

*Otay Ranch Phase 2
Resource Management
Plan*

DRAFT

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I. Introduction

The goal of the Otay Ranch Resource Management Plan (RMP) is to establish a permanent preserve within Otay Ranch to protect and enhance biological, paleontological, cultural and scenic resources, maintain biological diversity, and promote the survival and recovery of native species and habitats.

The RMP is written in two phases. Whereas Phase 1 establishes the framework for the RMP, the Phase 2 RMP translates Phase 1 policies into specific action programs. The Phase 2 RMP defines specifically how the adopted Phase 1 policies will be implemented.

A. Background**1. Phase 1 Resource Management Plan**

The Phase 1 RMP is a comprehensive plan for the preservation, enhancement and management of sensitive natural and cultural resources within Otay Ranch. The RMP was adopted by the County of San Diego (County) and City of Chula Vista (City), concurrent with the enactment of the Otay Ranch General Development Plan / Subregional Plan (GDP/SRP) in October 1993.

The Phase 1 RMP provides objectives and policies that guide its implementation. The Phase 1 RMP also identified an 11,375 acre preserve (Preserve) to protect and enhance the multiple resources present within Otay Ranch based on the information available at the time of its adoption. The Phase 1 RMP acknowledged that the subsequent Phase 2 RMP would include additional studies and research that would ultimately refine the Preserve boundary. (p. 15, Phase 1 RMP) As anticipated, since the approval of Phase 1 RMP, the Otay Ranch Preserve boundary has been refined through approved Sectional Planning Area (SPA) Plans and associated preserve boundary adjustments (Figure 1). The Otay Ranch Preserve also connects large areas of open space through a series of wildlife corridors.

In addition to the preserve, other "limited development areas" (LDAs) have been designated in the GDP/SRP. Two planning areas contain LDA (Planning Area 16 [370 acres] and Planning Area 17 [795 acres]) totaling 1,165 acres. LDA is a GDP/SRP land use designation within which "removal of native vegetation would be prohibited except as necessary for construction of roads and utilities." "Buildings or other structures, agriculture, landscaping, livestock, grazing, trash disposal or fences" are not allowed within these areas. The GDP/SRP provides LDAs may be included within private lots; however, as noted in the Phase 1 RMP, "these areas are presumed to be in open space," thus, the amount of land preserved in Otay Ranch was anticipated to exceed 12,000 acres.

After the adoption of the GDP/SRP, third party agencies including the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), Caltrans, and the County, acquired

approximately 1,450 acres of land designated as “developable” by the GDP/SRP and an additional approximately 2,020 acres of Otay Ranch preserve open space for conservation purposes. While these conserved lands are not owned or managed by the Otay Ranch Preserve Owner/Manager (POM), their current status as open space, adds to the biological function of the Preserve.

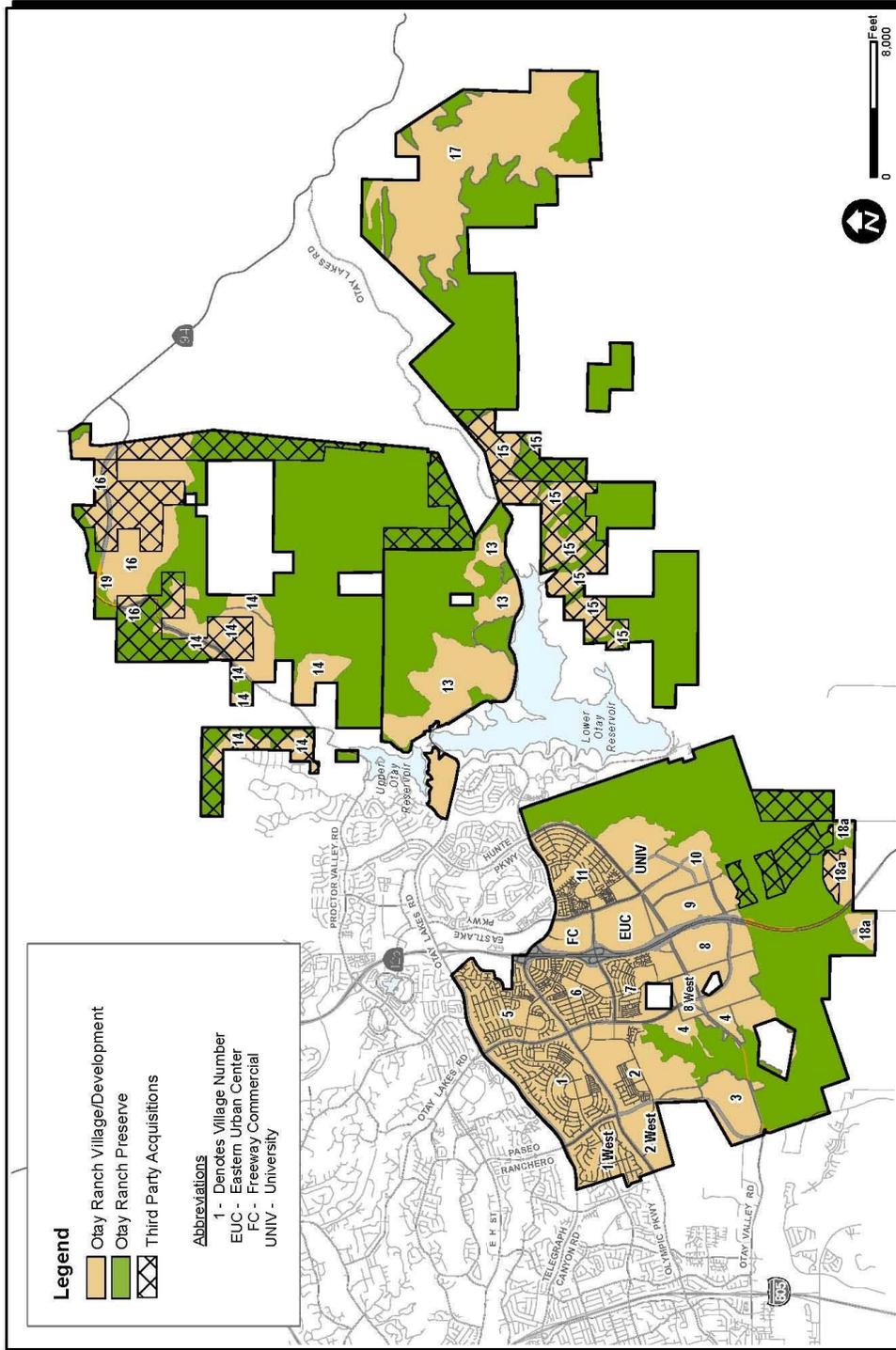


FIGURE 1
Otay Ranch Preserve

2. Phase 2 Resource Management Plan

The GDP/SRP provides that the Phase 1 RMP is to be implemented through the Phase 2 RMP. Unlike the Phase 1 RMP, the Phase 2 RMP is not a single plan or document, but rather a process. That is, the Phase 2 RMP encompasses a series of tasks that must be performed over time throughout implementation of the GDP/SRP. The Chula Vista City Council adopted the Phase 2 RMP on June 4, 1996 in conjunction with the initial Otay Ranch SPA One (Villages One and Five). On March 6, 1996 the County Board of Supervisors adopted segments of the Phase 2 RMP, as follows: identification of the POM, conveyance schedule¹, and the Preserve Funding Program.

Some Phase 2 RMP tasks have been fully satisfied upon the completion of a single study or the creation of a plan (i.e. Otay Valley Parcel Cultural Resource Survey). Other Phase 2 RMP tasks must be completed as a condition of approval of subsequent Otay Ranch SPAs (i.e. SPA Level Cultural Resource Site Testing). Still other Phase 2 RMP tasks must be performed over time, even if there are no pending discretionary actions (i.e. the Biota Monitoring Program). Accordingly, it is incorrect to assume that adoption of this document constitutes satisfaction of all Phase 2 RMP requirements.

Several of the Phase 2 RMP Studies, Plans, and Programs are of such scope and size that they could not be contained in a single document and are therefore presented as appendices to Phase 2 RMP. The appendices are as follows:

- Appendices F1. 1995 Contribution to Ongoing California Gnatcatcher and Cactus Wren Studies, Dudek 1995 (Gnatcatcher and Cactus Wren Studies)
- Appendices F2. Report on the Flora of the Otay Ranch Vernal Pools 1990-1991, San Diego County, California, Dudek 1992 (Vernal Pool Study)
- Appendices F3. Baldwin Otay Ranch Wildlife Corridor Study, Ogden, 1992 (Wildlife Corridor Study)
- Appendices F4. Otay Ranch Raptor Management Study, Ogden 1992 (Raptor Study)

¹ Both the City of Chula Vista and the County of San Diego subsequently amended the GDP/SRP and the RMP 1 and 2 to eliminate the requirement for a conveyance schedule. As such, further references to the conveyance schedule have been deleted from the Phase 2 RMP.

- Appendices F5. Otay Valley Parcel Cultural Resources Systematic Survey, Smith 1995 (Cultural Resources Survey)
- Appendices F6. Vernal Pool Preservation Management Plan, Dudek 1995 (Vernal Pool Management Plan)
- Appendices F7. Range Management Plan, Dudek/Wright 1995
- Appendices F8. Otay Ranch Coastal Sage Scrub and Maritime Succulent Scrub Habitat Replacement Master Plan, Dudek 1995 (Coastal Sage Scrub Master Plan)
- Appendices F9. SPA One 1994/1995 Biological Data Base, Dudek 1995 (SPA One Biological Data Report)
- Appendices F10. Results of an Archaeological Survey and the Evaluation of Cultural Resources at the Otay Ranch Sectional Planning Area One and Annexation Project, Smith 1995 (SPA One Cultural Resources Site Analysis)
- Appendices F11. Biota Monitoring Program, Dudek 1995
- Appendices F12. POM Joint Powers Agreement

To foster a clearer understanding of the Phase 2 RMP document, Table 2 provides a listing of all the Phase 2 RMP tasks. This Table identifies those tasks that are discussed more thoroughly in an appendix, tasks which were completed concurrent with the adoption of the GDP/SRP and tasks which must be performed as a condition of a subsequent approval.

**Table 2
Phase 2 RMP Tasks**

Title	Location
INTRODUCTION	
Resource Agency Consultation	Pages 12/13
Relationship to MSCP	Pages 12/13
RMP Amendments	Pages 13 - 15
Procedures for Ongoing Species Listings	Pages 15/16
PRESERVE MANAGEMENT, CONVEYANCE, FUNDING	
POM JEPA	Appendix 10
Preserve Funding Plan	Pages 26 - 37
RANCH-WIDE PHASE 2 RMP STUDIES, PLANS	
California Gnatcatcher and Cactus Wren Studies	Appendix 1
Vernal Pool Study	Appendix 2 (GDP/SRP)
Wildlife Corridor Study	Appendix 3 (GDP/SRP)
Raptor Study	Appendix 4 (GDP/SRP)
Resource Identification and Mapping	Otay Ranch Program EIR
Otay Valley Parcel Cultural Resources Survey	Appendix 5
Vernal Pool Management Plan	Appendix 6
Range Management Plan	Appendix 7
Maritime Succulent Scrub Master Plan	Appendix 8
Biota Monitoring Program	Appendix 9
Conceptual Infrastructure Plan	Pages 70 -78
Nature Interpretive Center Site Analysis	Pages 79/80
TASKS PERFORMED BY LATER SPAs	
Otay Valley Riparian Habitat Restoration Plan	Later
Demonstration Agriculture Plan	Later
Otay Valley Regional Park Active Use Plan	Later

B. Document Organization

As a dynamic planning process, it is difficult to organize the Phase 2 RMP into a single report. Therefore, this document should be viewed as a status report on the Phase 2 RMP tasks at the time of its approval and updates.

Subsequent SPAs must re-examine the status of some of the Phase 2 RMP tasks. Additionally, some Phase 2 RMP tasks need not be started until the processing of subsequent SPAs, or the occurrence of some other event, such as adoption and implementation of the Otay Valley Regional Park (OVRP) Plan.

This document reflects the fluid nature of many of the topics addressed and therefore is organized to combine tasks which have similar substantive characteristics or procedural requirements.

This document is organized into five chapters:

- Introduction
- Activities Related to Otay Ranch Preserve Management, Conveyance and Funding
- Ranch-wide Phase 2 RMP Studies, Plans and Programs
- Tasks Performed Later

The second chapter, "Introduction," contains background materials and addresses administrative topics. The chapter discusses the background of the Phase 1 and 2 RMPs, the organization of this document, the manner in which State and Federal Resource Agencies have been consulted, the relationship of the RMP to the Multiple Species Conservation Program (MSCP)², and the RMP amendment process and procedures.

The third chapter, "Activities Related to Otay Ranch Preserve Management, Conveyance and Funding" addresses activities related to preserve management, conveyance and funding. This chapter addresses the selection of the POM and the Preserve Funding Plan.

The fourth chapter, "Ranch-wide Phase 2 RMP Studies, Plans and Programs" contains the Ranch-wide Phase 2 RMP Studies, Plans and Programs. The chapter divides these efforts into two categories:

- Ranch-wide Phase 2 RMP Studies

² General reference to the "MSCP" refers to both the Chula Vista Subarea Plan and the County's South County Subarea Plan.

- Ranch-wide Phase 2 RMP Plans and Programs

“Phase 2 RMP Studies” evaluate tasks which provide a data base from which plans and programs are prepared. Once completed, these studies will generally not be revisited. “Phase 2 RMP Plans and Programs” are those efforts which generally require a continuing commitment to implementation.

Four of the “Phase 2 RMP Studies” were completed prior to the adoption of the original GDP/SRP and require no further action. These studies include:

- Vernal Pool Study;
- Wildlife Corridor Study;
- Raptor Study; and
- Resource Identification and Mapping.

