



Otay Ranch Phase 2 Resource Management Plan Update

Prepared for

County of San Diego
5510 Overland Avenue
San Diego, CA 92123

City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Prepared by

RECON Environmental, Inc.
1927 Fifth Avenue
San Diego, CA 92101
P 619.308.9333

RECON Number 8117
June 22, 2018 – Finalized September 2018

A handwritten signature in black ink, appearing to read "Cailin Lyons", with a long horizontal flourish extending to the right.

Cailin Lyons, Associate Biologist

Page intentionally left blank

TABLE OF CONTENTS

Acronyms.....iv

Preface v

1.0 Introduction 1

 1.1 Purpose and Need.....1

 1.2 Project History.....1

 1.3 Environmental Setting.....3

 1.4 Regulatory Context9

 1.4.1 Otay Ranch General Development Plan/ Subregional Plan9

 1.4.2 Phase 1 Resource Management Plan10

 1.4.3 Multiple Species Conservation Program Plan15

 1.4.3.1 County of San Diego MSCP Subarea Plan.....15

 1.4.3.2 City of Chula Vista MSCP Subarea Plan.....16

 1.4.3.3 City of San Diego MSCP Subarea Plan.....16

2.0 Existing Conditions..... 17

 2.1 Otay Ranch Planning Components.....17

 2.2 Comparison of Phase 1 RMP and Existing Conditions21

3.0 Land Use Considerations in the Preserve 21

 3.1 Interim Uses22

 3.2 Permitted Uses22

 3.2.1 Preserve Management, Scientific, and Biologic Activities.....22

 3.2.1.1 Mitigation Banking23

 3.2.1.2 Habitat Restoration.....23

 3.2.2 Emergency, Safety, and Law Enforcement23

 3.2.3 Motorized Vehicle Use24

 3.2.4 Public Access and Recreation24

 3.2.4.1 Otay Valley Regional Park.....25

 3.2.5 Infrastructure26

 3.2.5.1 County of San Diego26

 3.2.5.2 City of Chula Vista31

 3.3 Incompatible Uses34

 3.4 Adjacent Land Uses.....34

 3.4.1 Preserve Edge34

4.0 Preserve Management, Conveyance, & Funding 35

 4.1 Preserve Management.....35

 4.1.1 Management Structure.....35

 4.1.1.1 County of San Diego & City of Chula Vista35

 4.1.1.2 Preserve Steward/ Biologist35

 4.1.2 Decision Making Process36

 4.2 Preserve Funding36

 4.2.1 County of San Diego Funding.....36

4.2.2	City of Chula Vista Funding.....	36
4.2.3	Ancillary Funding.....	37
4.3	Preserve Conveyance.....	37
4.3.1	Fee Title.....	37
4.3.2	Covenant of Easement.....	38
4.3.3	Irrevocable Offer of Dedication.....	38
4.3.4	Fee-In-Lieu.....	38
4.3.5	Non-Otay Ranch Project Mitigation Lands Program.....	38
5.0	Biota Monitoring Program.....	39
6.0	Regulatory Framework for Future Development.....	40
6.1	Conveyance Requirement.....	41
6.1.1	Development Lands Subject to Conveyance.....	41
6.1.2	Common Use & Restricted Development Areas Not Subject to Conveyance.....	42
6.2	Preservation Standards.....	43
6.3	Preserve Boundary Modifications.....	45
6.3.1	County of San Diego.....	46
6.3.2	City of Chula Vista.....	46
6.4	Preserve Edge Plan Requirements.....	47
6.4.1	Adjacency Guidelines.....	47
6.4.1.1	County of San Diego.....	49
6.4.1.2	City of Chula Vista.....	49
7.0	Administration.....	51
7.1	RMP Amendments.....	51
7.1.1	County of San Diego.....	51
7.1.2	City of Chula Vista.....	53
8.0	References Cited.....	55

TABLE OF CONTENTS (CONT.)

FIGURES

Figure 1. Regional Location of Otay Ranch	5
Figure 2. Ownership Areas & Jurisdictional Boundaries	7
Figure 3. Otay Ranch in Relation to Conserved Lands (2017)	11
Figure 4. Original Otay Ranch Planning Components (1993)	13
Figure 5. Otay Ranch Planning Components (2017)	19
Figure 6. Otay Ranch in Relation to the Otay Valley Regional Park	29

TABLES

Table 1 Jurisdictions Within Otay Ranch.....	3
Table 2 Comparison of 1996 Estimate and Existing Acreage of Otay Ranch Planning Components	21
Table 3 Restoration & Translocation Requirements for Otay Ranch Development Projects	44
Table 4	48
Preserve Set-back Requirements	48

ATTACHMENTS

- 1: Summary of GDP/SRP Amendments and Policy Changes (October 1993-December 2017)
- 2: Status of Phase 1 RMP Policies and Standards (2017)
- 3: Conveyance Forecast and Preserve Assembly
- 4: Biota Monitoring Program
- 5: Preserve Configuration Preservation Summary

Acronyms

BLM	Bureau of Land Management
BMO	Biological Mitigation Ordinance
BMPs	Best Management Practices
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
City	City of Chula Vista
County	County of San Diego
CFD	Community Facilities District
EIR	Environmental Impact Report
GDP	City of Chula Vista General Development Plan
GIS	Geographical Information System
HCP/NCCP	Habitat Conservation Plan/Natural Community Conservation Plan
HLIT	Habitat Loss and Incidental Take (Ordinance)
HOA	Homeowners' Association
IOD	Irrevocable Offer of Dedication
JEPA	Joint Exercise of Powers Agreement
JPA	Joint Powers Agreement
MSCP	Multiple Species Conservation Program
MSPA	Management Strategic Plan Area
NPDES	National Pollutant Discharge Elimination System
OVRP	Otay Valley Regional Park
OWD	Otay Water District
P-C	Planned Community
POM	Preserve Owner/Manager
PSB	Preserve Steward/Biologist
RMP	Resource Management Plan
RWQCB	San Diego Regional Water Quality Control Board
SanGIS	San Diego Geographic Information Source
SPA	Sectional Planning Area (City)
SP	Specific Plan (County)
SUSMP	Standard Urban Storm Water Mitigation Plan
SR-125	State Route 125
SRP	County of San Diego Otay Subregional Plan Phase 2
USFWS	U.S. Fish & Wildlife Service

Preface

This document is a comprehensive update to the Otay Ranch Phase 2 Resource Management Plan (1996 Phase 2 RMP; City of Chula Vista 1996), adopted by the City of Chula Vista (City) and partially adopted by the County of San Diego (County) in 1996 with the purpose of establishing an implementation framework for the resource protection objectives of the Otay Ranch City of Chula Vista General Development Plan (GDP; City of Chula Vista 1993a)/San Diego Otay Subregional Plan Phase 2 (SRP; County of San Diego 1993) and Otay Ranch Resource Management Plan (Phase 1 RMP; County of San Diego and City of Chula Vista 1993). Amendments to the 1996 Phase 2 RMP have been adopted by the County Board of Supervisors and Chula Vista City Council. The current preparation of the first Specific Plan in Otay Ranch within the County's jurisdiction necessitates the County to initiate an update to the 1996 Phase 2 Resource Management Plan (RMP) to reflect the changes in the regulatory and planning context that have occurred since its adoption. The City was engaged by the County in a joint-planning effort to ensure that resource management policies are implemented consistently in both the County and City. The purpose of the update is to incorporate County and City actions that have occurred in Otay Ranch to date (December 2017), as well as reflect changes in regional biota monitoring and management priorities and standards. No new policy decisions or actions are proposed through this update. Upon adoption by the County Board of Supervisors and Chula Vista City Council, this document (termed Phase 2 RMP Update) will serve as a replacement of the 1996 Phase 2 RMP including amendments in the County and City, respectively.

Page intentionally left blank

1.0 Introduction

1.1 Purpose and Need

The Phase 2 Resource Management Plan (RMP) is a requirement of the GDP/SRP and Phase 1 RMP, with the purpose of establishing an implementation framework for the resource protection objectives of both documents. This document, termed the Phase 2 RMP Update, provides updated management and monitoring standards for resource protection and conservation within Otay Ranch consistent with regional practices and standards. The objectives of this document are to:

- Provide an overview of the changes in the Otay Ranch planning context since the approval of the GDP/SRP, Phase 1 RMP, and 1996 Phase 2 RMP;
- Establish a framework for implementation of the GDP/SRP and Phase 1 RMP policies that incorporate General Plan amendments and current policies and programs related to Otay Ranch adopted by the County and City, including the Multiple Species Conservation Program (MSCP) Plan and Subarea Plans;
- Summarize the current status of the GDP/SRP and Phase 1 RMP policies related to biological and cultural resources; and
- Update the Biota Monitoring Program consistent with regional priorities and monitoring standards.

1.2 Project History

In 1820, the Otay Rancho and Rancho Janal land grants were formally granted to the Estudillo family by Governor José María Echeandía. The land grants consisted of approximately 11,000 acres in the Otay River valley and were used primarily for cattle grazing. Numerous ownership changes occurred throughout the 1800s and early 1900s, and the properties were eventually known collectively as Rancho Otay. In 1936, Stephen Birch purchased Rancho Otay with several other large tracts of land, expanding the ranch to approximately 29,000 acres. The Birch family established a family farming business, United Enterprises, and used the land for cattle ranching and the production of lima beans, hay, and grain. A private residence for the Birch family was also built on an 11-acre estate, and small portions of the property were used for Stephen Birch's hobbies, including an orchid nursery and a game bird hatchery ('Bird Ranch') that was used for hunting on the ranch. The property was inherited by Stephen Birch's daughter, Mary Birch, and agricultural uses continued on the ranch through the 1980s. Following the deaths of Mary Birch and her husband, United Enterprises sold the Otay Ranch property to the Baldwin Company in 1988 (County of San Diego 1993; City of Chula Vista 1993a).

Planning in the community of Otay Ranch has a complex history. United Enterprises first initiated a planning process for Otay Ranch in 1984, by requesting authorization from the County to process an application for a General Plan amendment governing the property. Due to the size and complexity of the project and the need to work with other jurisdictions, the County created an informal cooperative planning process through the adoption of Board of

Supervisors Policy I-109. After four years of studies, the County Board of Supervisors authorized submittal of a General Plan amendment, which was submitted by the Baldwin Company in November of 1988. This proposal was reviewed by the County, City, citizen committees, technical committees, and planners from many entities. This process eventually led to the preparation of the GDP/SRP, which was subsequently adopted by the City and County in 1993.

A RMP was prepared concurrently with the GDP/SRP to comprehensively plan for the protection of open space, sensitive natural and cultural resources, and regional recreation opportunities. The RMP was intended to be enacted in two phases: Phase 1 and Phase 2. The Phase 1 RMP was adopted concurrently with the GDP/SRP in 1993, and designated an approximately 11,375 acre preserve for resource protection and conservation, henceforth referred to as 'Preserve'. The Phase 2 RMP provided an implementation strategy for the Phase 1 RMP, and was adopted by the Chula Vista City Council on June 4, 1996 in conjunction with the first development within Otay Ranch. The County Board of Supervisors adopted only segments of the 1996 Phase 2 RMP related to identification of the Preserve Owner/Manager (POM), conveyance schedule, and the Preserve Funding Program for the processing and conveyance of the Preserve lands associated with Specific Plan Area One (Villages 1 & 5).

Numerous changes in the planning context for Otay Ranch have occurred since the preparation of the GDP/SRP, Phase 1 RMP, and 1996 Phase 2 RMP. Upon the adoption of the GDP/SRP, Otay Ranch consisted of a single ownership, the Baldwin Company. A number of land sales took place following the economic downturn in 1996 resulting in multiple ownerships throughout the extent of the former ranch, including acquisitions for conservation and mitigation of non-Otay Ranch development impacts by public agencies and private developers. Although the policies contained in the GDP/SRP and RMP anticipated changes in ownership driven by future development, neither document contemplated such a significant expansion of multiple ownerships or that lands would be acquired by public agencies, including the United States Fish & Wildlife Service (USFWS) and California Department of Fish & Wildlife (CDFW) (henceforth, collectively referred to as the 'Wildlife Agencies'), as well as the Bureau of Land Management (BLM), California Department of Transportation (Caltrans), Otay Water District (OWD) and the City of San Diego.

Following the listing of the coastal California gnatcatcher (*Polioptila californica californica*) as a federally threatened species in 1993, jurisdictions within the region pursued a broad-based resource conservation strategy by implementing a series of joint Natural Community Conservation Plans/Habitat Conservation Plans through the Multiple Species Conservation Program (MSCP) Plan (County of San Diego 1998a). The County's Subarea Plan to the MSCP Plan was adopted in 1998 by the County and the City's Subarea Plan to the MSCP Plan was adopted in 2003 by the City of Chula Vista.

During the preparation of the County's MSCP Subarea Plan, the Baldwin Company entered into discussions with the Wildlife Agencies regarding land use and policy changes to the GDP/SRP and Phase 1 RMP. These discussions are contained in the 'Baldwin Letter', which is included within the South County Segment section of the County's MSCP Subarea Plan.

The numerous amendments to the GDP have refined the original land use plan and changed the village configuration in the City. Adjustments to the Preserve boundary have also occurred within the City, initiated through the MSCP boundary line adjustment process by project applicants for Otay Ranch village developments. Additional changes to the policies in the GDP/SRP, Phase 1 RMP, and Phase 2 RMP have been processed by General Plan amendments in both the County and City. A summary of General Plan amendments and other policy changes is included in Attachment 1.

Additional changes in species sensitivity classifications have occurred since the adoption of the GDP/SRP in 1993, including the listing of the Quino checkerspot butterfly (*Euphydryas editha quino*) as federally endangered and the elimination of the federal Category 2 Candidate species list. Regional priorities and monitoring standards have also changed over the last 20 years, necessitating updates to the Biota Monitoring Program.

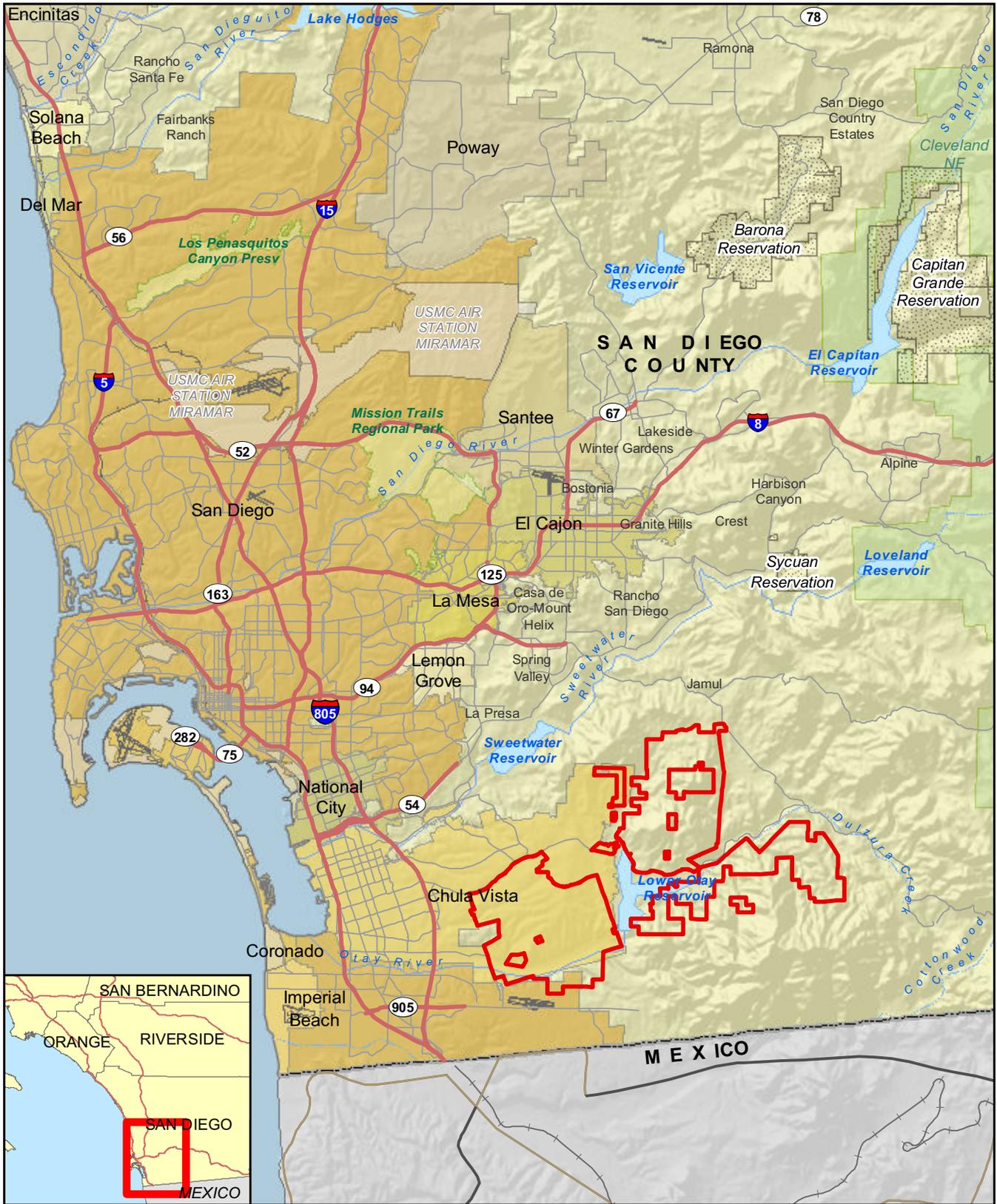
1.3 Environmental Setting

Otay Ranch encompasses approximately 22,881 acres in southwestern San Diego County, generally surrounding Lower Otay Reservoir (Figure 1). Otay Ranch spans the jurisdictions of the County, City, and City of San Diego (Figure 2). Development within areas of Otay Ranch under the jurisdiction of the County and City is governed by the GDP/SRP. The City of San Diego is not a signatory of the GDP/SRP; thus, areas of Otay Ranch in the City of San Diego's jurisdiction are not subject to the requirements of the GDP/SRP and are governed separately by the Otay Mesa Community Plan Update (City of San Diego 2014). Table 1 provides the acreages of each jurisdiction within Otay Ranch.

Designation	Total (acres)
County of San Diego	13,661
City of Chula Vista	8,834
City of San Diego	386
TOTAL	22,881

Otay Ranch is comprised of three nearby but non-contiguous ownership areas: the Otay Valley Area, the Proctor Valley/Jamul Mountains Area, and the San Ysidro Mountains Area (see Figure 2). Each of these large ownership areas is an aggregate of many smaller existing legal parcels within Otay Ranch. The dominant feature linking the three ownership areas is the Otay River system, which includes a tributary system of canyons and drainage courses and the Otay Reservoir system.

Page intentionally left blank

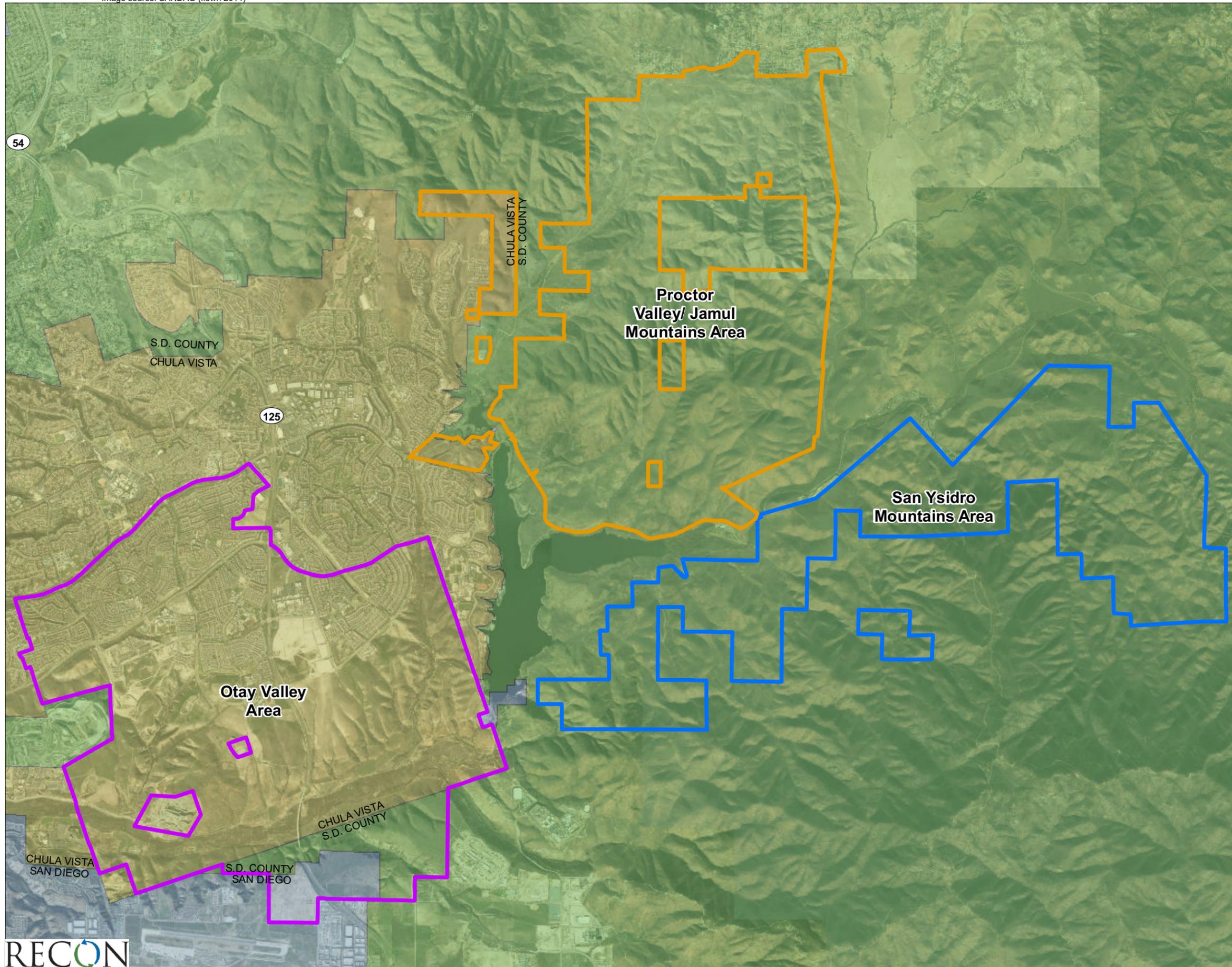


Otoy Ranch Boundary

FIGURE 1

Regional Location of Otoy Ranch

Page intentionally left blank



- Otay Ranch Ownership Areas**
- Otay Valley Area
 - Proctor Valley/ Jamul Mountains Area
 - San Ysidro Mountains Area
- Jurisdiction**
- County of San Diego
 - City of Chula Vista
 - City of San Diego



FIGURE 2
Ownership Areas
& Jurisdictional Boundaries

Page intentionally left blank

Otay Ranch contains large expanses of undeveloped land comprised of and contiguous with other conserved lands, including the San Diego National Wildlife Refuge, Otay Mountain Ecological Reserve, Rancho Jamul Ecological Reserve, Hollenbeck Canyon Wildlife Refuge, Otay Mountain Wilderness, San Miguel Habitat Management Area, and Cornerstone Lands. These lands are managed by a multiplicity of federal, state, and local agencies, including USFWS, CDFW, BLM, OWD, and City of San Diego. Figure 3 shows Otay Ranch in relation to these conserved lands and provides a regional context for the GDP/SRP and RMP in relation to other conservation efforts.

Combined with these areas, the undeveloped areas within Otay Ranch provide habitat for numerous species of plants and animals, function as a corridor for wildlife movement throughout the region, and contribute to regional biodiversity and natural ecosystem functions. Otay Ranch's diverse biological resources, strategic location adjacent to Baja California, and its connectivity to large areas of public ownership contribute to its regional significance and the importance for a coordinated conservation planning effort as future development within Otay Ranch is designed.

1.4 Regulatory Context

This section explains the background and purpose of three plans that are directly related to the Phase 2 RMP Update: the Otay Ranch GDP/SRP, the Phase 1 RMP, and the MSCP Plan (including Subarea Plans for the County and the City). The GDP/SRP is a land use document that comprehensively plans for development and conservation within Otay Ranch, and which is a part of the General Plans for the County and the City. The Phase 1 RMP is a companion document to the GDP/SRP, which includes a program for long-term protection and management of biological resources within Otay Ranch. The MSCP Subarea Plans for the County and the City are Habitat Conservation Plan/Natural Community Conservation Plans (HCP/NCCPs) that were prepared and adopted separate from the GDP/SRP and for an area that extends beyond Otay Ranch. As HCP/NCCPs, the MSCP Subarea Plans establish the conditions under which each jurisdiction may permit impacts (“take”) to a specific list of species and their habitats from land development and other lawful activities that are permitted by the County and the City. The primary difference between the GDP/SRP and the MSCP Subarea Plans is that the GDP/SRP is a land use document that divides Otay Ranch into three separate planning components (Development Area, Restricted Development Area, and Preserve) that are described in more detail in Section 2.1. The MSCP Subarea Plans are HCP/NCCPs that dictate the terms under which “take”, as defined in the Endangered Species Act and the NCCP Act, may occur.

1.4.1 Otay Ranch General Development Plan/ Subregional Plan

The GDP/SRP is a “general-plan level” document adopted by the County and City in 1993 to guide future development of Otay Ranch. The GDP/SRP 1) identifies the land use pattern and intensities for the Otay Ranch community; 2) identifies Otay Ranch land use, facility, environmental, economic and social goals, objectives and policies; 3) informs citizens, the land owner, decision-makers and local jurisdictions of the policies which will guide development

within Otay Ranch; 4) guides the coordinated development of Otay Ranch consistent with the goals of the City of Chula Vista, County of San Diego and the region; and 5) provides a foundation for the subsequent consideration and approval of Sectional Planning Area (City)/Specific Plans (County) and Subdivision Maps. The GDP/SRP clusters development in Otay Ranch into 14 villages and 7 planning areas that provide a balance of housing, shops, workplaces, schools, parks, and civic facilities with large expanses of protected open space occurring outside the urban edge (City of Chula Vista 2015, County of San Diego 1993).

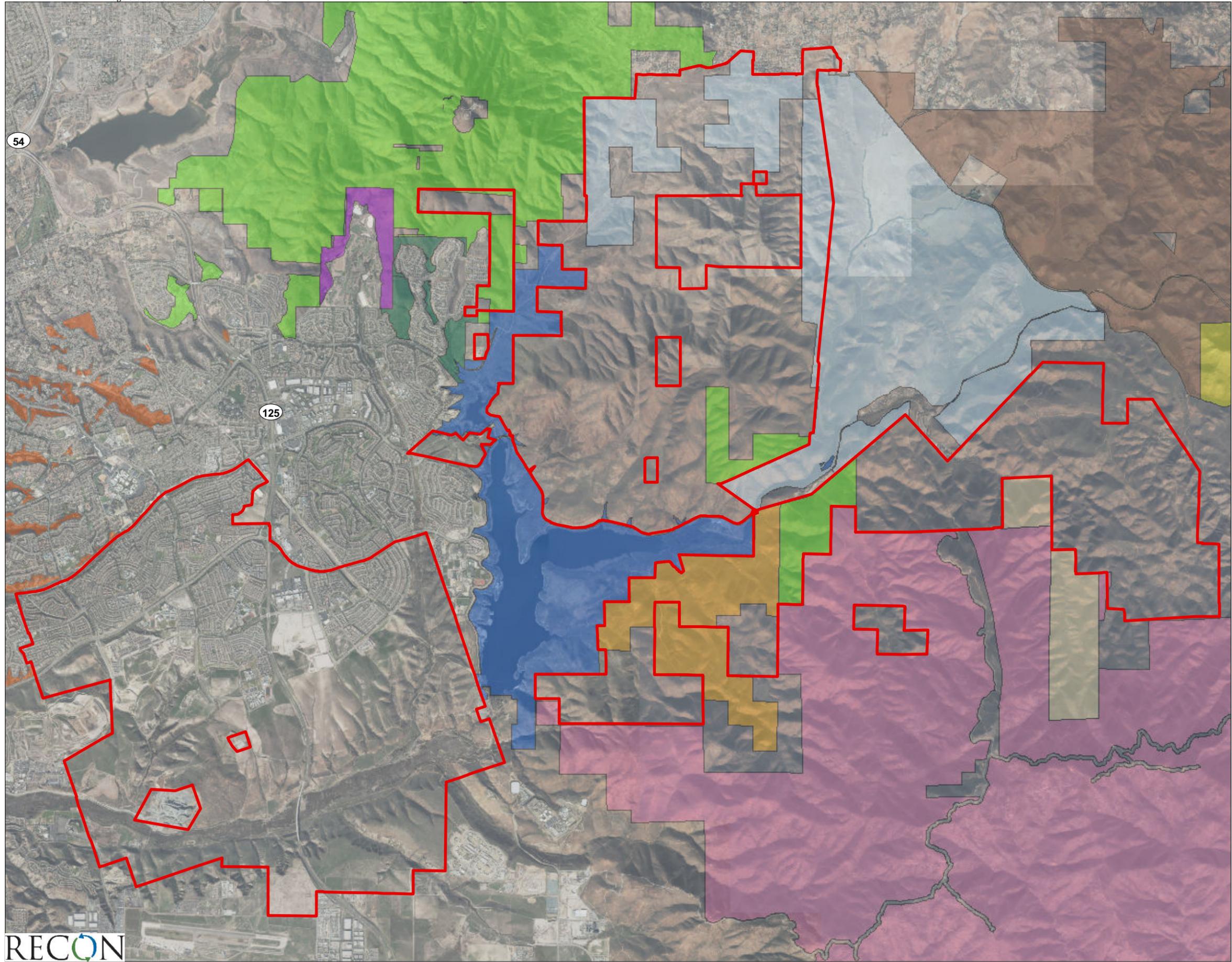
The GDP/SRP provides a foundation for the subsequent consideration and approval of more detailed planning processes prior to the subdivision of land. Subsequent permit applications are governed by the jurisdiction with the land use control over the applicable property. The County requires the preparation and adoption of ‘Specific Plans’ (SP), whereas the City requires the preparation of ‘Sectional Planning Area’ (SPA) plans. Thereafter, in both jurisdictions, the property may be subdivided in accordance with the California Subdivision Map Act and the Subdivision Ordinances of the respective jurisdiction.

Within the County planning structure, the SRP is contained within Part XXIII of the County General Plan. Within the City planning structure, the GDP is the planning document required to implement the City’s General Plan and the City’s zoning ordinance for the Planned Community (P-C) zone within Otay Ranch. As amendments to the SRP and GDP are processed separately through the County and City, respectively, there are differences between the County-adopted SRP and City-approved GDP.

As of December 2017, amendments to the GDP/SRP have been primarily related to land use, largely involving the village configuration within the City’s jurisdiction. Thus, land use designations for villages occurring within the City’s jurisdiction vary between the GDP and SRP and are governed by the most recently amended GDP (City of Chula Vista 2015). A summary of the GDP/SRP and RMP amendments to date (through December 2017) is included in Attachment 1.

1.4.2 Phase 1 Resource Management Plan

The Phase 1 RMP was adopted by the County and City in 1993 concurrent with the GDP/SRP to provide assurances for long-term resource protection within Otay Ranch and fulfill selected policies, standards, and guidelines of the GDP/SRP. The Phase 1 RMP is a comprehensive plan for the preservation, enhancement, and management of sensitive biological and cultural resources within Otay Ranch. To ensure resource protection, the Phase 1 RMP designates an approximately 11,375-acre conceptual Preserve within Otay Ranch for permanent, managed conservation. Attachment 2 includes a summary of the current status of the Phase 1 RMP policies and standards related to biological and cultural resources. The original Preserve configuration envisioned by the Phase 1 RMP is shown on Figure 4. It should be noted that the GDP/SRP village and planning area boundaries and the Phase 1 RMP boundaries shown on Figure 4 are not within physical alignment due to scale and mapping differences between the two documents.

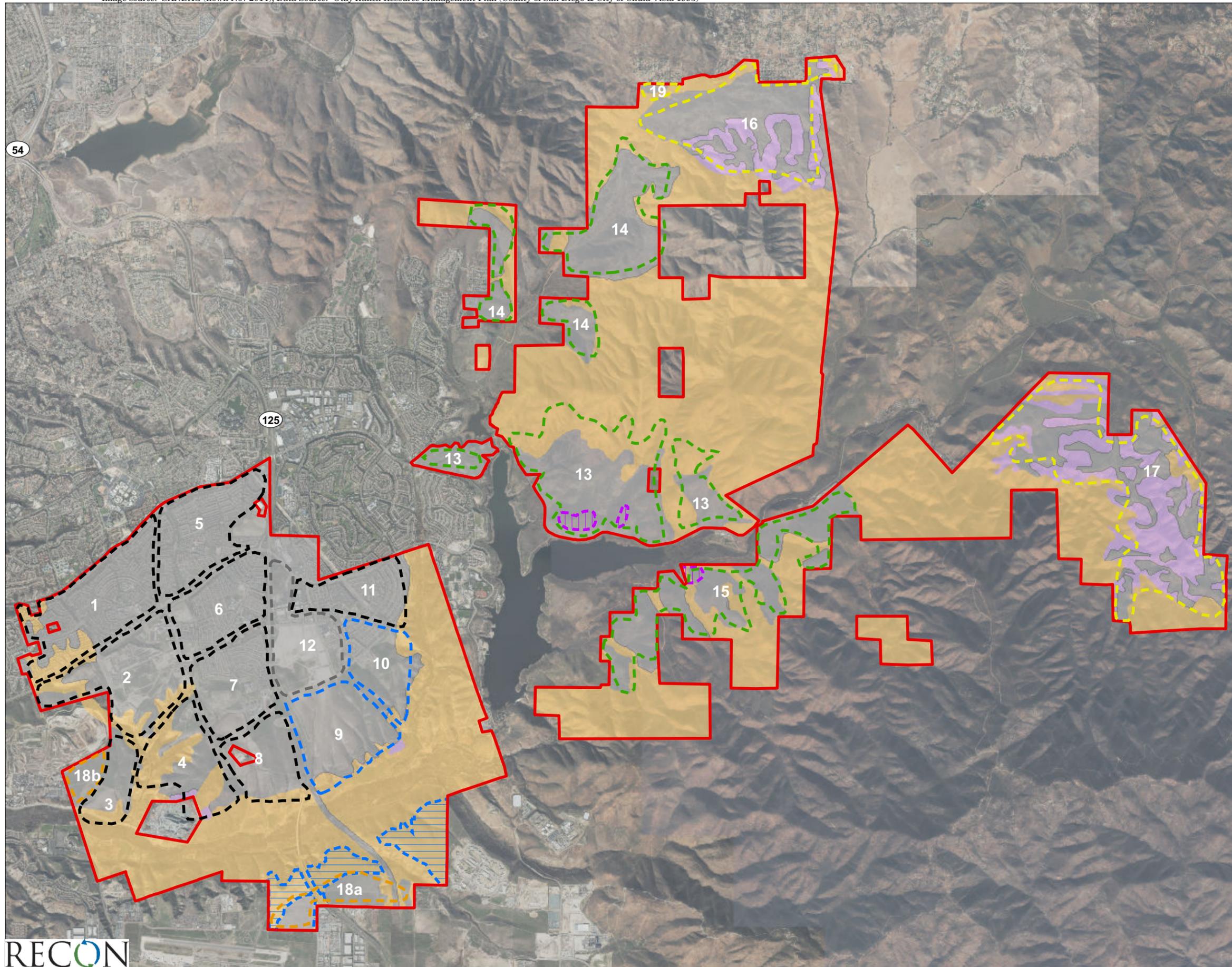


- Otay Ranch Boundary
- San Diego National Wildlife Refuge – USFWS
- Otay Mountain Ecological Reserve – CDFW
- Rancho Jamul Ecological Reserve - CDFW
- Hollenbeck Canyon Wildlife Area - CDFW
- Barbara and Lawrence Daley Preserve – County of San Diego
- San Miguel Habitat Management Area – OWD
- City of San Diego Public Utilities/ Cornerstone Lands
- Central City Preserve – City of Chula Vista
- Rolling Hills Ranch Preserve – City of Chula Vista
- Otay Mountain Wilderness – BLM**
- Otay Mountain Wilderness
- Cedar Canyon Area of Critical Environmental Concern



FIGURE 3
Otay Ranch in Relation to Other Conserved Lands (2017)

Page intentionally left blank



- Otay Ranch Boundary (Phase 1 RMP)
- Phase 1 RMP Otay Ranch Planning Components***
- Original Development Area
- Original Preserve
- Original Restricted Development Area
- Original Vernal Pool Preserve Area
- Original Sensitive Resource Study Area
- GDP/SRP Village and Planning Area Boundaries****
- Urban Villages (1-8, 11)
- Industrial Planning Area (18a, 18b)
- Rural Estate Area (16, 17, 19)
- Specialty Resort/Estate/Transition Villages (13-15)
- University/Urban Villages (9, 10)
- Eastern Urban Center/Freeway Commercial (12)
- *Source: Phase 1 RMP (County of San Diego & City of Chula Vista 1993)
- **Source: GDP/SRP (County of San Diego 1993 & City of Chula Vista 1993a)



FIGURE 4

Original Otay Ranch Planning Components (1993)

Page intentionally left blank

1.4.3 Multiple Species Conservation Program Plan

The Multiple Species Conservation Program (MSCP Plan; County of San Diego 1998a) is a comprehensive, long-term habitat conservation planning program in San Diego County that addresses the needs of multiple species and the preservation of natural vegetation communities. The plan encompasses 582,243 acres within 12 jurisdictions and several independent special districts in southwestern San Diego County, and creates a plan to mitigate for the potential loss of sensitive species and their habitat due to the impacts of future development on both public and private lands. Through the designation of a 172,000-acre regional preserve, the MSCP Plan is designed to conserve specific species at levels that meet the take authorization standards of the federal and state Endangered Species Acts and the Natural Community Conservation Planning Act.

