none"> Daily security guard at front entrance Graffiti removal Increase in trash 		<ul style="list-style-type: none"> Outreach with trail users New displays are planned to highlight California gnatcatcher
Greenhills Ranch	Reporting	--	<ul style="list-style-type: none"> Non-native annual grasses Mustard Tocalote 	<ul style="list-style-type: none"> At least quarterly patrols 7 maintenance and monitoring visits Minimal trash removed Monitor continued vandalism and trespassing 	--	<ul style="list-style-type: none"> Coordination with HOA for trespassing issues and future adaptive management
Hawano	Reporting	<ul style="list-style-type: none"> Maintenance on 8 of the 12 artificial burrows Mowing, line trimming, and herbicidal treatment around burrows and surrounding habitat 	<ul style="list-style-type: none"> Black mustard Invasive grasses Prickly lettuce Italian thistle Russian thistle 	<ul style="list-style-type: none"> Monthly site visits Illegal dumping along the two roads along the boundary 	--	<ul style="list-style-type: none"> Tours of the preserve with a Grazing Management Group, SDG&E, and Caltrans. Interns from University of California San Diego and San Diego State University removed invasive plants and trash
High Meadow Ranch (Trevi Hills)	Reporting	--	<ul style="list-style-type: none"> Temporary interruption in invasive species control, but the issue has been resolved 	<ul style="list-style-type: none"> No vandalism or graffiti Minimal trash was removed 	--	--
Hillside Meadows	Reporting	--	<ul style="list-style-type: none"> Crown daisy 	<ul style="list-style-type: none"> 8 site visits Off-road vehicle activity Fencing installed 	--	--
International Industrial Park Upland	Reporting	--	<ul style="list-style-type: none"> Non-native grasses Black mustard Artichoke thistle 	<ul style="list-style-type: none"> Monthly site visits Trash was removed 	--	--

Preserve	Status	Habitat Restoration	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
			<ul style="list-style-type: none"> • Shortpod mustard • Russian thistle • Tree tobacco • Crown daisy 			
International Industrial Park Wetland	Reporting	--	--	<ul style="list-style-type: none"> • Quarterly visits • Minimal trash removed 	--	--
Lonestar	Reporting	<ul style="list-style-type: none"> • Coordination with Cal Fire • Mowing of non-native grasses 	<ul style="list-style-type: none"> • Black mustard • Milk thistle • Tocalote • Fennel 	<ul style="list-style-type: none"> • Monthly visits • Repaired two sections of fencing • Minimal trash removed 	--	<ul style="list-style-type: none"> • Attended the San Diego County Burrowing Owl Management meeting • Coordination with San Diego Zoo Wildlife Alliance for burrowing owl management • Site visit with a Caltrans biologist
Maranatha Chapel	Non-compliant	--	--	--	--	--
Oakmont	Reporting	--	<ul style="list-style-type: none"> • Tocalote • Tamarisk • Common sow thistle • Fountain grass • Shortpod mustard • Castor bean 	<ul style="list-style-type: none"> • Evidence of off-road trespass • Signs installed • Minimal trash removed 	--	--
OMC	Reporting	--	<ul style="list-style-type: none"> • Australian saltbush • Black mustard • Artichoke thistle • Fennel • Shortpod mustard • Russian thistle • Tree tobacco • Stinkwort • Crown daisy 	<ul style="list-style-type: none"> • 12 general site visits • Coordinated with the San Diego County's Sheriff's Off-Road Enforcement team • Trash removal 	--	--

Preserve	Status	Habitat Restoration	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
Otay Crossings Commerce Park	Reporting	--	<ul style="list-style-type: none"> • Australian saltbush • Black mustard • Shortpod mustard • Fennel • Crown daisy • Bristly oxtongue • Stinkwort • Prickly lettuce • Sow thistle • Fountain grass • Russian thistle • Crystalline ice plant 	<ul style="list-style-type: none"> • Monthly patrols • Minimal trash removed • Coordination with Border Patrol to limit preserve access • Repairs to fence 	--	--
Otay Crossings Off-Site (Lonestar Ridge)	Reporting	<ul style="list-style-type: none"> • 25 acres mowed, line trimmed, and chemically treated to benefit the burrowing owl 	<ul style="list-style-type: none"> • Invasive grasses • Tocalote • Shortpod • Black mustard • Russian thistle • Stinkwort • Tree tobacco • Fennel 	<ul style="list-style-type: none"> • Monthly visits • Perimeter fencing repaired 	--	--
Pinnacles at Santa Fe Valley	Reporting	--	<ul style="list-style-type: none"> • Artichoke thistle • Russian thistle • Tocalote • Black mustard • Scarlet pimpernel • Stinkwort 	<ul style="list-style-type: none"> • At least quarterly visits • Repaired fencing • Minimal trash removed 	--	--
Quail Canyon	Reporting	--	<ul style="list-style-type: none"> • Invasive and non-native plant species 	<ul style="list-style-type: none"> • Ongoing unauthorized access, trail creation, and dumping 	--	--
Sloane Canyon	Reporting	--	<ul style="list-style-type: none"> • No removal occurred 	<ul style="list-style-type: none"> • Biannual patrols • Minimal trash removed 	--	<ul style="list-style-type: none"> • Communicated with adjacent property owners