The fifth chapter (Tasks Performed Later) identifies tasks listed in the Phase 2 RMP which are not required to be performed as part of the initial SPA plan³. These tasks are referenced in this document to acknowledge their importance and to assure that they are not overlooked later. These tasks include:

- Otay Valley Riparian Habitat Restoration Plan;
- Demonstration Agriculture Plan; and
- The OVRP (OVRP) Active Use Plan.

Each of these tasks relate to future uses within the Otay Valley. The Otay Valley is included within the OVRP Study Area. The OVRP is a multi-jurisdictional planning effort by the County and the cities of San Diego and Chula Vista. In 1990, the jurisdictions entered into a Joint Exercise of Powers Agreement for coordinated planning, acquisition, and design for OVRP.

C. Wildlife Agencies Consultation/Relationship to the Multiple Species Conservation Plan (MSCP)

The GDP/SRP and the Phase 1 RMP contain the following provisions relative to consultation with resource agencies:

³ The Phase 2 RMP initially adopted by the City of Chula Vista included several tasks solely focused on SPA One. Since then SPA One has been fully implemented and its required studies, plans and programs are available for review at the City of Chula Vista Planning Department.

RMP Policy: 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. (Phase 1 RMP Page 118)

Implementation Measure: 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.

The County adopted the South County MSCP Subarea Plan on October 22, 1997, incorporating the Otay Ranch planning area and the RMP. The City adopted the Chula Vista MSCP Subarea Plan on February 13, 2003 also incorporating the Otay Ranch planning area and the RMP.

The Otay Ranch GDP/SRP, when coupled with the Otay Ranch RMP and the Mitigation Measures imposed by the Otay Ranch Program EIR, meets or exceeds virtually all the preservation standards contained in the MSCP.

There was significant coordination between the County, City and the USFWS and the CDFW (collectively referred to as the Wildlife Agencies) in the preparation of the subarea plans thus satisfying the RMP requirements for agency consultation and consistency with regard to open space/resource protection programs.

D. Resource Management Plan Amendments

The GDP/SRP and the Phase 1 RMP contain the following RMP Policy language:

RMP Policy: Provide a regulatory framework for future permitting by resource agencies and amendments to the RMP (RMP Policy 9.6-9.8).

RMP Policies 9.6-9.8 of the RMP describe procedures for RMP amendments. Key features of the RMP amendment process are summarized as follows:

- An RMP amendment shall be required if a change is proposed that would substantially reduce the size or substantially revise the location of the Preserve boundary.
- An RMP amendment shall be required if a change or delay is proposed in the conveyance of all or portions of the Preserve to the POM.
- An RMP amendment shall be required for any permanent or interim land use within the Preserve that is not specifically permitted by Policies 6.1-6.8 and 8.1-8.4 of the RMP.
- Minor preserve boundary modifications do not require an amendment to the RMP.

- The procedures for an RMP amendment shall be the same as those for a SPA amendment and shall require a noticed public hearing by the legislative body having jurisdiction over the land use affected by the amendment.
- All RMP amendments shall be subject to review and comment by the POM, the City and the County.
- Any amendment to the RMP is viewed as discretionary.

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 RMP. The Policy provided that the following procedures shall be followed when processing an amendment to the RMP:

- A. The Department of Planning and Land Use 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 of Chula Vista.
- B. The Planning Commission shall hold a public hearing on the proposed amendment, and after considering recommendations of staff, the City of Chula Vista and any interested persons shall make a recommendation to the Board of Supervisors.
- C. 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 disapprove the proposed amendment.
- D. 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.
- E. 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 San Diego County Administrative Code, to cover all costs of the County associated with processing such application. The Director of Planning and Land Use may require that a deposit of estimated costs be made in advance of work being commenced on such an application.

2. City of Chula Vista

Within the City of Chula Vista, procedures for amending the RMP shall follow those established for amending a General Development Plan, as discussed in Chula Vista Municipal Code Section 19.48.070, listed below:

- A. Following its public hearing, the city council may adopt an amendment to the zoning code 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 40 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.
- B. 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. Except as provided for in CVMC 19.48.160.
- C. 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.

E. Procedures for Ongoing Species Listing

The RMP and the City and County MSCP Subarea Plans provide protection and conservation for species that are not listed as threatened or endangered under the federal or state Endangered Species Acts (ESA).

The City and County Subarea Plans and the Implementing Agreements to those Subarea Plans provide that, to the extent required and permitted by the ESA, the California ESA and the Natural Community Conservation Planning Act (NCCP), the USFWS and CDFW shall take into account the species and habitat conservation provided under the MSCP, including other conservation efforts such as the Otay Ranch RMP, in any future determinations, and in any future recommendations from the CDFW to the California Fish and Game Commission, concerning the potential listing as threatened or endangered of any Covered Species or any other species which is not so listed as of the effective date of the Implementing Agreements for each of the Subarea Plans.

If a Covered Species Subject to Incidental Take is not listed as threatened or endangered under the ESA as of the effective date of the Implementing Agreements, and becomes so listed during the term of the Agreements, then the Section 10(a) Permit shall become effective with respect to such species concurrent with its listing as threatened or endangered. If a Covered Species Subject to Incidental Take is not listed under the CESA as of the effective date of the Implementing Agreements, and becomes so listed during the term of Agreements, then the NCCP Authorization shall become effective with respect to such species concurrent with its listing as threatened or endangered, or its acceptance by the California Fish and Game Commission as a candidate for such

listing. CDFW shall take all necessary steps within its legal authority to make the CESA/NCCP Authorization effective promptly as to Covered Species Subject to Incidental Take accepted by the Commission as a Candidate for listing.

In the event of a listing of a non-covered species, the City and/or County and Wildlife Agencies will jointly identify measures that the City and/or County will follow to avoid take, jeopardy and/or adverse modification of any designated Critical Habitat within the City and County Subarea Plan areas, until and unless the City's and County's permits are amended to include coverage for the newly-listed species or the Wildlife Agencies notify the City and County that such measures are no longer required to avoid jeopardy, take or adverse modification of designated Critical Habitat of the newly listed species.

In this regard, the County is preparing an amendment to the South County MSCP Subarea Plan which will include the Quino checkerspot butterfly as a covered species under the approved MSCP Plan. In addition, it is anticipated that the design and pending discretionary approvals for the Village 13 Resort Community, if adopted, will either separately amend the South County MSCP Subarea plan to provide for coverage of the Quino checkerspot butterfly in Village 13 or otherwise provide for satisfactory protection and/or preservation of the Quino checkerspot butterfly in connection with Village 13. The City's Subarea Plan provides coverage for the Quino checkerspot butterfly.

II. *Activities Related to Otay Ranch Preserve Management, Conveyance and Funding*

The goal of the RMP is to establish a permanent resource preserve dedicated to the protection and enhancement of the biological, paleontological, cultural and scenic resources, maintenance of long-term biological diversity, and the assurance of the survival and recovery of native species and habitats within the resource preserve.

The Phase 1 RMP required that the City and County perform three tasks necessary to initiate the Resource Preserve prior to the approval of the first Otay Ranch SPA. They were to:

1. Select a POM
2. Adopt the conveyance obligation; and,
3. Identify a funding plan.

These tasks are reviewed in this chapter.

A. POM

The GDP/SRP and Policies 5.1 and 5.2 of the Phase 1 RMP state:

Policy: Selection of a POM who is acceptable to the City and the County. Advice of the USFWS and the CDFW will be sought prior to final selection of a POM.

Policy: The POM shall be selected prior to or concurrent with approval of the first SPA in the Phase 2 RMP.

Policy: The POM may be a local government, a public resource agency, a non-profit organization, or any other entity or entities acceptable to the landowner, City and County.

Policy: The POM may be an entity or entities working in a cooperative arrangement to fulfill the duties of the POM.

The POM oversees the day-to-day and long-range activities within the Otay Ranch Preserve. The POM takes an active role in the maintenance and enhancement of biological resources, the development of educational programs, and the implementation of Phase 1 and 2 RMP policies related to management of the Otay Ranch Preserve. The POM participates in the decision-making processes for all activities and amendments to the GDP/SRP or RMP or both that potentially affect the integrity of the Otay Ranch Preserve. The duties and responsibilities of the POM are specified in the Phase 1 RMP Policy 5.2:

RMP Policy 5.2

Define the responsibilities of the POM in the Phase 1 RMP.

Standard: Responsibilities of the POM shall include, but not be limited to, the following:

- 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.
- Monitoring of resources to identify changes in the quality and quantity of sensitive resources and habitats.
- 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 POM).
- 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.
- Development of educational facilities and interpretive programs.
- Implementation and/or accommodation of research programs.
- Coordination with local jurisdictions, resource agencies, and adjacent ownerships.
- Coordination with the OVRP JEP A, or subsequent park planning entity, regarding issues associated with OVRP.
- Enforcement activities.
- 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.

In May 1995, representatives from the County and City conducted candidate interviews for the POM. The Wildlife Agencies, the OVRP Citizen Advisory Committee and representatives from the property owners participated in the interview process.

After the interviews, the County and City jointly concluded that the role of the POM needed to be better defined and that the cost of operating the Preserve needed to be more precisely calculated. It was further concluded that none of the candidates demonstrated the range of skills and experience necessary to permanently perform the POM function. Additionally, many of the candidates expressed discomfort at being asked to make a long term commitment to an

11,375 acre Preserve without better definition of the resource preserve and attendant POM responsibilities.

In response to these issues, the County and City agreed that it was best suited to select themselves as the POM until greater information was known about the scope and nature of the Preserve. The allocation of POM responsibilities was jointly prepared by a City Council Ad Hoc Committee comprised of the Acting County Planning Director, the Acting County Parks Director, the Chula Vista Parks Director and the Executive Director of the Chula Vista Nature Interpretive Center. The County and City executed a Joint Powers Agreement for the planning, operation and maintenance of the Otay Ranch Preserve in March 1996 and has served as the POM since that time.

The following are the elements of the POM Management Structure adopted by the City and County:

- The City and the County jointly name each other as the Otay Ranch POM (reviewed every 5 years).
- The City and the County execute a joint powers agreement to delineate their respective roles and responsibilities.
- Property conveyed to the interim POM be conveyed to the City and the County with an undivided interest.
- The City and County jointly exercise responsibility and authority to review and comment on the various tasks, plans and programs identified in the RMP.
- The Board of Supervisors designates the Chief Administrative Officer to exercise the review and comment authority described above.
- The Chula Vista City Council designates the Chula Vista City Manager as authorized to exercise the review and comment authority described above.
- The City and the County will retain independent authority to contract with other parties to perform their respective allocated POM tasks.

1. POM Preserve Stewardship and Public Policy Responsibilities

The POM's responsibilities can be separated into two categories – preserve stewardship and public policy. Stewardship tasks involve on-the-ground management of the Preserve's property such as preserve maintenance, restoration, and monitoring; regulating public access and controlled burning; managing preserve education, research and interpretive programs and performing law enforcement. Public policy tasks are those instances where the RMP establishes the POM as an advisor to the City and/or the County (acting jointly or individually)

when those jurisdictions make public policy decisions affecting the Preserve, such as commenting on RMP amendments, edge plans, construction and improvement plans, mitigation requirements and Preserve budgets.

Table 3 identifies the specific RMP Policies Standards and Guidelines by each of these two categories.

Table 3
RMP Policies, Standards, or Guidelines as they apply to the POM

Stewardship Tasks	
2.14 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 POM and/or the OVRP 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.
3.2 Policy	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 POM and the appropriate jurisdiction. Implementation of such restoration programs shall be by an appropriate entity acceptable to the POM and the appropriate jurisdiction.
3.3 Policy	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.
3.8 Policy	In coordination with USFWS and CDFW, the POM 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.
5.2 Standard	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.
5.2 Standard	Monitoring of resources to identify changes in the quality and quantity of sensitive resources and habitats.
5.2 Standard	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 POM).
5.2 Standard	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.
5.2 Standard	Development of educational facilities and interpretive programs.

5.2 Standard	Implementation and/or accommodation of research programs .
5.2 Standard	Enforcement Activities .
5.3 Guideline	POM shall have the authority to curtail or restrict activities or uses that are shown to have a temporary or long term negative impact on resources within the Preserve.
5.12 Guideline	A draft funding program shall be submitted for review in conjunction with review of the first SPA. The draft document shall be reviewed and adopted by the City and County, with the concurrence of the POM and interested agencies. A final funding program shall be adopted prior to or concurrent with the approval of the first SPA. The program shall include (1) all sources of funding (not reliant on City or County general funds); (2) a five-year management plan; (3) a five-year budget; (4) proposed staffing; and 5) provisions for availability of initial start-up funds upon conveyance of the first parcel to the Preserve.
6.1 Policy	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.
6.1 Standard	Under the direction of the POM, an interpretive center(s) shall be constructed to display and interpret the biological, paleontological, and cultural resources present on Otay Ranch.
6.1 Standard	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.
6.1 Standard	The sale of educational materials, books, and plants shall be allowed.
6.3 Guideline	The POM may establish appropriate daily and seasonal limits on trail use in consultation with the appropriate jurisdictions.
6.5 Guideline	The POM shall be responsible for identifying and designating restricted use areas based on biological sensitivity.
6.5 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 POM.
6.5 Guideline	Controlled access for scientific research and educational purposes shall be allowed at the discretion of the POM.
6.5 Guideline	The POM shall have the authority to prohibit uses that have a negative effect on sensitive resources. If such negative effects are determined to be caused by an existing use, the POM shall notify the appropriate jurisdiction before taking action.
6.8 Standard	Where and when it is deemed appropriate for the enhancement of biological resources by the POM, and subject to review by the County and the City with advice from the Wildlife Agencies, controlled burning shall be conducted within the Preserve.