Local jurisdictions and special districts implement their respective portions of the MSCP Plan through Subarea Plans, which include individual Implementing Agreements that establish the conditions under which the jurisdiction will receive long-term take authorizations from the Wildlife Agencies for the take of covered species incidental to land development and other lawful land uses.

1.4.3.1 County of San Diego MSCP Subarea Plan

Pursuant to the MSCP Plan, the County Board of Supervisors adopted the Multiple Species Conservation Program County of San Diego Subarea Plan (County's MSCP Subarea Plan; County of San Diego 1997) on October 22, 1997, and entered into an Implementing Agreement with the Wildlife Agencies on March 17, 1998 (County of San Diego 1998b). The County's MSCP Subarea Plan outlines conservation and management requirements for biological resources and provides regulatory "take" authorization for impacts to 85 covered species within specified areas, and is implemented through the County's Biological Mitigation Ordinance (BMO; County of San Diego 2012). The County's MSCP Subarea Plan encompasses approximately 252,132 acres within unincorporated southwestern San Diego County and is divided into three Segments: Lake Hodges, Metropolitan–Lakeside–Jamul, and South County. Portions of Otay Ranch within the County's jurisdiction occur within the South County Segment of the County's MSCP Subarea Plan.

The County's MSCP Subarea Plan incorporates by reference the policies of the Phase 1 RMP as the framework for the conservation and management of biological resources within Otay Ranch. Thus, "take" authorization for projects within the Development Areas of Otay Ranch are subject to the habitat and species-specific preservation and mitigation requirements in the GDP/SRP and Phase 1 and 2 RMP (in addition to those incorporated into individual project approvals), and are not subject to the provisions of the County's BMO. However, projects within Otay Ranch areas designated as Preserve, such as infrastructure facilities, circulation element roads, and recreational facilities, are subject to and must demonstrate conformance with the BMO (County of San Diego 2012). Accordingly, all proposed projects in Otay Ranch must comply with the County's MSCP Subarea Plan in addition to all applicable land use and zoning regulations. This Phase 2 RMP does not modify the County's MSCP Subarea Plan requirements, including the designation of Preserve Areas or any existing land

use designations. Projects in Otay Ranch that have not been take authorized through the County's MSCP Subarea Plan may be required to receive concurrence from the Wildlife Agencies under the County's MSCP Subarea Plan, such as through a minor amendment, major amendment, or other designated process.¹

1.4.3.2 City of Chula Vista MSCP Subarea Plan

The City adopted the City of Chula Vista MSCP Subarea Plan (City's MSCP Subarea Plan; City of Chula Vista 2003a) on May 13, 2003. The City's MSCP Subarea Plan identifies a series of focused planning areas within which some lands will be dedicated for preservation of native habitats, and provides take authorization for Quino checkerspot butterfly and the 85 species covered by the MSCP Plan within specified areas. As part of the City's General Plan, any projects subject to City approval must demonstrate conformance with the City's MSCP Subarea Plan and the City's Habitat Loss and Incidental Take (HLIT) Ordinance (City of Chula Vista 2016a), which implements the City's MSCP Subarea Plan.

The City's MSCP Subarea Plan designates village developments in Otay Ranch as a "Covered Project" and relies on the Phase 1 RMP and Phase 2 RMP as the framework for the conservation and management of biological resources within Otay Ranch. Thus, "take" authorization for village development projects within the Development Areas of Otay Ranch are subject to the habitat and species-specific preservation and mitigation requirements in the GDP/SRP and Phase 1 and 2 RMP (in addition to those incorporated into individual project approvals), and are not subject to the provisions of the HLIT Ordinance. Planned Facilities within areas designated as Preserve are also considered Covered Projects. Take authorization for impacts from Planned Facilities are subject to specific Covered Project conditions and mitigation requirements, as well as the Facilities Siting Criteria in the City's MSCP Subarea Plan but are not subject to the HLIT Ordinance. Future Facilities within areas designated as Preserve are required to meet all applicable regulations in the HLIT Ordinance as well as the Facilities Siting Criteria in the City's MSCP Subarea Plan.

Both the Phase 1 RMP and Phase 2 RMP are incorporated by reference in the City's MSCP Subarea Plan and are appended as the Framework Management Plan for Otay Ranch. In anticipation of the need for updates, the City's MSCP Subarea Plan states that the RMP may be amended by the City through the use of its jurisdictional authority without amendment to the City's MSCP Subarea Plan if such amendments are consistent with the goals of both the MSCP Plan and City's MSCP Subarea Plan (City of Chula Vista 2003a).

1.4.3.3 City of San Diego MSCP Subarea Plan

The City of San Diego adopted the City of San Diego MSCP Subarea Plan and Implementing Agreement (City of San Diego 1997) on July 14, 1997. The City of San Diego's MSCP Subarea Plan encompasses approximately 206,124 acres primarily in the City of San Diego's jurisdiction and is divided into five Segments: Southern Area, Eastern Area, Urban Areas,

¹ The reader should refer to the County's MSCP Subarea Plan for maps of take authorized areas.

Northern Area, and Cornerstone Lands and San Pasqual Valley. Portions of Otay Ranch within the City of San Diego's jurisdiction occur within the Southern Area.

The City of San Diego is not a signatory of the GDP/SRP and, thus, the City of San Diego's MSCP Subarea Plan does not rely on the Phase 1 and Phase 2 RMP as the framework for the conservation and management of biological resources within Otay Ranch. Therefore, development in this area is subject to the provisions of the City of San Diego MSCP Subarea Plan and Environmentally Sensitive Lands Regulations, and would not be required to comply with the provisions of the Phase 1 and Phase 2 RMP unless annexed to the County of San Diego or the City of Chula Vista.

2.0 Existing Conditions

2.1 Otay Ranch Planning Components

Otay Ranch is divided into three separate planning components based on their development or conservation potential: Development Areas, Restricted Development Areas, and Preserve. These planning components, as originally envisioned by the original GDP/SRP and Phase 1 RMP, are shown on Figure 4. The configuration of these planning components subsequent to land use changes that have been processed to date (through December 2017) are shown on Figure 5, and are defined below. Figure 5 shows refinements to the Development Areas, Restricted Development Areas, and Preserve designations from the 1993 GDP/SRP based on approved amendments to the City General Plan and the County General Plan.

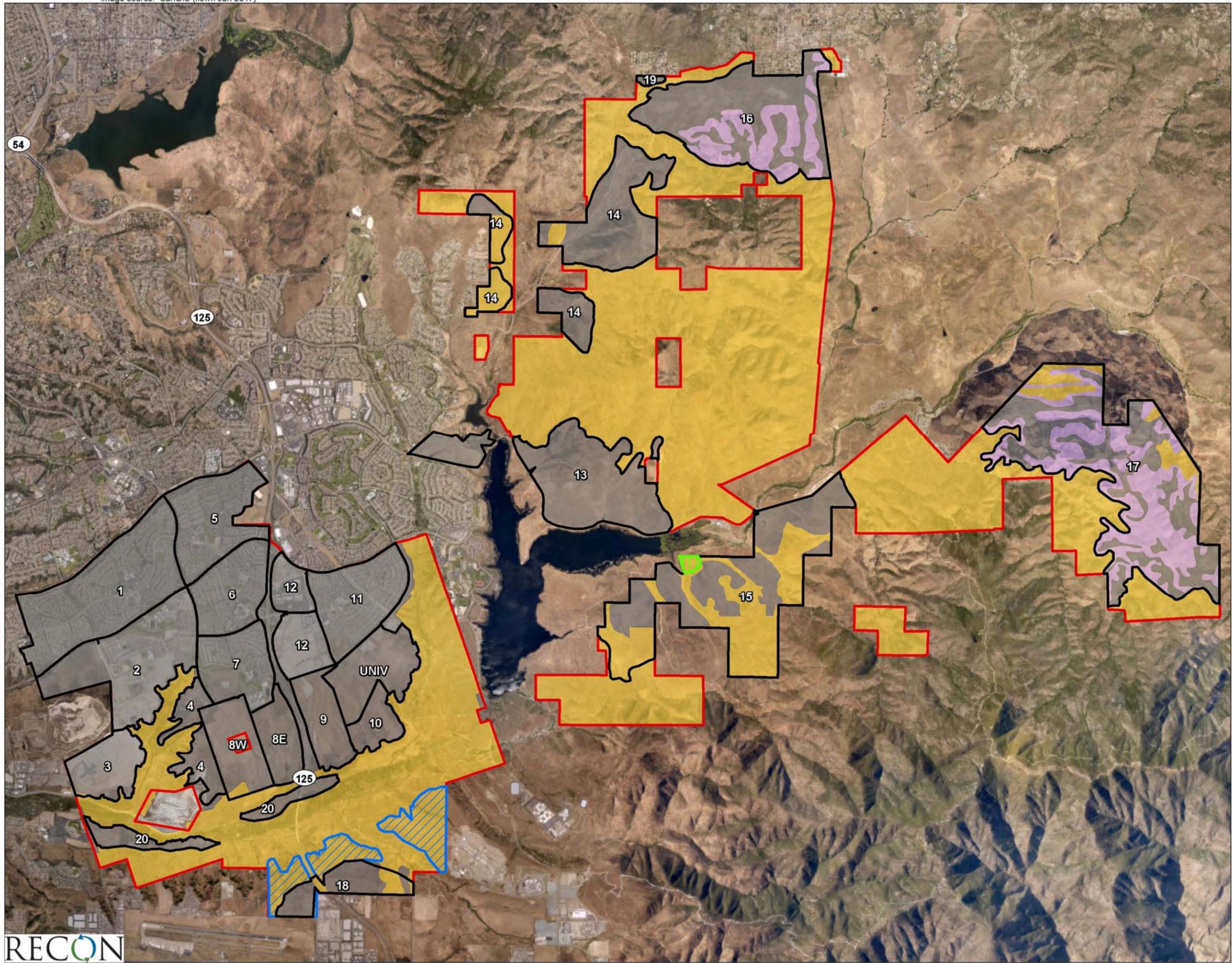
Development Area refers to the developable area within the 14 villages and 7 planning areas described in the GDP/SRP. The GDP/SRP designates various land uses and intensities within this area to be implemented in association with the adoption of future SP or SPA Plans. Villages/planning areas with higher intensity land uses, such as Urban Village, Freeway Commercial, Eastern Urban Center, and University, are generally designated within the City's jurisdiction adjacent to the City's urban core. Villages/planning areas with medium to low intensity land uses, such as Rural Estate Area and Specialty Resort/Estate/ Transitional Village, are primarily designated within the County's jurisdiction adjacent to unincorporated areas of the County. Industrial Planning Areas are also included adjacent to the Otay Landfill within the City of Chula Vista, and in Otay Mesa adjacent to industrial areas within the City of San Diego, with a small portion of the industrial area extending into the County. The Development Areas have an obligation to convey 1.188 acres of Preserve for each acre of development, excluding development associated with common uses (defined in Section 6.1.2).

Restricted Development Area consists of areas where development potential is limited to roads and utilities due to the presence of steep slopes and/or sensitive resources. These areas correspond with the GDP/SRP land use designation for Limited Development Area. Areas that are not utilized for roads and utilities are to be retained in easements as natural open space within residential lots, but will not be conveyed to the Preserve. Buildings or other structures, agriculture, landscaping, livestock, grazing, trash disposal, or fences are prohibited from these areas. Removal of native vegetation is prohibited except as necessary

for the construction of roads and utilities and for brush management. Restricted Development Areas may be refined at the SP or SPA planning level depending on slope and location of sensitive vegetation communities. However, per the Phase 1 RMP, the overall open space acreage cannot be reduced from 1,166 acres at the SP or SPA planning level during refinement.

Preserve encompasses the key biological resource areas identified in the GDP/SRP. The Preserve is assembled through conveyance of lands to the POM as final maps are recorded for each village identified in the GDP/SRP. These lands are accompanied by a long-term funding mechanism for management and monitoring, such as a Community Facilities District (CFD). The southern portion of the Preserve contains a conceptual Vernal Pool Preservation Area overlay zone encompassing the vernal pool complexes that were identified for preservation by the GDP/SRP (J23, J24, J25, J30 and J29 [partial]). Additional details about the Vernal Pool Preservation Area are included within Attachment 3 of this RMP.

Sensitive Resource Study Area is an overlay zone designated by the GDP/SRP. Sensitive Resource Study Area is a GDP/SRP land use designation for special areas that potentially support sensitive resources such as vernal pools and native grasslands. This designation may be reconfigured or eliminated upon the completion of additional studies and/or proposed mitigation. Areas without sensitive resources may be developed without the need for an amendment to the GDP/SRP.



- Otay Ranch Boundary*
- Otay Ranch Villages**
- Development Area
- Preserve
- Restricted Development Area
- Sensitive Resource Study Area
- Vernal Pool Preservation Area

*The Otay Ranch Boundary has been refined to remove portions of Eastlake occurring in the northeastern portion of the Otay Valley Area

** Village and Planning Area boundaries are for illustrative purposes only, and have been refined to reflect the existing Development Area boundaries and amendments to the GDP processed by the City of Chula Vista.



FIGURE 5

Otay Ranch Planning Components (2017)

Page intentionally left blank

2.2 Comparison of Phase 1 RMP and Existing Conditions

The Phase 1 RMP acknowledges that the subsequent Phase 2 RMP would include additional studies and research that would ultimately refine the 11,375-acre Preserve boundary, which was mapped at a very coarse scale. As anticipated, the configuration of the Preserve boundary has been refined since the approval of the Phase 1 RMP (see Figure 5). Calculations using ArcGIS version 10.4 based on the best available data, including MSCP and parcel boundaries, show that the Preserve area within Otay Ranch totals approximately 11,547 acres. This difference in acreage is attributed to limitations in the technology used to calculate the original Preserve acreages in the Phase 1 RMP, as well as refinements made to the Preserve boundary through amendments to the land use plan in the GDP/SRP and City/County General Plans, mapping refinements made at the Tentative Map level by approved SPA Plans, and boundary modifications made through the MSCP boundary line adjustment process. A ledger of the General Plan amendments and land use changes is included in Attachment 1 of this RMP. A comparison of the original calculations in the Phase 1 RMP and the existing acreages for the planning components within Otay Ranch based on current GIS analysis is shown in Table 2.

Planning Component	Estimated Acreage - 1996 Phase 2 RMP	Existing Acreage	Net Change (acres)
Development Areas	10,360	10,143	-217
Restricted Development Areas	1,164	1,206	+42
Preserve	11,375	11,547	+172
TOTAL	22,899	22,896¹	-3

¹Total includes 15 acres of Preserve outside of the GDP boundary in the Otay Quarry.

An updated conveyance forecast based on previous development approvals, approved SPA plans, and the land use plan in the most recently adopted GDP/SRP is provided in Attachment 3 (County of San Diego 1993; City of Chula Vista 2015). In addition, Attachment 3 also provides a summary of the Preserve assembly as of 2017, including agency acquisitions for conservation.

3.0 Land Use Considerations in the Preserve

The following land use considerations incorporate the land uses described in the GDP/SRP, Phase 1 RMP, County's MSCP Subarea Plan, and City's MSCP Subarea Plan. Where applicable, Phase 1 RMP policies are incorporated by reference, with the specific policy number bracketed [#.#] following the condensed policy.

3.1 Interim Uses

There may be a continuation of existing legal land uses and activities within areas designated as Preserve until such time as the property has been conveyed into the Preserve. Existing uses will not be allowed to negatively impact resources in the Preserve [8.1]. No expansion of such uses, or the clearing of additional areas, shall occur unless appropriate federal, state, and local permits have first been obtained. The County and City reserve the right to require any negative impacts to resources from unauthorized uses to be remedied prior to conveyance to the Preserve. The following interim land uses are considered consistent with the GDP/SRP, Phase 1 RMP, County's MSCP Subarea Plan, and City's MSCP Subarea Plan:

1. Existing agricultural uses, including cultivation and grazing, as an interim activity consistent with the Range Management Plan [8.1; 8.4]. Within the City, grazing shall be subject to the restrictions identified in Ordinance 3003 of the City's Municipal Code.
2. On-going mineral extraction operations, managed through the County and City's permit process [8.2].
3. Construction activities associated with infrastructure improvements consistent with approved development plans [8.3].
4. Maintenance and operations activities for existing public infrastructure, including access road maintenance and clearing/desilting of flood/drainage control facilities. Maintenance and operations activities are subject to all applicable requirements of federal and state law.

3.2 Permitted Uses

The following land uses and activities are considered consistent with the biological objectives of the GDP/SRP, Phase 1 RMP, and County and City's MSCP Subarea Plans and thus will be allowed within the Preserve. An amendment to the RMP shall be required for any land use within the Preserve that is not described herein [9.7].

3.2.1 Preserve Management, Scientific, and Biologic Activities

Preserve management activities, including biological monitoring, habitat restoration and enhancement, and maintenance activities, are permitted within the Preserve. All such activities shall be consistent with the respective jurisdiction's MSCP Subarea Plan and are subject to approval by the POM. Preserve management, scientific, and biologic activities may include (but are not limited to) the following uses:

1. Wetland mitigation banking [2.10].
2. Habitat restoration [3.1-3.8].
3. Biological monitoring [5.2, 5.4].

4. Maintenance activities including removal of trash, litter, and other debris, maintenance of trail systems, removal and control of exotic plant species (weeds), and control of cowbirds through trapping efforts [5.2].
5. Access control efforts to curtail activities such as grazing, shooting, off-road vehicle use, and illegal dumping that degrade biological resources [5.2].
6. Ecologically necessary controlled burning for the enhancement of biological resources [6.9].

3.2.1.1 Mitigation Banking

Mitigation banks may be established in areas with high biological values within the Preserve. The establishment of mitigation banks would require approvals from the respective jurisdiction and Wildlife Agencies, and would be required to comply with all applicable federal and state regulations.

Opportunities and plans for mitigation banks may be developed on Preserve lands held in public and private ownership in conjunction with preparation of wetland enhancement and restoration plans for the Otay River Valley and/or the vernal pool preservation plan. All revenue generated by wetland mitigation banks established by the POM shall be used to fund Preserve activities [2.10].

3.2.1.2 Habitat Restoration

Restoration programs intended to mitigate for disturbance of sensitive habitats associated with the development of Otay Ranch shall be funded and designed by the landowner in coordination with the POM and the appropriate jurisdiction. Implementation of such restoration programs shall be by an appropriate entity acceptable to the POM and the appropriate jurisdiction [3.2].

Restoration programs may be implemented for purposes other than compensation of impacts associated with development of Otay Ranch. Such programs shall be funded, designed, and implemented by the POM or other entity acceptable to the POM [3.3]. The POM will continue to identify potential restoration opportunities for threatened, endangered, and other sensitive species [3.8]. These restoration opportunities will be identified and implemented through the annual work plan prepared by the POM. The POM may also apply for ancillary funds (e.g., grants) to implement additional restoration activities.

3.2.2 Emergency, Safety, and Law Enforcement

All law enforcement, medical, rescue, and other emergency agencies are allowed access to the Preserve to carry out operations necessary to the health, safety, and welfare of the public. All organizations and agencies operating within the Preserve, including (but not limited to) the National Guard, the Immigration and Naturalization Service, U.S. Customs and Border Protection, and other law enforcement and fire control agencies, are subject to all applicable requirements of federal and state law. Vehicle use by these agencies is restricted to roadways.

3.2.3 Motorized Vehicle Use

Motorized vehicle use is conditionally compatible with the goals of the GDP/SRP. Motorized vehicles are defined as any vehicle powered by a motor, such as a car, truck, motorcycle, or quad. Motorized vehicle use is allowed in the Preserve for the following purposes:

1. Preserve operation, maintenance, and fire control [6.4].
2. Easement access [6.4].
3. Emergency, safety, and law enforcement personnel [6.4].
4. Construction equipment related to authorized habitat restoration activities

However, the following restrictions apply to motorized vehicle use:

1. Motorized vehicular use within the Preserve shall be restricted to roadways [6.4].
2. Off-road vehicles are prohibited [6.4].
3. Motorized vehicle access by the public is restricted to public rights-of-way and designated parking lots [6.4].
4. Easement access shall be consistent with existing easements and other ingress/egress documents, and will be restricted to the documented easement holder [6.4].
5. Fire roads shall be permitted within the Preserve only where absolutely necessary to ensure public safety and control wildfires that may damage biological resources [6.7].

3.2.4 Public Access and Recreation

Recreational activities are permitted consistent with the goals of the GDP/SRP, as well as the County and City's MSCP Subarea Plans. Public access and recreational land uses allowed in the Preserve are as follows:

1. Resource-related educational and interpretive programs to increase public sensitivity, awareness, and appreciation of resources within the Preserve [6.1]. Educational and interpretive programs are subject to approval by the POM.
2. Construction of a native plant nursery and/or botanic garden for public education. The sale of educational materials, books, and plants shall be allowed [6.1].
3. Active recreational usage is allowed within the Preserve up to 400 acres, and must be consistent with the resource protection and enhancement goal, objectives, and policies of the RMP [6.2]; refer to Section 3.2.4.1.
4. A trail system for the following passive recreational uses: hiking, scientific research, bird watching, mountain biking, and horseback riding. The trail system will be designed and implemented by a qualified firm in close coordination with the POM and the Wildlife Agencies [6.3].

The following restrictions apply to public access:

1. Motorized vehicle access by the public is restricted to public rights-of-way and designated parking lots [6.4].

2. Public access may be restricted within and adjacent to wetlands, vernal pools, restoration areas, and sensitive wildlife habitat (e.g. during the breeding season) at the discretion of the POM [6.5]. Restricted use areas will be identified at the time recreational facilities and/or trails are proposed.
3. Trails and other public access facilities may be restricted at the discretion of the POM.

3.2.4.1 Otay Valley Regional Park

A total of 2,458 acres of Preserve have been designated as the Otay Valley Regional Park (OVRP) by the OVRP Concept Plan (County of San Diego, City of Chula Vista, and City of San Diego 1997, updated in 2018). Within Otay Ranch, the OVRP would contain up to 209 acres of active recreational use (e.g. public parks and a nature interpretive center). The remainder of the OVRP would include a trail system designated for passive recreational use.

Preserve lands within the OVRP are subject to the land use considerations for (1) Preserve management, scientific and biologic activities, (2) emergency, safety, and law enforcement services, and (3) infrastructure in this RMP. However, the following land uses for public access and recreation are specifically permitted by the GDP/SRP and Phase 1 RMP in areas of the Preserve located within the OVRP:

1. Construction of a nature interpretive center [6.1].
2. Active recreational use (up to 209 acres) consistent with the OVRP Concept Plan when adopted. Siting and design of active recreational uses shall be subject to review by the POM and prepared in consultation with the OVRP Joint Exercise of Powers Agreement (JEPA) [6.2].
3. Passive recreational uses, including hiking, biking, and equestrian trails, as defined in the OVRP Concept Plan [6.3].
4. A demonstration agriculture site, located on prime or statewide important soils near Bird Ranch. A plan for the site will be subject to review by the POM and/or JEPA, and shall be submitted concurrent with the conveyance for this area or prior to the adoption of the last SPA on the Otay Valley Parcel [2.14].
5. Local roads for access.
6. Trails and staging areas for neighborhood or regional access.
7. Viewpoints and overlook areas.
8. Habitat restoration and enhancement of disturbed areas in accordance with an adopted revegetation plan.

The conceptual locations for the nature interpretive center and active recreation areas are included in Planning Area 20, outside the Preserve (Figure 6). However, these facilities may be sited inside the Preserve according to the policies set forth in the GDP/SRP and Phase 1 RMP, or in the alternative locations identified in the Phase 2 RMP (Exhibit 37). The final location(s) of the OVRP recreational facilities have been determined by the OVRP Concept Plan, which was adopted in 1997 and updated in 2017. The siting of such facilities will be based upon updated biological data and application of the siting criteria found in Policy 6.2

of the Phase 1 RMP, the OVRP Concept Plan, and the respective jurisdiction's Subarea Plans at the time that specific recreational uses are planned and developed.

Preserve lands contained within the OVRP would be conveyed to the POM for biological monitoring, with the exception of active recreation areas. Management and funding of facilities within the active recreation areas, as well as trail operation and maintenance, would be the responsibility of the City, County, and City of San Diego as outlined through the JEPA adopted in 1990, and since replaced in 2006 and updated in 2012.

3.2.5 Infrastructure

Construction and maintenance of roads, sewer, water, storm water/flood, and other utility-related facilities are permitted within the Preserve consistent with the goals of the GDP/SRP, as well as the County and City's MSCP Subarea Plans. Siting and design of infrastructure would be subject to the MSCP requirements of the jurisdiction in which they are sited in and are described in further detail below. Prior to approving the siting of infrastructure facilities, the jurisdiction in which the facilities are to be located shall request and consider written comments from the POM on the proposed location of the infrastructure facilities, pursuant to the *Otay Ranch POM Policy regarding the Placement of Infrastructure Facilities within the Otay Ranch Preserve* dated October 15, 2009. The POM will continue to coordinate with utility entities on activities that take place in the Preserve.

It should be noted that San Diego Gas and Electric (SDG&E) operates under a Habitat Conservation Plan and Subregional Natural Communities Conservation Plan (Subregional Plan) that is independent of the County and City's MSCP Subarea Plans. The Subregional Plan addresses SDG&E activities and potential impacts to Covered Species or habitat throughout SDG&E's area of operations.

3.2.5.1 County of San Diego

Within the County, infrastructure facilities and roads are subject to the requirements set forth in the County's MSCP Subarea Plan. These policies are summarized below.

a. Circulation Element Roads

The construction of new or modification of existing circulation element road corridors are allowed within the Preserve (County of San Diego 1997). The following circulation element road corridors within the Preserve are identified in the County's Circulation Element road map and are accounted for in the County's MSCP Subarea Plan:

1. Proctor Valley Road
2. Otay Lakes Road

b. Infrastructure Facilities

Public infrastructure facilities associated with development projects within Otay Ranch are allowed within the Preserve, per the County's MSCP Subarea Plan. Maintenance and

operation of new facilities shall be allowed in accordance with standard practices existing at the time of completion, including access road maintenance (County of San Diego 1997).

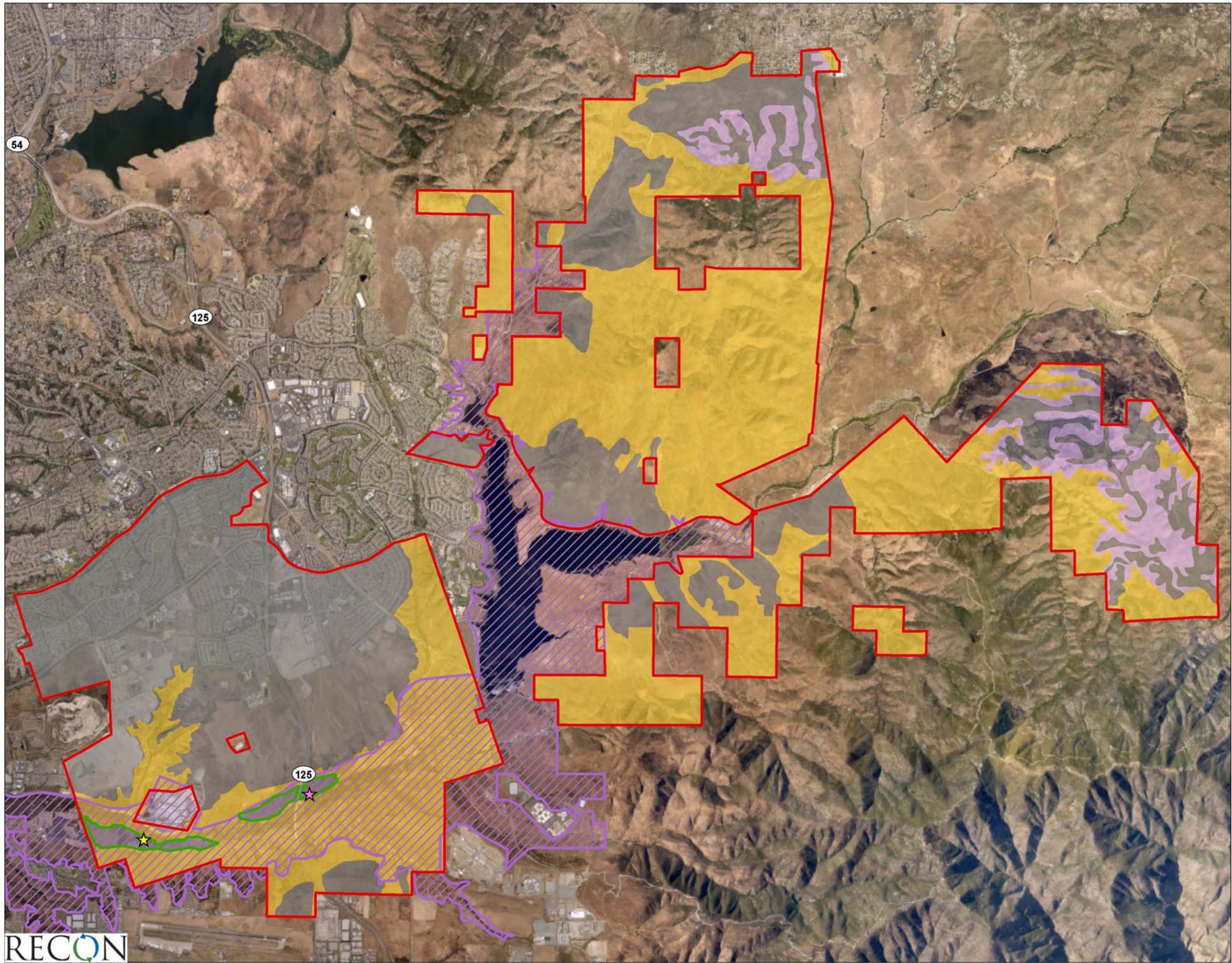
c. Findings

Take of covered species within the Preserve from the construction of public facilities or projects, such as circulation element roads and public infrastructure facilities, is based on the criteria in the County's MSCP Subarea Plan and the County's BMO. Take of covered species within the Preserve requires that the following findings are made by the County decision making body considering an application for such a project, as outlined in the County's BMO:

- a. The facility or project is consistent with the County General Plan, the MSCP Plan and the County's MSCP Subarea Plan, as approved by the Board of Supervisors;
- b. All feasible mitigation measures have been incorporated into the facility or project and there are no feasible, less environmentally damaging locations, alignments or non-structural alternatives that would meet project objectives;
- c. Where the facility or project encroaches into a wetland or floodplain, mitigation measures are required that result in a net gain in wetland and/or riparian habitat;
- d. Where the facility or project encroaches into steep slopes, native vegetation will be used to revegetate and landscape cut and fill areas;
- e. No mature riparian woodland is destroyed or reduced in size due to otherwise allowed encroachments; and
- f. All Critical Populations of Sensitive Plant Species within the County's MSCP Subarea (Attachment C of Document No. 0769999 on file with the Clerk of the Board), Rare, Narrow Endemic Animal Species within the County's MSCP Subarea (Attachment D of Document No. 0769999 on file with the Clerk of the Board), Narrow, Endemic Plant Species within the County's MSCP's Subarea (Attachment E of Document No. 0769999 on file with the Clerk of the Board), and San Diego County Sensitive Plant Species, as defined herein will be avoided as required by, and consistent with, the terms of the County's MSCP Subarea Plan (County of San Diego 2012).

In the event that the findings contained within the County's BMO are amended, the updated code would be applicable.

Page intentionally left blank



- Otay Ranch Boundary
 - Development Area
 - Preserve
 - Restricted Development Area
 - Active Recreation Areas
 - Otay Valley Regional Park
- Potential Recreational Facilities**
- ★ Vicinity of Potential Demonstration Agriculture Area at Bird Ranch
 - ★ Potential Nature Interpretive Center Site



FIGURE 6

Otay Ranch in Relation to the Otay Valley Regional Park

Page intentionally left blank

3.2.5.2 City of Chula Vista

Infrastructure is considered a permitted use within the Preserve in the City's jurisdiction and would be required to comply with the City's MSCP Subarea Plan. The City's MSCP Subarea Plan contains separate requirements for infrastructure projects defined as either Planned Facilities or Future Facilities, which are discussed in further detail below.

a. Planned Facilities

Planned Facilities consist of roads and infrastructure that were anticipated by the City's MSCP Subarea Plan as required to serve development. The following infrastructure projects are considered Planned Facilities within the Preserve:

1. Otay Lakes Road
2. Proctor Valley Road
3. Otay Valley Road
4. La Media Road
5. Paseo Ranchero south of Olympic Parkway, now known as Heritage Road
6. Main Street (formerly known as Rock Mountain Road)
7. Salt Creek Sewer Interceptor, Wolf Canyon Sewer, and Otay Valley Trunk Sewer (and associated ancillary sewer facilities including, but not limited to, pump stations, connections, and maintenance access roads)
8. Otay River Valley Equestrian Staging Areas (located in the active recreation area(s))
9. Trails designated in the OVRP Concept Plan
10. Otay River Valley Interpretive Centers (located in the active recreation area(s)) (City of Chula Vista 2003a).

Planned Facilities are considered Covered Projects by the City's MSCP Subarea Plan. Impacts to covered species would be subject to specific Covered Project conditions and mitigation requirements and the Facilities Siting Criteria in the City's MSCP Subarea Plan. Planned facilities are not subject to the City's HLIT Ordinance.

b. Future Facilities

Future Facilities are those necessary to support planned development but are not specifically identified in the City's MSCP Subarea Plan. Future Facilities are also considered a permitted use in the Preserve and would be required to meet all applicable regulations in the HLIT Ordinance for impacts to covered species as well as the Facilities Siting Criteria in the City's MSCP Subarea Plan.

c. Facilities Siting Criteria

Planned and Future Facilities within the City's jurisdiction are required to comply with the Facilities Siting Criteria in City's MSCP Subarea Plan:

1. Such facilities will be located in the least environmentally sensitive location feasible, and use existing roads, trails and other disturbed areas, including use

of the active recreation areas in the Otay River Valley, as much as possible (except where such areas are occupied by Quino checkerspot butterfly). Facilities should be routed through developed or developing areas where possible. If no other routing is feasible, alignments should follow previously existing roads, easements, rights of way, and disturbed areas, minimizing habitat fragmentation.