Preserve	Status	Habitat Restoration	Invasive Species Control	Access Control, Trail and Infrastructure Installation and Maintenance	Fire Management	Environmental Education
						the sensitive nature of the preserve
Starwood (Crosby)	Reporting	<ul style="list-style-type: none"> Riparian areas contain sycamores, coast live oaks, and prickly pear cacti Native plant installations in chaparral area continue to thrive 	<ul style="list-style-type: none"> Perennial Weed American bullfrog Brown-headed cowbird 	<ul style="list-style-type: none"> Coordination with Sheriff departments to address increased unauthorized use and vandalism Trash removed 	<ul style="list-style-type: none"> Defensible space maintained 	<ul style="list-style-type: none"> Regular website updates
Sweetwater Vistas	Reporting	--	<ul style="list-style-type: none"> Mustard Tocalote Crown daisy Artichoke thistle Castor bean Italian thistle Salt cedar African asparagus fern Stinkwort Tree tobacco 	<ul style="list-style-type: none"> Monthly patrols Large trash removed 	--	--
Woodridge	Reporting	<ul style="list-style-type: none"> 190 1-gallon pots and 580 cuttings of a combination of coast cholla and prickly pear were planted 	<ul style="list-style-type: none"> 1,000 shortpod and brittlebush plants Olive trees Tamarisk Tocalote Stinkwort 	<ul style="list-style-type: none"> Weekly to bi-weekly patrols Two additional signs installed Encroachment by a neighbor occurred that destroyed native habitat Minimal trash removed and trash cans emptied 	<ul style="list-style-type: none"> Fuel zones maintained and thinned no more than 50% 	<ul style="list-style-type: none"> Kiosk materials updated periodically Outreach with trail users

APPENDIX N

MSCP Covered Species on County Preserves and Current Status

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The following table indicates the status of the MSCP covered species that are found within County parks and preserves. A status update for each species is provided with information for the species that is specific to the County park, preserve or preserves within which each species is found.

MSCP Covered Species and Habitats	County Preserve or Park	Status of Species
Plants		
1. Del Mar manzanita	Lusardi Creek Preserve	Species populations have been conserved and are found within preserved southern maritime chaparral habitat.
2. Dunn's mariposa lily	Otay Ranch Preserve	Species populations have been conserved and are found within preserved chaparral and closed-cone coniferous forest habitats.
3. Encinitas baccharis	Del Dios Highlands Preserve	Species populations have been conserved and are found within preserved southern maritime chaparral habitat. Monitoring and species protection efforts maintain the stable population at Del Dios Highlands Preserve.
4. Felt-leaved monardella	Boulder Oaks Preserve El Capitan Preserve Otay Ranch Preserve	Species populations have been conserved and are found within preserved chaparral habitat.
5. Gander's pitcher sage	Otay Ranch Preserve	Species populations have been conserved and are found within preserved chaparral, coastal scrub, and closed-cone coniferous forest habitats.
6. Heart-leaved pitcher sage	Iron Mountain Preserve	Species populations have been conserved and are found within preserved granitic southern mixed chaparral habitat.
7. Lakeside ceanothus	Boulder Oaks Preserve El Capitan Preserve Louis A. Stelzer Park Oakoasis Preserve	Species populations have been conserved and are found within preserved chaparral habitat. Monitoring and species protection efforts maintain stable populations at Boulder Oaks Preserve, El Capitan Preserve, Louis A. Stelzer Park, and Oakoasis Preserve.
8. Orcutt's bird's beak	Otay Valley Regional Park Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved maritime succulent scrub habitat.
9. Orcutt's brodiaea	Boulder Oaks Preserve Los Peñasquitos Canyon Preserve Otay Ranch Preserve Santa Fe Valley Preserve	Species populations have been conserved and are found within preserved of chaparral habitat.
10. Otay manzanita	Otay Ranch Preserve	Species populations have been conserved and are found within preserved chaparral habitat.
11. Otay mesa mint	Otay Lakes County Park Otay Ranch Preserve	Species populations have been conserved and are found within preserved vernal pools habitat.