Public Policy Tasks	
5.2 Standard	Coordination with local jurisdictions, resource agencies , and adjacent ownerships.
5.2 Standard	Coordination with the OVRP JEPA , or subsequent park planning entity, regarding issues associated with OVRP.
5.2 Standard	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.
5.4 Guideline	The Preserve's monitoring program shall be submitted with the Phase 2 RMP with input from the

	Preserve Manager.
5.6 Policy	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.
5.12 Guideline	Identify the costs related to RMP planning, design, research, construction, and management activities and develop a funding strategy.
6.2 Standard	Siting and design of active recreational uses shall be subject to review and comment by the POM in consultation with the JEPA of the OVRP and shall be consistent with plans for the OVRP when adopted.
6.3 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 POM and resource agencies.
6.6 Guideline	Infrastructure plans and their implementation shall be subject to review and comment by the appropriate jurisdictions in coordination with the POM.
6.6 Guideline	CEQA mitigation requirements for impacts associated with infrastructure shall be reviewed by the appropriate jurisdictions and the POM if such improvements are located within the Preserve.
7.1 Policy	All development plans adjacent to the edge of the Preserve shall be subject to review and comment by the POM, the City of Chula Vista, and the County of San Diego to assure consistency with resource protection objectives and policies.
8.3 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 POM.
8.4 Standard	A Range Management Plan , which will depict the allowable interaction between grazing activity and 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 POM, the City and the County.
9.6 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 POM, by the City of Chula Vista, and by the County of San Diego.
9.8 Standard	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 POM, shall require written approval by both the City and the County.

B. Otay Ranch Preserve Conveyance

1. Preserve Conveyance

Establishment of the conveyance obligation within Otay Ranch requires the resolution of three issues:

- How much land must each village convey to ensure the eventual conveyance of the Otay Ranch Preserve to the POM?
- What governmental approval triggers actual conveyance of land to the POM?
- How much land will be conveyed on a village by village basis?

a. Original Calculations (1996)

The GDP/SRP as adopted in 1993 permitted 11,524 acres of land to be developed and required 11,375 acres of land to be conveyed for the Otay Ranch Preserve. Thus, it appears reasonable to conclude that for each acre of development, roughly one acre of preserve land should be conveyed.

However, this conclusion assumes that all land development in each village should have an equal obligation to convey land. This is not the case because some villages contain lands for facilities which will serve more than the residents of that village. Such facilities include local parks, schools, arterials, and lands designated as a public use area (Otay Valley Water Reuse Site). This analysis refers to the lands as "common uses."

The common use problem is solved by deleting common use acreage from village development totals and apportioning the obligation to convey land for the development of such areas to all the villages.

A second allocation problem must also be addressed. Two planning areas contain "Limited Development Areas" (LDAs) (Planning Area 16 [370 acres] and Planning Area 17 [795 acres]). LDA is a GDP/SRP land use designation within which "removal of native vegetation would be prohibited except as necessary for construction of roads and utilities." "Buildings or other structures, agriculture, landscaping, livestock, grazing, trash disposal or fences" are not allowed within these areas. The GDP/SRP provides that LDAs may be included within private lots; however, these areas were not identified as part of the Otay Ranch Preserve.

Thus, while these areas are restricted natural open space, they are deemed to be areas subject to development by the GDP/SRP acreage calculations. It would be unreasonable to require the

conveyance of land to the Otay Ranch Preserve, upon the subdivision of LDAs (private open space) into private lots.

The LDA problem is solved by deleting the LDA acreage from the village development totals. This increases the preserve conveyance obligation for the remaining development areas of Otay Ranch.

Application of the proposals discussed above related to common use and LDA lands resulted in a conveyance obligation of 1.188 acre conveyed per every acre of development. Under this approach, land would not be conveyed upon the development of “common use land” or the subdivision of LDA land into private lots.

b. Updated Forecast

The Otay Ranch Phase 1 RMP identified an 11,375 acre Preserve when adopted in 1993. In 1996 the Phase 2 RMP identified a conveyance requirement of 1.188 acres of conveyed land for every acre of developed land contained in a final map. Since the enactment of Phase 1 and 2 RMPs, Otay Ranch SPA plans and County General Plan Amendments have been adopted. This included the elimination of approximately 139.7 acres of developable land in Village 13 and 90.5 acres in Village 15, as memorialized in the South County MSCP Subarea Plan and County General Plan Amendment 98-03. These areas are now in the MSCP preserve.

Table 4 identifies actual conveyance, pending and forecasted conveyance on a parcel-by-parcel basis, updated to reflect the current status of Otay Ranch plans. Table 4 shows the conveyance obligation associated with each of the three Otay Ranch parcels (Otay Valley, Proctor Valley and San Ysidro Mountains) because prior SPA Plans in the Otay Valley Parcel changed the boundaries of villages at the time they were approved.

**Table 4
Otay Ranch Preserve Land by Parcel (Acres)**

Parcel	Total	LDA	Common	Total – (LDA + Comment)	Conveyance
Otay Valley Parcel	5,879.4		1,044.2	4,835.2	5,744.2
Proctor Valley Parcel	2,833.2	370.0	55.8	2,407.4	2,860.0
San Ysidro Mountains Parcel	2,411.0	795.0	15.0	1,601.0	1,902.0

TOTAL	11,123.6	1,165.0	1,115.0	8,843.6	10,506.2
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The difference between the conveyance identified in Table 4 and the 11,375 acre Preserve identified in the Phase 1 RMP is due to several factors:

- The amount of common use areas was greater than anticipated. The original Phase 2 RMP identified 735 acres of Common Use in the Otay Valley Parcel; however, approved and projected SPA Plans include a total of 1,044.2 acres of Common Uses.
- The Otay Ranch GDP/Otay SRP was done at 1,000-scale which produced very coarse data whereas subsequent conveyances have been based on more precise engineering through Final Mapping. At the time the initial Phase 2 RMP was approved, it was acknowledged that as SPA plans are processed, the actual conveyance obligation may vary slightly from the forecast referenced above due to more precise planning and engineering.

Development projects outside of Otay Ranch can and have acquired Otay Ranch preserve land as mitigation for those projects’ impacts. It is conceivable that any acreage anticipated to be conveyed to the Otay Ranch POM can be offset through implementation of the Non-Otay Ranch Mitigation Lands program whereby these lands could be conveyed to the POM in satisfaction of mitigation required for projects outside of Otay Ranch.

2. Conveyance Timing

Prior to final map recordation, the applicant shall convey to the POM fee title (free and clear of all encumbrances) to the amount of land that the related final map requires to be conveyed to the Preserve per the Phase 2 RMP. Irrevocable Offers of Dedication (IOD) may be used only in certain limited circumstances with the prior consent of the POM. Circumstances that may warrant acceptance of an IOD include where there are outstanding restoration requirements pertaining to the land to be conveyed or where the land to be conveyed is in excess of the conveyance requirement and there is no existing funding to allow the POM to manage the land. Each tentative map shall be subject to a condition requiring an entity, subject to the approval of the POM, to execute a maintenance agreement with the POM. The agreement shall require the entity to maintain the conveyed parcel(s) until the Community Facilities District (or other

funding mechanism) has generated sufficient revenues to enable the POM to assume maintenance responsibilities.

Prior to acceptance of any proposed conveyance lands by the POM, the property owner must provide evidence that the lands are free of hazardous materials, as documented in a Phase I Site Assessment complying with ASTM E 1528-96 and/or ASTM E 1527-97 (referenced in County Administrative Manual 0300-05). The property owner shall fund such studies, employing a professional firm approved to provide such analyses. Additionally, prior to acceptance of any proposed conveyance lands by the POM, the property owner must provide evidence that legal and physical access exist to the property site.

3. Permitted Uses

Uses permitted within conveyed land must comply with the provisions of the GDP/SRP (See GDP/SRP Part II, Chapter 10, Section 6). Seven broad categories of permitted uses are summarized below:

- Open space, including preservation, recreation and education, study and research, and management of environmental resources;
- passive recreation;
- Infrastructure consistent with approved GDP/SRP plans;
- Interim agricultural uses consistent with the Range Management Plan;
- Active recreation (194 acres pursuant to the Chula Vista MSCP and General Plan);
- A university within the areas designated within the GDP/SRP Land Use Map (excluding structures within the Salt Creek Canyon) and Chula Vista MSCP and;
- An Interpretive Center.

The GDP/SRP allows certain uses in the Preserve. The POM may allow any and all of these uses within conveyed lands subject to the criteria and conditions of the GDP/SRP. The Phase 2 RMP designated the City and the County to act as the POM for a 30 year duration, to be reviewed every five years. During this period, the POM will sell, lease or gift areas of conveyed land to a third party for the purposes of pursuing any of these permitted uses upon direction by the City and County. The City and County may consider designating such a third party as the POM for such conveyed areas and for such uses.

4. Non-Otay Ranch Project Mitigation Lands Program

On July 17, 2008 the POM Policy Committee adopted the Non-Otay Ranch Project Mitigation Lands Program. The program establishes eligibility and review criteria by which the POM may consider accepting management and monitoring responsibilities of lands used for mitigation for non-Otay Ranch projects.

C. Otay Ranch Preserve Funding Program

The GDP/SRP and the Phase 1 RMP contain the following Policy language:

RMP Policy 5.12: A draft funding program shall be submitted for review in conjunction with the review of the first SPA. The draft document shall be reviewed and adopted by the City, County, with the advice and consultation of the POM and interested agencies. A final funding program shall be adopted prior to or concurrent with the approval of the first SPA. The program shall include (1) all sources of funding (not reliant on City or County general funds); (2) a five-year management plan; (3) a five-year budget; (4) proposed staffing; and (5) provisions for availability of initial start-up funds upon conveyance of the first parcel to the Preserve.

1. Funding Program Context

Upon buildout of Otay Ranch, the Otay Ranch Preserve will be the largest urban open space system in San Diego County. The preserve's proximity and relationship to adjacent Bureau of Land Management land and other open space systems provides the opportunity for the Otay Ranch Preserve to be part of an unparalleled open space system. It is therefore foreseeable that the Otay Ranch Preserve will evolve into a complex system within which a variety of activities will be performed and relationships established. The purpose of this funding section is to identify forecasted Otay Ranch Preserve costs, identify funding sources and prepare an anticipated budget for the preserve system. The primary focus of the funding plan is to specify the financial relationships between the Otay Ranch properties⁴, the Otay Ranch Preserve and the POM. However, this discussion should occur in a context of the relationship between the Otay Ranch Preserve and other activities. Specifically, the Otay Ranch Preserve Funding Program must consider the following topics.

- The multiplicity of interested parties.
- The relationship between the Otay Ranch Preserve and the OVRP.
- The relationship between the Otay Ranch Preserve and the MSCP.

⁴The phrase "Otay Ranch properties" refers to the current and future ownerships of Otay Ranch lands.

- The relationship between the Otay Ranch Preserve and adjacent open spaces (currently owned and/or managed by the USFWS, the San Diego National Wildlife Refuge, CDFW, BLM, and the City of San Diego Water Department).
- The relationship between the Otay Ranch Preserve and opportunities to expand the preserve beyond those activities which are the responsibilities of the Otay Ranch properties (through enhanced opportunities or regional benefits).

Table 5 graphically organizes the multiplicity of issues and relationships related to the funding of the Otay Ranch Preserve and the POM. The Table examines which entity is responsible for the performance of specific tasks and which entity is responsible for the funding of specific tasks.

Table 5 is divided between those tasks for which there is a nexus between the tasks to be performed and the Otay Ranch properties. In those instances where there is an established nexus, the Otay Ranch properties are directly responsible for the performance of the task or responsible to provide the funding for the performance of the task by a third party (usually the POM).

Table 5 also identifies tasks for which there are no nexus between the Otay Ranch properties and the Otay Ranch Preserve. These tasks are divided into three categories: Enhanced Otay Ranch Preserve Opportunities, OVRP and Regional Opportunities.

Table 5

Otay Ranch Preserve Funding/Performance Context

Task	Otay Ranch Properties Nexus		Non-Otay Ranch Properties Nexus		
	Pre-Conveyance	Post-Conveyance	Enhanced* Opportunities	Regional Park	Regional Opportunities***
Property Acquisition	N/A	N/A	Performance: POM Funding: MSCP, Banking, Grants	N/A	Performance: POM Funding: MSCP, Banking, Grants
Capital Costs (trails, fences, etc.)	Performance and Funding: Property Owner	Performance: POM Funding: DIF or HMF or Other Assessment**	Performance: POM Funding: MSCP, Banking, Grants	Performance and Funding: Park Owner/ Operator	Performance: POM Funding: MSCP, Banking, Grants, General Fund, Contribution
Operations and Maintenance	Performance and Funding: Property Owner	Performance: POM Funding: DIF, HMF or Other Assessment	Performance: POM Funding: MSCP, Banking, Grants	Performance and Funding: Park Owner/ Operator	N/A
Revegetation/ Restoration	Performance and Funding: Property Owner (as related to impact mitigation)	Performance and Funding: Property owner (as related to a project's mitigation)	Performance: POM Funding: MSCP, Banking, Grants	None required	Performance: POM Funding: MSCP, Banking, Grants, General Fund Contributions
Other Plans or Studies (vireo, grasslands, etc.)	Performance and Funding: Property Owner (SPA by SPA)	None required	Performance: POM Funding: MSCP, Grants	None required	Performance: POM Funding: MSCP, Grants

*Enhanced - Increases in preserve boundaries or activities by reducing development, expediting conveyance, providing enhanced or new management, monitoring, research, instructive or educational programs, maximization of impact avoidance.

**CFD - Development Impact Fee; HMF - Habitat Maintenance Fee

***The extent to which the Otay Ranch Preserve, its improvements and programs benefit residents beyond Otay Ranch.

a. Enhanced Opportunities

Enhanced opportunities are those that occur to increase the Otay Ranch Preserve boundaries or activities related to providing funds for greater or new management, monitoring, research, restoration or educational programs. Enhanced opportunities could also include increasing Otay Ranch Preserve boundaries by preserve acquisition of otherwise developable property or by expediting conveyance. These enhanced opportunities are not the responsibility of the Otay Ranch properties but may be accomplished through, and by third parties (the MSCP, banking, grants, third-party acquisitions or General Fund contributions).

b. Otay Valley Regional Park (OVRP)

Within the Otay Ranch Preserve, 194 acres may be used for active recreation use within the OVRP. The County and the cities of Chula Vista and San Diego are currently jointly planning the park through the OVRP Joint Exercise of Power Authority (JEPA).