2. Such facilities shall avoid, to the maximum extent practicable, impact to Covered Species and Wetlands, and will be subject to the provisions, limitations and mitigation requirements for Narrow Endemic Species and Wetlands pursuant to Sections 5.2.3 and 5.2.4 of the City's MSCP Subarea Plan.
3. Where roads cross the Preserve, they should provide for wildlife movement in areas that are graphically depicted on and listed in the MSCP Plan Generalized Core Biological Resource Areas and Linkages map (Figure 1-4 of the MSCP Plan) as a core biological area or a regional linkage between core biological areas. All roads crossing the Preserve should be designed to result in the least impact feasible to Covered Species and Wetlands. Where possible at wildlife crossings, road bridges for vehicular traffic rather than tunnels for wildlife use will be employed. Culverts will only be used when they can achieve the wildlife crossing/movement goals for a specific location. To the extent feasible, crossings will be designed as follows: the substrate will be left in a natural condition or revegetated if soils engineering requirements force subsurface excavation and vegetated with native vegetation if possible; a line-of-sight to the other end will be provided; and if necessary, low-level illumination will be installed in the tunnel.
4. To minimize habitat disruption, habitat fragmentation, impediments to wildlife movement and impact to breeding areas, road and/or right-of-way width shall be narrowed from existing City design and engineering standards, to the maximum extent practicable. In addition, roads shall be located in lower quality habitat or disturbed areas to the maximum extent practicable.
5. Impacts to Covered Species and habitats within the Preserve resulting from construction of Future Facilities will be evaluated by the City during project review and permitting. The City may authorize Take for impacts to Covered Species and habitats resulting from construction of Future Facilities located outside the Preserve, pursuant to the City's MSCP Subarea Plan and consistent with the Facility Siting Criteria in [the City's MSCP Subarea Plan].
6. The City may authorize Take for impacts to Covered Species and habitats resulting from construction of Future Facilities located within the Preserve, subject to a limitation of two acres of impact for individual projects and a cumulative total of 50 acres of impact for all Future Facilities. Wildlife Agency concurrence will be required for authorization of Take for any impacts to Covered Species and habitat within the Preserve that exceed two acres that

may result from construction of any individual Future Facility. Wildlife Agency concurrence will be required for authorization of Take for impacts to Covered Species and habitat within the Preserve that exceed 50 acres that may result from all Future Facilities combined.

7. Planned and Future Facilities must avoid impacts to covered Narrow Endemic Species and Quino checkerspot butterfly to the maximum extent practicable. When such impacts cannot be avoided, impacts to covered Narrow Endemic Species within the Preserve that will result from construction of Planned and Future Facilities located within the Preserve are subject to equivalency findings and the limitations and provisions of Section 5.2.3.6 of the City's MSCP Subarea Plan. Impacts to Quino checkerspot butterfly that will result from construction of Planned and Future Facilities within the Preserve are subject to the provisions of Section 5.2.8 of the City's MSCP Subarea Plan (City of Chula Vista 2003a).

In the event that the Facilities Siting Criteria contained within the City's MSCP Subarea Plan is amended, the updated code would be applicable.

d. Maintenance and Repairs of Existing, Planned, and Future Roads and Infrastructure

Maintenance and repairs of existing, planned, and future roads and infrastructure in the City's jurisdiction shall comply with the City's MSCP Subarea Plan:

1. Construction, routine maintenance, and emergency repair activities for existing, planned and future roads, and other infrastructure are permitted in the Preserve including but not limited to repair, replacement and refurbishment, cleaning (including maintenance of desilting, retention and detention basins, and flood control facilities), and maintenance of cleared areas.
2. The affected agency will be allowed to enter the Preserve and complete necessary work consistent with normal "Best Management" practices. Construction, maintenance, and emergency repair of existing, planned, and future roads and facilities in the Preserve will to the maximum extent practicable avoid impacts to Covered Species and habitats. To the extent practicable, for non-emergency routine maintenance, the City will limit access during bird breeding seasons (April 1 through June 31) in areas where breeding and/or nesting activity may occur. Where avoidance is not feasible, impacts must be minimized. Areas temporarily disturbed by construction, maintenance, and/or emergency repair will be revegetated in accordance with an approved revegetation plan. A framework plan for temporary impacts and revegetation plans will be provided as part of the HLIT Ordinance. The City will apply the requirements of the HLIT Ordinance in all cases where its jurisdictional authority governs. The agency responsible for road and/or

infrastructure construction, maintenance, and emergency repair and causing unavoidable disturbance, or the holder of the permit authorizing such work, will be responsible for necessary revegetation (City of Chula Vista 2003a).

In the event that the criteria in the City's MSCP Subarea Plan are amended, the updated code would be applicable.

3.3 Incompatible Uses

The following land uses or activities are considered incompatible with the biological objectives of the GDP/SRP and County and City's MSCP Subarea Plans and thus will not be allowed within the Preserve:

1. Brush management, except as needed for Preserve management activities (e.g., habitat restoration, invasive species removal) and permitted infrastructure facilities within the Preserve as described above.
2. Materials storage or placement during the construction and operation of permitted infrastructure facilities and roads.
3. Motorized vehicle use by the public, unless within a public right-of-way or designated parking lots.

3.4 Adjacent Land Uses

3.4.1 Preserve Edge

The "edge" of the Preserve is defined as the 100-foot-wide strip of land within the developable portion of Otay Ranch surrounding the perimeter of the Preserve. Developments containing the Preserve edge shall be required to prepare a Preserve Edge Plan according to the requirements set forth in this RMP. Development within the 100-foot edge is restricted to uses that are allowed within the Preserve and the following uses:

1. Brush management in order to reduce fire fuel loads and reduce potential fire hazard [7.2].
2. Landscaping that is compatible with open space, as demonstrated by a Preserve Edge Plan [7.2]. No invasive plant species, such as those defined by the California Invasive Plant Council Invasive Plant Inventory, shall be included in the plant palette.
3. Fencing and walls that are built or landscaped in a way to minimize visual impacts to the Preserve and the OVRP. No structures other than fencing and walls shall be allowed [7.2].
4. Trails for passive recreational use. Trails should incorporate fencing or barriers and signage to reduce the likelihood of human intrusion into the Preserve.
5. Detention basins, brow ditches, storm drains, and other drainage features to protect the quality of the adjacent Preserve.

4.0 Preserve Management, Conveyance, & Funding

4.1 Preserve Management

4.1.1 Management Structure

4.1.1.1 County of San Diego & City of Chula Vista

In 1996, the County and City entered into a Joint Powers Agreement (JPA) for the planning, operation, and maintenance of the Preserve (County of San Diego and City of Chula Vista 1996). Through the JPA, the title of all lands conveyed to the Preserve are jointly held and managed by both the County and City, which are collectively designated as the POM. The JPA designates the following entities:

- Policy Committee. The Policy Committee consists of two elected representatives, one appointed from the City and one appointed from the County. The Policy Committee meets at a minimum of once annually, but may meet more often if agreed to by both parties. The responsibility of the Policy Committee is to review all operations conducted under the JPA.
- Preserve Management Team. The Preserve Management Team consists of the City's City Manager and the County's Deputy Chief Administrative Officer. The Preserve Management Team meets on an as-needed basis to monitor the implementation of the RMP and assigns staff to carry out the duties and responsibilities of the POM.
- POM. The POM consists of a staff committee made up of members from both the County and City that are responsible for the operation of the Preserve as directed by the Policy Committee. The responsibilities of the POM are identified in Chapter 4 of the Phase 1 RMP.

By designating the County and City as the POM, the JPA satisfies the GDP/SRP policy requiring the designation of the POM prior to the approval of the first SPA Plan [5.1]. The JPA is subject to review every five years, and is valid until March 6, 2026. The JPA may be extended an additional 30 years with written consent from the County and City.

4.1.1.2 Preserve Steward/ Biologist

In March 2009, the Policy Committee and Preserve Management Team directed the POM to retain a Preserve Steward/Biologist (PSB) to provide the technical expertise to advise the POM on the status of the Preserve, monitor the sensitive biological resources existing within the Preserve, and implement basic stewardship in accordance with the Phase 1 and Phase 2 RMP (POM Preserve Management Team 2009). The role of PSB is fulfilled by a qualified consultant with demonstrated preserve management and biological monitoring experience, and is reviewed by the Policy Committee and Preserve Management Team every five years.

4.1.2 Decision Making Process

Per Section 5 of the JPA, it is the responsibility of the Policy Committee to establish policies for the Preserve Management Team (County of San Diego and City of Chula Vista 1996). The JPA requires a quorum of both elected representatives of the Policy Committee for purposes of conducting business. If the Policy Committee is not able to reach a consensus on an issue related to the POM, the POM may utilize a neutral third-party for non-binding mediation following the procedures established in the Dispute Resolution Process (POM Policy Committee 2008a).

4.2 Preserve Funding

Per the JPA executed between the County and the City related to ongoing operation and maintenance of the Otay Ranch Preserve, both agencies are responsible for management of resources, restoration of habitat, and enforcement of open space restrictions for all conveyed lands under POM management. Although funding for management and monitoring of conveyed Preserve lands will be provided by separate funding mechanisms for village developments within the County and City, these two funding sources combined will establish the basis for the annual work plan budget to be presented and adopted by the joint County/City Policy Committee and Preserve Management Team. Since conveyed Preserve lands are in both the County and City areas, the funding will apply to all conveyed lands within the Preserve system and is not intended to be assigned to individual jurisdictions. The separate County and City funding mechanisms are described in further detail below.

4.2.1 County of San Diego Funding

Prior to the approval of the first Final Map within the Otay Ranch parcels under County jurisdiction, the County will approve a CFD or similar funding mechanism to fund management and monitoring of conveyed Preserve lands associated with the development. The CFD will require the County to prepare an annual report, which includes an annual budget, showing the estimate of the operations/maintenance and biota monitoring costs for the upcoming year so that special tax assessments are levied and allocated appropriately [5.12].

4.2.2 City of Chula Vista Funding

In 1998, the City adopted by resolution the Preserve Maintenance District, Community Facilities District No. 97.2 and Special Tax Report (CFD 97-2) for the purpose of creating a perpetual funding source for maintaining preserve areas that have been conveyed to the POM as a result of development of the Otay Ranch parcels within City jurisdiction. CFD 97-2 funds are collected through a special tax that is levied annually on each taxable property within the Preserve Maintenance District. Revenues from CFD 97-2 may be used for Preserve operations, maintenance, and monitoring—including ordinary and necessary administrative expenses and reserve fund requirements—for Preserve parcels conveyed by Otay Ranch

developments in the City's jurisdiction. Preserve parcels funded by CFD 97-2 may be located both inside and outside the Preserve Maintenance District as well as the City's jurisdiction.

CFD 97-2 requires the City to prepare an annual budget showing the estimate of the operations/maintenance and biota monitoring costs for the upcoming year so that taxes are levied and allocated appropriately within the improvement areas in the Preserve Maintenance District. The annual budget is determined in an annual work plan prepared by the PSB and approved by the POM. The annual work plan and associated operating budget is presented to the Preserve Management Team and Policy Committee for review. The operating budget is incorporated into the CFD 97-2 budget, which is then adopted by the City Council as part of the City's annual budget [5.12].

4.2.3 Ancillary Funding

The POM may utilize outside sources of funding, such as grants available for regional habitat management and monitoring efforts, to supplement funds provided by the CFDs. Ancillary funding would not replace or reduce the need for the CFDs, but would instead be used for enhanced opportunities such as management, monitoring, research, restoration, or educational programs beyond regular Preserve operations and maintenance as required by the Phase 1 and Phase 2 RMP. Ancillary funds can also be used for acquisition of developable land for preservation and/or to conserve Preserve lands not already conveyed to the POM.

4.3 Preserve Conveyance

SPA or SP applicants may convey Preserve lands to the POM via fee title or covenant of easement according to the guidelines set forth in this RMP. The preferred Preserve conveyance mechanism is fee title. In limited circumstances, an interim Irrevocable Offer of Dedication (IOD) may be accepted. A mechanism for fee-in-lieu has not been established as of December 2017, although may be pursued by the County and City in the future. Non-Otay Ranch projects (e.g., development projects outside the GDP/SRP boundary) may also convey lands to the Preserve per the discretion of the County and the City. The POM has established the Non-Otay Ranch Mitigation Lands Program to define eligibility criteria that must be met for the POM to consider accepting management and monitoring responsibilities of these lands. The establishment of additional conveyance mechanisms, including a formalized fee-in-lieu program, would require review by the Preserve Management Team and POM Policy Committee prior to implementation.

4.3.1 Fee Title

Prior to the recordation of each final map, the applicant shall convey fee title to the POM for an amount of land equal to the final map's obligation to convey land to the Preserve. Each tentative map shall be subject to a condition that the applicant shall execute a maintenance agreement with the POM stating that it is the responsibility of the applicant to maintain the conveyed parcel until the financing structure has generated sufficient revenues to enable the POM to assume maintenance responsibilities.

4.3.2 Covenant of Easement

Where an easement is conveyed, the applicant shall be required to obtain consent of the POM and provide subordination of any prior lien holders in order to ensure that the POM has a first priority interest in such land. Upon recordation of the final map, the applicant shall record an easement restricting use of the land to those permitted by the Phase 1 and Phase 2 RMP for an amount of land equal to the final map's obligation to convey land to the Preserve. Each tentative map shall be subject to a condition that fee title shall be granted upon demand by the POM and that the subdivider shall execute a maintenance agreement with the POM stating that it is the responsibility of the applicant to maintain the conveyed parcel until the CFD has generated sufficient revenues to enable the POM to assume maintenance responsibilities. Where consent and subordination cannot be obtained, the applicant shall convey fee title.

4.3.3 Irrevocable Offer of Dedication

IODs may be used as an interim method to convey lands until the lands are formally dedicated through fee title to the POM. IODs shall be approved by the County and the City pursuant to Section 7050 of the Government Code. When IODs are used, they must include a short-term implementation program for management and monitoring until the lands are formally dedicated to the POM through fee title. IODs are to be used in limited circumstances including if land was used as compensatory mitigation for a project. The POM cannot take fee title of land until the success criteria for the compensatory mitigation has been met.

4.3.4 Fee-In-Lieu

The County and City may establish a program to collect fees in lieu of actual conveyance of land to the POM. Assessments conducted by the County have indicated that an in-lieu fee program would be infeasible for the County to implement. As of December 2017, a fee-in-lieu program has not been established by the POM and is not considered for Preserve conveyances as an on-going practice. Should the County and City desire to establish a fee-in-lieu program, the program would be designed to generate fee revenues sufficient to acquire identified Preserve land in an amount equal to the acreage obligation of the project paying the fees. Fees would be payable upon recordation of final maps. While fees may be held in trust by the jurisdiction imposing and collecting the fees, they would ultimately be conveyed to the POM. The POM would use the fees for Preserve property acquisition. Fee revenues may not be utilized for any purpose other than property acquisitions for the Preserve and the administration of said property acquisitions.

4.3.5 Non-Otay Ranch Project Mitigation Lands Program

Through the Non-Otay Ranch Project Mitigation Lands Program (POM Policy Committee 2008b), developers who dedicate lands within the Preserve for mitigation of non-Otay Ranch projects are able to convey lands in fee title to the Preserve. For the POM to consider accepting

management and monitoring responsibilities of the lands, the following Eligibility and Review Criteria must be met:

1. The land must be located within the Preserve boundary.
2. The mitigation land offered by the applicant must be associated with a project within the County or City's jurisdiction.
3. The applicant must submit a Property Analysis Record (PAR) or similar cost analysis which includes abbreviated habitat/resources tasks, detailed cost analysis, and annual work plans/budgets. The cost analysis must be acceptable to both the County and City.
4. Funding must be provided in the form of a CFD or similar funding mechanism subject to the review of the POM and the approval of the jurisdiction in which the project is located.
5. The applicant must provide written evidence that all resource agency permits (i.e. short-term mitigation requirements, success criteria), as applicable, have been satisfied.
6. The POM will manage the land based on the Phase 2 RMP standards, as set forth in this revised document. The applicant must provide evidence that this management standard is acceptable to the Wildlife Agencies.
7. The land is free of environmental contamination liabilities.
8. The applicant must provide evidence that both legal and physical access have been obtained.
9. The site must be free of all encumbrances deemed unacceptable to the jurisdiction in which the project is located (i.e., conservation easements, liens, etc.) (POM Policy Committee 2008b).

Prior to acceptance, the POM will review issues, including but not limited to adjacency to land currently being managed by the POM. The POM will consider management of non-contiguous lands within the Preserve if the developer provides funding in excess of the estimated management costs. Based on its review, the POM will make a recommendation to the Preserve Management Team and bring forward a recommendation to the Policy Committee based on the direction of the Preserve Management Team. The Policy Committee is the final decision-making authority for the Non-Otay Ranch Project Mitigation Lands Program (POM Policy Committee 2008b).

5.0 Biota Monitoring Program

The purpose of the Biota Monitoring Program is to provide a monitoring framework to identify changes in the quality and quantity of on-site biological resources to inform future Preserve monitoring and management decisions. The Biota Monitoring Program will be implemented by the PSB in consultation with the POM following the conveyance of Preserve parcels to the POM, and shall not replace other monitoring programs required in conjunction with site-specific environmental review of individual development projects [5.5]. Management and monitoring activities undertaken by the PSB are consistent with the Biota Monitoring Program, which is consistent with the Mitigation Monitoring Program contained in the Final California Environmental Quality Act (CEQA) Findings of

Fact and Statement of Overriding Considerations (Otay Ranch Joint Planning Project 1993), the MSCP Plan, and the Subarea Plans for the City and the County. The Biota Monitoring Program fulfills the GDP/SRP and Phase 1 RMP requirement for the establishment of a comprehensive monitoring program for the biota of the Preserve [5.4]. The Biota Monitoring Program for Otay Ranch is included in Attachment 4 of this RMP.

The Biota Monitoring Program is comprised of two components: prioritization of resources to be monitored, and proposed monitoring methodologies. These components have been evaluated and prioritized based on current regional priorities and standards. It is anticipated that these priorities and standards will change over time due to changes in species sensitivity classifications, regional priorities, and/or monitoring standards. Thus, the Biota Monitoring Program is an adaptive document intended to be updated based on new scientific data and regional management and monitoring standards, and is designed to be a standalone document from the Phase 2 RMP Update. Formal changes to the Biota Monitoring Program will require approval from the POM prior to implementation, and will not require an amendment to the RMP.

As discussed within the Biota Monitoring Program (refer to Attachment 4), the PSB evaluates Preserve lands on an annual basis and provides monitoring and management recommendations to the POM. The PSB prepares an annual report which summarizes work completed in the previous calendar year, including but not limited to documenting access issues, new site disturbances, previously undetected plant and wildlife species, sensitive species, and management tasks performed. The PSB also prepares an annual work plan which details the proposed monitoring and management tasks for the following year for all conveyed Preserve parcels. The City is tracking the status of requirements that must be implemented at the SPA-level, and will provide an update on the progress made toward meeting required conservation objectives and policies in a future public document. The County will also track the status of requirements implemented at the SP-level after approval of SPs in the County's jurisdiction.

6.0 Regulatory Framework for Future Development

Future development within the Otay Ranch is required to comply with applicable policies and standards contained in the GDP/SRP, Phase 1 RMP, and Phase 2 RMP. The Phase 1 RMP and Phase 2 RMP are not a substitute for site-specific CEQA review of individual developments within Otay Ranch. Each SPA or SP is required to complete site-specific resource studies to determine the presence of sensitive resources on-site and the extent of impacts [9.5]. Focused surveys and special studies may be required based on the nature and extent of the resources present [2.13, 9.3, 9.4]. Specific survey and mitigation requirements are contained in the Mitigation Monitoring Program and the Final CEQA Findings of Fact and Statement of Overriding Considerations (Otay Ranch Joint Planning Project 1993), which are summarized in Part IV of the GDP/SRP (County of San Diego 1993; City of Chula Vista 2015). The following is a summary of the conveyance obligation, preservation

standards, boundary line adjustment criteria, and adjacency guidelines for future development in Otay Ranch.

6.1 Conveyance Requirement

As established by the 1996 Phase 2 RMP, Preserve land will be conveyed to the POM at a ratio of 1.188 acres for each 1.0 acre of development upon recordation of each final map. Limited exemptions from the conveyance obligation include common use areas and Restricted Development Areas under some circumstances. The conveyance obligation of lands within Otay Ranch is defined by the land use designations in the GDP/SRP, as described below.

6.1.1 Development Lands Subject to Conveyance

The following land use categories in the GDP/SRP are subject to the established 1.188-acre conveyance requirement:

- Residential. Areas designated as ‘Residential’ on final maps are subject to the conveyance requirement.
- Community Purpose Facility. Areas designated as ‘Community Purpose Facility’ on final maps are subject to the conveyance requirement. This designation includes facilities such as private schools, daycare facilities, and private parks.
- Commercial. Areas designated as ‘Commercial’ on final maps are subject to the conveyance requirement.
- Industrial. Areas designated as ‘Industrial’ on final maps are subject to the conveyance requirement.
- Open Space. Areas designated as ‘Open Space’ on final maps are conditionally subject to the conveyance requirement. Those areas designated as private and public open space, as defined below, are subject to the conveyance requirement:
 - Private Open Space. Open space areas (undeveloped or developed) that are maintained by the property owner and/or the homeowners' association (HOA) are counted as development land subject to conveyance.
 - Public Open Space. All natural and manufactured open space areas, even although dedicated to the County or City, are still counted as development land. Generally, these include steep slopes between arterials and platted residential lots.
- Restricted Development Areas. Restricted Development Areas are conditionally subject to the conveyance requirement. The development of roads and utilities within Restricted Development Areas are subject to the conveyance requirement, unless they specifically fall within the common use land use categories below.
- Roads. Streets and highways that are not designated as arterials on the GDP/SRP Circulation Element are counted as development land subject to conveyance.

This list is considered non-exclusive. Land use categories not described above shall be treated as development lands subject to the RMP conveyance obligation, unless they specifically fall within the common use land use categories listed below. Additionally, lands annexed into Otay Ranch are subject to the conveyance obligations set forth herein.

6.1.2 Common Use & Restricted Development Areas Not Subject to Conveyance

The following land use categories in the GDP/SRP are considered common use and, therefore, have an exemption to the RMP conveyance obligation:

- Arterials. Streets designated as ‘arterials’ in the GDP/SRP Circulation Element shall be counted as common use areas. Arterials identified in the GDP/SRP Circulation Element (County of San Diego 1993; City of Chula Vista 2015) include:
 - Olympic Parkway
 - Telegraph Canyon Road
 - Eastlake Parkway
 - Main Street (formerly known as Rock Mountain Road)
 - Hunte Parkway
 - La Media Road
 - Birch Road
 - Heritage Road
 - State Route 125 (SR-125)
 - Proctor Valley Road
 - Otay Lakes Road

Only the area within the street right-of-way is exempt. Open space areas such as arterial buffers (e.g., manufactured slopes) are considered development land subject to conveyance. The Bus Rapid Transit Line is not considered an arterial and is subject to conveyance. Additionally, future development within the SR-125 right of way unrelated to SR-125 operations (e.g., residential, non-residential commercial) is considered development land subject to conveyance.

- Schools. Areas designated as ‘Public Schools’ on final maps shall be counted as common use areas. Areas designated as ‘Private Schools’ are considered Community Purpose Facility and shall not be counted as common use areas.
- Parks/Public Parks. Areas designated as ‘Parks’ on final maps that meet public park standards shall be counted as common use areas. Areas designated as ‘Private Parks’ (e.g., HOA parks) shall not be counted as common use areas.
- University. Areas designated as ‘University’ shall be counted as common use area.
- Open Space. Open space areas contained in the Preserve and Active Recreation Areas shall be counted as common use, as described below:
 - Preserve. Open space areas that are within the Preserve shall be counted as common use.
 - Active Recreation Area. The open space area within the active recreation area shall be counted as common use, as it provides opportunities for public recreation.
- Restricted Development Area. Restricted development areas subdivided into private lots are not subject to the conveyance obligation; however, these areas must have an open space easement recorded upon subdivision.

6.2 Preservation Standards

The Preserve is designed to achieve the preservation standards set forth in the GDP/SRP related to sensitive biological resources and landforms. Thus, conveyance of Preserve land at the 1.188-mitigation ratio for each 1.0 acre of development achieves the habitat and species-based preservation standards set forth in the GDP/SRP (Attachment 5). However, in addition to the 1.188-mitigation ratio, additional habitat or species-based restoration and translocation is required for impacts to selected vegetation communities and species by the GDP/SRP CEQA Findings of Fact and Statement of Overriding Considerations to achieve these standards. A summary of these mitigation requirements is presented in Table 3 below. For a more detailed mitigation framework, refer to the Final CEQA Findings and Statement of Overriding Considerations (Otay Ranch Joint Planning Project 1993). It should be noted that the information in Table 3 does not summarize all of the requirements listed within the Final CEQA Findings and Statement of Overriding Considerations. Rather, the information provided within this table indicates clarifications to rectify discrepancies between the GDP/SRP and the Final CEQA Findings and Statement of Overriding Considerations. The requirements listed in Table 3 represent the most stringent requirements between the two aforementioned documents.

It should be noted that these mitigation standards apply to project-related impacts within areas designated as Development Areas that have Take Authorization from the County and City's MSCP Subarea Plan. Inside the Preserve, impacts to sensitive species or habitats are subject to the provisions of the County and City's MSCP Subarea Plans, which are discussed in Section 1.4.3 of this document. Within the City's jurisdiction, impacts outside Covered Project areas must comply with the provisions of the HLIT Ordinance. Within the County's jurisdiction, impacts outside the Take Authorized Area must comply with the provisions of the BMO and could be subject to a Major or Minor Amendment depending on how applicable lands are categorized within the MSCP.

The Phase 1 RMP and Phase 2 RMP provide the minimum preservation standards to be achieved for development within the County's jurisdiction. This Phase 2 RMP incorporates all mitigation measures established in the Mitigation Monitoring Program, the habitat and species preservation standards entitled 'Summary of Biological Mitigation Measures' contained in Exhibit B to the Mitigation Monitoring Program, the mitigation measures for biological impacts set forth in the environmental document adopted in support of the GDP/SRP, and the minimum preservation standards in the MSCP Plan and County Subarea Plan. Specific Plan applicants must meet these minimum preservation standards, or any future standards that may be adopted by the County, in order to monitor, preserve, and enhance biological resources in Otay Ranch. The required conservation measures may be funded in whole or in part by the project applicants and their successors as may be conditioned by the County and as discussed in Section 4.2 of this document.

**Table 3
Restoration & Translocation Requirements for Otay Ranch
Development Projects**

Resource	Mitigation Standard
Sensitive Vegetation Communities	
Alkali Meadow	Restoration for impacts at 1:1 ratio ^{1,2}
Coastal sage scrub (San Diego viguiera dominated) ³	Restoration for impacts at 2:1 ratio
Coastal sage scrub (Munz's sage dominated) ³	Restoration for impacts at 2:1 ratio
Maritime Succulent Scrub	Restoration for impacts at 1:1 ratio
Maritime Succulent Scrub (Coastal cactus wren occupied habitat)	Habitat restoration, creation, and enhancement for unavoidable impacts ²
Native Grassland	Restoration for impacts at 1:1 to 3:1 ratio
Vernal Pools	No-net-loss ²
Wetlands	No-net-loss ²
Sensitive Plant Species	
<i>Acanthomintha ilicifolia</i> San Diego thornmint	Translocation of impacted individuals
<i>Arctostaphylos otayensis</i> Otay manzanita	Translocation of impacted individuals
<i>Bloomeria clevelandii</i> San Diego goldenstar	Translocation of impacted individuals
<i>Cylindropuntia californica</i> var. <i>californica</i> snake cholla	Translocation of impacted individuals
<i>Dudleya variegata</i> variegated dudleya	Translocation of impacted individuals
<i>Ferocactus viridescens</i> San Diego barrel cactus	Translocation of impacted individuals
<i>Iva hayesiana</i> San Diego marsh-elder	Restoration for impacts at 2:1 ratio
<i>Physalis greenei</i> Greene's Ground-cherry	Translocation of impacted individuals
<i>Stipa diegoensis</i> San Diego needle grass	Translocation of impacted individuals
¹ Minimum ratio for impacts. ² Mitigation ratios shall be determined by the appropriate agency at the time of impacts. ³ Restoration for impacts is required for coastal sage scrub with San Diego viguiera or Munz's sage present at 50% or greater relative shrub cover.	

6.3 Preserve Boundary Modifications

Modifications to the Preserve boundary are allowed without an amendment to the GDP/SRP or Phase 1 and Phase 2 RMP. Boundary modifications are intended for use at the SP or SPA planning level to make minor refinements to include additional resources within the Preserve [9.8]. Boundary adjustments may occur for reasons such as new biological information obtained through site-specific studies and/or unforeseen engineering design opportunities or constraints identified during the siting or design of projects that require modification of the Preserve boundary. Boundary modifications cannot reduce the size of the Preserve boundary, unless it can be demonstrated that the modification results in a functionally equivalent Preserve and complies with the Phase 1 RMP policies and standards [9.8]. Boundary modifications are also required to demonstrate compliance with the adjacency guidelines, including the set-back requirements [9.8].

Preserve boundary modifications are processed through the respective jurisdiction's boundary adjustment process as set forth in the MSCP Plan and the respective jurisdiction's MSCP Subarea Plan. Adjustments to the MSCP boundaries must meet six functional equivalency criteria to demonstrate that the habitat conveyed is of equal or higher value. The comparison of biological value will be based on the following:

1. Effects on significantly and sufficiently conserved habitats (i.e., the exchange maintains or improves the conservation, configuration, or status of significantly or sufficiently conserved habitats, as defined in Section 4.2.4 [of the MSCP Plan]);
2. Effects to covered species (i.e., the exchange maintains or increases the conservation of covered species);
3. Effects on habitat linkages and function of preserve areas (i.e., the exchange results in similar or improved management efficiency and/or protection for biological resources);
4. Effects on preserve configuration and management (i.e., the exchange results in similar or improved management efficiency and/or protection for biological resources);
5. Effects on ecotones or other conditions affecting species diversity (i.e., the exchange maintains topographic or structural diversity and habitat interfaces of the preserve); and/or
6. Effects to species of concern not on the covered species list (i.e., the exchange does not significantly increase the likelihood that a species that is not covered by the MSCP will meet the criteria for listing under either the Federal or State Endangered Species Acts) (County of San Diego 1998a).

The processes by which MSCP boundary adjustments are processed in the County and City are discussed in further detail below. In the event that the boundary adjustment requirements in the MSCP Plan (County of San Diego 1998a), County's MSCP Subarea Plan (County of San Diego 1997), and/or City's MSCP Subarea Plan (City of Chula Vista 2003a) are modified, the updated code would be applied.

6.3.1 County of San Diego

Per the Implementing Agreement for the County's MSCP Subarea Plan (County of San Diego 1998b), adjustments to the MSCP boundaries may be allowed in limited circumstances. Boundary modifications require concurrence of the Wildlife Agencies and must demonstrate compliance with the provisions of Section 5.4.2 of the County's MSCP Plan.

6.3.2 City of Chula Vista

Per the Implementing Agreement for the City's MSCP Subarea Plan (City of Chula Vista 2003b), adjustments to the MSCP boundaries may be allowed in limited circumstances. Boundary modifications within the City's jurisdiction are processed in accordance with Section 5.4.2 of the City's MSCP Subarea Plan:

In the case of a Boundary Adjustment, the City will determine the adjusted Preserve boundary pursuant to the following process:

1. A preliminary determination of the biological value of a proposed boundary adjustment will be made by the City Director of Development Services (or designee) in accordance with Section 5.4.2 of the MSCP Plan and/or Section 5.2.3.6 of the City's MSCP Subarea Plan, if appropriate.
2. The City notifies the Wildlife Agencies in writing of the boundary adjustment, including written findings of equivalency made by the City Director of Development Services.
3. The adjusted boundary becomes the adopted boundary upon project approval unless the Wildlife Agencies object to the adjusted boundary within 30 days of receipt of City's written notice to the Wildlife Agencies. Objections by the Wildlife Agencies to boundary adjustments must be in writing and must state the rationale in support of the objection.
4. If the City receives written objection to a determination of a boundary adjustment by the Wildlife Agencies within 30 days of receipt of City's written notice to the Wildlife Agencies, then the City and Wildlife Agencies will have 60 days to meet, confer, and reach agreement upon final Preserve boundaries. If agreement is not reached, the boundary adjustment as proposed will not be approved.
5. If the Wildlife Agencies fail to respond to the City's notice within 30 days of receipt of the City's determination, the decision by the City Director of Development Services shall be deemed accepted.

Any adjustments to the Preserve boundary will be disclosed in any necessary environmental documentation prepared for the proposed project. An evaluation of the proposed boundary adjustment will be provided in the biological technical report and summarized in the appropriate sections of the environmental document. If it is determined through the process identified in Section 5.4.2 [of the City's MSCP Subarea Plan] that the adjustment will result in the same or higher biological value of the Preserve area, no further action by the jurisdictions or

Wildlife Agencies shall be required. An adjustment that does not meet the equivalency test will require an amendment to [the City's MSCP Subarea Plan] or separate Federal Endangered Species Act Section 10(a)(1)(B) permit or Section 7 Consultation (City of Chula Vista 2003a).

6.4 Preserve Edge Plan Requirements

The “edge” of the Preserve is defined as the 100-foot-wide strip of land within the developable portion of Otay Ranch surrounding the perimeter of the Preserve. Developments containing the Preserve edge shall be required to prepare a Preserve Edge Plan. Preserve Edge Plans shall be prepared in consultation with a qualified biologist, and are subject to review and approval by the County and/or City to ensure consistency with resource protection objectives and policies in the GDP/SRP [7.1; 7.2]. The Preserve Edge Plan shall demonstrate the project's compliance with the adjacency guidelines discussed below.

6.4.1 Adjacency Guidelines

Development adjacent to the Preserve is required to comply with the policies set forth in the GDP/SRP and Phase 1 RMP, as well as the adjacency requirements in the respective jurisdiction's MSCP Subarea Plan. Implementation of the following standards from the Phase 1 RMP for development of SP or SPA Plans adjacent to the Preserve is required to maintain and protect the biological integrity of the Preserve through implementation of the following standards from the Phase 1 RMP:

1. Provide temporary fencing around perimeter of sensitive habitat areas and/or areas occupied by sensitive species adjacent to any SP or SPA under construction [7.5].
2. Phase construction that is immediately adjacent to sensitive biological resources to avoid indirect impacts [7.5].
3. Development adjacent to sensitive habitats within the Preserve must comply with the set-back requirements in Table 4 below [9.8].
4. Demonstrate compliance with the adjacency guidelines in the County and City's MSCP Subarea Plans pertaining to their respective jurisdiction. These requirements are discussed in further detail below.

In the event that the Preserve adjacency requirements in the MSCP Plan (County of San Diego 1998a), County's MSCP Subarea Plan (County of San Diego 1997), and/or City's MSCP Subarea Plan (City of Chula Vista 2003a) are modified, the updated code would be applied.