MSCP Covered Species and Habitats	County Preserve or Park	Status of Species
12. Otay tarplant	Furby-North Property Otay Ranch Preserve Otay Valley Regional Park	Species populations have been conserved and are found within preserved maritime succulent scrub habitat.
13. Palmer's goldenbush	Lawrence and Barbara Daley Preserve Otay Ranch Preserve	Species populations have been conserved and are found within preserved chaparral and coastal sage scrub habitats.
14. San Diego barrel cactus	Dictionary Hill Preserve Furby-North Property Lusardi Creek Preserve Otay Ranch Preserve Tijuana River Valley Regional Park Los Peñasquitos Canyon Preserve	Species populations have been conserved and are found within preserved coastal sage scrub habitat.
15. San Diego button celery	Louis A. Stelzer Park Otay Ranch Preserve Otay Valley Regional Park Los Peñasquitos Canyon Preserve	Species populations have been conserved and are found within preserved vernal pool and marsh habitats.
16. San Diego goldenstar	Dictionary Hill Preserve Los Peñasquitos Canyon Preserve Louis A. Stelzer Park Otay Ranch Preserve Sycamore Canyon and Goodan Ranch Preserve	Species populations have been conserved and are found within preserved chaparral, coastal scrub, and grassland habitats.
17. San Diego mesa mint	Los Peñasquitos Canyon Preserve	Species populations have been conserved and are found within preserved vernal pool and marsh habitats.
18. San Diego thornmint	Sycamore Canyon and Goodan Ranch Preserve	Species populations have been conserved and are found within preserved coastal sage scrub and chaparral habitats. Monitoring and species protection efforts maintain a stable population at Sycamore Canyon and Goodan Ranch Preserve.
19. San Miguel savory	Boulder Oaks Preserve Otay Ranch Preserve	Species populations have been conserved and are found within preserved coastal sage scrub and chaparral habitats. Monitoring and species protection efforts maintain stable populations at Boulder Oaks Preserve and Otay Ranch Preserve.

MSCP Covered Species and Habitats	County Preserve or Park	Status of Species
20. Snake cholla	Furby-North Property Otay Ranch Preserve	Species populations have been conserved and are found within preserved maritime succulent scrub habitat.
21. Spreading (prostrate) navarretia	Otay Ranch Preserve	Species populations have been conserved and are found within preserved vernal pool habitat. Species protection efforts maintain a stable population at Otay Ranch Preserve.
22. Tecate cypress	Otay Ranch Preserve Boulder Oaks Preserve	Species populations have been conserved and are found within preserved southern interior cypress forest habitat.
23. Torrey pine	Tijuana River Valley Regional Park	Species distribution was enhanced via the County's Tree Planting Program and is found within preserved coastal sage scrub habitat.
24. Variegated dudleya	Dictionary Hill Preserve Lusardi Creek Preserve Otay Lakes Regional Park Otay Ranch Preserve Otay Valley Regional Park Sycamore Canyon and Goodan Ranch Preserve	Species populations have been conserved and are found within preserved chaparral and vernal pool habitats. Monitoring and species protection efforts maintain stable populations at Lusardi Creek and Sycamore Canyon/Goodan Ranch Preserves. Species protection efforts maintain stable populations at Dictionary Hill Preserve, Otay Lakes Regional Park, Otay Ranch Preserve, Otay Valley Regional Park.
25. Wart-stemmed ceanothus	Del Dios Highlands Preserve Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved coastal chaparral habitat.
26. Willowy monardella	Otay Ranch Preserve Sycamore Canyon and Goodan Ranch Preserve	Species populations have been conserved and are found within preserved chaparral, coastal sage scrub, riparian scrub, riparian forest, and woodland habitats. Monitoring and species protection efforts maintain stable populations Sycamore Canyon and Goodan Ranch Preserve and Otay Ranch Preserve.
Birds		
27. American peregrine falcon	Del Dios Highlands Otay Ranch Preserve Peutz Valley Preserve Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved foraging coastal wetland, riparian, and lake habitats.
28. Burrowing owl	Otay Ranch Preserve Sycamore Canyon and Goodan Ranch Preserve Ramona Grasslands Preserve ^a	Species populations have been conserved and are found within preserved grassland habitat. Species protection efforts are on-going.
29. Canada goose	Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved fresh and brackish water habitats and open fields and agricultural lands.