The GDP/SRP did not address the relationship between the Otay Ranch Preserve and the OVRP planning effort. However, it is anticipated that the Otay Ranch properties will convey land in fee to the POM. The POM would hold title to the land, and permit (through a lease or some other instrument) active recreation sites to operate within the Otay Ranch Preserve.

Neither the GDP/SRP, nor any other City or County program, require the Otay Ranch properties to fund the construction, operation or maintenance of a regional park facility. Additionally, while the GDP/SRP requires the identification of a nature interpretive site, neither the GDP/SRP nor any other City or County regulation require the Otay Ranch properties to construct such a center or pay for the construction, operation or maintenance of such a facility.

Thus, an issue to be addressed by the POM and the members of the OVRP JEPA at some future date is clarification of the relationship between the Otay Ranch Preserve and the regional park, and identification of funding sources for park construction, operation and maintenance.

c. Regional Opportunities

As discussed throughout this document, the Otay Ranch properties have an obligation to convey preserve land to the POM for the purposes of establishing an Otay Ranch Preserve. However, the creation of the Otay Ranch Preserve establishes a location and organizational framework within which properties other than Otay Ranch or entities other than the City and the County can contribute additional lands or Otay Ranch Preserve improvements to build an open space system of benefit to the entire region.

d. San Diego National Wildlife Refuge

The San Diego National Wildlife Refuge is located in Southwestern San Diego County, and currently includes approximately 9,471 acres (See Figure 6).

The purpose of the Refuge is to protect, manage, and restore habitats for federally listed endangered and threatened species and migratory birds and to maintain and enhance the biological diversity of native plants and animals.

The stated goal of the Refuge is to protect wildlife resources of national importance while providing compatible opportunities for the public to appreciate and enjoy the natural heritage of the region, as follows⁵:

- Protect, restore, and enhance native habitats to aid in the recovery of federally listed endangered and threatened species and to prevent the listing of additional species.
- Protect, manage, and restore the rare coastal sage scrub, chaparral, riparian woodland, vernal pools, coastal dune, and wetland habitats representative of the biological diversity of the southwestern San Diego region.
- Provide leadership in coordinating the land management activities of Federal, Tribal, State, and local governments and agencies, and with academia, private conservation organizations, and citizens in support of the Multiple Species Conservation Program preserve system.
- Provide breeding, migration, and wintering habitat for migratory birds, with emphasis on seabird and shorebird breeding habitat, and wintering waterfowl habitat.
- Provide safe and high quality opportunities for compatible wildlife-dependent educational and recreational activities that foster public appreciation of the unique natural heritage of the San Diego region.

⁵ *San Diego Nation Wildlife Refuge (San Diego, California, February 26, 2015)*

The establishment of a Refuge boundary only allows the USFWS to acquire lands from willing sellers at fair-market value or to enter into management agreements with interested landowners. An approved Refuge boundary does not grant the USFWS jurisdiction or control over lands within the refuge boundary, and it does not make lands within the refuge boundary part of the National Wildlife Refuge System. Lands do not become part of the National Wildlife Refuge System until they are purchased or are placed under an agreement that provides for management as part of the refuge system.

No new or additional zoning laws would be imposed by the USFWS within the approved Refuge boundary. Any landowner within an approved refuge boundary retains all existing rights, privileges, and responsibilities of private-land ownership as determined by local, city, or county jurisdictions. Lands remain under the control of the owner until management rights or the property has been transferred to or has been purchased by the USFWS.

Unlike other Federal lands which are managed under a multiple-use mandate (e.g., national forests administered by the U.S. Forest Service and public lands administered by the U.S. Bureau of Land Management), units of the National Wildlife Refuge System are managed as primary use areas. That is, they are managed primarily for the benefit of fish, wildlife, and their habitats; and secondarily for other uses. Refuges are closed to other uses unless specifically and formally opened.

Before secondary uses are allowed on national wildlife refuges, Federal law requires that they be formally determined to be "compatible" with the purpose for which the refuge was established. For recreational uses to be allowed, a Refuge Manager must further determine adequate funding and staffing is available for the development, operation, and maintenance of the activity.

If portions of the Otay Ranch Preserve are included in the San Diego National Wildlife Refuge, the duty to maintain and operate those portions of the Otay Ranch Preserve would become the obligation of the USFWS or its designees.

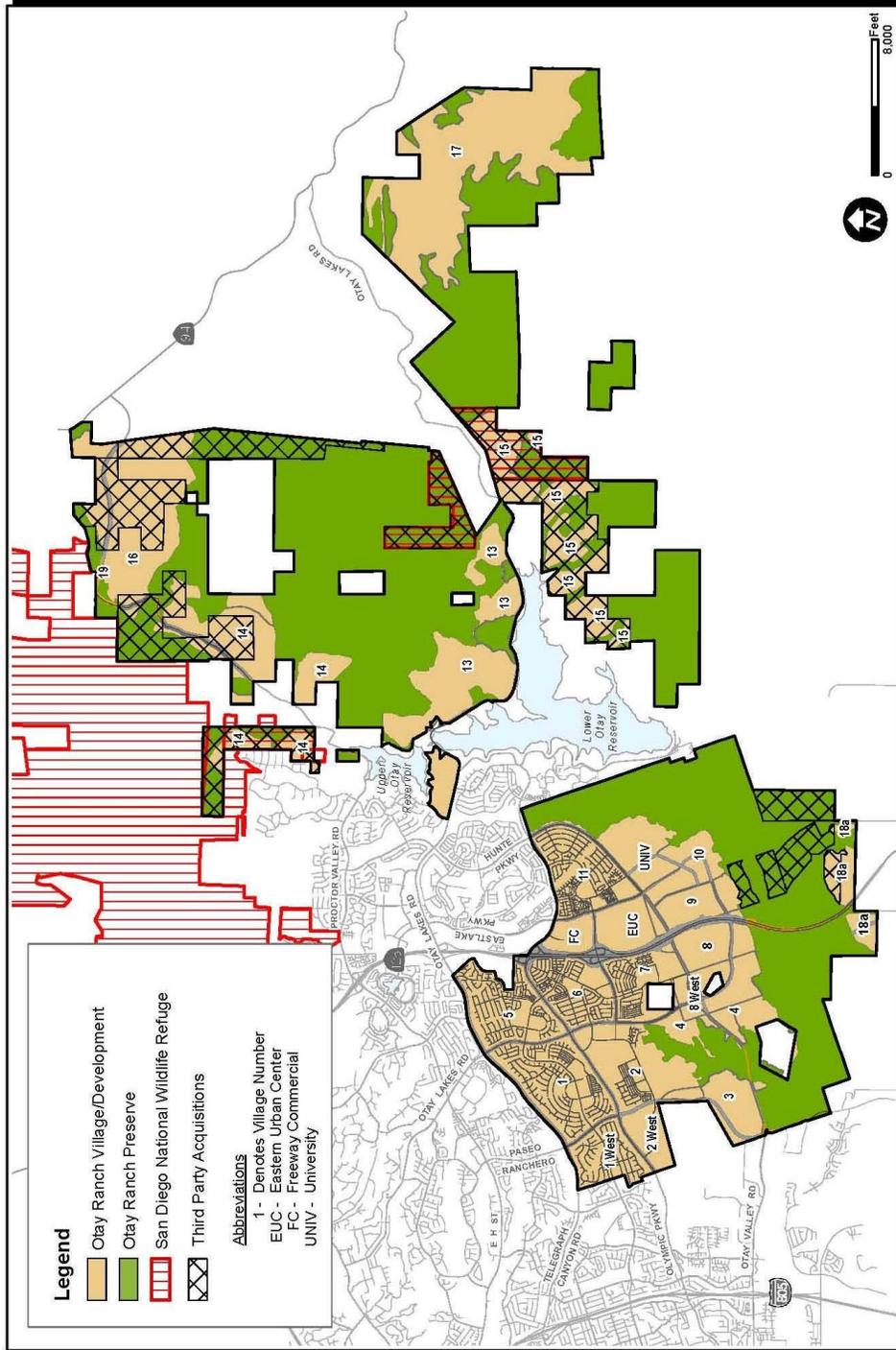


FIGURE 6

San Diego National Wildlife Refuge

e. Bureau of Land Management – Otay Mountain Wilderness

The Otay Mountain Wilderness was established on December 11, 1999, by Public Law 106-145 and protects approximately 16,893 acres⁶ of public lands in southwestern San Diego County. BLM wilderness areas are to be managed in accordance with the Wilderness Act of 1964, and 43 CFR 6300: *BLM Management of Designated Wilderness Areas*. The challenge for BLM in the Otay Mountain Wilderness is to maintain its wilderness values while meeting the needs of the local communities and jurisdictions for habitat conservation, law enforcement, fire management, and recreation.

The designating legislation made several findings regarding the area. Congress recognized that: 1) The Otay Mountain region is one of the last remaining pristine locations in western San Diego County, California; 2) The area is internationally known for its diversity of unique and sensitive plants; 3) The area plays a critical role in maintaining species biodiversity, as outlined in San Diego County's multi-species conservation plan; 4) Its proximity to the international border makes the area the focus of important law enforcement and border interdiction efforts which protect the area's wilderness values; and 5) The area presents unique fire management challenges for protecting lives and resources.

If portions of the Otay Ranch Preserve are included in the Otay Mountain Wilderness area, the duty to maintain and operate those portions of the Otay Ranch Preserve would become the obligation of BLM.

f. Otay Ranch Properties

The GDP/SRP established several tasks which are the direct or indirect responsibility of the Otay Ranch properties. Direct responsibility would be those tasks which would be performed by current or future Otay Ranch property owners. Indirect obligation would be those tasks which would be funded by current and/or future Otay Ranch property owners through a land based assessment. The broad tasks which are the responsibility of Otay Ranch property owners are as follows.

- Conveyance of land,
- Funding of the operation and maintenance of the Otay Ranch Preserve,
- Funding of a Biota Monitoring Program,
- Performance or funding of restoration programs.

The Otay Ranch Preserve funding program is based on the assumption that Otay Ranch properties will directly convey Otay Ranch Preserve land to the POM without financial consideration.

⁶ <http://www.wilderness.net/NWPS/wildView?WID=433> (February 26, 2015)

Relative to capital costs, the Otay Ranch funding program is based on the assumption that prior to conveyance of land to the POM, it is the obligation of the Otay Ranch properties to maintain the land until the POM assumes maintenance responsibilities. This includes construction of fencing necessary to protect the property. After conveyance of the property, it is the obligation of the POM to perform capital improvements and the obligation of Otay Ranch properties to fund such improvements to the extent that there is a relationship between the improvements and the approved development (i.e., there is no obligation to fund regional park capital improvements or any capital improvements beyond those contemplated in the GDP/SRP). Subsequent to conveyance, it is the obligation of the POM to perform operation and maintenance tasks. It is the obligation of the Otay Ranch properties to pay for operation and maintenance.

It is the obligation of Otay Ranch properties to revegetate and restore Otay Ranch Preserve lands to the extent required by the GDP/SRP prior to conveyance to the POM. The obligation of Otay Ranch properties to restore habitats is determined on a SPA by SPA basis (RMP Policy 3.5 and 3.6), and shall be designed and sized to mitigate for disturbance of sensitive habitats associated with SPA development (RMP Policy 3.2). Subsequent to conveyance, the Otay Ranch funding plan assumes that it is the continuing obligation of the property owner to restore and/or revegetate land consistent with the requirements of the GDP/SRP through the direction of the POM.

2. Estimated Otay Ranch Preserve Monitoring and Management Costs

The original Phase 2 RMP estimated costs for the POM to monitor and manage the Otay Ranch Preserve. Since that time, the POM has adopted a budgeting process, collected tax revenues to fund on-the-ground activities, and appointed a Preserve steward to implement the monitoring and maintenance programs.

Annual budgets for operations/maintenance and resource monitoring activities are determined by the POM through the preparation of an annual work plan. This work plan serves as a supplement to the Otay Ranch RMP, identifying the adaptive management and monitoring activities to be conducted by the Preserve steward throughout the fiscal year. Each year, the annual work plan and associated operating budget is presented to the Otay Ranch Preserve Management Team and Policy Committee for its review. Following approval by the Otay Ranch Management Team and Policy Committee, the operating budget is incorporated into Community Facilities District (CFD) 97-2 budget, which is ultimately adopted by Chula Vista City Council as part of the City's annual budget process.

3. Funding Program

As noted above, short-term management, which includes restoration and/or maintenance required to be completed as part of conditions of development project entitlement approvals, is financed and implemented by the property owner. Once the land has been dedicated and conveyed into the Preserve, long-term management begins under the authority of the POM.

The operations of the POM are currently financed by CFD 97-2, a tax assessment on all developed parcels within Otay Ranch. In 1998, the City adopted by resolution the Preserve Maintenance District, CFD 97-2 and Special Tax Report for the purpose of creating perpetual funding source for maintaining preserve areas which have been conveyed to the POM in accordance with the Otay Ranch RMP Phase 1 and Phase 2.

CFD 97-2 funds are collected through a special tax that is levied annually on each taxable property within Otay Ranch. Revenues generated through the CFD are utilized to implement the Preserve operations/maintenance and resource monitoring requirements of the Otay Ranch RMP. Revenues from CFD 97-2 may be used for preserve maintenance, operation and management, biota monitoring, and preserve security including ordinary and necessary administrative expenses.