Table 4 Preserve Set-back Requirements				
Resource	Minimum Set-back			Maximum Set-back (feet)
	Residential (feet)	Commercial (feet)	Other Uses ¹ (feet)	
Sensitive Vegetation Communities				
Alkali Meadow ²	100	100	100	NA
Coastal sage scrub ²	100	100	100	NA
Chaparral	100	50	50	NA
Mule fat scrub	50	50	50	100 ^{2,3}
Native grassland	25	25	25	50
Oak woodland ²	100	100	100	100
Riparian woodland/forest	100	100	100	200 ^{2,3}
Southern interior cypress forest ²	100	100	100	100
Vernal pools ⁴	100	100	100	NA
Sensitive Plant Species				
Sensitive plants (Priority 1, 2, & 3)	50	50	50	NA
Sensitive plants (Priority 4)	25	25	25	NA
<p>NA = Not applicable</p> <p>¹ Including (but not limited to) industrial, schools, parks, and roads.</p> <p>² The set-back requirements differ between the Phase 1 RMP and GDP/SRP CEQA Findings of Fact. The Phase 2 RMP Update defers to the higher standard contained in the GDP/SRP CEQA Findings of Fact (Otay Ranch Joint Planning Project 1993).</p> <p>³ Habitat occupied by or with potential for least Bell's vireo and southwestern willow flycatcher should utilize a 200-foot buffer (100-foot biological buffer and 100-foot landscaping buffer), when indirect impacts from adjacent roads or development are identified as potentially significant.</p> <p>⁴ Setback distance is from the boundary of the vernal pool watershed.</p> <p><u>Priority 1 species:</u> San Diego thornmint (<i>Acanthomintha ilicifolia</i>), Dunn's mariposa lily (<i>Calochortus dunnii</i>), slender-pod jewelflower (<i>Caulanthus heterophyllus</i>), San Diego button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>), Mexican flannelbush (<i>Fremontodendron mexicanum</i>), willowy monardella (<i>Monardella viminea</i>), California Orcutt's grass (<i>Orcuttia californica</i>), Otay Mesa mint (<i>Pogogyne nudiuscula</i>)</p> <p><u>Priority 2 species:</u> Otay manzanita (<i>Arctostaphylos otayensis</i>), Orcutt's brodiaea (<i>Brodiaea orcuttii</i>), dense pine reedgrass (<i>Calamagrostis koeleriodes</i>), San Miguel savory (<i>Clinopodium chandleri</i>), summary holly (<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>), Tecate cypress (<i>Hesperocyparis forbesii</i>), variegated dudleya (<i>Dudleya variegata</i>), coast barrel cactus (<i>Ferocactus viridescens</i>), San Diego goldenstar (<i>Bloomeria clevelandii</i>), little mousetail (<i>Myosurus minimus</i>), spreading navarretia (<i>Navarretia fossalis</i>), snake cholla (<i>Cylindropuntia californica</i> var. <i>californica</i>), chaparral nightshade (<i>Solanum xanti</i>), Gander's pitcher sage (<i>Lepechinia ganderi</i>)</p> <p><u>Priority 3 species:</u> California adolphia (<i>Adolphia californica</i>), San Diego bur-sage (<i>Ambrosia chenopodiifolia</i>), San Diego sagewort (<i>Artemisia palmeri</i>), delicate clarkia (<i>Clarkia delicata</i>), Orcutt's bird's-beak (<i>Dicranostegia orcuttiana</i>), Palmer's grapplinghook (<i>Harpagonella palmeri</i>), San Diego marsh-elder (<i>Iva hayesiana</i>), Munz's sage (<i>Salvia munzii</i>), Greene's ground-cherry (<i>Physalis greenei</i>), San Diego needle grass (<i>Stipa diegoensis</i>), San Diego viguiera (<i>Bahiopsis laciniata</i>)</p> <p><u>Priority 4 species:</u> southern mountain misery (<i>Chamaebatia australis</i>), western dichondra (<i>Dichondra occidentalis</i>), southwestern spiny rush (<i>Juncus acutus</i> ssp. <i>leopoldii</i>), chaparral pea (<i>Pickeringia montana</i> var. <i>tomentosa</i>), California adder's-tongue fern (<i>Ophioglossum lusitanicum</i> spp. <i>californicum</i>), Engelmann oak (<i>Quercus engelmannii</i>), Coulter's matilija poppy (<i>Romneya coulteri</i>), ashy spike-moss (<i>Selaginella cinerascens</i>)</p>				

6.4.1.1 County of San Diego

Development adjacent to the Preserve within the County's jurisdiction is required to adhere to the following adjacency guidelines from the County's MSCP Subarea Plan. In addition, development in Otay Ranch is required to follow fuel modification guidelines included within Section 3.4.3 of the county's MSCP Subarea Plan.

- A. Where feasible, plant materials used to landscape manufactured open space, road cuts/fills, and recreational facilities should consist of native species similar/compatible with the adjacent habitat in the Preserve. If possible, those species should be based on plants with genetic materials of the area.
- B. Areas and structures subject to heavy human use (e.g., ball fields, parking lots, hardscapes/playing courts, equestrian centers, staging areas, etc.) shall, to the extent feasible, be located away from the edge of the Preserve.
- C. Lighting within the Preserve edge shall be confined to areas necessary to ensure public safety, and shall be limited to low pressure sodium fixtures, shielded and directed away from the preserve where possible.
- D. Fencing along the Preserve boundary is desirable but not mandatory and may provide a barrier to fire, invasive species, and uncontrolled human access. Should a landowner or preserve manager decide to install fencing, the type, style and height must conform to existing regulations or those included in the applicable Specific Plan (County of San Diego 1997).

6.4.1.2 City of Chula Vista

Development adjacent to the Preserve within the City's jurisdiction is required to adhere to the following adjacency guidelines from the City's MSCP Subarea Plan.

- A. Drainage:
 - 1. All developed and paved areas must prevent the release of toxins, chemicals, petroleum products, exotic plant materials and other elements that might degrade or harm the natural environment or ecosystem processes within the Preserve. This can be accomplished using a variety of methods including natural detention basins, grass swales or mechanical trapping devices. These systems should be maintained approximately once a year, or as often as needed, to ensure proper functioning. Maintenance should include dredging out sediments if needed, removing exotic plant materials, and adding chemical-neutralizing compounds (e.g., clay compounds) when necessary and appropriate.
 - 2. Develop and implement urban runoff and drainage plans which will create the least impact practicable for all development adjacent to the Preserve. All development projects will be required to meet National Pollutant Discharge Elimination System (NPDES) standards and incorporate Best Management Practices (BMPs) as defined by the City's Standard Urban Storm Water Mitigation Plan (SUSMP).

3. Pursuant to the San Diego Regional Water Quality Control Board (RWQCB) Municipal Storm Water Permit, and the City of Chula Vista Storm Water Management Standards Requirements Manual, which includes the SUSMP, all development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (as defined in the Municipal Permit and the Local SUSMP) are required to implement site design, source control, and treatment control BMPs. The BMPs shall, at a minimum include:
 - Control post-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion and to protect stream habitat;
 - Conserve natural areas where feasible;
 - Minimize storm water pollutants of concern in runoff;
 - Remove pollutants of concern from urban runoff;
 - Minimize directly connected impervious areas where feasible;
 - Protect slopes and channels from eroding;
 - Include storm drain stenciling and signage;
 - Include additional water quality provisions applicable to individual project categories;
 - Ensure that post-development runoff does not contain pollutant loads which cause or contribute to an exceedance of water quality objectives or which have not been reduced to the maximum extent practicable; and
 - Implement BMPs close to pollutant sources.
 4. Require all NPDES-regulated projects to implement a combination of BMPs as close to potential pollutant sources as feasible.
- B. Toxic Substances: All agricultural uses, including animal-keeping activities, and recreational uses that use chemicals or general by-products such as manure, potentially toxic or impactive to wildlife, sensitive species, habitat, or water quality need to incorporate methods on their site to reduce impacts caused by the application and/or drainage of such materials into the Preserve. Methods shall be consistent with requirements of the RWQCB and NPDES standards.
- C. Lighting: Lighting of all developed areas adjacent to the Preserve should be directed away from the Preserve wherever feasible and consistent with public safety. Where necessary, development should provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the Preserve and sensitive species from night lighting. Consideration should be given to the use of low-pressure sodium lighting.
- D. Noise: Uses in or adjacent to the Preserve should be designed to minimize noise impacts. Berms or walls should be constructed adjacent to commercial areas and any other use that may introduce noises that could impact or interfere with wildlife utilization of the Preserve. Excessively noisy uses or activities adjacent to breeding areas, including temporary grading activities, must incorporate noise reduction measures or be curtailed during the breeding season of sensitive bird species, consistent with Table 3-5 of the MSCP Plan. Where noise associated with clearing, grading or grubbing will negatively

impact an occupied nest for the least Bell's vireo during the breeding season (March 15 to September 15), noise levels should not exceed 60 LEQ. However, on a case-by-case basis, if warranted, a more restrictive standard may be used. If an occupied least Bell's vireo nest is identified in a pre-construction survey, noise reduction techniques, such as temporary noise walls or berms, shall be incorporated into the construction plans to reduce noise levels below 60 LEQ. Where noise associated with clearing, grubbing or grading will negatively impact, an occupied nest for raptors between January 15 and July 31 or the coastal California gnatcatcher between February 15 and August 15 (during the breeding season), clearing, grubbing or grading activities will be modified if necessary, to prevent noise from negatively impacting the breeding success of the pair. If an occupied raptor or coastal California gnatcatcher nest is identified in a pre-construction survey, noise reduction techniques shall be incorporated into the construction plans. Outside the bird breeding season(s) no restrictions shall be placed on temporary construction noise.

- E. Invasives: No invasive non-native plant species shall be introduced into areas immediately adjacent to the Preserve. All open space slopes immediately adjacent to the Preserve should be planted with native species that reflect the adjacent native habitat. The plant list contained in the "Wildland / Urban Interface: Fuel Modification Standards," Appendix L, must be reviewed and utilized to the maximum extent practicable when developing landscaping plans in areas adjacent to the Preserve (City of Chula Vista 2003a).
- F. Fuel Modification: Per Section 7.4.7.1 of the City's Subarea Plan, fuel modification zones may be incorporated into the Preserve Edge.

7.0 Administration

7.1 RMP Amendments

Per Policy 9.6 of the Phase 1 RMP, the Phase 1 and Phase 2 RMP may be amended by the legislative body having jurisdiction over the use of land affected by the amendment, provided that all such amendments shall be subject to review and comment by the POM, City, and County. However, the procedures for processing an amendment to the RMP differ between the County and City. Within the County's planning structure, the procedures for amending the RMP follow County Board of Supervisors Policy I-109. Within the City's planning structure, RMP amendments follow the procedure for amending the GDP.

7.1.1 County of San Diego

The County adopted Board of Supervisors Policy I-109 to provide direction to County decision-makers concerning the processing of amendments to the Phase 1 or Phase 2 RMP (County of San Diego 1984). The policy provides that the following procedures shall be applied when processing an amendment to the Phase 1 or Phase 2 RMP:

Policy I:

It is the policy of the Board of Supervisors to establish a subcommittee composed of two members of the Board that would convene on an as-needed basis with a two-member subcommittee of the Chula Vista City Council to provide input and direction to the Board and City Council, staff, and the applicant on the following issues/plans: Sphere of Influence Study, Annexation Plans, Property Tax Agreements, Phase 2 RMP, Overall Design Plan, and other major issues identified by either body.

Policy II:

It is the policy of the Board of Supervisor that Otay Ranch Associated Documents listed below, all on file with the Clerk of the Board of Supervisors and identified by the Document Numbers indicated below, shall be used in the preparation of plans, reports and other documents for the Otay Ranch project, County decision-makers and staff shall assure that applications submitted for the development of portions of the Otay Ranch project are consistent with the Associated Documents:

1. Mitigation Monitoring Program (Doc. No. 759220)
2. Resource Management Plan (Doc. No. 759221)
3. Village Phasing Plan (Doc. No. 759222)
4. Facility Implementation Plans (Doc. No. 759223)
5. Service/Revenue Plan (Doc. No. 759224)

Amendments:

The above Otay Ranch Associated Documents may be amended by the Board of Supervisors from time to time. The following procedures shall be followed when the processing of any such amendment is authorized by the Board of Supervisors:

1. The Department of Planning & Development Services shall be responsible for preparation and processing of such an amendment. The amendment shall be prepared in consultation with the City. The Department shall prepare a report which analyzes the impacts of the proposed amendment and the comments received from the City.
2. The Planning Commission shall hold a public hearing on the proposed amendment, and after considering recommendations of staff, the City and any interested persons, shall make a recommendation to the Board of Supervisors.
3. Upon receipt of the Planning Commission's recommendation, the Board of Supervisors shall also hold a public hearing on the proposed amendment, and may approve, modify or deny the proposed amendment.
4. Notice of the hearings by the Planning Commission and the Board of Supervisors shall be given by publication of the subject, time and date thereof in a newspaper of general circulation within the County, as least 10 days prior to the hearing.
5. An applicant for a privately-initiated amendment to any of the Otay Ranch Associated Documents shall pay a fee in accordance with Paragraph D of

Schedule F of Section 362 of the County's Administrative Code, to cover all costs of the County associated with processing such application. The Director of Planning & Development Services may require that a deposit of estimated costs be made in advance of work being commenced on such an application (County of San Diego 1984).

This policy will be reviewed for continuance by December 31, 2020. In the event that the procedures for amending the RMP are revised, the updated policy would be applied.

7.1.2 City of Chula Vista

Within the City, amendments to the Phase 1 or Phase 2 RMP shall follow the procedures for amending a GDP set forth in Section 19.48.070 of the City's Municipal Code:

1. Following its public hearing, the City Council may adopt an amendment to the Zoning Ordinance establishing a P-C zone, or may deny the proposed amendment. The City Council shall make no modification of the proposed amendment as recommended by the Planning Commission unless and until such modification has been referred to the planning commission for additional study, report and recommendation. Such additional study, report and recommendation shall be made by the planning commission within forty days of the date of the referral, unless and except as the City Council may grant the Planning Commission additional time for its review of the matter.
2. At the time of adoption of a P-C zone amendment, the City Council shall adopt, by resolution, the general development plan as defined in Section 19.48.040 [of the City's Municipal Code].
3. Following the adoption of the P-C zone amendment and the general development plan, all development within the district shall thereafter be in substantial conformity with the adopted general development plan or such modifications thereto as may have been approved (City of Chula Vista 2016c).

In the event that the procedures for amending a GDP are revised in Section 19.48.070 of the City's Municipal Code (City of Chula Vista 2016c), the updated code would be applicable.

Page intentionally left blank

8.0 References Cited

Chula Vista, City of (City)

- 1993a General Development Plan. October 28.
- 1993b Otay Ranch Program EIR Mitigation Monitoring Program. October 28.
- 1996 Otay Ranch Phase 2 Resource Management Plan.
- 2003a Multiple Species Conservation Program Subarea Plan. February.
- 2003b Implementing Agreement By and Among United States Fish & Wildlife Service, California Department of Fish & Game, and City of Chula Vista to Establish a Multiple Species Conservation program (“MSCP”) For the Conservation of Threatened, Endangered, and Other Species in the Vicinity of Chula Vista, California. February.
- 2006 Otay Ranch Villages Two, Three, and a Portion of Four Sectional Planning Area (SPA) Plan Final Second Tier EIR. May 5.
- 2015 General Development Plan. Amended May 26.
- 2016a Municipal Code- Chapter 17.35 Habitat Loss and Incidental Take.
- 2016b GIS layer – 100% Conservation Area.
- 2016c Municipal Code – Section 19.48.070.

Otay Ranch Joint Planning Project

- 1993 Final CEQA Findings of Fact and Statement of Overriding Considerations. Otay Ranch Subregional Plan “County Board of Supervisors Final Plan”. Revised October 28.

POM Policy Committee

- 2008a Otay Ranch Preserve Joint Powers Agreement – Dispute Resolution Process.
- 2008b Non-Otay Ranch Project Mitigation Lands Program Eligibility and Review Criteria.

POM Preserve Management Team

- 2009 Meeting Summary – Otay Ranch Special Preserve Owner/Manager Preserve Management Team Meeting. March 17.

Reiser, C. H.

- 2001 *Rare Plants of San Diego County*. Aquifer Press, Imperial Beach, CA.

San Diego Association of Governments (SANDAG)

- 2012 Management Priorities for Invasive Non-native Plants – A Strategy for Regional Implementation, San Diego County, California. September.

San Diego, City of

- 2014 Community Plan Update. March.

San Diego, County of

- 1984 Board of Supervisors Policy Manual - Policy I-109.
- 1993 Otay Subregional Plan, Vol. 2. Adopted October 28.
- 1997 Multiple Species Conservation Program County of San Diego Subarea Plan.
- 1998a Final Multiple Species Conservation Program MSCP Plan.
- 1998b County of San Diego Multiple Species Conservation Program Implementing Agreement By and Between United States Fish and Wildlife Service California Department of Fish and Game County of San Diego. March 17.
- 2006 Otay Valley Regional Park Habitat Restoration Plan & Non-native Plant Removal Guidelines.
- 2007 Amendments to the Otay Ranch Subregional Plan and Phases 1 and 2 Resource Management Plans; General Plan Amendment 06-012; Otay Subregional Planning Area; (Districts: 1, 2). December 5.
- 2012 Biological Mitigation Ordinance (Excerpt from the San Diego County Code of Regulatory Ordinances).

San Diego, County of, and Chula Vista, City of

- 1993 Otay Ranch Resource Management Plan. October 28.
- 1996 Joint Powers Agreement Between the City of Chula Vista and County of San Diego for the Planning, Operations, and Maintenance of the Otay Ranch Open Space Preserve.

San Diego, County of; Chula Vista, City of; and San Diego, City of

- 1997 Otay Valley Regional Park Concept Plan.

San Diego Geographic Information Source (SanGIS)

- 2013 SanGIS using South County Multiple Species Conservation Program GIS data provided by County of San Diego Department of Planning and Land Use, Planning & Development Services, LUEG-GIS Service.
- 2016 SanGIS using legal recorded data provided by the County Recorders and Assessor's Office. SanGIS/SANDAG GIS Data Warehouse.

ATTACHMENTS

Page intentionally left blank

ATTACHMENT 1

Summary of GDP/SRP Amendments and Policy Changes (October 1993 - December 2017)

Page intentionally left blank

Attachment 1 Summary of GDP/SRP Amendments and RMP Policy Changes (October 1993 – December 2017)		
Document	Approval Date	Summary of Land Use Changes
General Plan Amendment 92-04 / Resolution PCM-90-03	October 23, 1993	County Board of Supervisors adopts Otay Ranch General Plan Amendment 92-04. This general plan amendment adopts Volume 2 of the SRP and the Phase 1 RMP. Chula Vista City Council adopts PCM 90-03, thus adopting the GDP.
Joint Powers Agreement between the City of Chula Vista and County of San Diego for the Planning, Operations, and Maintenance of the Otay Ranch Open Space Preserve	March 6, 1996	County and City enter into a JPA, establishing the County and City as the POM.
Resolution 18285	May 14, 1996	City adopts the GDP amendments set forth in Final Environmental Impact Report (FEIR) 95-01. The amendments affect master-planned villages, transit, irrigation of farmland, solar energy requirements, residential noise mitigation, and habitat noise mitigation standards.
Otay Ranch Phase 2 Resource Management Plan	June 4, 1996	City adopts the 1996 Phase 2 RMP concurrently with the first SPA Plan. The County Board of Supervisors adopts only segments of the 1996 Phase 2 RMP related to identification of the POM, conveyance schedule, and the Preserve Funding Program.
Resolution 19253 & 19254	November 10, 1998	City adopts the GDP amendments set forth in FEIR 97-03. The GDP amendments include several changes to Village One, Village Two, Village Six, Village Seven, Village 13, and Village 15, as well as land use changes within a 1,000-foot buffer zone around the landfill and an update to the Public Facilities Financing Plan to include 473.1 acres west of Paseo Ranchero.
Resolution 2001-362	October 23, 2001	City adopts the GDP amendments set forth in the Final Second Tier EIR for the Otay Ranch GDP Amendments/ Village 11 SPA Plan. The amendment includes (1) the realignment of certain arterial roads; (2) re-arrangement of land uses and village boundaries; (3) amendments to the Village Phasing Plan, and (4) re-arrangement of high school and middle school sites.
General Plan Amendment 98-03	July 18, 2001	County adopts General Plan Amendment 98-03 to reduce the density of Village 13 and 15 by removing development rights from portions of those villages.

Attachment 1 Summary of GDP/SRP Amendments and RMP Policy Changes (October 1993 – December 2017)		
Document	Approval Date	Summary of Land Use Changes
General Plan Amendment 00-01	August 7, 2002	County adopts amendment to the 1996 Phase 2 RMP to amend the Preserve conveyance plan, as well as the following procedural changes: (1) allowing a developer to use ‘metes and bounds’ to convey the exact amount of lands required; (2) conveying lands in excess of that required, and tracking of any excess by the POM; (3) allowance of conveyance using an ‘Irrevocable Offer of Dedication’ and subsequent transfer of fee title; (4) defining conditions for purchase of Preserve lands by governmental entities; (5) providing that organizations or individuals seeking to purchase designated development lands to preserve as open space, must also purchase and preserve the open space Preserve lands that normally would have been conveyed to the POM; (6) allowing the POM staff to evaluate proposed conveyances and impose reasonable conditions; (7) providing for dispute resolution by the POM Executive Committee; (8) providing that conveying parties maintain the land until their management can be assumed by the POM; (9) requiring completion of a Phase I hazardous materials study to assure the County and City that they are not accepting lands containing problematic conditions; (10) expanding the initial area of conveyances (11) allowing non-Otay Ranch developers to buy and then convey Preserve lands to the POM; and (12) allowing Otay Ranch developers to buy and then convey lands outside Otay Ranch if all Preserve lands have been conveyed.
Resolution 2005-345	October 11, 2005	City approves amendments to the GDP for the Village Six Setting and Land Use Table description for acreage and unit counts.
Resolution 2005-424	December 13, 2005	City approves the City’s comprehensive General Plan Update (GPU) Land Use Map and Land Use and Transportation Element, and the amendment to the City’s Multiple Species Conservation Program (MSCP) Subarea Plan. The GPU changed the designation of 119 acres within the Otay Ranch Village 14 (Inverted “L”) from Residential Low to Open Space Preserve.
Resolution 2006-155	May 23, 2006	City approves amendments to the GDP and the 1996 Phase 2 RMP set forth in the Otay Ranch Villages Two, Three, and a Portion of Four SPA Plan Final Second Tier EIR. The amendment eliminates the Preserve conveyance plan and coastal sage scrub restoration requirement.

Attachment 1 Summary of GDP/SRP Amendments and RMP Policy Changes (October 1993 – December 2017)		
Document	Approval Date	Summary of Land Use Changes
General Plan Amendment 06-012	December 5, 2007	County adopts General Plan Amendment 06-012 to eliminate the Preserve conveyance plan and coastal sage scrub restoration requirement.
Otay Ranch Open Space Easement Vacation VAC 09-003	December 9, 2009	County approves easement vacation to vacate 1,079 acres of a dedicated open space easement and irrevocable offer of dedication in portions of Village 13 & 15. A substitution of land of equal value and size was dedicated in return and the portions of Village 15 that were included in General Plan Amendment 98-03 were immediately granted back.
Resolution 2012-009	January 24, 2012	City adopts GDP amendment to reallocate 113 dwelling units among 10 neighborhoods within Village 2.
Resolution 2012-056	April 3, 2012	City adopts amendments to the GDP and Village 2 SPA Plan to add 197 units among four neighborhoods within Village 2.
Resolution 2013-029	February 26, 2013	City adopts the GDP amendment contained in ‘General Development Plan Amendment, Otay Ranch Village 8 West & Village 9, September 2012’. The amendment includes land use, circulation, and policy amendments for approximately 1,281 acres within Otay Ranch.
Resolution 2013-103	June 4, 2013	City adopts amendment to GDP and Village 6 SPA Plan to change the allowable number of residential units within the ‘MU’ land use category from 158 to 206 for a 6.97-acre parcel in Village 6.
Resolution 2014-208	November 4, 2014	City adopts amendment to GDP and Otay Ranch Villages 2, 3, and a Portion of 4 SPA Plan to add 1,562 units among 36 neighborhood and planning areas within Village 2.
Resolution 2014-233	December 2, 2014	City adopts GDP amendment contained in ‘University Villages, Otay Ranch Villages Three North and a Portion of Four, Eight East, and Ten, General Development Plan Amendment, July 2014’. The amendment includes land use, circulation, and policy changes for approximately 1,375 acres within Otay Ranch.
Resolution 2015-144	May 26, 2015	City adopts amendment to GDP to reflect land use and policy changes for approximately 35 acres within Planning Area 12.

Attachment 1 Summary of GDP/SRP Amendments and RMP Policy Changes (October 1993 – December 2017)		
Document	Approval Date	Summary of Land Use Changes
NOTES: GDP = City of Chula Vista General Development Plan EIR = Environmental Impact Report JPA = Joint Powers Agreement POM = Preserve Owner/Manager SP = Specific Plan SPA = Sectional Planning Area SRP = County of San Diego Subregional Plan		

ATTACHMENT 2

Status of Phase 1 RMP Policies and Standards (2017)

Page intentionally left blank

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
OBJECTIVE 1 - IDENTIFICATION OF SENSITIVE RESOURCES		
1.1	Use existing resource data to identify key resource areas.	Completed – Key resource areas are shown on Figure 9 of GDP/SRP EIR (Ogden 1992a).
1.2	Complete biological studies currently in progress. Standard: The following studies shall be completed by the landowner prior to or concurrent with the first SPA in the Phase 2 RMP: 1. Wildlife Movement/Corridor Study 2. Raptor Foraging/Habitat Study 3. Habitat and Population Studies on California Gnatcatcher and Cactus Wren (ongoing studies over 35-year period) 4. Vernal Pool Study	Completed – The following studies were completed concurrent with SPA One and included as appendices to the 1996 Phase 2 RMP: 1. Baldwin Otay Ranch Wildlife Corridor Study (Ogden 1992b) 2. Otay Ranch Raptor Management Study (Ogden 1992c) ¹ 3. 1995 Contribution to Ongoing California Gnatcatcher and Cactus Wren Studies (Dudek 1995a) ² 4. Vernal Pool Management Plan for Otay Ranch (Dudek 1995b)
1.3A	In conjunction with the first SPA in the Otay Valley Parcel, complete cultural resource studies to assess cultural resources throughout the Otay Valley Parcel.	Completed – The cultural resources study for the Otay Valley Parcel was completed concurrent with SPA One and is included as an appendix to the 1996 Phase 2 RMP entitled Otay Valley Parcel Cultural Resources Systematic Survey (Brian Smith & Associates 1995).

¹ As described in the Biota Monitoring Program, a Long-term Raptor Management Program will be implemented after the first final map is approved and a funding source is established for development within the unincorporated County. The Long-term Raptor Management Program will be consistent with the Otay Ranch Raptor Management Study.

² As described in the Biota Monitoring Program, the Preserve Steward Biologist conducts ongoing monitoring of California gnatcatcher and cactus wren, and reports this information within annual reports for the POM. The POM also has ongoing coordination meetings to discuss management and monitoring of these species with regional entities such as San Diego Management and Monitoring Program, and the Wildlife Agencies.

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
1.3B	In conjunction with the first SPA in the Proctor Valley Parcel, complete cultural resource studies to assess cultural resources throughout the Proctor Valley Parcel.	To be addressed at the SPA-level – The County amended the SRP and RMP so that ownerships within the Proctor Valley Parcels are only required to prepare SPA-specific cultural resource studies through General Plan Amendment 00-01 Minute Order #9, approved by County Board of Supervisors on March 22, 2000.
1.3C	In conjunction with the first SPA in the San Ysidro Mountains Parcel, complete cultural resource studies to assess cultural resources throughout the San Ysidro Mountains Parcel. Standard: In conjunction with the Phase 2 RMP, a systematic survey for cultural resources shall be completed for all portions of Otay Ranch.	To be addressed at the SPA-level – The County amended the SRP and RMP so that ownerships within the San Ysidro Parcels are only required to prepare SPA-specific cultural resource studies through General Plan Amendment 00-01 Minute Order #9, approved by County Board of Supervisors on March 22, 2000.
1.4	Recover any significant fossils unearthed during grading activities for subsequent scientific study and/or display. Standard: Prior to issuance of a grading permit within areas identified on Figure 9 of [the Phase 1 RMP] as paleontologically sensitive (i.e., the Otay, Sweetwater, and San Diego formations), a letter shall be filed with the lead agency indicating that a qualified paleontologist has been retained to carry out an appropriate mitigation program.	To be addressed at the SPA-level. Mitigation for potential impacts to paleontological resources will be determined at the project level and is subject to discretionary review and approval.
1.5	Identify and map floodplains within Otay Ranch. Standard: Floodplain mapping shall include FEMA and County-mapped floodplains.	Completed – Floodplains within Otay Ranch are shown on Figure 1 of the Phase 1 RMP.
1.6	Identify major landforms within Otay Ranch.	Completed – Major landforms within Otay Ranch are identified in Section 5.5 of the Phase 1 RMP.
	Standard: The Otay Ranch GDP/Subregional Plan shall contain standards for the protection of major landforms and scenic resources.	Completed – Standards related to the protection of major landforms and visual resources are addressed in Chapter 10, Sections C and D of the GDP/SRP.

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
1.7	Identify and map agricultural lands within Otay Ranch on a SPA-by-SPA basis.	To be addressed at the SPA-level. Future development proposals are subject to discretionary review and approval and are required to complete site-specific analysis for impacts to agricultural resources in accordance with California Environmental Quality Act.
OBJECTIVE 2 - PRESERVATION OF SENSITIVE RESOURCES		
2.1	Include large blocks of key biological resource areas within the Preserve.	Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to include large blocks of key biological resource areas.
2.2	Preserve coastal sage scrub habitat (including Diegan coastal sage scrub, disturbed coastal sage scrub, maritime succulent scrub, coastal sage scrub/non-native grassland, and coastal sage scrub/chaparral). Habitat values can be measured in terms of number of acres, biodiversity, habitat maturity and presence of sensitive species.	Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to achieve this standard. An amendment to the GDP/SRP was processed by the County and City in 2007 eliminating the coastal sage scrub restoration requirement, and thus reducing the preservation standard to 70% for coastal sage scrub.
	<p>Standards:</p> <ol style="list-style-type: none"> 1. Preservation and restoration activities shall be consistent with the guidelines of any applicable regional open space/resource protection program and shall result in equal or greater overall habitat values than occur under existing conditions. 2. A minimum of 85% of the total acreage of coastal sage scrub habitat onsite shall be preserved or restored. 3. The 85% standard may be achieved through a combination of preservation (a minimum of 70% of existing habitat) with the remainder through restoration of disturbed and/or non-native habitats. 	For the County, the amendment was processed through General Plan Amendment 06-012, and approved by the County Board of Supervisors in 2007 (County of San Diego 2007). For the City, the amendment was included in Appendix 3b of the Otay Ranch Villages Two, Three, and a Portion of Four SPA Plan Final Second Tier EIR (City of Chula Vista 2006), and certified by City Council in 2007.
2.3	Preserve native grasslands (valley needlegrass grassland).	Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to achieve this standard.
	<p>Standards:</p> <ol style="list-style-type: none"> 1. A minimum of 80% of the total acreage of native 	

Attachment 2		
Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	<p>grassland habitat onsite shall be preserved or restored.</p> <p>2. The 80% standard may be achieved through a combination of preservation (a minimum of 25% of existing habitat) with the remainder through restoration of disturbed and/or non-native habitats.</p> <p>3. Restoration must result in habitat for threatened and endangered species that is of equal or greater value than that of the habitat disturbed.</p>	
2.4	<p>Preserve the following habitat types: southern interior cypress forest, coast live oak woodland, oak riparian forest, riparian woodland, and sycamore alluvial scrub.</p>	<p>Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to achieve this standard.</p>
	<p>Standard: 100% of the acreage of southern interior cypress forest, coast live oak woodland, oak riparian forest, riparian woodland, and sycamore alluvial woodland (as mapped by MBA/RECON 1989) shall be preserved. Where it is infeasible to include these areas within the Preserve, include in non-Preserve open space.</p>	
2.5	<p>Maintain large, viable populations of the California gnatcatcher and cactus wren within the Preserve.</p>	<p>Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to achieve this standard.</p>
	<p>Standards:</p> <p>1. Include within the Preserve sufficient habitat to maintain at least 52% of existing documented pairs/individuals of the California gnatcatcher.</p> <p>2. Include within the Preserve sufficient habitat to achieve no loss of viable cactus wren populations.</p>	
2.6	<p>Preserve onsite State and Federally listed rare, threatened, and endangered species (see Policy 2.9 for vernal pool species).</p>	<p>Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to achieve this standard.</p>
	<p>Standards:</p>	

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	<ol style="list-style-type: none"> 1. Include within the Preserve 95% of San Diego thorn-mint (<i>Acanthomintha ilicifolia</i>) known to be present on the Ranch, i.e., the larger population including several thousand plants located in the southwestern portion of the Proctor Valley parcel. Implement required EIR mitigation measures. 2. Include within the Preserve 100% of Dunn's mariposa lily (<i>Calochortus dunnii</i>) known to be present on the Ranch, i.e., one small population at the upper end of Little Cedar Canyon and one small population on a peak in the northwest corner of the Jamul Mountains. 3. Include within the Preserve 100% of the Mexican flannelbush (<i>Fremontodendron mexicanum</i>) known to be present on the Ranch, i.e., three individuals in upper Cedar Canyon. 4. Include within the Preserve 70% of the Otay tarplant (<i>Hemizonia conjugens</i>) known to be present on the Ranch, i.e., several thousand plants in Salt Creek, Wolf Canyon, and the detached, inverted "L" parcel. Although this standard is below that for other State and Federally-listed plant species, the large number of individuals and widespread occurrence of Otay tarplant on-site indicate that it is less vulnerable than other State and Federally-listed species. The remaining populations on-site are extensive enough to assure the continued survival of this species. 5. Include within the Preserve 100% of the willowy monardella (<i>Monardella linoides</i> ssp. <i>viminea</i>) known to be present on the Ranch, i.e., several hundred plants in the bottom of a deep drainage on the west side of the San Ysidro Mountain parcel. 	