MSCP Covered Species and Habitats	County Preserve or Park	Status of Species
30. Coastal (San Diego) cactus wren	El Capitan Preserve Furby-North Property Lakeside Linkage Preserve Otay Ranch Preserve Otay Valley Regional Park Sweetwater Regional Park Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved maritime succulent scrub. Monitoring, species protection efforts, and habitat restoration and enhancement maintain a stable population at Lakeside Linkage Preserve. Species protection efforts are on-going.
31. Coastal California gnatcatcher	Boulder Oaks Preserve Del Dios Highlands Preserve Dictionary Hill Preserve Furby-North Property Lakeside Linkage Preserve Louis A. Stelzer Park Lusardi Creek Preserve Otay Lakes Regional Park Otay Ranch Preserve Otay Valley Regional Park Ramona Grasslands Preserve Santa Fe Valley Preserve Stoneridge Preserve Sweetwater Regional Park Sycamore Canyon and Goodan Ranch Preserve Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved coastal sage scrub habitat. Species protection efforts on County properties have been successful and are on-going. Species protection efforts are on-going
32. Cooper's hawk	Barnett Ranch Preserve Boulder Oaks Preserve Del Dios Highlands Preserve Dictionary Hill Preserve El Capitan Preserve Iron Mountain Preserve Lakeside Linkage Preserve Lawrence and Barbara Daley Preserve Lusardi Creek Preserve Oakoasis Preserve Otay Ranch Preserve Skyline Preserve Stoneridge Preserve Sycamore Canyon and Goodan Ranch Preserve Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved riparian and wooded habitats.
33. Ferruginous hawk	Del Dios Highlands Preserve	Species populations have been conserved and are found within preserved foraging grassland habitat.
34. Golden eagle	Barnett Ranch Preserve Del Dios Highlands Preserve El Capitan Preserve Otay Ranch Preserve Ramona Grasslands Preserve Skyline Preserve Sycamore Canyon and Goodan Ranch Preserve	Species populations have been conserved and are found within preserved foraging grassland, chaparral, and coastal sage scrub habitat and nesting cliff habitat. Monitoring and species protection efforts ensure successful fledging at Ramona Grasslands Preserve and El Capitan Preserve. Species protection efforts are on-going.

MSCP Covered Species and Habitats	County Preserve or Park	Status of Species
35. least Bell's vireo	Furby-North Property Los Peñasquitos Canyon Preserve Lusardi Creek Preserve Otay Lakes Regional Park Otay Ranch Preserve Otay Valley Regional Park Sweetwater Regional Park Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved riparian habitat. Species protection efforts have been successful and are on-going.
36. Light-footed Ridgway's rail (Clapper rail)	Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved freshwater marsh and riparian habitats. Monitoring and species protection efforts enhance a population at Tijuana River Valley Regional Park.
37. Northern harrier	Del Dios Highlands Preserve Furby-North Property Lawrence and Barbara Daley Preserve Louis A. Stelzer Preserve Lusardi Creek Preserve Otay Ranch Preserve Skyline Preserve Ramona Grasslands Preserve Sycamore Canyon and Goodan Ranch Preserve Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved foraging and nesting wetland, marsh, marshy meadow, grassland, and riparian woodland habitats.
38. Southern California rufous-crowned sparrow	Barnett Ranch Preserve Boulder Oaks Preserve Del Dios Highlands Preserve Dictionary Hill Preserve El Capitan Preserve El Monte Park Furby-North Preserve Iron Mountain Preserve Lakeside Linkage Preserve Lawrence and Barbara Daley Preserve Louis A. Stelzer Park Lusardi Creek Preserve Oakoasis Preserve Otay Ranch Preserve Peutz Valley Preserve Ramona Grasslands Preserve Skyline Preserve Stoneridge Preserve Sycamore Canyon and Goodan Ranch Preserve Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved coastal sage scrub habitat.
39. Southwestern willow flycatcher	Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved riparian habitat.
40. Swainson's hawk	Barnett Ranch Preserve Skyline Preserve	Species populations have been conserved and are found within preserved foraging grassland habitat.