As development occurs within unincorporated lands, the County will require the creation of a Community Facility District or like funding mechanism similar to the City's CFD 97-2 to fund the management and monitoring of conveyance lands associated with the development.

4. Otay Ranch Preserve Budget

The POM budget for the 2014/2015 fiscal year is estimated at \$717,500, including an approximately \$200,000 Capital Improvements Project (CIP) for access control. The average annual budget has remained at approximately \$500,000, which is inclusive of POM administrative costs, due to limited new construction between 2007 and 2014; however, as new development occurs, it is anticipated that the total budget will grow proportionately.

Throughout each fiscal year, funds are used for POM administration and continued biological resource monitoring, operation, and maintenance of conveyed Preserve lands including, but not limited to, access control measures, biological resource surveys, invasive species treatment, land stewardship, and annual reporting.

The City (on behalf of the Otay Ranch POM) contracted a Preserve Steward/Biologist (PSB). The PSB's role is to perform annual Preserve stewardship and conduct required biological surveys and monitoring pursuant to the annual work plan approved for the corresponding fiscal year. The following summarizes the operations/maintenance and resource monitoring activities performed by the Preserve steward during the 2014-15 Fiscal Year:

a. Preserve Operations/Maintenance

- Access Control
 - Coordinate with U.S. Border Patrol (USBP), USFWS, CDFW, and County Sheriff
 - Fence and sign installation and repair
- Invasive Species Treatment
 - Non-native vegetation treatment and removal
 - Brown headed cowbird trapping

b. Preserve Resource Monitoring

- Surveys
 - Coastal California gnatcatcher
 - Coastal Cactus Wren
 - Quino checkerspot butterfly
 - Least Bell's vireo & yellow-billed cuckoo
 - Focused rare plant

- Land Stewardship
 - Site visits

- Meetings and Coordination
 - San Diego Management and Monitoring Program (SDMMP)
 - South County Land Managers (SCLM)
 - Environmental Mitigation Program Working Group (EMPWG)
 - POM PMT/PC

- Reporting and Regional Database Contributions
 - Annual Work Plans
 - Pre- and post-notification/survey reports
 - Data contributions to CNDDB, SanBios, and SC-MTX

III. Ranch-Wide Phase 2 RMP Studies, Plans and Programs

This chapter contains the Ranch-wide Phase 2 RMP studies, plans and programs, organized into two categories:

- Ranch-Wide Phase 2 RMP Studies
- Ranch-Wide Phase 2 RMP Plans and Programs

The Ranch-wide Phase 2 RMP Studies section reviews studies which provide a data base from which plans and programs are prepared. Once completed, these tasks will not be revisited.

Four of the “Phase 2 RMP Studies” were completed prior to adoption of the original GDP/SRP and require no further action. These studies include:

- Vernal Pool Study
- Wildlife Corridor Study
- Raptor Study
- Resource Identification and Mapping

The Phase 2 RMP Plans and Programs section includes those efforts which generally require a continuing commitment to implementation.

A. Ranch-Wide Phase 2 RMP Studies

1. Ongoing California Gnatcatcher and Cactus Wren Studies (Appendix 1.) 1995 Contribution to Ongoing California Gnatcatcher and Cactus Wren Studies

The GDP/SRP and Phase 1 RMP contain the following Policy language:

RMP Policy 1.2: The following studies shall be completed by the landowner prior to or concurrent with the first SPA in the Phase 2 RMP. Habitat and Population Studies on California Gnatcatcher and Cactus Wren (ongoing studies over 35-year period).

a. Purpose

The purpose of ongoing studies of the coastal California gnatcatcher (*Poliioptila californica californica*; CAGN) and the cactus wren (*Campylorhynchus brunneicapillus*; CAWR) is to obtain data to be used to assess the long-term viability of these species on the Ranch and to provide additional insight into habitat requirements. A primary focus of these studies is to detect significant changes (versus annual population fluctuations) in the population status of these species.

Data from long-term habitat and population studies will demonstrate if the goals of the RMP are being met for long-term viability of CAGN and CAWR. Monitoring may provide feedback on management activities, resulting in recommendations for changes or improvements in restoration and management

strategies. In addition, long term studies aid the scientific community by contributing basic knowledge on the productivity and demography of the species and their relationship to the habitat.

One of the goals of the RMP is to provide long-term protection for CAGN and CAWR. Uniform population surveys of selected study sites will demonstrate if the ranch-wide population numbers of these two species are being maintained within the usual year-to-year fluctuation. The long-term studies will be accomplished through a systematic and regular sampling program. Such a program will entail detailed studies at a selected number of sites rather than large and labor intensive studies of the entire Ranch.

b. Methodology

Habitat and population studies will be conducted within ten (10) study plots of approximately 100 acres. Five of the plots will be located in areas believed to be of particular significance for gnatcatchers and cactus wrens. Areas for these study plots include Salt Creek Canyon, the Otay River Valley, Poggi Canyon, western San Ysidro Mountains, and southwestern Jamul Mountain. Five additional plots are scattered randomly throughout the Otay Ranch Preserve where coastal sage scrub is present.

Each study plot will be surveyed for CAGN and CAWR following the presence/absence survey guidelines of the U.S. Fish and Wildlife Service once a year for five years and then once every three years through the buildout of the Ranch. The USWFS guidelines require three surveys of each 100-acre polygon, at least one week apart, during the breeding season (15 February through 15 July). The surveys should be conducted between January and April to avoid problems in over counting when juveniles are present.

In addition to the surveys of the ten study plots described above, a walkover ranch-wide survey of CAGN/CAWR will be conducted every five years beginning in 2000. The ranch-wide survey will be conducted during the spring and consist of one pass through the entire ranch to estimate ranch-wide population of CAGN and CAWR and to identify new CAGN or CAWR occupation areas, if any. Once every 10 years, a random survey will be undertaken, based on a scope to be prepared by the POM (POM) and reviewed by the City and County. The purpose of the 10-year studies will be to examine population trend analyses. The first 10-year study will take place in 2005.

During future surveys, CAGN and CAWR locations will be recorded on 200'-scale topographic maps, and information about the sighting will be recorded. A data sheet will be used to record the vegetation and site specific description of the CAGN or CAWR location, and will include the following:

- General and specific location of sighting.
- Weather conditions.
- Number, status, sex, and age of individuals.
- Site description: slope, aspect, elevation.

- Vegetation description: type, three dominant species, height, percent cover, percent gap, percent bare ground, percent herbaceous species.
- General comments, including nest location (if found), behavior, presence of cowbirds, etc.

Vegetation and CAGN/CAWR data from the study plots will be compiled and analyzed during the year they are captured. The analyses will include comparisons of current data with data from previous years. A regression analysis will be conducted, with an emphasis on identifying long-term trends rather than short-term phenomena.

In addition to the foregoing analyses, spring surveys for CAGN and CAWR will be conducted on a SPA-by-SPA basis at the time development is proposed within those SPAs. Surveys would be conducted only in those SPAs with a potential for occupation by these species.

c. 1995 Contribution to Ongoing CAGN and CAWR Studies

For 1995, the contribution to ongoing CAGN and CAWR studies includes identification and mapping of the ten, 100-acre study plots for the surveys beginning in 1996 and described above, along with documentation of the previously unpublished data from the Otay Valley Parcel compiled for the NCCP Scientific Review Panel (Appendix F1). The data and mapping points will be evaluated to eliminate points that represent "double-counting" of CAGN or CAWR. These results will provide a conservative estimate of the population size on the Ranch and identify areas of occupation.

A summary report will be prepared which presents the composite, multi-year (1989-1993) population results, including the spatial distribution throughout the Ranch. The numbers derived from the review serve as a baseline for the CAGN and CAWR population size within each parcel, and form the basis for monitoring ongoing potential future "take" of CAGN and CAWR. Future monitoring of ranch-wide or SPA-level populations will also be compared to this baseline.

d. Research Applications

Habitat studies will be used for analyses of correlations between vegetation characteristics of occupied habitat and the presence of CAGN and/or CAWR. Within each 100-acre study plot, four permanent line-intercept vegetation transects 100 meters long will be established. Permanent transects will be randomly located within the study plot at the onset of the studies. For each line-transect, vegetation data will be compiled each year. Vegetation data to be obtained include percent cover of the vegetation, number of individuals of each dominant shrub (frequency), percent cover of each dominant shrub (dominance), relative density, canopy height, and the species' importance value. In addition, the vegetation information collected for each CAGN and/or CAWR location may be included in some habitat relationship analyses.

2. Vernal Pool Study (Appendix 2.) Report on the Flora of the Otay Ranch Vernal Pools 1990-1991, San Diego County, California

The GDP/SRP and Phase 1 RMP contain the following Policy language:

RMP Policy 1.2: The following studies shall be completed by the landowner prior to or concurrent with the first SPA in the Phase 2 RMP... Vernal Pool Study.

The Phase 2 RMP requirement to prepare a Vernal Pool Study was satisfied in 1993 as part of the GDP/SRP. The adopted plan and attendant EIR incorporates the data and analysis from the "Report on the Flora of the Otay Ranch Vernal Pools, 1990-1991, San Diego County, California," prepared by Dudek and Associates. This report is Appendix 2 of this document.

3. Wildlife Corridor Study (Appendix 3.) Baldwin Otay Ranch Wildlife Corridor Study

The GDP/SRP and Phase 1 RMP contain the following Policy language:

RMP Policy 1.2 Standard: The following studies shall be completed by the landowner prior to or concurrent with the first SPA in the Phase 2 RMP... Wildlife Corridor Study.

The Phase 2 RMP requirement to prepare a Wildlife Corridor Study was performed in 1993 as part of the GDP/SRP. The adopted plan and attendant EIR incorporates the data and analysis from the "Baldwin Otay Ranch Wildlife Corridor Studies," prepared by Ogden Environmental and Energy Services. This report is Appendix 3 of this document.

4. Raptor Study (Appendix 4.) Otay Ranch Raptor Management Study

The GDP/SRP and Phase 1 RMP contain the following Policy language:

RMP Policy 1.2: The following studies shall be completed by the landowner prior to or concurrent with the first SPA in the Phase 2 RMP... Raptor Foraging/Habitat Study.

The Phase 2 RMP requirement to prepare a Raptor Study was satisfied in 1993 as part of the GDP/SRP. The adopted plan and attendant EIR incorporated the data and analysis from the "Otay Ranch Raptor Management Study", prepared by Ogden Environmental and Energy Services. This report is Appendix F4 of this document.

5. Resource Identification and Mapping

The Otay Ranch GDP/SRP and Phase 1 RMP contain the following Policy language:

RMP Objective 1: Identify sensitive and significant biological, cultural, paleontological, agricultural, and scenic resources within Otay Ranch that require protection and/or management.

RMP Policy 1.6: Identify major land forms within Otay Ranch.

RMP Policy 1.1 Guideline: Incorporate existing and updated vegetation maps, sensitive species distribution maps, biological reports, the vernal pool report, the wildlife corridor

study, the raptor habitat/foraging study, and all other pertinent data presented in studies by ASI, RECON, MBA, Ogden, and Dudek into the identification of resource areas.

All key resource areas have been identified pursuant to initial and updated resource studies as part of the Otay Ranch Program Environmental Impact Report prepared by Ogden Environmental and Energy Services and adopted by the County Board of Supervisors and the Chula Vista City Council concurrent with the adoption of the GDP/SRP.

6. Otay Valley Parcel Cultural Resources Survey (Appendix 5.) Otay Valley Parcel Cultural Resources Systematic Survey

The Otay Ranch GDP/SRP and Phase 1 RMP contain the following Policy language:

RMP Policy 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.

A systematic survey of the cultural resources in the Otay Valley Parcel has been completed as part of the Phase 2 RMP. The results of the survey are presented in Appendix F5 to this report, "Otay Valley Parcel Cultural Resource Systematic Survey," (Brian Smith and Associates, 1995).

The County amended the SRP and RMP to revise the requirement for parcel wide cultural surveys for the San Ysidro Mountain Parcel and the Proctor Valley Parcel, (March 22, 2000, Minute Order #9). As a result the City and County have different RMP Policies relative to cultural surveys for the San Ysidro Mountains and Proctor Valley Parcels, as follows:

RMP Policy 1.3B

City Language: In conjunction with the first SPA in the Proctor Valley Parcel, complete cultural resource studies to assess cultural resources throughout the Proctor Valley Parcel.

County Language: In conjunction with the first SPA for each ownership within the Proctor Valley parcel, a complete cultural resource study to assess cultural resources on that ownership shall be required prior to with the submittal of any development application.

Results of the surveys conducted within the Proctor Valley and San Ysidro Mountains Parcels will be added as confidential appendices to this RMP as they are prepared.

RMP Policy 1.3C

City Language: 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.

County Language: In conjunction with the first SPA for each ownership within the San Ysidro Mountains parcel, a complete cultural resource study to assess cultural resources on that ownership shall be required prior to with the submittal of any development application.

Results of the surveys conducted within the Proctor Valley and San Ysidro Mountains Parcels will be added as confidential appendices to this RMP as they are prepared.

Standard: In conjunction with the Phase 2 RMP, a systematic survey for cultural resources shall be completed for all portions of Otay Ranch.

Guidelines:

- 1) Survey of the remaining un-surveyed area within each parcel shall be completed at the time of the first SPA approval.
- 2) Following completion of the systematic survey, sites recommended for testing within SPAs shall be tested and evaluated on a SPA-by-SPA basis for their importance pursuant to CEQA.
- 3) The testing program shall be conducted in accordance with County of San Diego Guidelines on a SPA-by-SPA basis.

B. Ranch-Wide Phase 2 RMP Plans and Program

1. Vernal Pool Preservation and Management Plan (Appendix 6.) Vernal Pool Preservation Management Plan

The GDP/SRP and Phase 1 RMP contain the following Policy language:

RMP Policy 3.7: Develop a vernal pool restoration plan.

RMP Policy 2.10 Standard 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.