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	6. Include within the Preserve 100% of the slender-pod caulanthus (<i>Caulanthus stenocarpus</i>) known from the Ranch, i.e., the small population near the peak in the northwestern corner of the Jamul Mountains.	
2.7	Preserve on-site populations of plant species recognized as sensitive by the California Native Plant Society (Smith and Berg 1988).	Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to achieve this standard.
	<p>Standards:</p> <p>1. Include within the Preserve a minimum of 75% of Otay Ranch populations of plant species recognized as List 1B or List 2 by the California Native Plant Society (Berg and Smith 1988) (excluding those listed above in Policy 2.6): California adolphia (<i>Adolphia californica</i>), San Diego bur-sage (<i>Ambrosia chenopodiifolia</i>), Otay manzanita (<i>Arctostaphylos otayensis</i>), San Diego sagewort (<i>Artemisia palmeri</i>), Campo clarkia (<i>Clarkia delicata</i>), summer-holly (<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>), Orcutt's bird's-beak (<i>Cordythalthus orcuttianus</i>), Tecate cypress (<i>Cupressus forbesi</i>), San Diego barrel cactus (<i>Ferocactus viridescens</i>), Palmer's grappling-hook (<i>Harpagonella palmeri</i>), San Diego marsh-elder (<i>Iva hayesiana</i>), Gander's pitcher-sage (<i>Lepechinia ganderi</i>), snake cholla (<i>Opuntia parryi</i> var. <i>serpentina</i>), narrow-leaved nightshade (<i>Solanum tenuilobatum</i>), San Diego County needlegrass (<i>Achnatherum diegoensis</i>), and San Diego County viguiera (<i>Viguiera laciniata</i>).</p> <p>2. Include within the Preserve 54% of known points of occurrence for San Diego golden-star (<i>Muilla clevelandii</i>).</p>	

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	<p>3. Include within the Preserve a minimum of 50% of the Otay Ranch populations of plant species recognized as List 3 or List 4 by the California Native Plant Society (Berg and Smith 1988): dense reed grass (<i>Calamogrostis densa</i>), San Miguel savory (<i>Calamintha chandleri</i>), southern mountain misery (<i>Chamaebatia australis</i>), Fallbrook spine-flower (<i>Chorizanthe procumbens</i> var. <i>albiflora</i>), western dichondra (<i>Dichondra occidentalis</i>), variegated dudleya (<i>Dudleya variegata</i>), spiny rush (<i>Juncus acutus</i> var. <i>sphaerocarpus</i>), dwarf pepper-grass (<i>Lepidium latipes</i>), California adder's-tongue fern (<i>Ophioglossum lusitanicum</i> ssp. <i>californicum</i>), Greene's ground-cherry (<i>Physalis greenei</i>), Engelmann oak (<i>Quercus engelmannii</i>), Coulter's matilija poppy (<i>Romneya coulteri</i>), and ashy spike-moss (<i>Selaginella cinerascens</i>).</p> <p>4. Include within the Preserve a minimum of 46% of the Munz's sage (<i>Salvia munzii</i>) known from the Ranch. Although recognized as a List 2 species by CNPS, Munz's sage is extremely common and widespread on the Proctor Valley parcel. Hence, preservation of 46% of this population will assure the continued survival of the species on the Ranch.</p>	
2.8	<p>Preserve on-site populations of plant and wildlife species recognized as Category 2 Candidates for listing by USFWS.</p>	<p>Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to achieve this standard.</p>
	<p>Standard: Include within the Preserve a minimum of 75% of Otay Ranch populations of plant and wildlife species recognized as Category 2 candidates by USFWS in a Preserve configuration which will ensure</p>	

Attachment 2		
Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	their conservation in perpetuity. This standard may be re-evaluated if future studies demonstrate a greater or lesser need for conservation of any resources.	
2.9	Preservation of a minimum of 95% of the vernal pool habitat on the Ranch supporting vernal pool indicator species (as defined in the vernal pool report). Necessary State and/or Federal permits would be obtained in accordance with Section 404 of the Clean Water Act, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game implementing Section 1600 of the California Fish and Game Code.	Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to achieve this standard.
	<p>Standards:</p> <ol style="list-style-type: none"> 1. In conjunction with the first SPA in the Phase 2 RMP, develop a Vernal Pool Preservation and Management Plan. 2. Establish a vernal pool preserve of no less than 330 acres on Otay Mesa south of the Otay River to include all vernal pools identified by the California Department of Fish and Game (Bauder 1986) as J23, J24, J25, J30 and identified sensitive portions of J29 (see Figure 23). 3. Preserve a minimum of 95% of the Otay Ranch distribution of the State and Federally-listed San Diego button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>) and 100% of the State-listed Otay Mesa mint (<i>Pogogyne nudiuscula</i>), in locations identified in the vernal pool report (Dudek 1992). 4. Assure the continued survival of little mouseltail (<i>Myosurus minimus</i> var. <i>apus</i>) and San Diego navarettia (<i>Navarettia fossalis</i>) on Otay Ranch 	<p>See responses below.</p> <ol style="list-style-type: none"> 1. Completed – The Vernal Pool Preservation and Management Plan was completed concurrent with SPA One and included as an appendix to the 1996 Phase 2 RMP entitled Vernal Pool Management Plan for Otay Ranch (Dudek 1995b). 2. Completed – A conceptual vernal pool preserve boundary preserving pools J23, J24, J25, J30, and J29 (partial) was identified in the Phase 1 RMP. A refined vernal pool preserve boundary is identified in this document, and will ultimately be comprised of public and privately conserved lands. 3. Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to achieve this standard. 4. Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to achieve this standard. Enhancement, restoration, and management efforts may be implemented at the SPA-

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	<p>through preservation of present known localities for these species on the Ranch plus a combination of enhancement, restoration, and management efforts.</p> <p>5. Develop a vernal pool restoration plan to achieve the following:</p> <ul style="list-style-type: none"> a. restore the biota of individual, badly degraded vernal pools; b. increase diversity and frequency of native biota in all disturbed vernal pools; c. preserve and enhance vernal pools on K-6 where little mousetail occurs; d. reduce the effect of alien plants; e. enhance the populations of sensitive species; f. stabilize soils on mounds and in watershed areas; g. provide research and educational opportunities. 	<p>level in conjunction with mitigation and/or in conjunction with Preserve management following conveyance to the POM.</p> <p>5. A vernal pool restoration plan may be implemented at the SPA-level in conjunction with mitigation and/or in conjunction with Preserve management following conveyance to the POM.</p>
2.10	<p>Preserve and enhance wetlands.</p> <p>Standards:</p> <ul style="list-style-type: none"> 1. No net loss of in-kind wetland quality or quantity in accordance with the standards of the U.S. Army Corps of Engineers (COE), implementing Section 404 of the Clean Water Act, the U.S. Fish and Wildlife Service, and the California Department of Fish and Game implementing Section 1600 of the California Fish and Game Code. 2. If feasible, opportunities and plans for mitigation banks shall be developed in conjunction with preparation of wetlands enhancement plans for Otay River Valley and the vernal pool preservation plan in conjunction with the Phase 2 RMP and the first SPA. All revenue generated by wetlands mitigation banks shall be used to fund Preserve activities. 	<p>Preservation standard to be addressed at the SPA-level. Future development proposals are required to demonstrate no-net-loss of wetlands. Wetlands enhancement may be implemented at the SPA-level in conjunction with mitigation and/or in conjunction with Preserve management following conveyance to the POM.</p>

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
2.11	Preserve habitat for raptor nesting, roosting, and foraging.	Completed – Preserve boundaries were established in Section 5.1 of the Phase 1 RMP, and designed to achieve this standard.
2.12	Preserve significant cultural resources. Standard: Implement the recommended program for a systematic parcel-by-parcel cultural resources investigations to be completed in conjunction with the first SPA within each of the three larger parcels.	To be addressed at the SPA-level – The cultural resources study for the Otay Valley Parcel was completed concurrent with SPA One. The County amended the SRP and RMP so that ownerships within the San Ysidro and Proctor Valley Parcels are only required to prepare SPA-specific cultural resource studies through General Plan Amendment 00-01 Minute Order #9, approved by County Board of Supervisors on March 22, 2000.
2.13	Design drainage improvements within identified floodplains to provide for adequate flood protection and sensitivity to biological resources. Standards: <ol style="list-style-type: none"> 1. Flood control plans shall be in conformance with RMP policies protecting sensitive resources and with State and Federal wetland regulations. 2. Concrete or rip-rap flood control channels shall be prohibited within the Preserve. Drop structures and armour lock structures shall be avoided. Minimal structural improvements may be permitted for road and utility crossings and for the protection of the public health, safety and general welfare. 3. Drainage improvements shall not result in an increase in erosion or sedimentation that would adversely affect Preserve resources. 4. Flood control plans should address potential erosion hazards in Salt Creek and Wolf canyons. 	
		To be addressed at the SPA-level. Future development and infrastructure projects adjacent to the Preserve are required to demonstrate conformance with the adjacency standards, which include set-backs and other requirements for development within the Preserve edge. Future infrastructure projects inside the Preserve are required to comply with the siting and design requirements of their respective MSCP.

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
2.14	Provide opportunities for demonstration agricultural activities within the Preserve.	To be addressed by the Otay Valley Regional Park Concept Plan. Recreational opportunities within the active use areas, including opportunities for demonstration agriculture, will be addressed in the Otay Valley Regional Park Concept Plan.
	Standard: A site which supports prime or statewide important soils should be located near proposed composting facilities and Bird Ranch. A plan for the size and operation of the demonstration agricultural activities will be subject to review and approval of the Preserve Owner/Manager and/or the Otay Valley Regional Park management and shall be submitted concurrent with the conveyance for this area or prior to adoption of the last SPA on the Otay Valley Parcel, whichever occurs first. In addition to the demonstration agricultural site, sites should be made available for smaller "community gardens" adjacent to or within individual villages. Some community gardens may be located within open space areas being maintained by an open space maintenance district, with specific design and maintenance issues to be addressed at the SPA Plan review.	
OBJECTIVE 3 - ENHANCE & RESTORE SENSITIVE RESOURCES		
3.1	Identify areas within the Preserve that possess high potential for habitat restoration.	Completed – Conceptual locations of potential restoration areas are shown on Figures 20-23 of the Phase 1 RMP.
	Standard: Conceptual locations of potential restoration areas are illustrated on [Figures 20-23 of the Phase 1 RMP].	
3.2	Restoration programs intended to mitigate for disturbance of sensitive habitats associated with development of Otay Ranch shall be funded and designed by the landowner in coordination with the Preserve Owner/Manager and the appropriate jurisdiction. Implementation of such restoration programs shall be by an appropriate entity acceptable to the Preserve Owner/Manager and the appropriate jurisdiction.	To be addressed at the SPA-level. Mitigation for impacts to sensitive habitats will be determined at the project level and is subject to discretionary review.

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
3.3	Restoration programs may be implemented for purposes other than compensation of impacts associated with development of Otay Ranch. Such programs shall be funded, designed and implemented by the Preserve Owner/Manager or other entity acceptable to the Preserve Owner/Manager.	On-going – It is the on-going responsibility of the POM to implement restoration programs in the Preserve not associated with compensatory mitigation consistent with the intent of the GDP/SRP. The POM may obtain grant funding for the implementation of restoration programs within the Preserve.
3.4	Develop a restoration program for coastal sage scrub (and maritime succulent scrub) habitat. (See the Appendix for the conceptual restoration plan). Coastal sage scrub restoration activities shall commence prior to or concurrent with approval of the first SPA within Otay Ranch and shall have achieved success, based on performance standards included in Chapter 4 prior to or concurrent with approval for any development resulting in significant impacts to coastal sage scrub habitat occupied by California gnatcatchers on the Proctor Valley or San Ysidro Mountains parcels.	No longer applicable and addressed at SPA-level – A restoration program for coastal sage scrub included as Appendix 1 to the 1996 Phase 2 RMP entitled Otay Ranch Coastal Sage Scrub and Maritime Succulent Scrub Habitat Replacement Master Plan (Dudek 1995c). However, the coastal sage scrub restoration requirement was subsequently eliminated based on agreements with the Wildlife Agencies, and additional conservation measures provided by the MSCP. For the County, the amendment was processed through General Plan Amendment 06-012, and approved by the County Board of Supervisors in 2007 (County of San Diego 2007). For the City, the amendment was included in Appendix 3b of the Otay Ranch Villages Two, Three, and a Portion of Four SPA Plan Final Second Tier EIR (City of Chula Vista 2006), and certified by City Council in 2007. The restoration requirement for maritime succulent scrub is in place and implemented at the SPA-level.
	<p>Standards:</p> <ol style="list-style-type: none"> 1. A conceptual restoration plan for coastal sage scrub habitat is included in the Phase 1 RMP. (The Appendix to of this document contains this plan). 2. Restoration programs shall be implemented on a SPA-by-SPA basis in accordance with Phase 2 RMP. 3. The success of a specific coastal sage scrub restoration effort will be measured by the ability of the restored habitat to support native wildlife species. An increase in bird species richness will be used as an indicator of "habitat suitability." 	

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
3.5	Develop a restoration program for riparian habitats. (See Chapter 4 for description of conceptual restoration plan.)	See responses below. 1. Completed – A riparian restoration program was included as an appendix to the Phase 1 RMP entitled Conceptual Riparian Habitat Revegetation Plan. 2. To be addressed at the SPA-level. Restoration projects will be implemented on a SPA-by-SPA basis, and are subject to discretionary review and approval. 3. To be addressed at the SPA-level. Success criteria will be determined on a project-by-project basis.
	Standards: 1. A conceptual restoration plan for riparian habitats shall be included in the Phase 1 RMP. (The Appendix to this document contains this plan). 2. Restoration programs shall be implemented on a SPA-by-SPA basis in accordance with Phase 2 RMP. 3. The success of a specific riparian restoration effort will be measured by the ability of the restored habitat to support native wildlife species. An increase in bird species richness will be used as an indicator of "habitat suitability."	
3.6	Develop a restoration program for native grassland habitats. (See Chapter 4 for description of conceptual restoration plan.)	See responses below. 1. Completed – A native grassland restoration program was included as an appendix to the Phase 1 RMP entitled Conceptual native Grassland Revegetation Plan. 2. To be addressed at the SPA-level. Restoration projects will be implemented on a SPA-by-SPA basis, and are subject to discretionary review and approval.
	Standards: 1. A conceptual restoration plan for native grassland habitats shall be included in the Phase 1 RMP. (The Appendix to this document contains this plan). 2. Restoration programs shall be implemented on a SPA-by-SPA basis in accordance with Phase 2 RMP.	
3.7	Develop a vernal pool restoration program.	Completed – A vernal pool restoration program was included as an appendix to the 1996 Phase 2 RMP entitled Vernal Pool Management Plan for Otay Ranch.
	Standard: Vernal pool restoration standards and guidelines are described in Policy 2.9	
3.8	In coordination with USFWS and CDFG, the Preserve Owner/Manager shall develop a program for creation or enhancement of habitat for sensitive species that were formerly, or are occasionally present (e.g., as least Bell's vireo) on Otay Ranch.	See responses below. 1. Completed – A program for the creation and enhancement of sensitive species such as least Bell's vireo is included in the Otay Valley Regional Park Habitat Restoration Plan & Non-native Plant Removal Guidelines (County of San Diego 2006).
	Standards:	

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	<ol style="list-style-type: none"> 1. Prepare a conceptual riparian revegetation plan to create habitat in the Otay River Valley of acceptable quality for breeding and nesting of least Bell's vireo (<i>Vireo bellii pusillus</i>). 2. Investigate the possibility of habitat enhancement and re-introduction of quino checkerspot (<i>Euphydryas editha quino</i>) in the vernal pool preserve during in conjunction with the Phase 2 RMP. 3. Continue to identify potential restoration opportunities for additional threatened and endangered species as they are listed by the resource agencies. 	<ol style="list-style-type: none"> 2. On-going – Habitat restoration and enhancement opportunities will be identified and implemented by the POM. Habitat enhancement for Quino checkerspot butterfly is currently being implemented in the portion of the vernal pool preserve under POM management and other Preserve lands. A more detailed discussion of these habitat enhancement efforts is included in the FY 2016-17 Annual Work Plan for the Otay Ranch Conveyed Lands Managed by the Otay Ranch POM (RECON 2016). 3. On-going – It is the on-going responsibility of the POM and PSB to identify potential restoration opportunities for additional threatened and endangered species as they become listed.
OBJECTIVE 4 - WILDLIFE CORRIDORS		
4.1	Design the Preserve to provide adequate habitat linkages and wildlife corridors to accommodate gene flow and wildlife movement.	Completed – The Preserve configuration accounted for important wildlife corridors identified in the Wildlife Corridor Study. The Preserve configuration also provides linkages with off-site open space, such as the Otay Mountain Wilderness and San Diego National Wildlife Refuge, and is contiguous with hard-line preserve areas identified in the MSCP Subarea Plans.
	<p>Standards:</p> <ol style="list-style-type: none"> 1. Incorporate important wildlife corridors, as identified by the Wildlife Corridor Study (Ogden, 1992), into the Preserve (see Figure 13 [of the Phase 1 RMP]). 2. Integrate resource components of the Preserve with the Otay Valley Regional Park in a manner consistent with the goal and objectives of the Resource Management Plan. 3. Optimize linkages off-site with private open space and other regional and subregional habitat plans. 	

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
4.2	Conform to standards approved by the Scientific Review Panel (SRP) for the Natural Communities Conservation Plan (NCCP) as they pertain to coastal sage scrub regarding biological resources data collection requirements.	No longer applicable – The Preserve was incorporated into and conforms to the standards of the County and City’s MSCP Subarea Plans.
	Standard: Assure that biological data for Otay Ranch are acceptable to the Scientific Review (SRP) panel so that, if feasible, the Preserve can be incorporated into a larger South County NCCP.	
OBJECTIVE 5- PRESERVE MANAGEMENT & MAINTENANCE		
5.1	Select a Preserve Owner/Manager who is acceptable to the City of Chula Vista and the County of San Diego. Advice of the U.S. Fish and Wildlife Service and the California Department of Fish and Game will be sought prior to final selection of a Preserve Owner/Manager.	Completed – The County and City are designated as the POM through the JPA. The County and City meet the standards presented in Policy 5.1 of the GDP/SRP. The JPA is subject to review every five years, and is valid until March 6, 2026. The JPA may be extended an additional 30 years with written consent from the County and City. Should the County and City choose to terminate the JPA and pursue an alternative entity to fulfill the role of POM, they would be subject to the standards set forth in Policy 5.1.
	Standards: <ol style="list-style-type: none"> 1. The Preserve Owner/Manager shall be selected prior to or concurrent with approval of the first SPA in the Phase 2 RMP. 2. The Preserve Owner/Manager may be a local government, a public resource agency, a non-profit organization, or any other entity or entities acceptable to the landowner, City of Chula Vista, and County of San Diego. 3. The Preserve Owner/Manager may be an entity or entities working in a cooperative arrangement to fulfill the duties of the Owner/Manager. 4. The selection process may be initiated by a Request for Qualifications (RFQ) or similar announcement, followed by a recruitment/interview process. 	

Attachment 2		
Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	<p>5. Review and selection of the Preserve Manager shall be conducted jointly by the landowner, the City of Chula Vista, and the County of San Diego.</p> <p>6. It is desirable for candidates for Preserve Owner/Manager to have the following experience and capabilities:</p> <ul style="list-style-type: none"> a. Demonstrated experience managing biological resources including endangered species. b. At least 5 years of previous experience with law enforcement and access control. c. Demonstrated ability to interact effectively with local and regional conservation agencies, recreational agencies, and the local community. d. Prior experience in coordination with individuals involved in ongoing scientific research. e. Demonstrated ability to coordinate continued monitoring efforts of the Preserve's biota, as shown by staff experience and existing programs. f. Cultural resource management experience. g. Demonstrated previous experience in long-term management of large (greater than 10,000 acres) open space areas with numerous sensitive species. h. Demonstrated ability to efficiently manage personnel and finances over a long (10+ years) term. i. Ability and willingness to cooperate with local and regional agencies and direct experience in working with governing boards and/or advisory committees representing such agencies. 	

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
5.2	<p>Define the responsibilities of the Preserve Owner/Manager in the Phase 1 RMP (see Chapter 4).</p> <p>Standard: Responsibilities of the Preserve Owner/Manager shall include, but not be limited to, the following:</p> <ol style="list-style-type: none"> 1. Maintenance of existing high quality resources through the prevention of further disturbance, including controlling access to the Preserve, prohibiting off-road traffic, enforcing "no trespassing" rules, and curtailing activities that degrade resources, such as grazing, shooting, and illegal dumping. 2. Monitoring of resources to identify changes in the quality and quantity of sensitive resources and habitats. 3. Implementation and monitoring of restoration activities, as appropriate (it is understood that some restoration activities may be carried out by individual Otay Ranch developers in coordination with the Preserve Owner/Manager). 4. Implementation of maintenance activities including removal of trash, litter, and other debris, maintenance of trail systems, removal and control of exotic plant species (weeds), and control of cowbirds through trapping efforts. 5. Development of educational facilities and interpretive programs. 6. Implementation and/or accommodation of research programs. 7. Coordination with local jurisdictions, resource agencies, and adjacent ownerships. 	<p>Completed – The responsibilities of the POM are defined in Chapter 1 of the Phase 1 RMP and include the responsibilities outlined in Policy 5.2 of the GDP/SRP. It is the on-going responsibility of the POM to implement these responsibilities consistent with the intent of the GDP/SRP.</p>

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	8. Coordination with the Otay Valley Regional Park JEPAs, or subsequent park planning entity, regarding issues associated with Otay Valley Regional Park. 9. Enforcement activities. 10. Review of RMP Amendments, Preserve boundary adjustments, infrastructure plans, plans for active recreational uses with the Preserve, plans for land uses adjacent to the Preserve and other activities/studies as identified in the RMP.	
5.3	Develop and implement a strategy that facilitates effective, long-term management of the Management Preserve consistent with the goal of the RMP.	Completed – The strategies outlined in the Phase 2 RMP Update are intended to provide a strategy for the long-term management of the Preserve consistent with the Phase 1 RMP. It is the on-going responsibility of the POM to implement these management activities to ensure no reduction in habitat values consistent with the intent of the GDP/SRP.
	Standard: Management activities shall be undertaken to ensure no reduction in habitat values and no adverse impacts to biological resources included within the Management Preserve.	
5.4	Establish a comprehensive monitoring program for the biota of the Preserve in conjunction with the Phase 2 RMP.	Completed – A comprehensive Biota Monitoring Program is included in this document. The Biota Monitoring Program includes a program designed to monitor sensitive plants, wildlife, and vegetation communities. Annual monitoring tasks are prioritized in an annual work plan prepared by the PSB based on the monitoring schedule contained in the Biota Monitoring Program.
	Standard: Develop and implement an annual monitoring program designed to identify changes in quality and quantity of onsite biological resources, including sensitive wildlife species, sensitive plant species, and sensitive habitat types.	
5.5	Monitoring programs associated with management of the Preserve shall conform to and carry out programs required by CEQA (PRC 21081.6) but shall not replace other monitoring programs required in conjunction with site-specific environmental review of individual development within Otay Ranch.	Completed – Monitoring programs associated with the Biota Monitoring Program shall commence following conveyance of Preserve lands to the POM. The Biota Monitoring Program shall not replace monitoring programs required in conjunction with environmental review for individual development projects within Otay Ranch.

Attachment 2		
Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
5.6	Develop and obtain City and County approval (in coordination with the Owner/Manager) of a plan for the orderly conveyance of dedicated parcels of land to the Preserve.	<p>No longer applicable – A conveyance plan was included in the 1996 Phase 2 RMP. However, due to changes in ownership, the original conveyance plan was no longer consider feasible and the requirement was subsequently eliminated from the GDP/SRP and Phase 1 RMP. For the County, the amendment was processed through General Plan Amendment 06-012, and approved by the County Board of Supervisors in 2007 (County of San Diego 2007). For the City, the amendment was included in Appendix 3b of the Otay Ranch Villages Two, Three, and a Portion of Four Sectional Planning Area (SPA) Plan Final Second Tier Environmental Impact Report (EIR) (City of Chula Vista 2006), and certified by City Council in 2007.</p>
	<p>Standard: The conveyance plan shall be developed in accordance with the conveyance criteria outlined below. A conveyance schedule shall be prepared in conjunction with the Phase 2 RMP.</p>	
5.7	Any change in the order of conveyance shall be considered only during the review and approval process for a SPA, and shall not require a General Plan Amendment. The jurisdiction processing the SPA shall advise and consult with the other agency before approval of a change in order of conveyance. However, any change in the order of conveyance is subject to joint approval by the City of Chula Vista and County of San Diego, if the land under consideration for conveyance is in a different jurisdiction than the SPA under consideration.	
5.8	Changes in land ownership resulting from the sale or transfer of ownership of any SPA shall not affect the conveyance of land to the Preserve.	<p>On-going – As discussed above, the conveyance plan required by Policy 5.7 was eliminated by subsequent general plan amendments in both the County and City. However, all development projects within Otay Ranch are subject to the 1.188-acre conveyance requirement, with the exception of the development of common uses or the subdivision of Restricted Development Areas.</p>
	<p>Standard: The development of any village or SPA, even if conveyed to a third party, shall be accompanied by the conveyance of the appropriate parcel to the Preserve. To the extent that conveyance of a specific parcel of land is required, it shall be a condition of approval for the first Tentative Map of that SPA.</p>	
5.9	Preserve lands become the property of the Owner/Manager and are not available for development.	<p>On-going – Title to lands conveyed into the Preserve are jointly held by the County and City per the Joint Powers Agreement.</p>

Attachment 2		
Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
5.10	<p>Include a reversionary clause in the Management Preserve ownership agreement that will prevent resale or use of the Management Preserve for any development or activities not permitted by the adopted RMP.</p> <p>Standard: In the event that the selected Preserve Manager/Owner is, for any reason, unable or unwilling to manage the Preserve in a manner consistent with the goal and policies of the RMP, ownership of the Preserve shall be transferred to the County of San Diego, City of Chula Vista, or other receiving entity acceptable to the City, County, and landowner. Such a receiving entity shall transfer ownership to a qualified owner/manager reviewed by the resource agencies (USFWS, CDFG) and acceptable to the County of San Diego and the City of Chula Vista. Said transfer should be implemented as soon as possible, and not later than six months after exercising the reversionary clause, unless extraordinary circumstances require, as determined by the County Board of Supervisors and the City of Chula Vista City Council prior to expiration of the six months additional time.</p>	<p>On-going – Transfer of ownership and/or Preserve management responsibilities would be required to comply with the conditions of the Joint Powers Agreement, which prevents the resale of conveyed lands under POM management (County of San Diego & City of Chula Vista 1996).</p>
5.11	<p>Develop a work program that establishes the timing and responsibilities for the provision of a nature interpretive center within the Preserve.</p> <p>Standard: As part of the Phase 2 RMP, identify the potential locations of a nature interpretive center within the Preserve.</p>	<p>Completed – The Otay Valley Regional Park Concept Plan includes provisions for the nature interpretive center.</p>
		<p>Completed – A conceptual location for the nature interpretive center is shown on Figure 6 of this document. The final nature interpretive center site will be determined through Otay Valley Regional Park planning processes.</p>
5.12	<p>Identify the costs related to RMP planning, design, research, construction, and management activities and develop a funding strategy.</p>	<p>Completed – CFD 97-2 currently provides funding for management and monitoring of Preserve conveyances</p>

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	Standard: As part of the Phase 2 RMP, a cost estimate for RMP implementation shall be prepared, funding alternatives shall be identified and evaluated, and the implementation plan shall be prepared.	associated with the City village developments. Prior to the approval of the first Final Map within the County’s jurisdiction of Otay Ranch, a CFD or similar funding mechanism will be established to fund management and monitoring of Preserve conveyances associated with the County village developments. The annual operating budget is determined in an annual work plan approved by the POM and then incorporated into the CFD budget.
5.13	Clarify the relationship between the Otay Ranch Resource Management Plan and the Otay Valley Regional Park JEPA.	Completed – Preserve lands contained within the Otay Valley Regional Park would be conveyed to the POM for biological monitoring, with the exception of active use areas and recreational facilities such as the nature interpretive center and demonstration agriculture site. Management and funding of active use areas, trails, and recreational facilities are the responsibility of the City, County, and City of San Diego through the JEPA adopted in 1990.
	Standard: The potential for the Otay Valley Regional Park JEPA to assume ownership and management responsibility for the Otay River Valley and adjacent areas on the Otay Valley parcel, or portions thereof (particularly active recreation areas), shall be evaluated and funding sources identified in the Phase 2 RMP.	
OBJECTIVE 6 - PERMITTED USES		
6.1	Provide resource-related educational and interpretive programs to increase public sensitivity to, and awareness and appreciation of resources within the Preserve, consistent with the goal of the RMP.	On-going – Public access is currently restricted from the Preserve. Resource-related educational and interpretive programs may be provided at the discretion of the POM. Management and funding of the nature interpretive center is the responsibility of the City, County, and City of San Diego through the Joint Exercise of Powers Agreement adopted in 1990.
	Standards: <ol style="list-style-type: none"> 1. Under the direction of the Preserve Owner/Manager, an interpretive center(s) shall be constructed to display and interpret the biological, paleontological, and cultural resources present on Otay Ranch. 2. Construct a native plant nursery and/or botanic garden to be used for public education of native plants and plant communities and for restoration activities. 3. The sale of educational materials, books, and plants shall be allowed. 	

Attachment 2		
Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
6.2	Active recreational use acreage within the Preserve shall not be greater than 400 acres and shall be consistent with the resource protection and enhancement goal, objectives and policies of the RMP.	On-going – The City’s 2005 General Plan Amendment reduced the acreage of the active recreation areas to 209 acres. Siting and design of active recreational use are subject to review by the POM and shall be consistent with the objectives contained in the RMP and Otay Valley Regional Park Concept Plan.
	Standard: Siting and design of active recreational uses shall be subject to review and comment by the Preserve Owner/Manager in consultation with the JEPA of the Otay Valley Regional Park and shall be consistent with plans for the Otay Valley Regional Park when adopted.	
6.3	Provide a system of trails through the Preserve that is compatible with resource protection. This is considered to be a passive use and not a part of the 400-acre active recreational area.	On-going – A conceptual trail system will be identified in the Otay Trail Alignment Study and is subject to review and comment by the POM and Wildlife Agencies.
	Standard: A qualified firm shall be hired to design and implement construction of a trails system through the Preserve, following review and comment by the Preserve Owner/Manager and resource agencies.	
6.4	Motorized vehicular access by the public to the Preserve shall be restricted.	On-going – Motorized vehicle use is a permitted use within the Preserve for the following activities: Preserve operation, Preserve maintenance, fire control, easement access, and emergency, safety, and law enforcement personnel. Motorized vehicular access by the public is strictly prohibited within the Preserve.
	Standards: <ol style="list-style-type: none"> 1. Motorized vehicular use within the Preserve shall be restricted to activities necessary for Preserve operation and maintenance and fire control. 2. Motorized vehicular use within the Preserve shall be restricted to roadways within the Preserve. 3. Where existing easements and other ingress/egress documents allow motorized access, such access shall be permitted but shall be restricted to the documented easement holder. 4. Motorized vehicular use associated with construction shall be permitted consistent with resource protection. 	

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	5. Off-road vehicles shall be prohibited. 6. Motorized vehicle use for emergency access shall be permitted. Fire roads shall be permitted within the Preserve only where absolutely necessary to assure public safety and control wildfires that may damage biological resources.	
6.5	Identify restricted use areas within the Preserve.	On-going – Public access is currently restricted from the Preserve. The conceptual trail alignments proposed in the Otay Ranch Preserve Trail Alignment Study will be designed to avoid areas containing sensitive biological resources that are not suitable for public access.
	Standard: Public access may be restricted within and adjacent to wetlands, vernal pools, restoration areas, and sensitive wildlife habitat (e.g., during breeding season) at the discretion of the Preserve Owner/Manager.	
6.6	Infrastructure may be allowed within the Preserve; conceptual locations of infrastructure facilities located within or crossing the Preserve are illustrated in Figures 14-18 [of the Phase 1 RMP] (final infrastructure plans may deviate from the conceptual locations shown as long as Preserve resources are not adversely affected).	On-going – Infrastructure is a permitted use with the Preserve. The siting and design criteria contained in the County and City’s MSCP Subarea Plans provide standards for the buildout of infrastructure within the Preserve.
	Standard: Develop a general infrastructure plan in conjunction with the first SPA of the Phase 2 RMP that provides standards and criteria to guide specific infrastructure siting and design during the phased buildout of Otay Ranch.	
6.7	Fire roads shall be permitted within the Preserve only where absolutely necessary to assure public safety and control wildfires that may damage biological resources.	On-going – Fire roads are a permitted use within the Preserve where necessary to assure public safety and protect biological resources.
6.8	Ecologically necessary controlled burning may be permitted within the Preserve.	On-going – Controlled burning for the enhancement of biological resources is a permitted use within the Preserve.
	Standard: Where and when it is deemed appropriate for the enhancement of biological resources by the Preserve Owner/Manager, and subject to review by the County of San Diego and the City of Chula Vista with advice from	

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	the resource agencies (USFWS, CDFG), controlled burning shall be conducted within the Preserve.	
OBJECTIVE 7- RESOURCE PRESERVE – ADJACENT LAND USES		
7.1	All development plans adjacent to the edge of the Preserve shall be subject to review and comment by the Preserve Owner/Manager, the City of Chula Vista, and the County of San Diego to assure consistency with resource protection objectives and policies.	To be addressed at the SPA-level. Future development projects containing areas within 100 feet of the Preserve are subject to review and comment by the City and County.
7.2	The "edge" of the Preserve is a strip of land 100 feet wide that surrounds the perimeter of the Preserve. It is not a part of the Preserve - it is a privately or publicly owned area included in lots within the urban portion of Otay Ranch immediately adjacent to the Preserve. Standard: "Edge Plans" shall be developed for all SPAs that contain areas adjacent to the Preserve.	To be addressed at the SPA-level. Future development projects containing areas within 100 feet of the Preserve are required to prepare a Preserve Edge Plan. Uses within the edge are limited to walls, fencing, and landscaping. Projects adjacent to the edge must also demonstrate that uses adjacent to the Preserve edge are the least impactful to biological resources.
7.3	Protect and maintain biological integrity of un conveyed land adjacent to developing SPAs. Standards: 1. Provide temporary fencing around perimeter of sensitive habitat areas and/or areas occupied by sensitive species adjacent to any SPA under construction to inhibit encroachment by construction traffic, etc. 2. Phase construction of SPAs immediately adjacent to sensitive biological resources to avoid indirect impacts. For example, construction activities that equal or exceed volume levels that inhibit breeding and nesting activities of the California gnatcatcher should be curtailed during the nesting period of the bird.	To be addressed at the SPA-level. Future development projects adjacent to conveyed and un conveyed Preserve land are required to implement avoidance measures to avoid impacts to the Preserve. This may include phasing of construction to avoid indirect impacts to nesting sensitive bird species such as coastal California gnatcatcher and least Bell’s vireo, and providing temporary fencing to prevent encroachment by construction into the Preserve.

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
OBJECTIVE 8 - RESOURCE PRESERVE – INTERIM LAND USES		
8.1	Existing conditions (uses) will not be allowed to negatively impact the sensitive resources in the Preserve.	On-going – The continuation of existing agricultural uses are permitted within the Preserve as an interim land use. Within the City, grazing shall be subject to the restrictions identified in Ordinance 3003 of the City’s Municipal Code.
	<p>Standards</p> <ol style="list-style-type: none"> 1. Existing agricultural uses, including cultivation and grazing, shall be permitted to continue as an interim activity only where they have occurred historically and continually. 2. No increase in irrigation shall be allowed, except for temporary irrigation that may be installed as part of restoration plans. 3. Grazing by sheep and goats shall not be allowed. 4. Cattle grazing shall be phased out in accordance with the conveyance program and Range Management Plan. 	
8.2	The County of San Diego or City of Chula Vista shall manage ongoing mineral extraction operations through the permit process.	On-going – The continuation of existing mineral extraction operation is allowed within the Preserve as an interim land use. Permits for mineral extraction operations are subject to review and approval from the County and City.
8.3	Construction activities associated with infrastructure necessary for implementation of an approved development plan shall be allowed as an interim activity.	On-going – Construction activities associated with approved infrastructure improvements are allowed as an interim land use within the Preserve.
	Standard: All construction activities shall take place in accordance with standards and criteria outlined in the conceptual infrastructure improvement plans as required in Policy 6.7. The improvement plans shall be subject to approval by the appropriate jurisdiction and review by the Preserve Owner/Manager.	
8.4	Develop a Range Management Plan.	Completed – The range management plan was completed concurrent with SPA One and included as an appendix to the
	Standard: A Range Management Plan, which will depict the allowable interaction between grazing activity and	

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
	sensitive resources, shall be developed as part of the submittal of the first SPA in the Phase 2 RMP. Under this plan, the most sensitive areas (i.e., areas that support sensitive species) shall have restricted access either by fencing or other appropriate method. The plan shall be subject to review and comment by the Preserve Owner/Manager, the City and the County.	1996 Phase 2 RMP entitled Range Management Plan for Otay Ranch, San Diego County, California (Dudek 1995d).
OBJECTIVE 9 - RESOURCE PRESERVE – REGULATORY FRAMEWORK FOR FUTURE USES		
9.1	Consult with resource agencies (i.e., U.S Army Corps of Engineers, USFWS, CDFG) at an early stage regarding impacts to resources under their jurisdictions.	On-going – Agency consultation will be initiated consistent with this requirement of the Phase 1 RMP.
	Standard: The Phase 1 RMP and future RMP documents shall be distributed for review by the resource agencies (USFWS, CDFG) prior to approval.	
9.2	If feasible, negotiate a Memorandum of Agreement (MOA) (or separate memoranda) with the resource agencies concurrent with the Phase 2 RMP. The purpose of the MOA shall be to achieve concurrence on the RMP management approach and facilitate obtaining necessary Federal and State permits for the project at a later date.	Completed – This requirement is deemed complete through City and County participation in their respective MSCP Subarea Plans.
9.3	Complete wetland delineations using the Federal Unified Method, or approved modification thereof, for each Specific Plan or SPA containing wetlands.	On-going – Future development proposals are subject to discretionary review and approval and are required to complete site-specific resource studies, including an assessment of potential impacts to jurisdictional resources. Projects with the potential to impact jurisdictional resources would be required to complete a wetland delineation in accordance with the U.S. Army Corps of Engineers Wetland Delineation Manual, or most current accepted methodology for wetland delineation.
	Standard: Wetland delineations and permitting shall be in accordance with the standards and guidelines of the U.S. Army Corps of Engineers.	