MSCP Covered Species and Habitats	County Preserve or Park	Status of Species
41. Tricolored blackbird	Barnett Ranch Preserve Ramona Grasslands Preserve ^a Tijuana River Valley Regional Park	Species populations have been conserved and are found within preserved foraging grassland habitat. Monitoring and species protection efforts ensure that the population adjacent to Ramona Grasslands Preserve is stable. Species protection efforts maintain populations at Barnett Ranch Preserve and Tijuana River Valley Regional Park.
42. Western bluebird	Barnett Ranch Preserve Boulder Oaks Preserve Del Dios Highlands Preserve El Capitan Preserve El Monte Park Lakeside Linkage Preserve Lawrence and Barbara Daley Preserve Oakoasis Preserve Peutz Valley Preserve Ramona Grasslands Preserve Stoneridge Preserve Sycamore Canyon and Goodan Ranch Preserve	Species populations have been conserved and are found within preserved grassland, coastal sage scrub, and riparian woodland habitats.
43. White-faced ibis	Del Dios Highlands Preserve	Species populations have been conserved and are found within preserved freshwater wetland habitat.
Reptiles		
44. Belding's orange-throated whiptail	Barnett Ranch Preserve Boulder Oaks Preserve Del Dios Highlands Preserve Dictionary Hill Preserve El Capitan Preserve Furby-North Property Iron Mountain Preserve Lakeside Linkage Preserve Lawrence and Barbara Daley Preserve Louis A Stelzer Park Lusardi Creek Preserve Otay Ranch Preserve Peutz Valley Preserve Ramona Grasslands Preserve Skyline Preserve Stoneridge Preserve Sycamore Canyon and Goodan Ranch Preserve Tijuana River Valley Preserve	Species populations have been conserved and are found within preserved chaparral and scrub habitats.

MSCP Covered Species and Habitats	County Preserve or Park	Status of Species
45. Blainville's horned lizard	Barnett Ranch Preserve Boulder Oaks Preserve Del Dios Highlands Preserve Dictionary Hill Preserve El Capitan Preserve Furby-North Property Iron Mountain Preserve Lakeside Linkage Preserve Lawrence and Barbara Daley Preserve Louis A. Stelzer Park Lusardi Creek Preserve Oakoasis Preserve Otay Ranch Preserve Peutz Valley Preserve Ramona Grasslands Preserve Skyline Preserve Stoneridge Preserve Sycamore Canyon and Goodan Ranch Preserve Tijuana River Valley Preserve	Species populations have been conserved and are found within preserved chaparral and scrub habitats.
Mammals		
46. Mountain Lion	Barnett Ranch Preserve Boulder Oaks Preserve Del Dios Highlands Preserve El Capitan Preserve Iron Mountain Preserve Otay Ranch Preserve Peutz Valley Preserve Sycamore Canyon and Goodan Ranch Preserve	Species populations have been conserved and are found within diverse preserved habitats. Species protection and increasing habitat connectivity efforts are on-going.
47. Southern mule deer	Barnett Ranch Preserve Boulder Oaks Preserve Del Dios Highlands Preserve El Capitan Preserve El Monte Park Iron Mountain Preserve Lakeside Linkage Preserve Lawrence and Barbara Daley Preserve Louis A. Stelzer Preserve Lusardi Creek Preserve Oakoasis Preserve Otay Ranch Preserve Peutz Valley Preserve Ramona Grasslands Preserve Stoneridge Preserve Sycamore Canyon and Goodan Ranch Preserve	Species populations have been conserved and are found within preserved grassland, scrub, and chaparral habitats. Species protection and increasing habitat connectivity efforts are on-going.

MSCP Covered Species and Habitats	County Preserve or Park	Status of Species
Invertebrates		
48. San Diego fairy shrimp	Otay Ranch Preserve Ramona Grasslands Preserve ^a	Species populations have been conserved and are found within preserved vernal pool habitat. Monitoring and species protection efforts maintain stable populations at Ramona Grasslands Preserve and Otay Ranch Preserve.
49. Thorne's hairstreak butterfly	Otay Ranch Preserve	Species populations have been conserved and are found within preserved foraging chaparral habitat and larval host Tecate cypress habitat.

^a Species was observed on draft North County MSCP portion of the County Preserve and is presumed to utilize the South County MSCP area of the County Preserve.

Reference:

Preston, K., E. Perkins, C. Brown, S. McCutcheon, A. Bernabe, E. Luciani, B. Kus, and S. Wynn. 2022. State of the Regional Preserve System in Western San Diego County, USGS Cooperator report prepared for San Diego Association of Governments Environmental Mitigation Program, Agreements 5004597 and 548642.