RMP Policy 3.8 Standard 2: Investigate the possibility of habitat enhancement and re-introduction of quino checkerspot (*Euphydryas editha quino*) in the Vernal Pool Preserve during the submittal of the Phase 2 RMP.

The Phase 1 RMP contains the following implementation requirements and performance standards concerning vernal pool preservation.

Policy 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.

Standards

- a. 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, J35, J30, and identified sensitive portions of J29.
- b. Preserve a minimum of 95% of the Otay Ranch distribution of the State- and federally-listed endangered San Diego button-celery (*Eryngium aristulatum* var. *parishii*), and 100% of the State- and federally-listed Otay Mesa mint (*Pogogyne nudiuscula*) in locations identified in the vernal pool report (Dudek 1992).
- c. Assure the continued survival of little mousetail (*Myosurus minimus* var. *apus*) and spreading navarretia (*Navarretia fossalis*) on Otay Ranch through preservation of present known localities for these species on the Ranch plus a combination of enhancement, restoration and management efforts.
- d. Develop a vernal pool restoration plan to achieve the follow:
 - restore the biota of individual, badly degraded vernal pools;
 - increase diversity and frequency of native biota in all disturbed vernal pools;
 - reduce effect of alien plants;
 - enhance the populations of sensitive species;
 - stabilize soils on mounds and in watershed areas;
 - provide research and educational opportunities..

The SPA One applicant has addressed these policies and standards through the preparation of the Vernal Pool Preservation and Management Plan, Appendix 6 to this document.

a. Vernal Pool Preservation Boundaries

In conformance with RMP Policy 2.9 of the Phase 1 RMP, the boundaries of the conceptual Vernal Pool Preserve have been refined and formalized. Because of additional conservation of the K8 vernal pool complex within Village 13, the Vernal Pool Preserve has been expanded to include the

K8 series pools. The preserve must be located in two areas: Lower Otay Lakes, and Otay Mesa south of the Otay River. The preserve must include greater than 330 acres, and include all vernal pools identified by the California Department of Fish and Game (Bauder 1986) as K8, J23, J24, J25, J30, and sensitive portions of J29.

Two alternative designs/configurations for the Otay Mesa portion of the Vernal Pool Preserve have been developed (Figure 7), one of which will be incorporated into the final draft of the Vernal Pool Preservation and Management Plan. Both alternatives are based on modifications of the boundary contained in the GDP/SRP and the RMP.

Alternative 1 includes preserve boundary modifications based solely on the existing cumulative data base. The boundaries of this alternative conform reasonably well with those identified in the GDP/SRP and the RMP, with two minor modifications. The narrow, linear portion of the preserve that formerly extended north-south along the western edge of La Media Road has been eliminated from the Vernal Pool Preserve. The northern portion of an area formerly identified for industrial development has been added to the Vernal Pool Preserve. The linear area adjacent to La Media Road was eliminated because following development it would represent a slender peninsula of highly degraded vernal pool habitat between La Media Road and the industrial development that would be highly subject to edge effects and other forms of indirect impacts. Hence, the benefits of protecting the area (i.e., a modest amount of highly degraded vernal pool habitat supporting no sensitive species) would be far outweighed by the cost of its preservation and management. The area added to the Vernal Pool Preserve was included because it was recently documented to support considerable populations of spreading navarretia (*Navarretia fossalis*) and little mousetail (*Myosurus minimus*), both of which are exceedingly rare on the Ranch.

Alternative 2 includes preserve boundary modifications based on a more pragmatic assessment of the value of including specific areas within the Vernal Pool Preserve, focusing on existing conditions and future management needs. The boundaries of this alternative include three deviations from the GDP/SRP/RMP Vernal Pool Preserve. The narrow, linear portion of the preserve that formerly extending north-south along the western edge of La Media Road has been eliminated; the northern portion the industrial development area has been added (with a 50-foot buffer from the nearest pools); and the entire western edge of the conceptual preserve (from the RMP) has been eliminated. In this alternative, highly degraded areas (previously farmed and lacking vernal pool topography) have been excluded because the high cost of management and enhancement would far exceed the value of preservation of the small populations of sensitive plants. Exotic plant removal would require extensive work, and recreation of vernal pool topography may be impossible.

Under either preserve design, the Vernal Pool Preserve would include over 400 acres of vernal pool landscape, and would capture 100% of the known distribution of Otay Mesa mint, 95% of the Otay Ranch distribution of San Diego button-celery, the only known extant populations of spreading

navarretia on the Ranch, a large population of little mousetail (the only known locations for this species outside the preserve is K6), the single historical Otay Ranch location for California Orcutt grass, the single known Otay Ranch location of Riverside fairy shrimp, and numerous pools that support San Diego fairy shrimp.

It should also be noted that additional vernal pool conservation and restoration has been provided as a result of the construction of SR-125. The SR-125 project was pursued separately, and is not part of the Otay Ranch development or Preserve system. This effectively expands the conservation of vernal pools in the northern portion of Planning Area 18a. However, this area is being restored and managed separately from the Otay Ranch Vernal Pool Preserve.

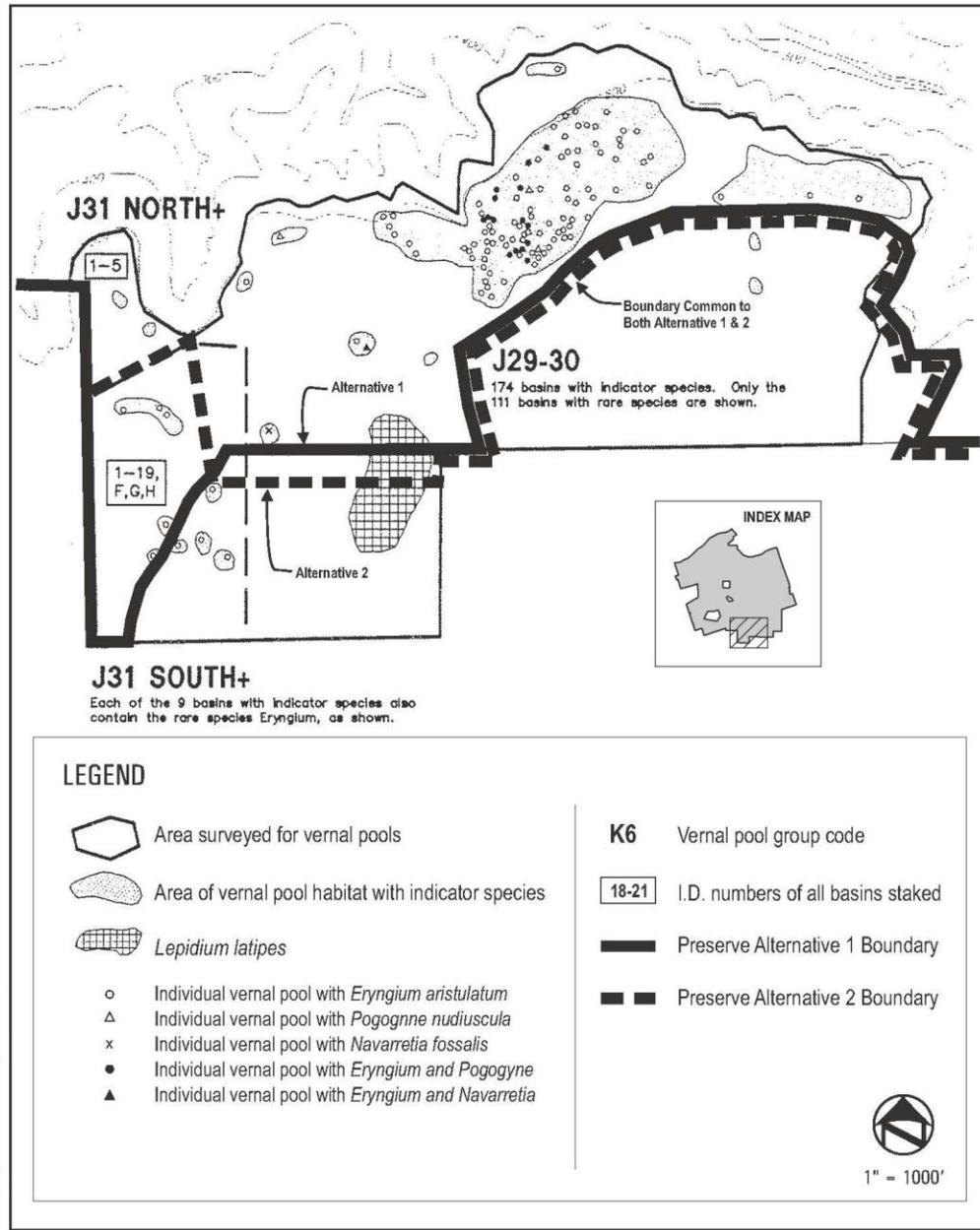
The Vernal Pool Preserve also includes the K8 series of pools in the Lower Otay Lakes area, as shown on Figure 8. The K8 preserve area consists of approximately 5.8 acres, and a total of 16 vernal pools (0.27 acre – total basin area) were identified during surveys conducted since 1999 within the K8 complex. In general, these vernal pools contain flora that include wooly marbles (*Psilocarphus brevissimus*), graceful hairgrass (*Deschampsia danthonioides*), soft chess, narrow-leaved filago (*Filago gallica*), broad-leaved filaree, fascicled tarplant, and doveweed. Pools that held water during most of the 1999-2007 survey periods were found to contain American pillwort (*Pilularia americana*), long-stalk water-starwort (*Callitriche longipedunculata*), pale spike-sedge (*Eleocharis macrostachya*), wild heliotrope, and aquatic crassula (*Crassula aquatica*) in addition to some of the species listed above. The vegetation surrounding the K8 vernal pool mesa consists of sparse coastal sage scrub. Based on surveys conducted in 1999 and 2000, of the 16 vernal pools within the K8 complex, five pools were positive for San Diego fairy shrimp during wet season surveys, and eight were positive for cysts in dry season surveys.

b. Vernal Pool Management

The general management and monitoring duties outlined in the Vernal Pool Preservation and Management Plan will be the responsibility of the POM. These include a variety of tasks such as:

- Inhibiting additional degradation (through fencing, elimination of cattle grazing, and access control);

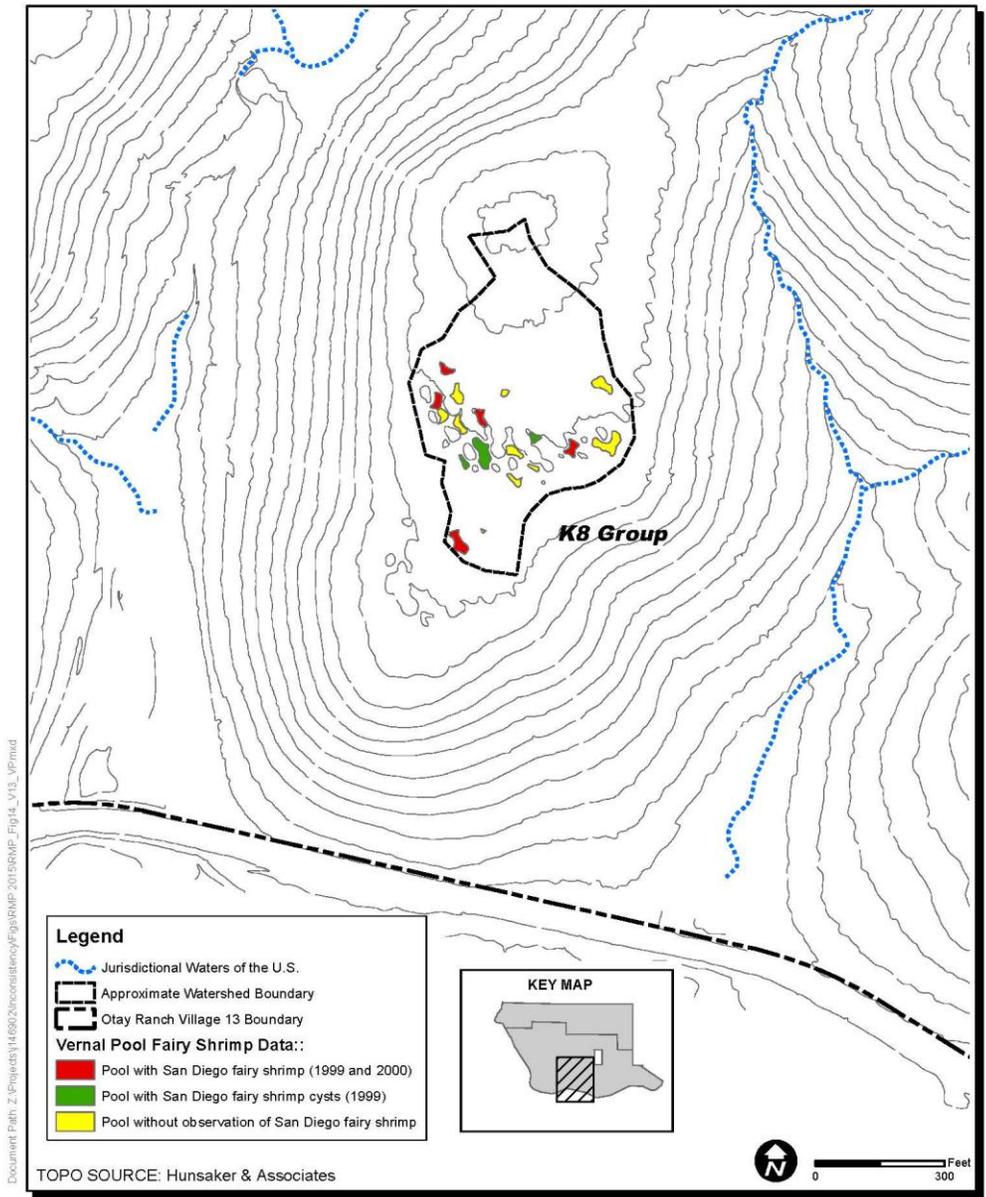
Figure 7
Vernal Pool Preserve Alternatives



Vernal Pool Preserve - Otay Mesa Alternatives 1 and 2

FIGURE
13

Figure 8
Village 13 Vernal Pool Preserve



Vernal Pool Preserve - Lower Otay Lakes **FIGURE 14**

- Establishing protocols for the use of pools for research and education (e.g., who is permitted and what activities are allowed);
- Development of specific monitoring strategies for determining changes in flora and fauna of the pools (e.g., when, why, who); and
- A minimal amount of general enhancement activities (e.g., trash removal).

c. Vernal Pool Impacts

The Otay Ranch property owners will be responsible for the active restoration and enhancement of vernal pool habitat only in association with impacts to vernal pools. The Final Program EIR for Otay Ranch (1992) indicated that a total of 14 acres of vernal pool habitat would be lost as a result of implementation of the GDP/SRP. The EIR indicated that acreage of vernal pool habitat represents the circumscribed concentrations of vernal pools and the intervening Mima mound topography, and that this area is substantially greater than the vernal pool surface area. Because the circumscribed areas include the Mima mound topography for each potentially affected area, the 14-acre impact is interpreted to reflect the total amount of vernal pool watershed affected. Because mitigation for impacts to vernal pools will be based on a number of factors, including vernal pool surface area, area of watershed, and quality of the pools, there is a need to more accurately identify (both quantitatively and qualitatively) potential impacts in order to estimate future mitigation requirements, if only in a conceptual manner.