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
9.4	Identify areas subject to CDFG Section 1600 Streambed Alteration Agreements concurrent with site-specific environmental review of each Specific Plan or SPA.	To be addressed at the SPA level – Future development proposals are subject to discretionary review and approval and are required to complete site-specific resource studies and obtain permits for impacts to jurisdictional resources in accordance with CEQA.
9.5	The Otay Ranch Resource Management Plan is not a substitute for site-specific CEQA review of individual developments within Otay Ranch, however, it is anticipated that the Resource Management Plan, including attendant enhancements, programs and dedications, may mitigate the impacts of subsequent discretionary projects.	To be addressed at the SPA level – Future development proposals are subject to discretionary review and approval, and are required to complete site-specific resource studies in accordance with CEQA.
	<p>Standards:</p> <ol style="list-style-type: none"> 1. Site-specific resource studies shall be completed for each SPA/Specific Plan. 2. Future resource studies will reflect changes in State and Federal agency status of sensitive plant and wildlife species. 	
9.6	Establish a procedure for amending the RMP.	Completed – In the County, amendments to the RMP follow the procedures set forth in County Board of Supervisors Policy I-109. In the City, amendments to the RMP follow the procedures set forth in the Section 19.48.070 of the City’s Municipal Code.
	<p>Standard: Following notice of public hearing, the RMP may be amended by the legislative body having jurisdiction over the use of land affected by the amendment, provided that all such amendments shall be subject to review and comment by the Preserve Owner/Manager, by the City of Chula Vista, and by the County of San Diego.</p>	
9.7	An amendment shall be required for any land use within the Preserve that is not specifically permitted by these policies, including the location of a university, landfill, or other development within the Preserve.	To be addressed at the SPA level – Future development proposals are subject to discretionary review and approval, and would require an amendment for any land use within the Preserve not described within Chapter 3 of this document or permitted by the GDP/SRP.

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
9.8	<p>Preserve boundary modifications shall be made based on site-specific studies completed for individual SPA/Specific Plans.</p> <p>Standards:</p> <ol style="list-style-type: none"> 1. The overall size of the Preserve shall not be reduced by a Preserve boundary modification unless it can be demonstrated that the biological standards and guidelines can be met and the Preserve design is not adversely affected by a Preserve boundary modification that results in a reduced acreage. 2. All amendments to the RMP that would reduce the size or substantially revise the location of the Preserve boundary, or that would in any way delay the conveyance of all or portions of the Preserve to the Owner/Manager, shall require written approval by both the City of Chula Vista and the County of San Diego. 3. Boundary modifications shall conform with the setback criteria listed [on pages 134 & 135 of the RMP1]. The locations of the most sensitive areas are illustrated in Figure 19. 4. Boundary modifications are intended for use at the SPA level to make minor refinements to include additional resources within the Preserve. 	<p>On-going - Preserve boundary modifications would follow the boundary line adjustment process described in the County’s MSCP Plan and City’s MSCP Subarea Plan, and would be required to demonstrate compliance with Policy 9.8 of the Phase 1 RMP.</p>
<p>NOTES:</p> <p>CEQA = California Environmental Quality Act CFD = Community Facilities District EIR = Environmental Impact Report JPA = Joint Powers Agreement GDP = City of Chula Vista General Development Plan MSCP = Multiple Species Conservation Program SRP = County of San Diego Otay Subregional Plan Phase 2</p>		

Attachment 2 Status of Phase 1 RMP Policies and Standards (2017)		
Policy Number	Policy/ Standard (County of San Diego & City of Chula Vista 1993)	Status
<p>SP = Specific Plan SPA = Sectional Planning Area POM = Preserve Owner/ Manager PSB = Preserve Steward/ Biologist RMP = Resource Management Plan</p> <p>REFERENCES CITED</p> <p>Chula Vista, City of (City) 2006 Otay Ranch Villages Two, Three, and a Portion of Four Sectional Planning Area (SPA) Plan Final Second Tier EIR. May 5.</p> <p>San Diego, County of, and Chula Vista, City of 1993 Otay Ranch Resource Management Plan. October 28. 1996 Joint Powers Agreement Between the City of Chula Vista and County of San Diego for the Planning, Operations, and Maintenance of the Otay Ranch Open Space Preserve.</p> <p>Dudek & Associates (Dudek) 1992 Report of the Flora of the Otay Ranch Vernal Pools 1990-1991, San Diego County, California. 1995a 1995 Contribution to Ongoing California Gnatcatcher and Cactus Wren Studies. 1995b Vernal Pool Management Plan for Otay Ranch. 1995c Otay Ranch Coastal Sage Scrub and Maritime Succulent Scrub Habitat Replacement Master Plan. 1995d Range Management Plan for Otay Ranch, San Diego County, California.</p>		

Attachment 2
Status of Phase 1 RMP Policies and Standards (2017)

Ogden Environmental (Ogden)

- 1992a Final Program Environmental Impact Report. Prepared for Otay Ranch Joint Planning Project.
- 1992b Baldwin Otay Ranch Wildlife Corridor Study.
- 1992c Otay Ranch Raptor Management Study.

RECON Environmental, Inc. (RECON)

- 2016 FY 2016-17 Annual Work Plan for the Otay Ranch Conveyed Lands Managed by the Otay Ranch Preserve Owner/Manager.

San Diego, County of

- 1993 Otay Subregional Plan, Vol. 2. Adopted October 28.
- 1997 Multiple Species Conservation Program County of San Diego Subarea Plan.
- 2006 Otay Valley Regional Park Habitat Restoration Plan & Non-native Plant Removal Guidelines.
- 2007 Amendments to the Otay Ranch Subregional Plan and Phases 1 and 2 Resource Management Plans; General Plan Amendment 06-012; Otay Subregional Planning Area (Districts 1, 2). December 5.

ATTACHMENT 3

Conveyance Forecast and Preserve Assembly

Page intentionally left blank

Attachment 3: Conveyance Forecast & Preserve Assembly

1.0 Conveyance Forecast

The land use plan in the most recently adopted General Development Plan/Subregional Plan (GDP/SRP) contains provisions for the development of up to 14 villages and 7 planning areas in the City of Chula Vista and unincorporated area of the County of San Diego (County of San Diego 1993; City of Chula Vista 2015). Development of the Otay Ranch villages and planning areas are subject to the 1.188-acre conveyance obligation, which forms the basis for Preserve assembly.

As of 2017, the villages and planning areas are in various stages of planning and development. **Table 3-1** shows the entitlement status of the villages and planning areas in Otay Ranch based on recorded final maps, approved SPA plans, and current land uses in the GDP/SRP as of 2017. The conveyance forecast in the table is based on the total developable area within each village/planning area that is subject to conveyance, and thus does not include common use areas which are not subject to the conveyance requirement.

It should be noted that areas that have been acquired for conservation have not been subtracted from the development totals for each village/planning area, as these lands retain the underlying land use designations in the GDP/SRP. Thus, the final development footprint and subsequent conveyance obligation for each village/planning area may vary from the acreages contained in **Table 3-1** below and will be determined upon recordation of each final map.

1.1 County of San Diego

The GDP/SRP provides a framework for the development of three villages and four planning areas in the County's jurisdictional area: Villages 13, 14, and 15, and Planning Areas 16, 17, 18 (partial), and 19 (County of San Diego 1993). As of 2017, no SPA plans have been approved for the County villages/planning areas.

Portions of Villages 14 and 15 and Planning Area 16 have been acquired by the California Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (USFWS) and retained in Rancho Jamul Ecological Reserve, Otay Mountain Ecological Reserve, and San Diego National Wildlife Refuge (**Figure 3-1**). Additionally, the portion of Planning Area 18 occurring within the County has been partially acquired for conservation by the California Department of Transportation and private entities. Development within these areas would likely be precluded by federal and state regulations for conserved lands. However, the underlying land use designation would allow for future development to occur upon approval of a SPA plan, if so desired, due to changes in ownership or other circumstances.

**Table 3-1
Otay Ranch Entitlement Status and Conveyance Forecast – December 2017¹**

Ownership Status	Development Area Subject to Conveyance (acres)	Conveyance Obligation (acres)
Approved Final Map (Total)	3,092.59	3,674.00
<i>Villages 1 & 5</i>	<i>1,302.24</i>	<i>1,547.06</i>
<i>Village 2 (partial)</i>	<i>383.11</i>	<i>455.13</i>
<i>Village 3² (partial)</i>	<i>217.15</i>	<i>257.97</i>
<i>Village 6</i>	<i>336.88</i>	<i>400.21</i>
<i>Village 7 (partial)</i>	<i>196.86</i>	<i>233.87</i>
<i>Village 11</i>	<i>408.30</i>	<i>485.06</i>
<i>Planning Area 12 (partial)³</i>	<i>248.05</i>	<i>294.68</i>
Entitled by Approved SPA Plan (Total)¹	1,080.25	1,283.34
<i>Village 2 (partial)</i>	<i>248.69</i>	<i>295.44</i>
<i>Village 3²</i>	<i>9.54</i>	<i>11.33</i>
<i>Village 7 (partial)</i>	<i>18.79</i>	<i>22.32</i>
<i>Village 8 East</i>	<i>216.10</i>	<i>256.73</i>
<i>Village 8 West</i>	<i>195.90</i>	<i>232.73</i>
<i>Village 9</i>	<i>200.20</i>	<i>237.84</i>
<i>Village 10</i>	<i>133.90</i>	<i>159.07</i>
<i>Planning Area 12 (partial)</i>	<i>57.13</i>	<i>67.87</i>
Approved SPA Plan Required for Future Development (Total)	4,136.11	4,913.70
<i>Village 4</i>	<i>163.96</i>	<i>194.78</i>
<i>Village 7 (partial)</i>	<i>51.65</i>	<i>61.36</i>
<i>Planning Area 10 (Regional Technology Park)⁴</i>	<i>85.00</i>	<i>100.98</i>
<i>Village 13</i>	<i>631.50</i>	<i>750.22</i>
<i>Village 14</i>	<i>665.20</i>	<i>790.26</i>
<i>Village 15</i>	<i>688.70</i>	<i>818.18</i>
<i>Planning Area 16</i>	<i>718.60</i>	<i>853.70</i>
<i>Planning Area 17</i>	<i>816.70</i>	<i>970.24</i>
<i>Planning Area 18⁶</i>	<i>215.80</i>	<i>256.37</i>
<i>Planning Area 19</i>	<i>20.00</i>	<i>23.76</i>
<i>Planning Area 20</i>	<i>15.00</i>	<i>17.82</i>
<i>Other Areas⁵</i>	<i>64.00</i>	<i>76.03</i>

¹ Actual village development footprints and conveyance obligations are based on gross estimates from the GDP/SRP and approved SPA Plans, and may differ from the totals presented in this table. The final development footprints and conveyance obligations will be determined upon recordation of the final map for each village/planning area.

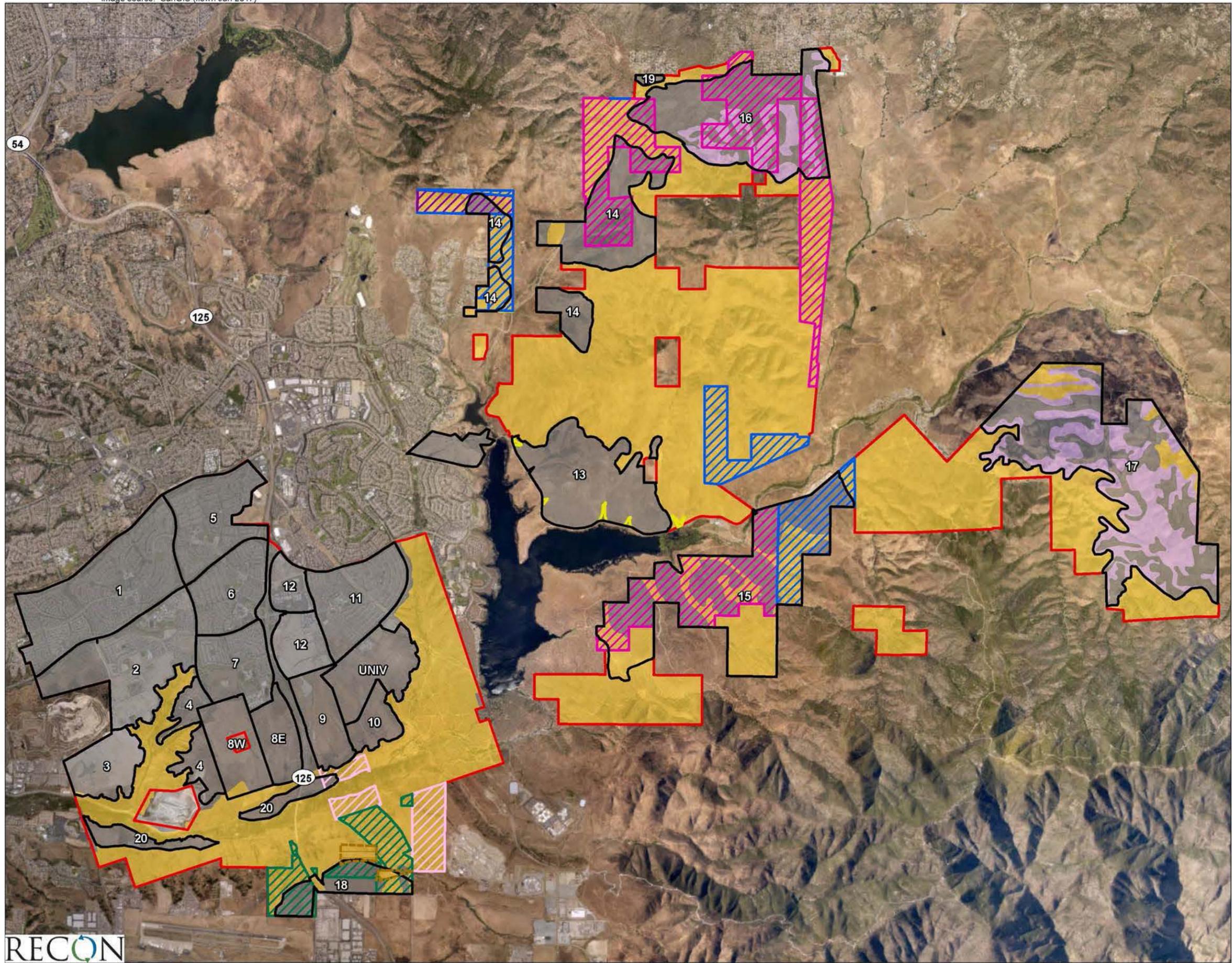
² Includes Planning Area 18B through the Village 3 GDP amendment.

³ 3.53 acres will be deducted from the Planning Area 12 conveyance obligation per the adopted Eastern Urban Center Park Agreement for Phase I Park Credit (DOC#2009-0599389) recorded October 28, 2009.

⁴ The area designated as ‘University’ is not included in the developable total as this would be considered a Common Use and not subject to conveyance.

⁵ ‘Other Areas’ consists of a small portion of Village 13 occurring within the City of Chula Vista.

⁶ A total of 256 acres were anticipated to be conveyed to the Preserve from development of Planning Area 18 within the City of San Diego. As the City of San Diego is not a signatory of the GDP/SRP, this area is not subject to the conveyance requirements in the 1996 Phase 2 RMP. However, these lands have been acquired for conservation or mitigation.



- Otay Ranch Boundary
 - Otay Ranch Villages*
 - Development Area
 - Preserve
 - Restricted Development Area
- Agency Aquisitions**
- Bureau of Land Management
 - US Fish and Wildlife Service
 - CA Dept. of Fish and Wildlife
 - California Dept of Transportation
 - Otay Water District
 - County of San Diego
 - City of San Diego
 - Private Acquisitions (Recorded Open Space Easement)

* Note: Village and Planning Area boundaries are for illustrative purposes only.

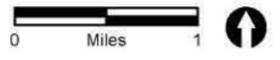


FIGURE 3-1
Otay Ranch Acquisitions (2017)

Page intentionally left blank

1.2 City of Chula Vista

The GDP/SRP provides a framework for the development of 11 villages and 3 planning areas in the City's jurisdiction: Villages 1 through 11 and Planning Areas 10, 12, and 20 (City of Chula Vista 2015). (Note: Villages that have been split up into separate sections are considered one village for the purposes of this analysis). As of 2017, portions of eight villages/planning areas within the City have processed final maps for a total of 3,092.59 acres of development, resulting in the conveyance of 3,674 acres to the Preserve. A total of 1,080.25 acres within portions of seven villages/planning areas in the City are entitled for development through approved SPA plans, but have not yet processed final maps. Portions of three villages/planning areas in the City remain to be entitled for development.

Portions of Village 14 occurring within the City's jurisdiction have been acquired by USFWS and Otay Water District. The area owned by USFWS is retained in San Diego National Wildlife Refuge. Otay Water District's ownership is located in an area designated as 'Other Agency Preserve Planning Efforts' by the City's MSCP Subarea Plan. A small portion of Planning Area 20 is also owned by the County of San Diego for conservation purposes (see **Figure 3-1**).

2.0 Preserve Assembly – 1993 to 2017

As shown in **Table 3-2**, a total of 5,850 acres of Preserve land are currently held in conservation. This includes 3,674 acres of Preserve land that has been conveyed to the POM in association with Otay Ranch development impacts as shown in **Table 3-1**. In addition, there are 2,176 acres of agency acquisitions and privately acquired Preserve land (**Figure 3-2a**). Although the agency acquisitions and privately acquired Preserve lands are not anticipated to be conveyed to the POM, they contribute toward the conservation goals of the GDP/SRP and Phase 1 RMP and add to the biological function of the Otay Ranch Preserve.

Additionally, a total of 1,794 acres on non-Preserve land (e.g., Development Area or Limited Development Area) are currently held in conservation. This includes 1,787 acres of agency acquisitions and 7 acres privately acquired Development Area/Limited Development Area (see **Figure 3-2a**). Although these areas retain development rights, development within these areas would likely be precluded by federal and state regulations for conserved lands. Thus, these areas would serve to broaden the conservation footprint within Otay Ranch beyond the Preserve boundary.

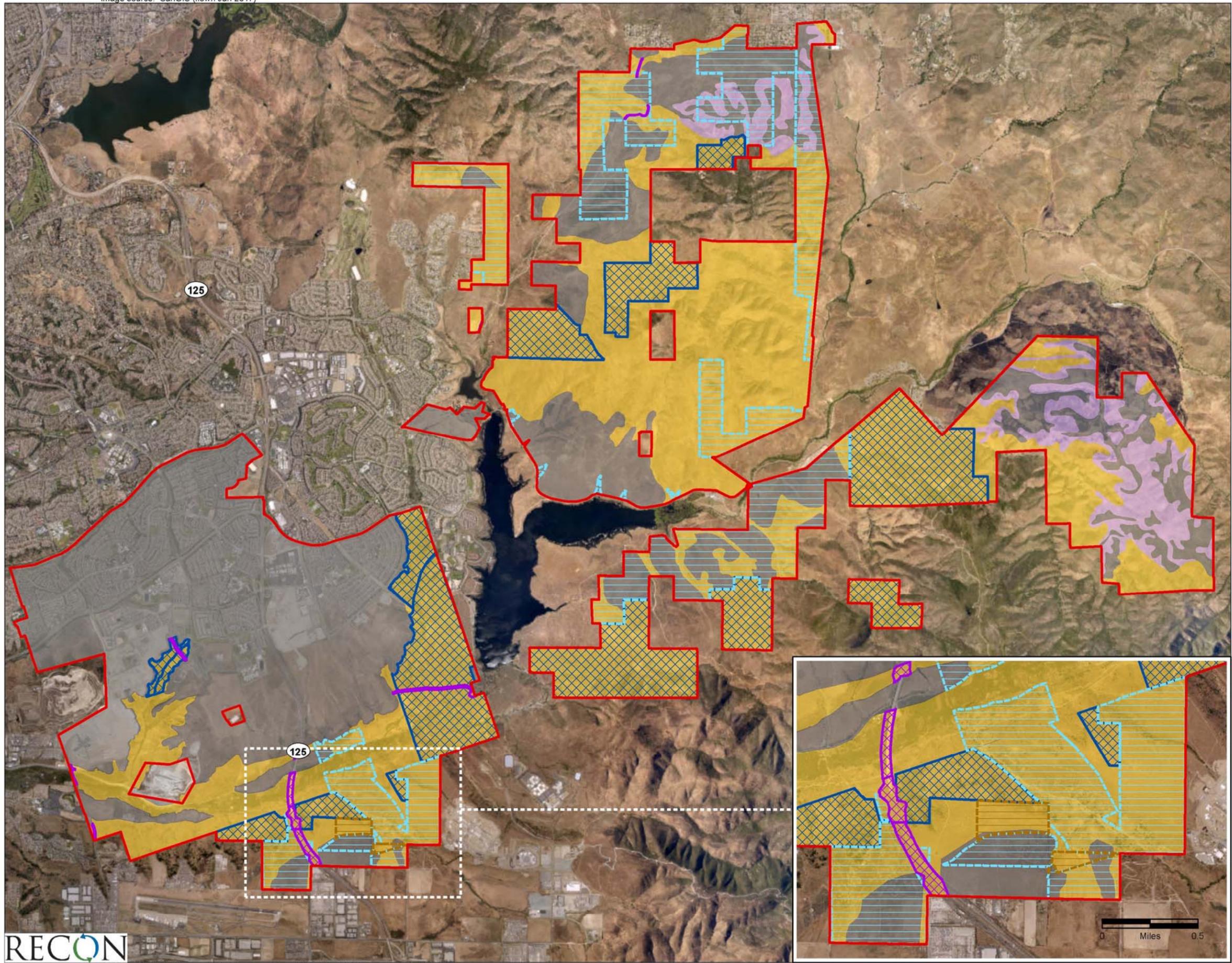
A balance of 5,697 acres of Preserve remains available for conservation or conveyance to the POM as of December 2017 (**Figure 3-2b**). Of this acreage, approximately 69 acres of Preserve are not anticipated to be conveyed to the POM due to existing rights-of-way and utility easements. Thus, a total of 5,628 acres are estimated to be available for conveyance in association with Otay Ranch development impacts. A summary of the conservation status of lands within the Preserve as of December 2017 is included in **Table 3-2**.

The remaining 5,628 acres represents those lands that are categorized as "Preserve" within the overall GDP/SRP mapping, but have not yet been conveyed to the POM or conserved by other entities. There are 1,283 acres expected to be conveyed from the Preserve as a result of entitled projects (see **Table 3-1**). Therefore, there is a remaining approximately 4,345 acres

of land within the Preserve that is available for future conveyance or conservation by third parties.

As of December 2017, it is not anticipated that future development in Otay Ranch will result in conveyances that total the 4,913.70 acres that would be expected per the GDP/SRP (see **Table 3-1**). Of the villages and planning areas within Otay Ranch that are owned by private entities and could be developed, preliminary projections from the County and the City indicate that the future conveyances could potentially be less than 4,345 acres. These calculations are considered highly speculative as they are calculated based on future development projects that have not yet been approved by the County and the City. Considering that there are 4,345 acres remaining in the Preserve, it is possible that there could be land that is designated as Preserve but is not conveyed to the POM as a result of future development in Otay Ranch.

The POM allows for acquisition of Preserve lands by third parties for conservation or to mitigate for impacts from non-Otay Ranch projects. It is anticipated that any Preserve lands not conveyed to the POM as a result of development in Otay Ranch would be conserved by third party acquisitions or remain in their currently undeveloped state due to the GDP/SRP designation, which prohibits development of lands within the Preserve.



- Otay Ranch Boundary
- Development Area
- Preserve
- Restricted Development Area
- Ownership Status**
- Agency Acquisitions
- Private Acquisitions (Recorded Open Space Easement)
- Conveyed Land Under POM Management
- Right-of-Way/Utility Easements

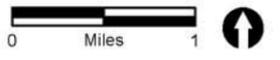
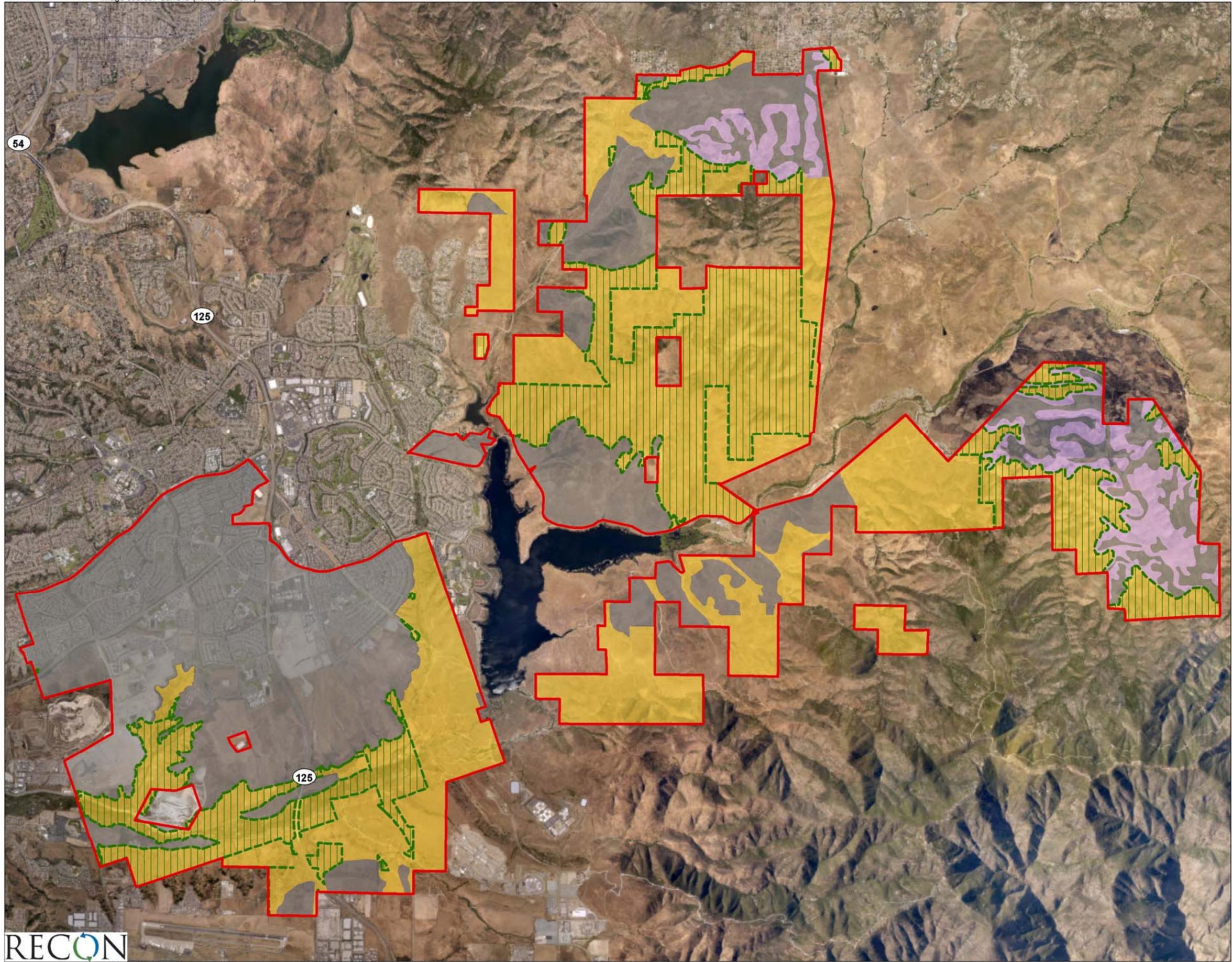


FIGURE 3-2a

Preserve Assembly (2017)

Page intentionally left blank



-  Otay Ranch Boundary
-  Development Area
-  Preserve
-  Restricted Development Area
-  Preserve Available for Conveyance as of December 2017

0 Miles 1 

FIGURE 3-2b
Preserve Land Available for
Conveyance (2017)

Page intentionally left blank

Table 3-2 Status of Preserve Assembly - 2017	
Conservation Status of Preserve and Non-Preserve Land	Preserve Total (acres)
Conserved Preserve Land	
Conveyed Preserve Land Under POM Management ¹	3,674
Agency Acquisitions of Preserve Land (Total)	2,130
<i>California Department of Fish & Wildlife</i>	814
<i>California Department of Transportation</i>	282
<i>City of San Diego</i>	3
<i>County of San Diego</i>	291
<i>Otay Water District</i>	103
<i>U.S. Fish & Wildlife Service</i>	637
Private Acquisition of Preserve Land (Recorded Open Space Easement)	46
Subtotal	5,850
Conserved Non-Preserve Land	
Agency Acquisitions of Development Area (Total)	1,787
<i>California Department of Fish & Wildlife</i>	1,393
<i>California Department of Transportation</i>	143
<i>City of San Diego</i>	11
<i>County of San Diego</i>	11
<i>Otay Water District</i>	35
<i>U.S. Fish & Wildlife Service</i>	194
Private Acquisition of Development Area & Restricted Development Area (Recorded Open Space Easement)	7
Subtotal	1,794
Preserve Land Available for Conservation	
Preserve Land Available for Conveyance ¹	5,628
Subtotal	5,628
GRAND TOTAL	13,272
NOTE: Totals are gross estimates based on recorded parcel data provided by SanGIS (2016). Acreages calculated may differ slightly from deed acreages due to minor discrepancies in parcel boundaries based on GIS.	
¹ Total does not include 69 acres of Preserve land within existing right-of-ways and utility easements, which are not anticipated to be conveyed to the POM.	

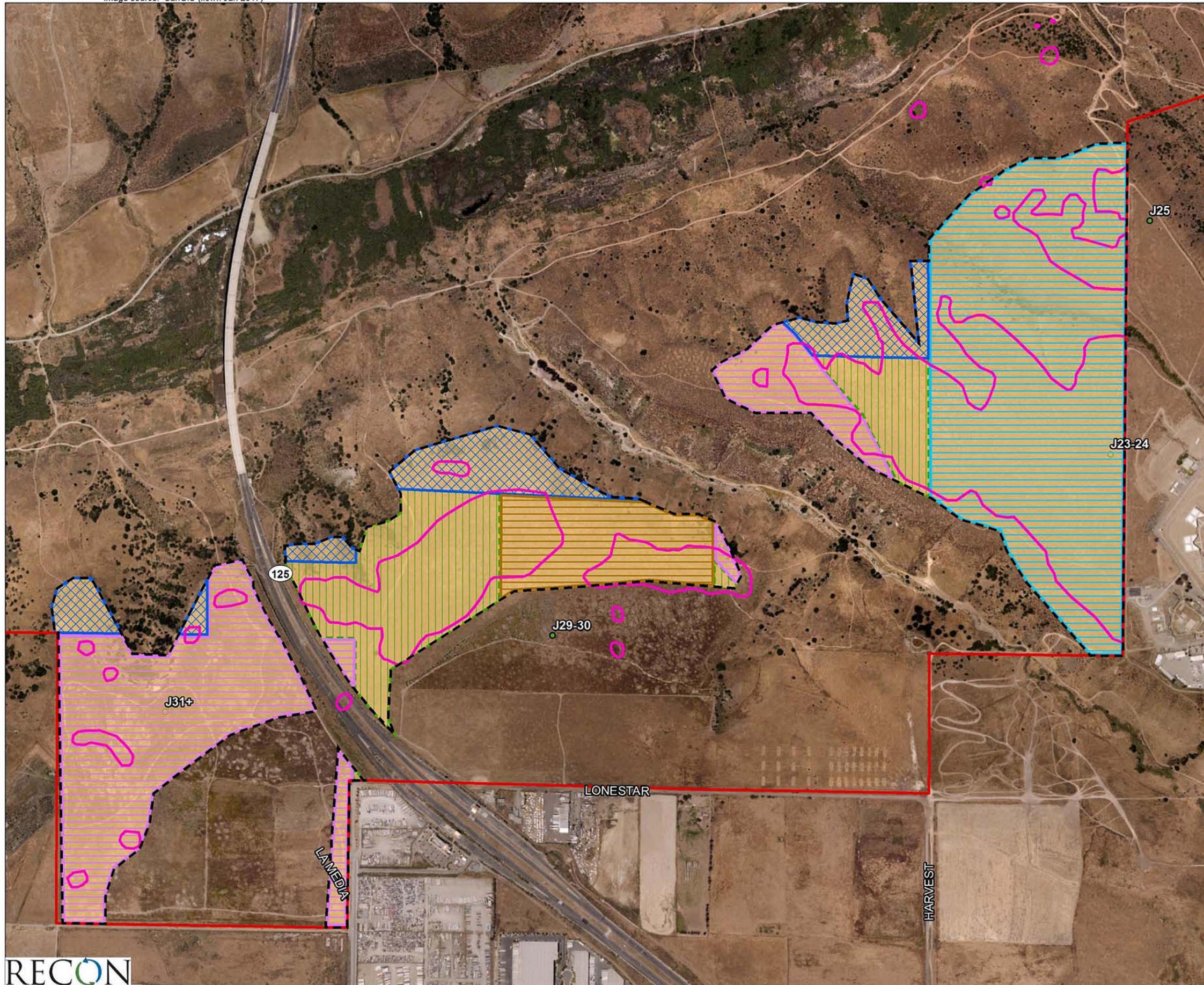
2.1 Vernal Pool Preservation Area

Within the Preserve, specific areas were designated by the Phase 1 RMP to be included in a conceptual Vernal Pool Preserve overlay zone. The purpose of this overlay zone was to fulfill Policy 2.9 of the GDP/SRP and Phase 1 RMP, which requires the preservation of vernal pool complexes J23, J24, J25, J30, and J29 (partial) in an area encompassing no less than 330 acres. At the time the conceptual boundaries were proposed, it was recognized that the SR-125 alignment would intersect the conceptual Vernal Pool Preserve overlay area and that the conceptual boundaries shown in the Phase 1 RMP would be refined after its construction. The finalized Vernal Pool Preservation Area is shown on **Figure 3-3** and totals 408 acres. **Figure 3-3** shows the refined boundary in relation to the southern segment of the SR-125 (completed in 2007) and illustrates the ownership status as of December 2017. The finalized Vernal Pool Preservation Area encompasses all vernal pools identified for conservation by the Phase 1 RMP and exceeds the 330-acre requirement. As lands with vernal pools are conveyed to the Preserve, site-specific vernal pool restoration plans will be completed.

The Vernal Pool Preservation Area consists of multiple ownerships, with a majority of it held in permanent, protected conservation. As of December 2017, 341 acres (83%) of the Vernal Pool Preservation Area are held in permanent conservation and a total of 67 acres are available for conveyance to the Preserve (**Table 3-3**). Of the conserved lands, a total of 41 acres have been conveyed to the POM in association with Otay Ranch developments and an additional 155 acres are owned by the County. The County land is not anticipated to be conveyed to the Preserve because it was purchased using grant funding for the acquisition of Otay Valley Regional Park land and lacks a Community Facilities District or other source of long-term funding for management. Additionally, these lands are located within a Formerly Used Defense Site area that has not been cleared of ordinance by the U.S. Army Corps of Engineers. The County conducts access control measures including patrolling, signage, and fencing to prevent impacts to this land within the Vernal Pool Preservation Area. The California Department of Transportation has also acquired 110 acres of the Preserve in this area. The remaining 35 acres of conserved land are held by third parties for mitigation of non-Otay Ranch development impacts in the City of San Diego's jurisdiction. These lands consist of privately owned parcels with recorded Biological Open Space easements (Easement ID 9004160 & 90033283). These parcels will not be conveyed to the Preserve, as they are not associated with Otay Ranch development impacts; however, their conserved status adds to the biological function and value of the Vernal Pool Preserve.

Table 3-3 Status of Vernal Pool Preserve Assembly – December 2016	
Conservation Status of Vernal Pool Preserve Land	Vernal Pool Preserve Total (acres)
Conserved Vernal Pool Preserve Land	
Conveyed Vernal Pool Preserve Land Under POM Management	41
Agency Acquisitions of Vernal Pool Preserve Land (Total)	265
<i>County of San Diego</i>	<i>155</i>
<i>California Department of Transportation</i>	<i>110</i>
Privately Conserved Vernal Pool Preserve Land (Easement ID 9004160 & 90033283).	35
Subtotal	341
Vernal Pool Preserve Available for Conveyance	
Vernal Pool Preserve Land Available for Conveyance	67
Subtotal	67
GRAND TOTAL	408
Note: Ownerships are based on recorded parcel data provided by SanGIS (2016). Acreages calculated may differ slightly than deed acreages due to minor discrepancies in parcel boundaries based on GIS.	

Page intentionally left blank



- Otay Ranch Boundary
 - Vernal Pool Preservation Area
 - Preserve
 - Vernal Pool Complexes*
- Ownership Status**
- Preserve Remaining to Be Conveyed (Within City of San Diego & County of San Diego Jurisdictions)
 - Conveyed Land Under POM Management
 - Private Acquisitions (Recorded Open Space Easement)
- Agency Acquisitions**
- County of San Diego
 - CA Department of Transportation

*Source: Vernal Pool Management Plan for Otay Ranch (Dudek & Associates 1995)



FIGURE 3-3
Vernal Pool Preservation Area (2017)

Page intentionally left blank

ATTACHMENT 4
Biota Monitoring Program

Page intentionally left blank



Biota Monitoring Program for Otay Ranch

Prepared for

County of San Diego
5510 Overland Avenue
San Diego, CA 92123

City of Chula Vista
276 Fourth Avenue
Chula Vista, CA 91910

Prepared by

RECON Environmental, Inc.
1927 Fifth Avenue
San Diego, CA 92101
P 619.308.9333

RECON Number 8117
June 22, 2018 – Finalized September 2018

A handwritten signature in black ink, appearing to read "Cailin Lyons", with a long horizontal flourish extending to the right.

Cailin Lyons, Associate Biologist

TABLE OF CONTENTS

1.0 Introduction 1

2.0 Botanical Resources 1

2.1 Resources to be Monitored 1

 2.1.1 Vegetation Communities 1

 2.1.2 Sensitive Plant Species 2

2.2 Methodology 3

 2.2.1 Baseline Surveys 3

 2.2.2 Vegetation Community Monitoring 4

 2.2.3 Focused Surveys 5

 2.2.4 Invasive Species Monitoring 6

3.0 Zoological Resources 7

3.1 Resources to be Monitored 7

 3.1.1 Sensitive Wildlife Species 7

3.2 Methodology 8

 3.2.1 Baseline Surveys for General Wildlife 8

 3.2.2 Focused Surveys for Sensitive Wildlife 8

 3.2.3 Invasive Species Monitoring 12

4.0 Climate Adaptation Strategy 13

5.0 References Cited 15

TABLES

Table 1 Vegetation Communities to be Monitored Within the Preserve 2

Table 2 14

Cross-walk of Biota Monitoring Tasks with Climate Change Adaptation Strategies 14

APPENDICES

- 1: Biota Monitoring Program Plant Species Priority Groups
- 2: Biota Monitoring Program Wildlife Species Priority Groups

1.0 Introduction

The purpose of the Biota Monitoring Program is to provide a monitoring framework to identify changes in the quality and quantity of on-site biological resources, including sensitive wildlife species, sensitive plant species, and sensitive habitat types within lands conveyed to the County of San Diego (County) and City of Chula Vista (City), henceforth collectively referred to as the Preserve Owner/Manager (POM). The data provided by the monitoring program will be used to evaluate and prioritize future Preserve monitoring and management decisions.

The Preserve Steward/Biologist (PSB) will evaluate all conveyed lands under POM management in the context of this monitoring program on an annual basis and provide monitoring and management recommendations to the POM in an annual work plan. The annual work plan will include in detail the proposed monitoring and management tasks for each year for all conveyed Preserve parcels [5.4]. Monitoring and management tasks will be prioritized based on the results of the monitoring program, as well as regional priorities and standards. The monitoring intervals contained herein may be increased, reduced, delayed, or suspended at the discretion of the PSB in consultation with the POM due to changes (or lack of changes) in species populations, environmental conditions, or regional priorities and standards. Any deviation from the monitoring requirements contained in the Biota Monitoring Program will be documented and justified in the annual work plan.

The Biota Monitoring Program is comprised of two components: prioritization of resources to be monitored and proposed monitoring methodologies. These components have been evaluated and prioritized based on current regional priorities and standards. It is anticipated that these priorities and standards will change over time due to changes in species sensitivity classifications, regional priorities, and/or monitoring standards. Thus, it is intended that the priorities and standards contained in this monitoring program will be reviewed annually by the PSB in consultation with the POM. Formal changes to priorities or monitoring methods will require approval from the POM prior to implementation, and will be documented by the PSB in the annual work plan.

2.0 Botanical Resources

2.1 Resources to be Monitored

2.1.1 Vegetation Communities

Comprehensive vegetation mapping will occur within the Preserve parcels following conveyance to establish the baseline condition and determine the distribution of sensitive vegetation communities and wetlands. Table 1 shows the sensitivity status of vegetation communities that may be present within the Preserve as defined by the Multiple Species Conservation Program County of San Diego Subarea Plan ([County's MSCP Subarea Plan]; County of San Diego 1997) and Multiple Species Conservation Program Subarea Plan ([City's MSCP Subarea Plan]; City of Chula Vista 2003).

Table 1 Vegetation Communities to be Monitored Within the Preserve		
Vegetation Community/ Land Cover Type	County’s MSCP Subarea Plan Tier	City’s MSCP Subarea Plan Tier
Agricultural Lands	IV	IV
Closed Cone Coniferous Forest	I	NA
Chaparral ¹	III	III
Chamise Chaparral	I ² /III	III
Coastal Sage Scrub	II	II
Coastal Sage Scrub–Chaparral Scrub	II	II
Disturbed Lands	IV	IV
Eucalyptus Woodland	IV	IV
Flat-topped Buckwheat	II	NA
Maritime Succulent Scrub	I	I
Native Grassland	I	I
Non-native Grassland	III	III
Oak Woodland	I	I
Southern Maritime Chaparral	I	NA
Southern Mixed Chaparral	I ² /III	III
Wetlands ³	I	NA ⁴
NA = Not Applicable ¹ Includes all forms of chaparral besides those listed in the table. ² Mafic form. ³ Includes vernal pools, alkali marsh, freshwater marsh, riparian forests, riparian woodlands, and riparian scrubs. ⁴ Wetlands are considered a sensitive resource by the City’s MSCP Subarea Plan but do not have a Tier, as they are addressed separately from upland habitats.		

2.1.2 Sensitive Plant Species

Sensitive plant species that are included in the Otay Ranch Resource Management Plan (Phase 1 RMP; County of San Diego and City of Chula Vista 1993), County’s MSCP Subarea Plan (County of San Diego 1997), City’s MSCP Subarea Plan (City of Chula Vista 2003), and/or Management Strategic Plan for Southwestern San Diego County ([Management Strategic Plan]; San Diego Management and Monitoring Program [SDMMP] 2013) have been prioritized for monitoring based on their level of sensitivity and likelihood to occur within the Preserve. Determination of the potential occurrence for these species is based upon known ranges and habitat preferences for the species (CNPS 2016; Reiser 2001) and species occurrence records and plant vouchers from the California Natural Diversity Database (CNDDB; State of California 2016), Master Occurrence Matrix (SDMMP 2016), and Consortium of California Herbaria (Consortium of California Herbaria 2016). Appendix 1 of this Biota Monitoring Program contains a list of all plant species evaluated for inclusion in the program and the current priority group for each species. A description of the criteria that were used to define each priority group is detailed below.

- Priority Group 1. Priority Group 1 plant species are listed by state and federal agencies as threatened, endangered, or rare, classified as a narrow endemic by the

City or County's MSCP Subarea Plans, and/or have a Species Management Category of 'SL' (Species at risk of loss from the Management Strategic Plan Area [MSPA]), 'SO' (Significant occurrences at risk of loss from the MSPA), or 'SS' (Species more stable but still requiring species-specific management to persist in the MSPA) as defined by the Management Strategic Plan. Priority Group 1 species are considered the highest priority for monitoring, and should be funded and monitored every designated monitoring period. A total of 19 plant species meet the criteria for Priority Group 1.

- Priority Group 2. Priority Group 2 plant species are covered by the MSCP and have a California Rare Plant Rank (CRPR) of 1B (considered rare, threatened, or endangered throughout its range) or 2B (considered rare, threatened, or endangered in California), as defined by California Native Plant Society (CNPS; 2016). Priority Group 2 plant species are distinguished from Priority Group 1 plant species as they are not federally or state-listed, considered a narrow endemic, or an 'SL', 'SO', or 'SS' species. Priority Group 2 species should be monitored every designated monitoring period as funding allows. A total of three plant species meet the criteria for Priority Group 2.
- Priority Group 3. Priority Group 3 plant species have a CRPR of 1B (considered rare, threatened, or endangered throughout its range) or 2B (considered rare, threatened, or endangered in California) and/or have a Species Management Category of 'VF' (Species with limited distribution in MSPA or needing specific vegetation characteristics requiring management) or 'VG' (Species not specifically managed for, but may benefit from vegetation management for VF species). Priority Group 3 species are distinguished from Priority Group 2 species as they are not covered by the MSCP. Priority Group 3 species should be monitored every designated monitoring period as funding allows. A total of 10 plant species meet the criteria for Priority Group 3.
- Priority Group 4. Priority Group 4 plant species have a CRPR of 3 (more information about the plant's distribution and rarity needed) or 4 (plants of limited distribution). Priority Group 4 species are distinguished from Priority Group 3 species as they have a lower CRPR and/or have not been prioritized for monitoring and/or management activities by the Management Strategic Plan. Priority Group 4 species should be monitored incidentally during other tasks as funding allows. A total of 11 plant species meet the criteria for Priority Group 4.

It is anticipated that changes in species sensitivity and/or regional monitoring strategies may warrant revisions to the priority groups described above and identified in Appendix 1 of this Biota Monitoring Program. Priority groups will be evaluated by the PSB prior to the submittal of each annual work plan, and any changes to priority groups due to on-going species listings and/or regional priorities will be approved by the POM and documented in the annual work plan.

2.2 Methodology

2.2.1 Baseline Surveys

Baseline surveys will be conducted by the PSB on each new parcel during the first spring following inclusion in the Preserve. Baseline surveys will be conducted according to the

current accepted methodologies and will include mapping vegetation, compiling an inventory of all plant and wildlife species encountered, and establishing permanent photo points.

Prior to conducting baseline surveys, literature and databases will be reviewed from various resources in an effort to utilize multiple sources of historical data on the vegetation present on the parcel set or in its vicinity. Resources to be reviewed may include, the Consortium of California Herbaria (Consortium of California Herbaria 2016), *Rare Plants of San Diego County* (Reiser 2001), Inventory of Rare, Threatened, and Endangered Plants of California (CNPS 2016), CNDDDB (State of California 2016), Master Occurrence Matrix (SDMMP 2016), San Diego Biological Information and Observation System (SanBIOS; County of San Diego 2009), South Coast Multi-taxa Database (SC-MTX; SDMMP 2010), and the USFWS Species Observation Point database (USFWS 2015), or modern equivalents.

Vegetation mapping will be conducted according to *A Manual of California Vegetation Second Edition* (Sawyer et al. 2009), or most current accepted methodology for vegetation mapping. The floral list will be recorded at the same time that vegetation mapping occurs in the field. Meandering transects will be walked by biologists throughout the parcels. Plant species will be identified and recorded in the field or collected/photographed and identified using the Jepson eFlora (2016) or most current and appropriate taxonomic key. The locations of all sensitive plant species, sensitive wildlife species, and host plants for Priority Group 1 wildlife species will be recorded using a Global Positioning System (GPS) with sub-meter accuracy.

Permanent photo points will be established during baseline surveys. The number and location of photo points within each parcel will be determined based on the size of the parcel set, variety of vegetation communities, and the potential for adverse edge effects. The monitoring photo point locations will be chosen so that they provide a broad view of representative vegetation communities within the parcel set. Existing prominent features (either natural or man-made) will be mindfully placed in each photo to make relocating the exact location easy in future years. The prominent features will be chosen so that changes to the landscape (i.e., fire or weed encroachment) will minimally affect the visibility of the feature. Photo points may also be established along habitat ecotones to monitor habitat shifts in elevation. Additional monitoring photo point locations may be added in the future.

A baseline survey report documenting the results of the survey will be prepared by the PSB. The baseline survey report will include a discussion of topography and soils, a description of each vegetation community, a complete floral and faunal inventory, an assessment of invasive species, and a qualitative discussion of wildlife movement corridors and threats (e.g., invasive species, access issues). The report will include exhibits showing the vegetation community mapping and all sensitive plant and wildlife species identified. All sensitive plant and wildlife species occurrences will be submitted to the CNDDDB, SanBIOS, and SC-MTX databases, or modern equivalents.

2.2.2 Vegetation Community Monitoring

Comprehensive vegetation community monitoring, consisting of vegetation mapping and photo point monitoring, will be proposed on 10-year intervals or following a catastrophic event (e.g., fire), unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. Vegetation communities will be mapped by the PSB according to

A Manual of California Vegetation, Second Edition (Sawyer et al. 2009), or the most current accepted methodology for vegetation mapping. Photo point monitoring will be conducted concurrently with vegetation mapping at the photo points established during baseline surveys. In the event of a fire or other catastrophic incident, vegetation community mapping and photo monitoring may occur at a shorter interval. The results of vegetation community mapping and photo point monitoring shall be reported by the PSB to the POM in an annual report. The monitoring results will be compared with previous monitoring results to determine if type conversion or habitat loss has occurred. The data will be used to inform future monitoring and management decisions.

2.2.3 Focused Surveys

a. Rare Plant Surveys

Initial baseline rare plant surveys for each new parcel will be conducted by the PSB during the first spring following the baseline survey. During the first rare plant survey completed for each parcel set, all Priority Group 1 through 4 plant species will be recorded. On-going monitoring is recommended as follows: three-year intervals for rare annual and herbaceous plant species and five-year intervals for rare perennial species, unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. Special focus will be given to documenting the full distribution of Priority Group 1 species. Priority Group 2 and 3 species will be monitored during rare plant surveys, as funding allows, unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. Priority Group 4 species will only be monitored incidentally when encountered during other monitoring tasks.

Species occurrence records from CNDDDB and the Master Occurrence Matrix will be reviewed prior to initiating rare plant surveys, to determine which sensitive plant species have been documented in the vicinity of the parcel sets. Herbarium voucher records from the on-line Consortium of California Herbaria may also be searched to determine additional sensitive plant species that have been vouchered near the parcel sets.

Rare plant surveys will be conducted using the CNPS Botanical Survey Guidelines (2001) or most current accepted protocol. Surveyors will walk meandering transects and will visually search for sensitive plants. All sensitive plant species identified will be recorded using sub-meter GPS and will include information adapted from the CNDDDB field form, including the species name, number of individuals, site quality, threats, surveyor, survey date, and additional comments. Surveys will occur in spring when annual and herbaceous perennial species are most visible. If environmental conditions are not appropriate during any given monitoring year (e.g., drought conditions, recent fire), the monitoring schedule may be revised to postpone the surveys until the next season in which conditions are suitable.

During rare plant surveys at each parcel set, study plots may be established for known populations of Priority Group 1 species with an “IMG” activity code (defined as ‘Inspect and Manage’) in the Management Strategic Plan (see Appendix 1 of this Biota Monitoring Program). “IMG” species will be monitored consistent with the methods in the Management Strategic Plan Monitoring Protocol for Rare Plant Occurrences on Conserved Lands in Western San Diego County (MSP Rare Plant Protocol; SDMMP 2015) or according to the

most current accepted protocol. Sampling will include detailed mapping of the population and surrounding habitat, a threats assessment, and the establishment of permanent photo points in accordance with the most current protocol. Each study plot will be surveyed at an appropriate time of year for its focal species. Study plots will be sampled concurrent with each parcel set's rare plant survey, as funding allows.

Focused survey results and incidental observations shall be reported by the PSB to the POM in an annual report. All sensitive plant species occurrences shall be submitted by the PSB to the CNDDDB, SanBIOS, and SC-MTX databases, or modern equivalents. All data collected in association with the MSP Rare Plant Protocol will be submitted by the PSB to SDMMMP for inclusion in the SC-MTX database.

b. Vernal Pool Plant Monitoring

Vernal pool plant monitoring is recommended to occur every five years for Preserve parcels containing vernal pool habitat to determine the presence/absence of Priority Group 1 vernal pool plant species and other species, unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of a quantitative assessment of vernal pool plant species within a subset of pools. A total of two survey visits are recommended during inundation—typically in February or March—and after the pool has dried for the season—typically April or May. All plant species present within the pool will be identified and assigned an absolute percent cover. Monitoring results shall be reported by the PSB to the POM in an annual report. All sensitive plant species occurrences shall be submitted by the PSB to the CNDDDB, SanBIOS, and SC-MTX databases.

2.2.4 Invasive Species Monitoring

New infestations of high-priority invasive plants will be recorded incidentally by the PSB during monitoring efforts following the Early Detection Rapid Response (EDRR) method, with special focus in drainages and edge areas that are susceptible to new invasions. Priority will be given to detecting Cal-IPC High, Moderate, and Alert species and priority invasive plant species in the Invasive Plant Strategic Plan (Cal-IPC 2016; SANDAG 2012). The monitoring strategy of EDRR consists of detecting invasive infestations at their first arrival within a given area while the populations are still localized and small (USDA 2016). EDRR greatly increases the likelihood that new invasions will be addressed successfully and prevented from becoming established and widespread in a given area. Through this method, invasive species that have recently invaded are managed first. Controlling new occurrences of invasive plants is a more cost-effective method of treatment than treating large infestations that are more difficult to eradicate. The results of invasive species monitoring will be used to inform management decisions. Weed control efforts will be prioritized and implemented by the PSB in coordination with the POM.

3.0 Zoological Resources

3.1 Resources to be Monitored

3.1.1 Sensitive Wildlife Species

Sensitive wildlife species that are included in the Phase 1 RMP (County of San Diego and City of Chula Vista 1993), County's MSCP Subarea Plan (1997), City's MSCP Subarea Plan (2003), and/or Management Strategic Plan (SDMMP 2013) have been prioritized based on their level of sensitivity and likelihood to occur within the Preserve. Determination of the potential occurrence for these species is based upon known ranges and habitat preferences for the species (Jennings and Hayes 1994; Unitt 2004) and species occurrence records from the CNDDDB (State of California 2016) and the Master Occurrence Matrix (SDMMP 2016). Appendix 2 of this Biota Monitoring Program contains a list of all wildlife species evaluated for inclusion in the program and the current priority group for each species. A description of the criteria that was used to define each priority group is detailed below.

- Priority Group 1. Priority Group 1 wildlife species are listed by state and federal agencies as threatened, endangered, or a candidate for listing, classified as a narrow endemic by the City or County's MSCP Subarea Plan, and/or have a Species Management Category of 'SL', 'SO', or 'SS'. Priority Group 1 species are considered the highest priority for monitoring and should be funded and monitored every designated monitoring period. A total of 18 wildlife species meet the criteria for Priority Group 1.
- Priority Group 2. Priority Group 2 wildlife species are covered by the City or County's MSCP Subarea Plan. A majority of these species are also classified by CDFW as a species of special concern, fully protected, or watch list species. Priority Group 2 wildlife species are distinguished from Priority Group 1 wildlife species as they are not federally or state-listed, considered a narrow endemic, or a 'SL', 'SO', or 'SS' species. Priority Group 2 species should be monitored every designated monitoring period as funding allows. A total of 11 wildlife species meet the criteria for Priority Group 2.
- Priority Group 3. Priority Group 3 wildlife species are classified by CDFW as a species of special concern, fully protected, or watch list species and/or have a Species Management Category of 'VF' or 'VG'. Priority Group 3 species are distinguished from Priority Group 2 species as they are not covered by the City or County's MSCP Subarea Plan. Priority Group 3 species should be monitored every designated monitoring period as funding allows. A total of eight wildlife species meet the criteria for Priority Group 3.
- Priority Group 4. Priority Group 4 wildlife species are classified by CDFW as a species of special concern, fully protected, or watch list species. Priority Group 4 species are distinguished from Priority Group 3 species as they have not been identified as regionally sensitive and prioritized for monitoring and/or management activities by the Management Strategic Plan. Priority Group 4 species should be monitored

incidentally during other tasks as funding allows. A total of nine wildlife species meet the criteria for Priority Group 4.

It is anticipated that changes in species sensitivity and/or regional monitoring strategies may warrant revisions to the priority groups described above and identified in Appendix 2 of this Biota Monitoring Program. Priority groups will be evaluated by the PSB prior to the submittal of each annual work plan, and any changes to priority groups due to on-going species listings and/or regional priorities will be approved by the POM and documented in the annual work plan.

3.2 Methodology

3.2.1 Baseline Surveys for General Wildlife

A baseline wildlife survey will be conducted by the PSB on each new parcel during the first spring following inclusion into the Preserve. Prior to conducting the baseline survey, literature and databases will be reviewed from various resources in an effort to utilize multiple sources of historical data on the sensitive wildlife present on the parcel or in the vicinity. Resources to be reviewed may include the CNDDDB (State of California 2016), SanBIOS (County of San Diego 2009), Master Occurrence Matrix (SDMMP 2016), and the USFWS Species Observation Point database (USFWS 2015).

The baseline wildlife survey will occur shortly after sunrise when bird and mammal species are most active and will continue into the afternoon as temperatures increase to allow for reptile species to be more active and more easily detected. The faunal list will be compiled through species observations and detections (e.g., calls, nests, scat). The locations of all sensitive wildlife species identified will be recorded using a GPS with sub-meter accuracy.

The results of the faunal inventory will be included in the baseline survey report. All sensitive wildlife species occurrences will be submitted by the PSB to the CNDDDB, SanBIOS, and SC-MTX databases, or modern equivalents.

3.2.2 Focused Surveys for Sensitive Wildlife

Focused surveys to be conducted for sensitive wildlife species will be determined by the PSB in consultation with the POM for each Preserve parcel based upon the presence of suitable habitat identified during baseline surveys and/or previous species occurrence records. Monitoring will be proposed at the intervals described below, unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. The survey schedule will be evaluated by the PSB on an annual basis. Any alterations to the schedule will be justified in the annual work plan. All focused survey results and incidental observations shall be reported by the PSB to the POM in an annual report. All sensitive wildlife species occurrences shall be submitted to the CNDDDB, SanBIOS, and SC-MTX databases. Surveys conducted in accordance with USFWS and CDFW survey protocols and guidelines will adhere to all applicable notification and reporting requirements outlined in the survey protocol, unless waived by the applicable agency. Survey methodologies and monitoring intervals for sensitive birds, invertebrates, amphibians, reptiles, and mammals are described in further detail below.

a. Sensitive Birds

The following protocols and monitoring intervals are recommended for Priority Group 1 bird species:

- Coastal California gnatcatcher (*Polioptila californica californica*). Monitoring is recommended to occur every five years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of presence/absence surveys within all suitable and previously occupied habitat following the currently accepted USFWS protocol at the time of the survey.
- Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*). Monitoring is recommended to occur every three years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of presence/absence surveys within all suitable and previously occupied habitat following the currently accepted practices at the time of the survey.
- Burrowing owl (*Athene cunicularia hypugaea*). Monitoring is recommended to occur every three years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of focused surveys for burrowing owls in areas containing high-quality habitat with suitable burrows for nesting following the currently accepted CDFW protocol at the time of the survey. It is recommended that monitoring efforts consist of bi-annual visits to previously occupied burrows, in winter and spring, to determine status of the population.
- Least Bell's vireo (*Vireo bellii pusillus*). Monitoring is recommended to occur every three years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of focused surveys and nest monitoring for least Bell's vireo in suitable riparian habitat following the currently accepted USFWS survey guidelines at the time of the survey. Nest monitoring will be used to determine brown-headed cowbird parasitism rates.
- Southwestern willow flycatcher (*Empidonax traillii extimus*). Monitoring is recommended to occur every three years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of focused surveys for southwestern willow flycatcher in suitable riparian habitat following the currently accepted USFWS protocol at the time of the survey.
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). Monitoring is recommended to occur every three years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey

schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of focused surveys for western yellow-billed cuckoo in suitable riparian habitat following the currently accepted protocol at the time of the survey.

- **Sensitive Raptors.** The following raptor species are considered Priority Group 1 species: golden eagle (*Aquila chrysaetos canadensis*), northern harrier (*Circus cyaneus hudsonius*), and American peregrine falcon (*Falco peregrinus anatum*). Observations of these species will be incidentally recorded during all monitoring activities. Additional focused surveys may be completed at the discretion of the PSB in consultation with the POM. More detailed monitoring methods for these species will be included in a Long-term Raptor Management Program to be prepared in coordination with regional monitoring efforts. The Long Term Raptor Management Program will be implemented after the first final map is approved and a funding source is established for development in the unincorporated county. The Long-term Raptor Management Program will be consistent with the recommendations of the Otay Ranch Raptor Management Study such that includes components such as population monitoring, habitat enhancement, protection from human disturbance, and education/outreach. Other management techniques that may be more appropriate for the raptor population on Otay Ranch may be implemented per the discretion of the POM and the PSB. The Program will include periodic long-term monitoring of onsite raptor populations to determine their status and the appropriateness of management techniques. The overall goal of the Long-term Raptor Management Program is to maintain and where feasible enhance preserved raptor populations on Otay Ranch.

A comprehensive list of all sensitive bird species in Priority Groups 2–4 will be recorded in conjunction with vegetation surveys every 10 years and through incidental observations made during other monitoring tasks. Focused surveys for species in Priority Groups 2–3 may be conducted at the discretion of the PSB in consultation with the POM, as funding allows.

b. Sensitive Invertebrates

The following protocols and monitoring intervals are recommended for Priority Group 1 invertebrate species:

- **Quino checkerspot (*Euphydryas editha quino*).** Monitoring is recommended to occur every five years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of modified surveys based on USFWS protocols. The modified protocol will consist of up to five survey visits in high-quality habitat and/or previously occupied areas and will be conducted once per week during appropriate weather conditions.
- **Hermes copper (*Lycaena hermes*).** Monitoring is recommended to occur every five years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of meandering surveys within suitable habitat areas supporting dense stands of the host

plant of the Hermes copper, spiny redberry (*Rhamnus crocea*), during the adult flight period (mid-May to mid-July, depending on elevation).

- Thorne's hairstreak (*Mitoura thornei*). Monitoring is recommended to occur every five years by for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of presence/absence surveys for Thorne's hairstreak within suitable Tecate cypress forest habitat. One survey will be conducted during the first flight period in March. An additional survey may be conducted during the second flight period in June if Thorne's hairstreak is not detected during the first survey.
- Harbison's dun skipper (*Euphyes vestris harbisoni*). Monitoring is recommended to occur every five years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of presence/absence surveys for Harbison's dun skipper within suitable habitat containing San Diego sedge (*Carex spissa*) during the adult flight period (mid-May to mid-July).
- San Diego fairy shrimp (*Branchinecta sandiegonensis*) and Riverside fairy shrimp (*Streptocephalus woottoni*). Monitoring is recommended to occur every five years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of modified surveys based on USFWS protocols within a subset of pools. The subset of pools will be determined by the PSB in consultation with the POM. Any pools known to support Riverside fairy shrimp will be included in the subset. The modified protocol will consist of up to five survey visits conducted every 10–14 days when pools are inundated.

If rainfall and/or temperatures are not favorable for surveying, an altered survey schedule may be followed. Modifications to USFWS protocols shall be discussed in consultation with USFWS at the time surveys are planned.

c. Sensitive Amphibians and Reptiles

The following protocols and monitoring intervals are recommended for Priority Group 1 invertebrate species:

- Arroyo toad (*Bufo californicus*). Monitoring is recommended to occur every three years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consist of modified surveys based on USFWS protocols during the breeding season within suitable habitat. It is recommended that the modified protocol consists of up to five survey visits, with no fewer than three visits during any given monitoring event. If weather conditions are not favorable for arroyo toad breeding activity, the diurnal component of the surveys may be dropped or an alternate survey schedule may be proposed. Modifications to the survey protocol may be proposed by the PSB and shall

be discussed in consultation with the POM and USFWS at the time surveys are planned.

- Western pond turtle (*Actinemys [=Clemmys] marmorata pallida*). Monitoring is recommended to occur every three years for Preserve parcels containing suitable and/or previously occupied habitat for this species unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. It is recommended that monitoring efforts consisting of modified visual surveys based on the U.S. Geological Survey methodology will be conducted during the breeding season within suitable habitat. Trapping surveys are not proposed as part of the Biota Monitoring Program but may be performed in conjunction with other regional monitoring efforts.

All other sensitive amphibian and reptile species in Priority Groups 2–4 (see Appendix 2 of this the Biota Monitoring Program) will be recorded through incidental observations made during other monitoring tasks. Focused surveys for species in Priority Groups 2–3 may be conducted at the discretion of the PSB in consultation with the POM, as funding allows.

d. Sensitive Mammals

The following protocols and monitoring intervals are recommended for Priority Group 1 mammal species:

- American badger (*Taxidea taxus*). Observations of American badgers or sign (e.g. dens) will be incidentally recorded during all monitoring activities. Monitoring of previously occupied burrows is recommended to occur annually unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. Monitoring efforts should consist of twice annual visits to previously occupied burrows, in winter and spring, to check for recent sign to determine status of the individual. Additional focused surveys may be completed at the discretion of the PSB in consultation with the POM.

Sensitive mammal species in Priority Groups 2–4 (see Appendix 2 of this Biota Monitoring Program) will be recorded through incidental direct observations or detection of sign (e.g., scat, burrows, nests) made during other monitoring tasks. Focused surveys or monitoring at known burrow locations for mammal species in Priority Groups 2–3 may be conducted at the discretion of the PSB in consultation with the POM, as funding allows.

3.2.3 Invasive Species Monitoring

a. Brown-headed Cowbird

Monitoring and control of brown-headed cowbird (*Molothrus ater*) using trapping techniques are recommended to occur a minimum of once every three years in areas where least Bell's vireo populations are present within the Preserve unless an alteration to the survey schedule is recommended by the PSB in consultation with the POM. Brown-headed cowbird parasitism rates determined during least Bell's vireo monitoring efforts may be used to inform the timing and frequency of trapping efforts. If least Bell's vireo nest monitoring results show low

parasitism rates, then trapping may be halted for one to two years. If least Bell's vireo nest monitoring results show medium to high parasitism rates, then annual trapping may be proposed. In the absence of nest monitoring, brown-headed cowbird trapping is recommended to be performed a minimum of once every three years.

b. Woodland Pests

Suitable oak and riparian woodland, forest, and scrub habitats will be monitored by the PSB for Kuroshio shot hole borer (*Euwallacea* sp.), gold-spotted oak borer (*Agrilus auroguttatus*), and other pest infestations following the EDRR method. Suspected occurrences of Kuroshio shot hole borer and gold-spotted oak borer will be recorded using GPS and reported to the POM. Samples will be submitted to the County Department of Agriculture for identification. A management and monitoring strategy will be developed should an infestation of this species be identified within the Preserve.

4.0 Climate Adaptation Strategy

Climate change adaptation is defined by the National Wildlife Federation as “initiatives and measures to reduce the vulnerability of natural or human systems against actual or expected climate change effects” (National Wildlife Federation 2014). The monitoring strategies contained in the Biota Monitoring Program will provide the PSB and POM with information regarding the responses of species populations to the effects of climate change, as well as early detection of threats to sensitive populations. Management actions, such as invasive species control and habitat restoration and enhancement, will be used to improve the resiliency of populations of sensitive vegetation communities, plants, and animals that are considered the most susceptible to these effects. A cross-walk of biota monitoring tasks linked with climate adaptation strategies is shown in Table 2. Climate adaptation strategies will be incorporated into the annual work plan as part of annual management tasks.

Table 2	
Cross-walk of Biota Monitoring Tasks with Climate Change Adaptation Strategies	
Monitoring Task	Purpose
Botanical Resources	
Baseline Surveys for Vegetation	Baseline surveys provide baseline biological data for vegetation communities and plant species present within the Preserve at the time a parcel is brought into the Preserve. These data can be used to track changes in vegetation community and/or plant species diversity or abundance due to the effects of climate change, as well as provide a baseline for recovery should a climate-related catastrophic event, such as fire or severe flooding, occur.
Vegetation Community Monitoring	Vegetation community monitoring will provide information related to climate-related responses, including type conversion or elevation shifts due to the effects of climate change-related phenomenon such as prolonged drought, altered hydrologic regime, the proliferation of non-native, invasive plant species, or other catastrophic events.
Focused Surveys for Sensitive Plants	Focused surveys will monitor the response of sensitive plant species populations that are susceptible to the effects of climate change (e.g., increased drought, proliferation of non-native plant species). Monitoring will inform management actions to reduce threats and improve the resiliency of high-priority populations. Management actions may include habitat enhancement and weed control in areas with high-priority sensitive plant populations.
Invasive Species Monitoring	Invasive species monitoring will provide information regarding new and emerging threats to sensitive habitats and species. Monitoring will inform management actions (e.g., weed control) to reduce threats and improve the resiliency of high-priority sensitive plant populations, as well as to prevent the establishment of new populations of high-priority invasive species.
Zoological Resources	
Baseline Surveys for General Wildlife	Baseline surveys will provide baseline biological data for wildlife species present within the Preserve at the time a parcel is brought into the Preserve. These data can be used to track changes in species diversity and abundance due to the effects of climate change, as well as provide a baseline for recovery should a climate-related catastrophic event, such as fire or severe flooding, occur.
Focused Surveys for Sensitive Wildlife	Focused surveys will monitor the response of sensitive wildlife species populations that are susceptible to the effects of climate change (e.g., reduced food availability, type conversion of suitable habitat). Monitoring will inform management actions to reduce threats and improve the resiliency of high-priority populations. Management actions may include habitat restoration and enhancement to expand the amount of suitable habitat available, create refugia, increase potential food sources, and connect fragmented or isolated habitat patches.
Invasive Species Monitoring	Invasive species monitoring will provide information regarding new and emerging threats to sensitive habitats and species. Monitoring will inform management actions (e.g., trapping and other control methods) to reduce threats to high-priority populations of sensitive wildlife species, as well as to prevent the establishment of new populations of high-priority invasive species.

5.0 References Cited

California, State of

- 2016 Natural Diversity Data Base. RareFind Version 5. Department of Fish and Game. Accessed online from <http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>.

California Invasive Plant Council (Cal-IPC)

- 2016 Invasive Plant Inventory Database. Accessed online from <http://www.cal-ipc.org/paf/>.

California Native Plant Society (CNPS)

- 2001 CNPS Botanical Survey Guidelines. Revised June 2. Accessed online from <http://www.cnps.org/cnps/rareplants/forum.php>.
- 2016 Inventory of Rare, Threatened, and Endangered Plants of California (online edition, v8-02). Accessed online from <http://www.rareplants.cnps.org/>

Chula Vista, City of (City)

- 2003 Multiple Species Conservation Program Subarea Plan. February.

Consortium of California Herbaria

- 2016 Data provided by the participants of the Consortium of California Herbaria. Accessed online from <http://www.ucjeps.berkeley.edu/consortium/>.

Jennings, M. R., and M. P. Hayes

- 1994 Amphibian and Reptile Species of Special Concern in California. Final report submitted to the California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, CA.

Jepson Flora Project

- 2016 Jepson eFlora. Accessed online from <http://ucjeps.berkeley.edu/interchange/>.

National Wildlife Federation

- 2014 Climate-Smart Conservation: Putting Adaptation Principles into Practice.

Reiser, C. H.

- 2001 *Rare Plants of San Diego County*. Aquifer Press, Imperial Beach, CA.

San Diego Association of Governments (SANDAG)

- 2012 Management Priorities for Invasive Non-native Plants – A Strategy for Regional Implementation, San Diego County, California. September.

San Diego, County of

- 1997 Multiple Species Conservation Program County of San Diego Subarea Plan.
- 2009 San Diego Biological Information and Observation System. San Diego Geographic Information Source – JPA. Accessed online from <http://www.sangis.org/download/index.html>.

San Diego, County of, and Chula Vista, City of
1993 Otay Ranch Resource Management Plan. October 28.

San Diego Management & Monitoring Program (SDMMP)

- 2010 Multi-Taxa Database.
- 2013 Management Strategic Plan for Conserved Lands in Western San Diego County.
- 2015 Management Strategic Plan Monitoring Protocol for Rare Plant Occurrences on Conserved Lands in Western San Diego County.
- 2016 Master Occurrence Matrix. Accessed online from http://portal.sdmmp.com/gis_viewer.php.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens.

- 2009 A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento, CA.

Unitt, P.

- 2004 San Diego County Bird Atlas.

United States Department of Agriculture (USDA)

- 2016 National Invasive Species Information Center. Plants: Early Detection and Rapid Response. Accessed online from <http://www.invasivespeciesinfo.gov/plants/detection.shtml>.

U.S. Fish and Wildlife Service (USFWS)

- 2015 Species Observation Points. Provided by Carlsbad Field Office.