In the highest quality vernal pool areas on the Ranch, there are approximately 15-20 vernal pools per acre. Based on an average of 200 square feet of pool surface area per pool, each acre potentially could support about 0.07-0.09 acre of vernal pool surface area. However, in the more disturbed areas and areas of lower quality vernal pools, vernal pool surface area is significantly less per acre. In order to quantify the approximate impact acreage of vernal pool surface area potentially lost by implementation of the GDP/SRP, the following methodology was utilized: (1) a list was compiled of all vernal pool complexes on or adjacent to Otay Ranch (Table 1); (2) pools potentially directly impacted by implementation of the GDP/SRP were identified by overlaying the approved GDP/SRP on maps illustrating the locations of vernal pools; and (3) vernal pool surface area of potentially impacted pools was calculated using the dimensions provided in the "Hydrology and Flora of Otay Ranch Vernal Pools" report (Table 2). For pools of the M2 complex, data accumulated for the biological analysis of SPA One were used to quantify potential impacts. For pools of the J30 complex, data collected for the SDG&E Pipeline 2000 project (Dudek 1994) were used to quantify potential impacts.

Implementation of the Otay Ranch GDP/SRP potentially would result in the loss of 25 vernal pools encompassing 10,518 sq. ft. (0.21 acre) of vernal pool surface area scattered over approximately 14.0 acres of vernal pool habitat. The largest impacts to vernal pool surface area would be realized in the J30 (7,721 sq. ft., Otay Mesa Series) location. This area encompasses nearly 73 percent all the vernal pool surface area potentially lost. Modification of the boundary of the Vernal Pool Preserve, in

conformance with RMP Policy 2.9 of the RMP, in addition to additional conservation provided by the SR-125 mitigation project, would result in the preservation of all of the J30 pools (7,721 sq. ft., Otay Mesa Series location), leaving a total potential impact of 2,797 sq. ft. (0.06 acre). Of the remaining vernal pool surface area potentially disturbed by the GDP/SRP, only K6 supports any sensitive species - it supports a small population of little moustail (*Myosurus minimus*).

d. Vernal Pool Mitigation

In summary, the total anticipated impact is the loss of 2,797 sq. ft. (0.06 acre) of vernal pool surface area. The impacted pools are of low quality, for the most part. Little moustail would be lost from the K6 complex. Mitigation measures available to Otay Ranch for these impacts include the following:

- Restoration of the disturbed "circle" in J25, which represents 1.7 acres of highly disturbed vernal pool habitat. Restoration would require the reconfiguration and reconstruction of the Mima mounds and basins, removal of weedy vegetation, revegetation of the mounds with upland sage scrub species, and inoculation of the pools with vernal pool species. This location would represent an appropriate place in which to attempt "seed trials" to increase the area occupied by the critically endangered *Pogogyne nudiuscula*, which occurs in other intact pools on this mesa.
- Restoration of the scraped/disturbed swath that extends along the southern and southwestern perimeter of J25, which represents 2.75 acres (i.e., approximately 2,400 feet long and 50 feet wide). Restoration would require the reconfiguration and reconstruction of the Mima mounds and basins, removal of weedy vegetation, revegetation of the mounds with upland sage scrub species, and inoculation of the pools with vernal pool species.
- Restoration of the scraped/disturbed swath that extends through the middle of the J23-24 series, which represents 5.85 acres (i.e., approximately 3,400 feet long and 75 feet wide). Restoration would require the reconfiguration and reconstruction of the Mima mounds and basins, removal of weedy vegetation, revegetation of the mounds with upland sage scrub species, and inoculation of the pools with vernal pool species. Restoration of a vernal pool and mima-mound areas within the Village 13 portion of the Vernal Pool Preserve which have been previously disturbed by off-road vehicle, and other activities, and are within an historic mima-mound and vernal pool habitat area. Implementation of the restoration program will result in an increase in the functional area of vernal pools. The upland mima-mounds surrounding the restored pool will be planted and/or enhanced with available salvageable, native vegetation collected from adjacent areas and from the proposed graded areas within the mitigation site. The mounds will also be seeded with additional native upland species to help augment the native cover. In addition, the adjacent upland habitat will also be enhanced through weed eradication and

revegetation with transitional coastal sage scrub species. These enhancement measures will help stabilize the surface soils and will help improve long-term habitat quality through exotic plant and weed reduction, through native plant establishment and by providing a native plant buffer for the restored vernal pool habitat.

- Fencing of the Proctor Valley vernal pools to prevent inadvertent encroachment by County road crews and off-road vehicle use.
- An exclusion study on the K6 mesa to determine the biological value of these pools.

In the J23-24 and J25 mesas, there are approximately 15-20 vernal pools per acre. Based on an average of 200 square feet of pool surface area per pool, each acre includes 0.07-0.09 acre of vernal pool surface area.

Implementation of the measures described above would result in the restoration of approximately 16.1 acres of vernal pool habitat within the K8, J23-24 and J-25 complexes, which likely would include a minimum of 169 individual pools with a combined surface area of approximately 1.0-1.1 acre.

These efforts would be considered appropriate mitigation for the projected loss of low quality vernal pools, encompassing 0.06 acre of vernal pool surface area.

Precise quantification of impacts to vernal pools and their associated watershed will be determined in the future as part of the environmental review of each SPA. Likewise, specific mitigation measures required to receive appropriate permits will be negotiated with the Wildlife Agencies at the time of impacts. Nonetheless, the preliminary analyses presented above provide a general framework of anticipated impacts and identify appropriate mitigation measures.

e. Vernal Pool Mitigation Bank Opportunities

Restoration, enhancement, management, and research opportunities within the Otay Ranch Vernal Pool Preserve are likely to provide more mitigation opportunities than will be required to mitigate impacts associated with implementation of the GDP/SRP. Implementation of enhancement and restoration activities beyond those necessary to mitigate for direct impacts of development within Otay Ranch may be viewed as a contribution to a vernal pool "mitigation bank."

Restoration opportunities, above and beyond those needed for mitigation for impacts associated with the GDP/SRP shall be available as a "mitigation bank" for impacts to vernal pools that occur outside of Otay Ranch (as permitted by the GDP/SRP, Page 366) and administered by the POM. Mitigation for these impacts will be determined based on individual permit requirements negotiated between individual applicants and the Wildlife Agencies on a case-by-case basis. Potential opportunities for this type of mitigation are presented below.

Mitigation bank opportunities include the following:

- Reconfiguration of pools disturbed by roads.
- Removal of exotic plant species.
- Installation of permanent fencing.
- Funding of research efforts.
- Revegetation of Mima mounds with coastal sage scrub and/or native grassland to reduce the amount of non-native vegetation in the Vernal Pool Preserve.
- Topographic reconfiguration and floral restoration of disturbed pools in the disturbed "circle" in J25.
- Increase the number of pools with *Pogogyne nudiuscula* on J23-24, J25, and J29-30 through seeding trials.
- Funding of research for a variety of projects:
 - studies of vernal pool hydrology within the Vernal Pool Preserve
 - studies on the effect of weed removal (gradual vs. abrupt)
 - taxonomic studies on species of unresolved systematic position
 - ecological and phenological studies on listed and candidate plant species
 - ecological studies on fairy shrimp (and other invertebrates)
 - ecological studies on pollinators of sensitive vernal pool plants
 - effects of grazing on vernal pools
- Design and implement a biota monitoring program for determining changes in flora and fauna of the pools. (New opportunity not included in the Biota Monitoring Program.)
- Provision of funds to identify and coordinate with all easement holders, landowners, lease holders, government agencies, etc., that may obtain access to Otay Ranch. Inform these agencies of the sensitivity of vernal pool areas and monitor all activities through or within vernal pool habitat.
- Restoration of road pools in K8, J23-24 and J25.
- Reintroduction of quino checkerspot (*Euphydryas editha quino*) into the Vernal Pool Preserve.
- Contribution to signage and interpretive programs.

f. Management Recommendations

Each pool and its immediate surrounding watershed (outside of the Vernal Pool Preserve and vulnerable to degradation) should be identified with brightly colored flossing. Pools that support state and/or federally-listed or candidate species should be fenced. Where pools occur in close proximity, the entire complex should be flagged or fenced.

Otay Mesa Series

The vast majority of the vernal pools in the Otay Mesa Series are included within the Vernal Pool Preserve. This area should receive management efforts consistent with the remainder of the Otay Ranch Preserve. The most important management features are the inhibition of undesirable access by vehicles, removal of cattle grazing, and monitoring populations of rare species. Based on input from the POM, fencing of the perimeter of the series may be necessary to achieve these goals. At a minimum, all vehicles should be prohibited access except for the perimeter of the mesas where there are existing dirt roads. In addition, starting in Spring 1996, cattle should be excluded according to the schedule and criteria identified below.

Otay Valley Series

With the exception of the K2 complex, all of the pools in the Otay Valley Series will be included within the Otay Ranch Preserve. Because no sensitive species have been reported from this series, management efforts should be directed at maintaining the topographic integrity of the basins and mounds. Prior to construction activities on immediately adjacent areas, these complexes should be fenced to inhibit inadvertent encroachment, and construction crews should receive direction to avoid these areas.

Poggi Canyon Series

Pools of the Poggi Canyon Series will be eliminated by development associated with SPA One; hence, management recommendations are inappropriate.

Lower Otay Lake - South Series

The K5, K10+, and K11+ complexes are entirely offsite of Otay Ranch. Prior to development of Otay Ranch in the immediate vicinity, these complexes should be fenced to avoid inadvertent encroachment by construction equipment. The portions of the K12+, K13+, and K14+ complexes onsite potentially will be lost to development; hence, management recommendations are inappropriate. [None of the latter three pool complexes support sensitive species.]

Lower Otay Lake - North Series

Based on the approved GDP/SRP, the entire Lower Otay Lake - North Series (i.e., K6 and K9+) would be lost to development; hence management efforts are inappropriate for all but the K8 complex. The

remaining pools in the Lower Otay Lake area (K8 complex) would be included in the Vernal Pool Preserve.

Lower Proctor Valley Series

Pools of the R1 series are vulnerable due to their proximity to Proctor Valley Road. However, nearly all of these pools are offsite. It is recommended that the pools in this series be fenced to inhibit degradation from off-road vehicles, trash dumping, and road maintenance activities. The POM should coordinate with County road crews to ensure that they are aware of the sensitive nature of this area and that inadvertent impacts should be avoided.

Upper Proctor Valley Series

Pools of the R3+ series are also vulnerable due to their proximity to Proctor Valley Road. It is recommended that the three vernal pools in this series be fenced to inhibit degradation from off-road vehicles, trash dumping, and road maintenance activities. The POM should coordinate with the County road crews to ensure that they are aware of the sensitive nature of this area and that inadvertent impacts may constitute a violation of the Federal Endangered Species Act because of the presence of San Diego button-celery. If deemed appropriate by the POM and the County, these pools could be included in the Vernal Pool Preserve as a "satellite" preserve unit. Under this scenario, these pools would receive protection, management, monitoring, and enhancement consistent with other pools within the Vernal Pool Preserve south of the Otay River.

2. Range Management Plan (Appendix 7.) Range Management Plan

The Otay Ranch GDP/SRP and the Phase 1 RMP contain the following Policy language:

RMP Policies 8.1, 8.4: A Range Management Plan, which will depict the allowable interaction between grazing activity and 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 POM, the City and County.

In satisfaction of this requirement, the SPA One applicant prepared the "Otay Ranch Range Management Plan," (Dudek/Wright, 1995). The plan is Appendix F7 to this document.

The purpose of the Range Management Plan is to identify the relationship between livestock grazing activity and sensitive habitat and species protection. Several policies of the Otay Ranch Resource Management Plan raise range management issues; including the following:

- The RMP calls for the development and implementation of a strategy that facilitates effective long term management of the Preserve.
- The RMP states that existing uses on the Ranch should not be allowed to negatively impact sensitive resources within the management preserve and includes the following standards:
 - Existing agriculture uses including cultivation and grazing shall be permitted to continue as an interim activity only where they have occurred historically and continually.
 - No increase in irrigation shall be allowed except for temporary irrigation that may be installed as part of restoration plans, unless approved by the POM. Grazing by sheep and goats shall not be allowed.
 - Cattle grazing shall be phased out in accordance with the conveyance and Range Management Plans.