APPENDICES

Page intentionally left blank

APPENDIX 1

Biota Monitoring Program Plant Species Priority Groups

Page intentionally left blank

Appendix 1 Biota Monitoring Program Plant Species Priority Groups					
Species	State/Federal Status (State of California 2016a & 2016b)	CNPS Rare Plant Ranking (2016)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
Priority Group 1—Annuals & Herbaceous Perennials					
<i>Acanthomintha ilicifolia</i> San Diego thornmint	CE/FT	1B.1	NE, MSCP	NE, 4-2	SO
<i>Bloomeria</i> [= <i>Muilla</i>] <i>clevelandii</i> San Diego goldenstar	-/-	1B.1	MSCP	4-2	SS/ ISV, IMG
<i>Brodiaea orcuttii</i> Orcutt's brodiaea	-/-	1B.1	MSCP	NE, 4-2	SO/ ISV, IMG
<i>Calochortus dunnii</i> Dunn's mariposa lily	CR/-	1B.2	NE, MSCP	NE, 4-3	VG
<i>Deinandra</i> [= <i>Hemizonia</i>] <i>conjugens</i> Otay tarplant	CE/FT	1B.1	NE, MSCP	NE, 4-1	SS/ ISV, IMG
<i>Dicranostegia orcuttiana</i> [= <i>Cordylanthus orcuttianus</i>] Orcutt's bird's-beak	-/-	2B.1	MSCP	4-1	SL
<i>Dudleya variegata</i> variegated dudleya	-/-	1B.2	NE, MSCP	NE, 4-1	SS/ ISV, IMG
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button-celery	CE/FE	1B.1	MSCP	4-2	VF
<i>Navarretia fossalis</i> spreading navarretia [= <i>prostrate navarretia</i>]	-/FT	1B.1	MSCP	4-2	VF
<i>Orcuttia californica</i> California Orcutt grass	CE/FE	1B.1	MSCP	4-2	SL & VF
<i>Packera</i> [= <i>Senecio</i>] <i>ganderi</i> Gander's ragwort [= Gander's butterweed]	CR/-	1B.2	MSCP	4-3	SO/ ISV, IMG

Appendix 1 Biota Monitoring Program Plant Species Priority Groups					
Species	State/Federal Status (State of California 2016b & 2016c)	CNPS Rare Plant Ranking (2016)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
<i>Pogogyne nudiuscula</i> Otay mesa mint	CE/FE	1B.1	MSCP	4-2	SL & VF
Priority Group 1—Perennials					
<i>Clinopodium</i> [=Satureja] <i>chandleri</i> San Miguel savory	-/-	1B.2	MSCP	4-2	SL/ IMG, ISV
<i>Cylindropuntia californica</i> var. <i>californica</i> [=Opuntia parryi var. <i>serpentina</i>] snake cholla	-/-	1B.1	NE, MSCP	NE, 4-1	VG
<i>Fremontodendron mexicanum</i> Mexican flannelbush	CR/FE	1B.1	-	-	SL/ ISV, IMG
<i>Ericameria palmeri</i> var. <i>palmeri</i> [= <i>E. palmeri</i> ssp. <i>palmeri</i>] Palmer's goldenbush [=Palmer's ericameria]	-/-	1B.1	NE, MSCP	NE, 4-2	VF
<i>Lepechinia ganderi</i> Gander's pitcher sage	-/-	1B.3	NE, MSCP	NE, 4-3	VG
<i>Monardella hypoleuca</i> ssp. <i>lanata</i> felt-leaved monardella	-/-	1B.2	MSCP	NE, 4-3	VF
<i>Monardella stoneana</i> [previously included in <i>M.</i> <i>linoides</i> ssp. <i>viminea</i>] Jennifer's monardella	-/-	1B.2	-	-	SL

Appendix 1 Biota Monitoring Program Plant Species Priority Groups					
Species	State/Federal Status (State of California 2016b & 2016c)	CNPS Rare Plant Ranking (2016)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
Priority Group 2—Perennials					
<i>Arctostaphylos otayensis</i> Otay manzanita	-/-	1B.2	MSCP	4-3	VF
<i>Ferocactus viridescens</i> San Diego barrel cactus	-/-	2B.1	MSCP	4-1	VG
<i>Hesperocyparis [=Cupressus] forbesii</i> Tecate cypress	-/-	1B.1	MSCP	4-3	VF
Priority Group 3—Annuals					
<i>Clarkia delicata</i> Delicate clarkia [=Campo clarkia]	-/-	1B.2	-	-	-
Priority Group 3—Perennials					
<i>Adolphia californica</i> California adolphia	-/-	2B.1	-	-	VG
<i>Ambrosia chenopodiifolia</i> San Diego bur-sage	-/-	2B.1	-	-	-
<i>Atriplex coulteri</i> Coulter's saltbush	-/-	1B.2	-	-	VF
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i> summer holly	-/-	1B.2	-	-	VG
<i>Euphorbia misera</i> cliff spurge	-/-	2B.2	-	-	VF
<i>Iva hayesiana</i> San Diego marsh-elder	-/-	2B.2	-	-	VG

Appendix 1 Biota Monitoring Program Plant Species Priority Groups					
Species	State/Federal Status (State of California 2016b & 2016c)	CNPS Rare Plant Ranking (2016)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
<i>Salvia munzii</i> Munz's sage	-/-	2B.2	-	-	-
<i>Quercus dumosa</i> Nuttall's scrub oak	-/-	1B.1	-	-	VF
<i>Quercus engelmannii</i> Engelmann oak	-/-	4.2	-	-	VF
Priority Group 4					
<i>Artemisia palmeri</i> San Diego sagewort	-/-	4.2	-	-	-
<i>Bahiopsis [=Viguiera] laciniata</i> San Diego viguiera [=San Diego County viguiera]	-/-	4.2	-	-	-
<i>Chamaebatia australis</i> southern mountain misery	-/-	4.2	-	-	-
<i>Dichondra occidentalis</i> western dichondra	-/-	4.2	-	-	-
<i>Harpagonella palmeri</i> Palmer's grapplinghook	-/-	4.2	-	-	-
<i>Juncus acutus</i> ssp. <i>leopoldii</i> southwestern spiny rush	-/-	4.2	-	-	-
<i>Myosurus minimus</i> Little mousetail	-/-	3.1	-	-	-*
<i>Ophioglossum californicum</i> California adder's-tongue	-/-	4.2	-	-	-

Appendix 1 Biota Monitoring Program Plant Species Priority Groups					
Species	State/Federal Status (State of California 2016b & 2016c)	CNPS Rare Plant Ranking (2016)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
<i>Romneya coulteri</i> Coulter's matilija poppy	-/-	4.2	-	-	-
<i>Selaginella cinerascens</i> ashy spike-moss	-/-	4.1	-	-	-
<i>Stipa diegoensis</i> [=Achnatherum <i>diegoense</i>] San Diego needlegrass	-/-	4.2	-	-	-
Species Evaluated But Not Expected To Occur					
<i>Acmispon prostratus</i> [=Lotus <i>nuttallianus</i>] Nuttall's lotus	-/-	1B.1	MSCP	4-3	SO/ IMG
<i>Agave shawi</i> var. <i>shawii</i> Shaw's agave	-/-	2B.1	NE, MSCP	NE, 4-3	SL/ IMG
<i>Ambrosia pumila</i> San Diego ambrosia	-/FE	1B.1	NE, MSCP	NE, 4-2	SO/ IMG
<i>Aphanisma blitoides</i> aphanisma	-/-	1B.2	MSCP	4-3	SL/ ISV, IMG
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i> Del Mar manzanita	-/FE	1B.1	MSCP	4-3	VF/ ISV, IMG
<i>Arctostaphylos rainbowensis</i> rainbow manzanita	-/-	1B.1	-	-	VG
<i>Astragalus tener</i> var. <i>titi</i> coastal dunes milkvetch	CE/FE	1B.1	MSCP	4-3	-
<i>Atriplex parishii</i> Parish's brittle scale	-/-	1B.1	-	-	VF
<i>Baccharis vanessae</i> Encinitas baccharis [=Encinitas coyote brush]	CE/FT	1B.1	NE, MSCP	NE, 4-3	SO/ ISV, IMG

Appendix 1 Biota Monitoring Program Plant Species Priority Groups					
Species	State/Federal Status (State of California 2016b & 2016c)	CNPS Rare Plant Ranking (2016)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
<i>Berberis nevinii</i> Nevin's barberry	CE/FE	1B.1	NE, MSCP	NE, 4-3	–
<i>Brodiaea filifolia</i> thread-leaved brodiaea [=thread-leaf brodiaea]	CE/FT	1B.1	NE, MSCP	NE, 4-3	SS/ ISV, IMG
<i>Brodiaea santarosae</i> Santa Rosa brodiaea	–/–	1B.2	–	–	SS/ ISV
<i>Ceanothus cyaneus</i> Lakeside ceanothus	–/–	1B.2	NE, MSCP	NE, 4-3	VF
<i>Ceanothus verrucosus</i> wart-stemmed ceanothus	–/–	2B.2	MSCP	4-3	VF
<i>Centromadia</i> [=Hemizonia] <i>parryi</i> ssp. <i>australis</i> southern tarplant	–/–	1B.1	–	–	VF
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> [=Cordylanthus <i>maritimus</i> ssp. <i>maritimus</i>] salt marsh bird's-beak	CE/FE	1B.2	MSCP	NE, 4-1	SL/ IMG
<i>Chorizanthe orcuttiana</i> Orcutt's spineflower	CE/FE	1B.1	–	–	SL/ IMG
<i>Chorizanthe procumbens</i> [=var. <i>albiflora</i>] prostrate spineflower [=Fallbrook spine-flower]					
<i>Corethrogyne</i> [=Lessingia] <i>filaginifolia</i> var. <i>linifolia</i> Del Mar Mesa sand aster	–/–	1B.1	MSCP	4-3	–

Appendix 1 Biota Monitoring Program Plant Species Priority Groups					
Species	State/Federal Status (State of California 2016b & 2016c)	CNPS Rare Plant Ranking (2016)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	-/-	1B.1	-	-	SL
<i>Dudleya brevifolia</i> [= <i>D. blochmaniae</i> ssp. <i>brevifolia</i>] short-leaved dudleya [short-leaved live-forever]	CE/-	1B.1	NE, MSCP	NE, 4-3	SL/ IMG
<i>Dudleya viscida</i> sticky dudleya	-/-	1B.2	MSCP	4-3	SS/ IMG
<i>Erysimum ammophilum</i> Sand-loving wallflower [=coast wallflower]	-/-	1B.2	MSCP	4-3	SL/ ISV, IMG
<i>Hazardia orcuttii</i> Orcutt's hazardia	CT/FC	1B.1	-	-	SL
<i>Lepechinia cardiophylla</i> heart-leaved pitcher sage	-/-	1B.2	NE, MSCP	4-3	SL/ IMG
<i>Lepidium latipes</i> Dwarf pepper-grass	-/-	CBR	-	-	-
<i>Monardella viminea</i> [= <i>M. linoidea</i> ssp. <i>viminea</i>] willow monardella	CE/FE	1B.1	NE, MSCP	NE, 4-3	SL/ IMG
<i>Nolina cismontana</i> chaparral nolina	-/-	1B.2	-	-	SL/ ISV, IMG
<i>Nolina interrata</i> Dehesa nolina [=Dehesa bear-grass]	CE/-	1B.1	NE, MSCP	NE, 4-3	SO/ ISV, IMG

Appendix 1 Biota Monitoring Program Plant Species Priority Groups					
Species	State/Federal Status (State of California 2016b & 2016c)	CNPS Rare Plant Ranking (2016)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
<i>Pinus torreyana</i> ssp. <i>torreyana</i> Torrey pine (native pop.)	-/-	1B.2	MSCP	4-3	VF
<i>Physalis crassifolia</i> [=greenei] Greene's ground-cherry					
<i>Pogogyne abramsii</i> San Diego mesa mint	CE/FE	1B.1	MSCP	4-3	VF
<i>Rosa minutifolia</i> small-leaved rose	CE/-	2B.1	MSCP	4-3	SS/ ISV, IMG
<i>Tetracoccus dioicus</i> Parry's tetracoccus	-/-	1B.2	MSCP	4-3	SS/ ISV, IMG
Phase 1 RMP Species Evaluated But No Longer Considered Sensitive					
<i>Calamagrostis koelerioides</i> [= <i>C. densa</i>] dense pine reedgrass [=dense reed grass]	-/-	CBR	MSCP	4-3	-
<i>Caulanthus heterophyllus</i> [= <i>Caulanthus heterophyllus</i> var. <i>heterophyllus</i> and <i>Caulanthus</i> <i>stenocarpus</i>] slender-pod jewelflower	-/-	CBR	MSCP	4-2	-
<i>Solanum xanti</i> [=tenuilobatum] Chaparral nightshade [=narrow-leaved nightshade]	-/-	CBR	-	4-2	-

Appendix 1
Biota Monitoring Program
Plant Species Priority Groups

CALIFORNIA NATIVE PLANT SOCIETY RARE PLANT RANKING

- 1B = Species rare, threatened, or endangered in California and elsewhere. These species are eligible for state listing.
- 2B = Species rare, threatened, or endangered in California but more common elsewhere. These species are eligible for state listing.
- 3 = Species for which more information is needed. Distribution, endangerment, and/or taxonomic information is needed.
- 4 = A watch list of species of limited distribution. These species need to be monitored for changes in the status of their populations.
- .1 = Species seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat).
- .2 = Species fairly threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat).
- .3 = Species not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known).
- CBR = Considered but rejected

COUNTY'S MSCP SUBAREA PLAN

- NE = Narrow endemic
- MSCP = Multiple Species Conservation Program covered species

CITY'S MSCP SUBAREA PLAN

- NE = Narrow endemic
- 4-1 = Species adequately conserved (Table 4-1)
- 4-2 = Species with known occurrences or suitable habitat within *Chula Vista Subarea* (Table 4-2)
- 4-3 = Species not likely to be found in the *Chula Vista Subarea* (Table 4-3)

MANAGEMENT STRATEGIC PLAN

- SL = Species at risk of loss from the Management Strategic Plan Area.
- SO = Significant occurrence(s) at risk of loss from the Management Strategic Plan Area.
- SS = Species more stable but still requires species specific management to persist in the Management Strategic Plan Area.
- VF = Species with limited distribution in the Management Strategic Plan Area or needing specific vegetation characteristics requiring management.
- VG = Species not specifically managed for, but may benefit from vegetation management for VF species.
- ISV = Implement surveys to gather baseline data for managing the species.
- IMG = Inspect and implement management actions as necessary.

Appendix 1
Biota Monitoring Program
Plant Species Priority Groups

REFERENCES CITED

California Native Plant Society (CNPS)

2016 Inventory of Rare, Threatened, and Endangered Plants of California (online edition, v8-02). Accessed online from <http://www.rareplants.cnps.org/>

California, State of

2016a State and Federally Listed Endangered, Threatened, and Rare Plants of California. Natural Diversity Database. Department of Fish and Wildlife. April

2016b Special Vascular Plants, Bryophytes, and Lichens List. Natural Diversity Database. Department of Fish and Wildlife. April.

Chula Vista, City of (City)

2003 Multiple Species Conservation Program Subarea Plan. February.

San Diego, County of (County)

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

San Diego Management & Monitoring Program (SDMMP)

2013 Management Strategic Plan for Conserved Lands in Western San Diego County.

APPENDIX 2

Biota Monitoring Program Wildlife Species Priority Groups

Page intentionally left blank

Appendix 2 Biota Monitoring Program Wildlife Species Priority Groups				
Species	State/Federal Status (State of California 2016a & 2016b)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
Priority Group 1				
<i>Actinemys [=Clemmys] marmorata pallida</i> Western pond turtle	CSC/-	NE, MSCP	4-2	SL/ IMG
<i>Athene cunicularia hypugaea</i> Burrowing owl	CSC/-	NE, MSCP	4-1	SL/ ISV
<i>Aquila chrysaetos canadensis</i> Golden eagle	CFP, WL/BEPA	NE, MSCP	4-2	SO
<i>Branchinecta sandiegonensis</i> San Diego fairy shrimp	-/FE	NE, MSCP	4-2	SO & VF
<i>Bufo californicus</i> Arroyo toad	CSC/FE	NE, MSCP	4-2	SO/ ISV
<i>Campylorhynchus brunneicapillus sandiegonensis</i> Coastal cactus wren	CSC/-	NE, MSCP	4-1	SO
<i>Circus cyaneus hudsonius</i> Northern harrier	CSC/-	MSCP	4-2	SO/ ISV
<i>Coccyzus americanus occidentalis</i> Western yellow-billed cuckoo	CE/FT	NE	-	-
<i>Empidonax traillii extimus</i> Southwestern willow flycatcher	CE/FE	NE, MSCP	4-2	SL
<i>Euphydryas editha quino</i> Quino checkerspot	-/FE	NE	4-1	SL
<i>Euphyes vestris harbisoni</i> Harbison dun skipper	-/-	NE	-	-
<i>Falco peregrinus anatum</i> American peregrine falcon	CFP/-	NE, MSCP	4-2	VG

Appendix 2 Biota Monitoring Program Wildlife Species Priority Groups				
Species	State/Federal Status (State of California 2016a & 2016b)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
<i>Lycaena hermes</i> Hermes copper	-/FC	-	-	SL
<i>Mitoura thornei</i> Thorne's hairstreak	-/-	NE, MSCP	4-3	VF
<i>Polioptila californica californica</i> Coastal California gnatcatcher	CSC/FT	MSCP	4-1	VF
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	-/FE	NE, MSCP	4-2	VF
<i>Taxidea taxus</i> American [=mountain] badger	CSC/-	MSCP	4-2	SL
<i>Vireo bellii pusillus</i> Least Bell's vireo	CE/FE	NE, MSCP	4-1	VF
Priority Group 2				
<i>Accipiter cooperi</i> Cooper's hawk	WL/-	MSCP	4-2	VG
<i>Agelaius tricolor</i> Tricolored blackbird	CSC/-	MSCP	4-2	VF
<i>Aimophila ruficeps canescens</i> Southern California rufous-crowned sparrow	WL/-	MSCP	4-1	VG
<i>Aspidoscelis hyperthrus beldingi</i> Belding's orange-throated whiptail	CSC/-	MSCP	4-2	VG
<i>Buteo regalis</i> Ferruginous hawk	WL/-	MSCP	4-2	VG
<i>Felis concolor</i> Mountain lion	-/-	MSCP	4-2	VG

Appendix 2 Biota Monitoring Program Wildlife Species Priority Groups				
Species	State/Federal Status (State of California 2016a & 2016b)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
<i>Numenius americanus</i> Long-billed curlew	WL/-	MSCP	4-1	VG
<i>Phrynosoma blainvillii</i> [=coronatum blainvillii] Coast [=San Diego] horned lizard	CSC/-	MSCP	4-2	VF coastal & VG inland
<i>Plegadis chihi</i> White-faced ibis	WL/-	MSCP	4-2	VG
<i>Odocoileus hemionus fuliginata</i> Southern mule deer	-/-	MSCP	4-2	VG
<i>Sialia mexicana occidentalis</i> Western blue-bird	-/-	MSCP	4-2	VG
Priority Group 3				
<i>Accipiter striatus velox</i> Sharp-shinned hawk	WL/-	-	-	VG
<i>Asio otus</i> Long-eared owl	CSC/-	-	-	-
<i>Artemisiospiza</i> [=Amphispiza] <i>belli belli</i> Bell's sage sparrow	WL/-	-	-	VG
<i>Chaetodipus fallax fallax</i> Northwestern San Diego pocket mouse	CSC/-	-	-	VG
<i>Cnemidophorus tigris multiscutatus</i> Coastal whiptail	-/-	-	-	VG
<i>Crotalus ruber</i> Red-diamond rattlesnake	CSC/-	-	-	VG
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	CSC/-	-	-	VF

Appendix 2 Biota Monitoring Program Wildlife Species Priority Groups				
Species	State/Federal Status (State of California 2016a & 2016b)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
<i>Thamnophis hammondi</i> Two-striped gartersnake	CSC/-	-	-	VG
Priority Group 4				
<i>Chaetodipus californicus femoralis</i> Dulzura pocket mouse	CSC/-	-	-	-
<i>Elanus leucurus</i> White-tailed kite ²	CFP/-	-	-	-
<i>Eremophila alpestris actia</i> California horned lark	WL/-	-	-	-
<i>Eumops perotis californicus</i> California mastiff bat	CSC/-	-	-	-
<i>Falco mexicanus</i> Prairie falcon	WL/-	-	-	-
<i>Lanius ludovicianus</i> Loggerhead shrike	CSC/-	-	-	-
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	CSC/-	-	-	-
<i>Eumeces skiltonianus interparietalis</i> Coronado skink	CSC/-	-	-	-
<i>Salvadora hexalepis virgultea</i> Coast patch-nosed snake	CSC/-	-	-	-
Species Evaluated But Not Expected to Occur				
<i>Branta canadensis</i> Canada goose	-/-	MSCP	4-2	VG
<i>Buteo swainsoni</i> Swainson's hawk	CT/-	MSCP	4-2	VG

Appendix 2 Biota Monitoring Program Wildlife Species Priority Groups				
Species	State/Federal Status (State of California 2016a & 2016b)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
<i>Charadrius alexandrinus nivosus</i> Western snowy plover	CSC/FT	MSCP	4-1	SL
<i>Charadrius montanus</i> Mountain plover	CSC/-	MSCP	4-3	-
<i>Egretta rufescens</i> Reddish egret	-/-	MSCP	4-2	VG
<i>Haliaeetus leucocephalus</i> Bald eagle	CE, CFP/BEPA	MSCP	4-2	VG
<i>Panoquina errans</i> Wandering skipper	-/-	MSCP	4-1	VG
<i>Passerculus sandwichensis beldingi</i> Belding's savannah sparrow	CE/-	NE, MSCP	4-1	VF
<i>Passerculus sandwichensis rostratus</i> Large-billed savannah sparrow	CSC/-	MSCP	4-1	VG
<i>Pelecanus occidentalis californicus</i> California brown pelican	CFP/-	MSCP	4-2	VG
<i>Rana aurora draytonii</i> California red-legged frog	CSC/FT	NE, MSCP	4-3	-
<i>Rallus obsoletus</i> [=longirostris] <i>levipes</i> Light-footed Ridgway's rail	CE, CFP/FE	NE, MSCP	4-1	SO
<i>Sternula antillarum browni</i> California least tern	CE, CFP/FE	NE, MSCP	4-1	SS
<i>Thalasseus</i> [=Sterna] <i>elegans</i> Elegant tern	WL/-	MSCP	4-2	VG

Appendix 2 Biota Monitoring Program Wildlife Species Priority Groups				
Species	State/Federal Status (State of California 2016a & 2016b)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
Species Evaluated But No Longer Considered Sensitive				
<i>Bubo virginianus</i> Great horned owl	-/-	-	-	-
<i>Buteo jamaicensis</i> Red-tailed hawk	-/-	-	-	-
<i>Buteo lineatus</i> Red-shouldered hawk	-/-	-	-	-
<i>Falco sparverius</i> American kestrel	-/-	-	-	-
<i>Lichanura trivirgata roseofusca</i> [=Charina trivirgata] Rosy boa	-/-	-	-	-
<i>Otus kennicotti</i> Western screech owl	-/-	-	-	-
<i>Tyto alba</i> Barn owl	-/-	-	-	-

Appendix 2 Biota Monitoring Program Wildlife Species Priority Groups				
Species	State/Federal Status (State of California 2016a & 2016b)	County's MSCP Subarea Plan (1997)	City's MSCP Subarea Plan (2003)	Management Strategic Plan Species Management Category/ Monitoring Activity Code ¹ (SDMMP 2013)
¹ Only the ISV and IMG activity codes from the Management Strategic Plan have been included. The remaining activity codes in the Management Strategic Plan are related to regional studies or management actions and are, therefore, not pertinent to the Biota Monitoring Program.				
FEDERAL CANDIDATES AND LISTED SPECIES FE = Federally listed endangered FT = Federally listed threatened FC = Federal candidate for listing BEPA = Bald Eagle Protection Act		STATE LISTED SPECIES CE = State listed endangered CT = State listed threatened CR = State listed rare CFP = CDFW fully protected species CSC = CDFW species of special concern WL = CDFW watch list species		
COUNTY'S MSCP SUBAREA PLAN NE = Narrow endemic MSCP = Multiple Species Conservation Program covered species				
CITY'S MSCP SUBAREA PLAN NE = Narrow endemic 4-1 = Species adequately conserved (Table 4-1) 4-2 = Species with known occurrences or suitable habitat within <i>Chula Vista Subarea</i> (Table 4-2) 4-3 = Species not likely to be found in the <i>Chula Vista Subarea</i> (Table 4-3)				

Appendix 2
Biota Monitoring Program
Wildlife Species Priority Groups

MANAGEMENT STRATEGIC PLAN

- SL = Species at risk of loss from the Management Strategic Plan Area.
SO = Significant occurrence(s) at risk of loss from the Management Strategic Plan Area.
SS = Species more stable but still requires species specific management to persist in the Management Strategic Plan Area.
VF = Species with limited distribution in the Management Strategic Plan Area or needing specific vegetation characteristics requiring management.
ISV = Implement surveys to gather baseline data for managing the species.
IMG = Inspect and implement management actions as necessary.

REFERENCES CITED

California Native Plant Society (CNPS)

- 2016 Inventory of Rare, Threatened, and Endangered Plants of California (online edition, v8-02). Accessed online from <http://www.rareplants.cnps.org/>.

California, State of

- 2016a State & Federally Listed Endangered & Threatened Animals of California. Natural Diversity Database. Department of Fish and Wildlife. April.
2016b Special Animals. Department of Fish and Wildlife. April.

Chula Vista, City of (City)

- 2003 Multiple Species Conservation Program Subarea Plan. February.

San Diego, County of (County)

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

San Diego Management & Monitoring Program (SDMMP)

- 2013 Management Strategic Plan for Conserved Lands in Western San Diego County.

ATTACHMENT 5

Preserve Configuration Preservation Summary

Page intentionally left blank

Attachment 5	
Preserve Configuration Preservation Summary	
Resource	Preservation Standard
Sensitive Vegetation Communities	
Alkali Meadow	72% ¹
Coastal Sage Scrub	70% ²
Floodplain Scrub	95% ¹
Freshwater Marsh	95% ¹
Maritime Succulent Scrub	80% ³
Native Grassland	25% ⁴
Non-native Grassland	-
Oak Woodland	100%
Riparian Forest/Woodland	100%
Southern Interior Cypress Forest	100%
Southern Willow Scrub	95% ¹
Vernal Pools	95% ¹
Sensitive Plant Species	
<i>Acanthomintha ilicifolia</i> San Diego thornmint	95% ⁵
<i>Adolphia californica</i> California adolphia	75%
<i>Ambrosia chenopodiifolia</i> San Diego bur-sage	75%
<i>Arctostaphylos otayensis</i> Otay manzanita	80% ⁵
<i>Artemisia palmeri</i> San Diego sagewort	75%
<i>Bahiopsis [=Viguiera] laciniata</i> San Diego viguiera [=San Diego County viguiera]	75% ⁶
<i>Bloomeria [=Muilla] clevelandii</i> San Diego goldenstar	54% ⁵
<i>Brodiaea orcuttii</i> Orcutt's brodiaea	75%
<i>Calamagrostis koeleriodes</i> [=C. densa] dense pine reedgrass [=dense reed grass]	N/A*
<i>Clinopodium [=Satureja] chandleri</i> San Miguel savory	50%
<i>Calochortus dunnii</i> Dunn's mariposa lily	100%
<i>Caulanthus heterophyllus</i> [=C. heterophyllus var. heterophyllus and C. stenocarpus] slender-pod jewelflower	N/A*
<i>Chamaebatia australis</i> southern mountain misery	50%
<i>Chorizanthe procumbens</i> var. <i>albiflora</i> Fallbrook spine-flower	50%
<i>Clarkia delicata</i> delicate clarkia	75% ⁷
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i> summer holly	75%

Resource	Preservation Standard
<i>Cylindropuntia californica</i> var. <i>californica</i> [= <i>Opuntia parryi</i> var. <i>serpentina</i>] snake cholla	80% ⁵
<i>Deinandra</i> [= <i>Hemizonia</i>] <i>conjugens</i> Otay tarplant	80%
<i>Dicranostegia orcuttiana</i> [= <i>Cordylanthus orcuttianus</i>] Orcutt's bird's-beak	75% ⁸
<i>Dichondra occidentalis</i> western dichondra	50%
<i>Dudleya variegata</i> variegated dudleya	75% ⁵
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button-celery (where occurring with vernal pool species)	100%
<i>Eryngium aristulatum</i> var. <i>parishii</i> San Diego button-celery (all other occurrences)	95%
<i>Ferocactus viridescens</i> San Diego barrel cactus	75% ⁵
<i>Fremontodendron mexicanum</i> Mexican flannelbush	100%
<i>Harpagonella palmeri</i> Palmer's grapplinghook	75%
<i>Hesperocyparis</i> [= <i>Cupressus</i>] <i>forbesii</i> Tecate cypress	75%
<i>Iva hayesiana</i> San Diego marsh-elder	75% ⁹
<i>Juncus acutus</i> ssp. <i>leopoldii</i> southwestern spiny rush	50%
<i>Lepechinia ganderi</i> Gander's pitcher sage	75%
<i>Lepidium latipes</i> Dwarf pepper-grass	50%
<i>Monardella viminea</i> [= <i>M. linoides</i> ssp. <i>viminea</i>] willow monardella	100%
<i>Myosurus minimus</i> little mousetail	100%
<i>Navarretia fossalis</i> spreading navarretia [=prostrate navarretia]	100%
<i>Ophioglossum lusitanicum</i> spp. <i>californicum</i> California adder's-tongue fern	50%
<i>Physalis greenei</i> Greene's Ground-cherry	50% ⁵
<i>Pogogyne nudiuscula</i> Otay mesa mint	95%
<i>Quercus engelmannii</i> Engelmann oak	50%
<i>Romneya coulteri</i> Coulter's matilija poppy	50%
<i>Salvia munzii</i> Munz's sage	46% ⁶

Resource	Preservation Standard
<i>Selaginella cinerascens</i> ashy spike-moss	50%
<i>Stipa diegoensis</i> [=Achnatherum diegoense] San Diego needle grass	75% ⁵
<i>Solanum xanti</i> [=tenuilobatum] chaparral nightshade [=narrow-leaved nightshade]	N/A*
Sensitive Wildlife Species	
Cooper's hawk <i>Accipiter cooperii</i>	MSCP
Western pond turtle <i>Actinemys</i> [=Clemmys] <i>marmorata pallida</i>	MSCP
Tricolored blackbird <i>Agelaius tricolor</i>	MSCP
Southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	MSCP
Silvery legless lizard <i>Anniella pulchra pulchra</i>	80%
Pallid bat <i>Antrozous pallidus</i> (roosting habitat)	100%
Golden eagle <i>Aquila chrysaetos canadensis</i>	MSCP
Bell's sage sparrow <i>Artemisiospiza</i> [=Amphispiza] <i>belli belli</i>	80%
Long-eared owl <i>Asio otus wilsonianus</i>	100%
Belding's orange-throated whiptail <i>Aspidoscelis hyperythra beldingi</i>	MSCP
Western burrowing owl <i>Athene cunicularia hypugaea</i>	MSCP
San Diego fairy shrimp <i>Branchinecta sandiegonensis</i> (occupied habitat)	95%
Arroyo toad <i>Bufo californicus</i>	MSCP
Coastal cactus wren <i>Campylorhynchus brunneicapillus sandiegonensis</i> (viable populations)	100% ¹⁰
Dulzura pocket mouse <i>Chaetodipus californicus femoralis</i>	80%
Northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	80%
Mexican long-tongued bat <i>Choeronycteris Mexicana</i> (roosting habitat)	100%
Spotted bat <i>Euderma maculatum</i> (roosting habitat)	100%
Big free-tailed bat <i>Nyctinomops macrotus</i> (roosting habitat)	100%
Northern harrier <i>Circus cyaneus hudsonius</i>	MSCP
Coastal whiptail <i>Cnemidophorus multiscultatus tigris</i>	80%
San Diego banded gecko <i>Coleonyx variegatus abbotti</i>	80%

Resource	Preservation Standard
Townsend's western big-eared bat <i>Corynorhinus townsendii townsendii</i> (roosting habitat)	100%
Red diamond rattlesnake <i>Crotalus ruber</i>	80%
San Diego ring-necked snake <i>Diadophis punctatus similis</i>	80%
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	MSCP
California horned lark <i>Eremophila alpestris actia</i>	80%
Coronado skink <i>Eumeces skiltonianus interparietalis</i>	80%
Western mastiff bat <i>Eumops perotis californicus</i> (roosting habitat)	100%
Quino checkerspot <i>Euphydryas editha quino</i>	MSCP for City and 100% for County
Harbison dun skipper <i>Euphyes vestris harbisoni</i>	100%
Yellow-breasted chat <i>Icteria virens auricollis</i>	80%
California mountain kingsnake <i>Lampropeltis zonata</i> (San Diego population)	100%
Loggerhead shrike <i>Lanius ludovicianus</i>	80%
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	80%
Rosy boa <i>Lichanura trivirgata roseofusca</i>	N/A*
Hermes copper <i>Lycaena hermes</i>	100%
California leaf-nosed bat <i>Macrotus californicus</i> (roosting habitat)	100%
Thorne's hairstreak butterfly <i>Mitoura thornei</i>	MSCP
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	80%
Southern grasshopper mouse <i>Onychomys torridus ramona</i>	80%
Pacific pocket mouse <i>Perognathus longimembris pacificus</i>	100%
Coast horned lizard <i>Phrynosoma coronatum</i> (San Diego/blainvillii pop.)	MSCP
Coastal California gnatcatcher <i>Polioptila californica californica</i> (known occurrences)	52% ²
California red-legged frog <i>Rana aurora draytonii</i>	MSCP
Coast patch-nosed snake <i>Salvadora hexalepis virgultea</i>	80%
Yellow warbler <i>Setophaga [=Dendroica] petechia</i>	80%
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	MSCP

Resource	Preservation Standard
Western spadefoot <i>Spea hammondi</i>	80%
Two-striped gartersnake <i>Thamnophis hammondi</i>	80%
Least Bell's vireo <i>Vireo bellii pusillus</i>	MSCP
Sandstone night lizard <i>Xantusia gracilis</i>	80%
Steep Slopes	
Steep Slopes	83%
<p>NOTES:</p> <p>The preservation standards contained within this table represent overall goals for the Otay Ranch Preserve; the standards may be re-evaluated and refined at the project level.</p> <p>* = As shows within Attachment 4, Appendix 1 and Appendix 2, these species were evaluated within the Phase 1 RMP but are no longer considered sensitive</p> <p>¹ = The Preserve has been designed to achieve this standard. However, restoration for impacts is required at a minimum 1:1 ratio to ensure no net loss of wetlands or vernal pools. Mitigation ratios shall be determined by the appropriate public agency at the time of impacts.</p> <p>² = The restoration requirement to achieve this standard was eliminated by County Board of Supervisors General Plan Amendment 06-012 and City Council Resolution 2006-155.</p> <p>³ = 56-acre minimum restoration requirement to achieve this standard.</p> <p>⁴ = The Preserve has been designed to achieve this standard. Restoration for impacts is required at a 1:1 to 3:1 ratio.</p> <p>⁵ = The Preserve has been designed to achieve this standard. However, impacted plants must be re-established or translocated (e.g. salvaged or propagated from seed) into protected open space to achieve this standard, according to the methods specified in the GDP/SRP EIR Findings of Fact.</p> <p>⁶ = The Preserve has been designed to achieve this standard. Restoration for impacts to coastal sage scrub dominated by these species (e.g. greater than 50 percent relative shrub cover) is required at a 2:1 ratio.</p> <p>⁷ = Preservation standard is 100% for the population in the canyon in northeastern Jamul Mountains.</p> <p>⁸ = Preservation standard is 100% preservation is required for the population in the canyon south of the San Diego Air Sports Center. All canyon slopes in this area are required to be preserved in open space to avoid potential impacts.</p> <p>⁹ = This species shall be restored at a 2:1 ratio in drainages that have been disturbed.</p> <p>¹⁰ = Habitat restoration, creation, and enhancement is required for unavoidable impacts to occupied habitat to achieve this standard. Mitigation ratios for occupied habitat and potential habitat will be based on accepted standards by the appropriate agency at the time of impacts.</p>	

Page intentionally left blank