The Otay Ranch Range Management Plan analyzes current grazing conditions on Otay Ranch and identifies the means by which to achieve the policies and standards identified in the RMP for managed grazing activities. The plan identifies existing facilities and recommends new facilities. Range conditions are reviewed and improved range management practices are identified. Livestock inventory is reviewed in terms of numbers and kinds of animals, existing management practice, and seasonal stocking requirements.

The Range Management Plan identifies management goals both within the designated Otay Ranch Preserve and Ranch-wide. Goals that apply to the Otay Ranch Preserve are intended to maintain resources in their existing condition prior to conveyance of land to the Otay Ranch Preserve. Ranch-wide goals are related to maintaining a well-run and balanced ranching operation on the entire Ranch. Of concern with respect to the Phase 2 RMP, are those management goals that apply to the Otay Ranch Preserve. The Ranch-wide management goals are discretionary programs that may or may not be implemented by the land owner.

With respect to Range Management activities within areas designated for further conveyance to the Otay Ranch Preserve, the Range Management Plan includes the following recommendations:

- Eliminate grazing in the area designated Vernal Pool Preserve (pasture 9) at the onset of winter rains through summer when plants have set seed and senesced (generally by early summer). Restriction of grazing shall begin in late 1997-early 1998; either fencing of the Vernal Pool Preserve or elimination of grazing on Otay Mesa will be required to implement this recommendation.
- Coordinate grazing activities within the Vernal Pool Preserve with restoration activities presented in the Vernal Pool Management Plan for Otay Ranch (Dudek 1995a); grazing

should be eliminated entirely from the Vernal Pool Preserve prior to initiation of restoration activities.

- Eliminate grazing in riparian habitat in the Otay River Valley (Horse, River Valley West, River Valley East, and O'Neal pastures) during the winter through summer months following the onset of winter rains beginning in late 1997-early 1998; some repair of existing fencing and new fence construction will be required to implement this recommendation.
- Continue grazing in existing locations and at existing stocking levels on the Proctor Valley and San Ysidro Mountains Parcels prior to conveyance of land to the Preserve.
- Coordinate grazing activities within those portions of the Preserve designated for coastal sage scrub restoration activities with the Coastal Sage Scrub and Maritime Succulent Scrub Habitat Replacement and Master Plan (Dudek 1995b); the Master Plan calls for elimination of grazing in areas designated for restoration for a period of time prior to initiation of restoration activities to facilitate soil preparation and exotic plant control.
- As lands are conveyed to the Preserve, temporary ongoing managed grazing activities on conveyed lands may be desirable and should be coordinated with the POM; as discussed in the Range Management Plan, properly managed cattle grazing at light to moderate levels need not negatively affect biological resources and, in fact, abrupt elimination of grazing may be undesirable, particularly with respect to the control of exotic and pest plant species.

Otay Ranch Grazing Ordinance

Subsequent to conditional adoption of the Chula Vista Subarea Plan by the City Council in October 2000, the City immediately initiated preparation of a Grazing Ordinance to implement the Otay Ranch Range Management Plan. The ordinance became effective when the City received Take Authorization. The Otay Ranch Grazing Ordinance codified the Preserve Management Goals and Recommendations of the Range Management Plan for the Otay River Valley Management Area, including the following:

1. No increase in irrigation will be allowed except for temporary irrigation that may be installed as part of habitat restoration plans;
2. Grazing by sheep and goats will not be allowed;
3. Elimination of grazing in the riparian habitat in the Otay River Valley (Horse, River Valley West, River Valley East, and O'Neal pastures) during the winter through summer months following the onset of winter rains;

4. Elimination of grazing in Salt Creek (O'Neal and Salt Creek Pastures) during the breeding season of the coastal California gnatcatcher from February 15 through August 15, annually;
5. Elimination of grazing in areas designated for restoration for a period of time prior to initiation of restoration activities to facilitate soil preparation and exotic plant control; and
6. Maintaining any existing or future fencing and gating installed for range management purposes.

3. Maritime Succulent Scrub Pilot Restoration Program

The GDP/SRP and the Phase 1 RMP contain the following Policy language:

RMP Policy 3.4: Develop a restoration program for maritime succulent scrub habitat. Maritime succulent 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 the RMP prior to or concurrent with approval for any development resulting in significant impacts to maritime succulent scrub habitat occupied by California gnatcatchers on the Proctor Valley or San Ysidro Mountains parcels.

According to the Otay Ranch Program EIR, Otay Ranch contains approximately 285 acres of Maritime Succulent Scrub (MSS). The Phase 1 RMP and Findings of Fact require that 56 acres of MSS be restored through the build-out of Otay Ranch. The obligation to restore MSS arises when the MSS habitat is disturbed. The GDP/SRP contemplated that 56 acres of MSS would be restored, for a restoration ratio of 1:1. Accordingly, based on the Program EIR data it was initially assured that impact and restoration would occur as depicted in Table 9. Application of this ratio results in a village-by-village restoration obligation also depicted in Table 9.

However, more precise biological surveys have led to different conclusions. Specifically, the SPA One EIR (Villages One and Five, and Olympic Parkway) identified 26.85 acres of impact to MSS or disturbed MSS. The Villages 2, 3, and a portion of Village 4 EIR identified 4.0 acres of impact to MSS and disturbed MSS.

Mitigation for the SPA One MSS impacts was performed pursuant to 4d Interim Take Permits which required restoration, preservation and enhancement at greater than the GDP/SRP 1:1 ratio. Specifically, the SPA One applicant successfully restored 48.64 acres of MSS and preserved/enhanced an additional 6.23 acres of MSS for a complete 54.87 acre mitigation package. This exceeds the RMP restoration requirement by 21.79 acres. However, the MSS restoration

requirement remains at 1:1 for future Otay Ranch Villages. Accordingly, the Villages 2, 3, and a portion of Village 4 certified EIR requires that the applicant mitigate for impacts to MSS at a 1:1 ratio.

Table 9
Phase 2 RMP Maritime Succulent Scrub Allocation By Village

Village/Planning Area	Habitat Type	Estimated Area Impacted (Acres)
Village 1	MSS	11
Village 2	MSS	2
Village 3	MSS	1
Village 4	MSS	10
Village 9	MSS	2
Village 10	MSS	11
Circulation Element Roads	MSS	20
Total	MSS	57

SPA One MSS Restoration has been completed within the Wolf Canyon portion of the Otay Ranch Preserve. The restoration was completed pursuant to the success criteria established by the Wildlife Agencies through the 4(d) habitat loss permit issued for SPA One, and consistent with the performance standards established in the RMP. The restoration has successfully completed its 5-year monitoring period.

4. Biota Monitoring Program (Appendix 11)

The GDP/SRP and the Phase 1 RMP contain the following Policy language:

RMP Policies 5.4, 5.5: Establish a comprehensive monitoring program for the biota of the Preserve in conjunction with the Phase 2 RMP.

RMP Policies 5.4, 5.5: 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, consistent with the following guidelines:

The Phase 1 RMP guidelines for RMP Policy 5.4 state:

- Monitoring shall include, but not be restricted to, focused surveys and population estimates for state- and federally-recognized plants and wildlife species, use of wildlife corridors, and assessments of habitat quality.
- Annual monitoring reports summarizing the results of monitoring efforts shall be submitted to the City, County, and Wildlife Agencies.
- Based on the monitoring reports, the City, County, and Wildlife Agencies shall evaluate RMP performance, and, if necessary, recommend program modifications.
- Monitoring programs shall include performance standards.
- Habitat restoration efforts shall be monitored.
- Monitoring of the Preserve's sensitive resources may be integrated with mitigation monitoring and reporting programs (MMRPs) carried out in accordance with the CEQA review of individual developments within Otay Ranch.
- The Preserve's monitoring program shall be submitted with the Phase 2 RMP Biota Monitoring Program with input from the POM.

The SPA One applicant has addressed the performance of these policies and standards through the preparation of the "Biota Monitoring Program," Dudek, 1995. This report is Appendix F11 of this report. The key components of the plan are summarized below.

Monitoring requirements for different habitats and different species vary. For this reason, differing and flexible monitoring requirements are recommended. The purpose of this Biota Monitoring Program is to provide the Preserve/Owner Manager with guidelines and direction for implementing the monitoring program. It is not intended to be a strict set of criteria that must be met without variance. It is important to understand that as the biota of the Preserve changes, either by natural succession of vegetation communities or specific environmental perturbations such as fire, flood, drought, etc., changes in the monitoring program will probably be necessary.

Table 10 lists the Otay Ranch biological resources which are the focus of the monitoring program.

Table 10
Biological Resources to be Monitored

Biological Resource	Percent Preserved
Habitats	
Maritime Succulent Scrub	80 ²
Floodplain Scrub, Southern Willow Scrub & Aquatic/Freshwater Marsh	95
Valley Needlegrass Grassland/Perennial Grassland	25
Alkali Meadow	72
Vernal Pools (large or high value & all others per Policy 2.9 of RMP)	95
Vernal Pools (specified on page 29 of EIR Findings of Fact)	100
Woodlands	100
Plant Species	
San Diego Thorn-mint (<i>Acanthomintha ilicifolia</i>)	95
San Diego County Stipa (Needle-grass) (<i>Achnatherum diegoensis</i>)	75
California Adolphia (<i>Adolphia californica</i>)	75
San Diego Bur-sage (<i>Ambrosia chenopodiifolia</i>)	75
Otay Manzanita (<i>Arctostaphylos otayensis</i>)	75
San Diego Sagewort (<i>Artemisia palmeri</i>)	75
Orcutt's Brodiaea (<i>Brodiaea orcuttii</i>)	75
Dense Reed Grass (<i>Calamagrostis densa</i>)	50
San Miquel Savory (<i>Calamintha chandleri</i>)	50
Dunn's Mariposa Lily (<i>Calochortus dunnii</i>)	100
Slender-pod Caulanthus (<i>Caulanthus stenocarpus</i>)	100
Southern Mountain Misery (<i>Chamaebatia australis</i>)	50
Fallbrook Spine-flower (<i>Chorizanthe procumbens</i> var. <i>albiflora</i>)	50
Campo (Delicate) Clarkia (<i>Clarkia delicata</i>)	75
Summer-holly (<i>Comarostaphylos diversifolia</i> spp. <i>diversifolia</i>)	75
Orcutt's Bird's-beak (<i>Cordylanthus orcuttianus</i>)	75
Tecate Cypress (<i>Cupressus forbesii</i>)	75
Western Dichondra (<i>Dichondra occidentalis</i>)	50
Variegated Dudleya (<i>Dudleya variegata</i>)	75
San Diego Button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>) (on-site)	95
San Diego Button-celery (where occurring with vernal pool species)	100
San Diego Barrel Cactus (<i>Ferocactus viridescens</i>)	75
Mexican Flannelbush (<i>Fremontodendron mexicanum</i>)	100

Palmer's Grappling-hook (<i>Harpaqonella palmeri</i> var. <i>palmeri</i>)	75
Otay Tarplant (<i>Hemizonia conjugens</i>)	70
San Diego Marsh-elder (<i>Iva hayesiana</i>)	75
Spiny Rush (<i>Juncus acutus</i> var. <i>sphaerocarpus</i>)	50
Gander's Pitcher-sage (<i>Lepechinia ganderi</i>)	75
Dwarf Pepper-grass (<i>Lepidium latipes</i>)	50
Willow Monardella (<i>Monardella linoides</i> spp. <i>viminea</i>)	100
San Diego Goldenstar (<i>Muilla clevelandii</i>)	54
Little Mousetail (<i>Myosurus minimus</i> var. <i>apus</i>)	100
San Diego Navarretia (<i>Navarretia fossalis</i>)	100
California Adder's-tongue Fern (<i>Ophioglossum lusitanicum</i> spp. <i>californicum</i>)	50
Snake Cholla (<i>Opuntia parryi</i> var. <i>serpentina</i>)	75
Greene's Ground-cherry (<i>Physalis greenei</i>) (if present)	50
Otay Mesa Mint (<i>Pogogyne nudiuscula</i>)	95
Engelmann Oak (<i>Quercus engelmannii</i>)	50
Coulter's Matilija Poppy (<i>Romneya coulteri</i>)	50
Munz's Sage (<i>Salvia munzii</i>)	46
Ashy Spike-moss (<i>Selaginella cinerascens</i>)	50
Narrow-leaved Nightshade (<i>Solanum tenuilobatum</i>)	75
San Diego Sunflower (<i>Viguiera laciniata</i>)	75
Wildlife Species	
Cooper's Hawk (<i>Accipiter cooperii</i>)	NA ³
Tricolored Blackbird (<i>Agelaius tricolor</i>)	100
Southern California Rufous-crowned Sparrow (<i>Aimophila ruficeps canescens</i>)	75
Bell's Sage Sparrow (<i>Amphispiza belli belli</i>)	70-75
Golden Eagle (<i>Aquila chrysaetos</i>)	NA
Burrowing Owl (<i>Athene cunicularia</i>)	80-90
San Diego Vernal Pool Fairy Shrimp (<i>Branchinecta sandiegensis</i>)	95

Cactus Wren (<i>Campylorhynchus brunneicapillus</i>) (viable populations)	100
Northern Harrier (<i>Circus cyaneus</i>)	NA
Southwestern Pond Turtle (<i>Clemmys marmorata pallida</i>)*	100
Orange-throated Whiptail (<i>Cnemidophorus hyperythrus beldingi</i>)	60-70
Southwestern Willow Flycatcher (<i>Empidonax traillii extimus</i>)	100
Quino Checkerspot (<i>Euphydryas editha quino</i>)*	100
Harbison's Dun Skipper (<i>Euphyes vestris harbisoni</i>)*	100
Prairie Falcon (<i>Falco mexicanus</i>)	NA
Hermes Copper (<i>Lycaena hermes</i>)*	100
Thorne's Hairstreak (<i>Mitouri thornei</i>)*	100
San Diego Horned Lizard (<i>Phrynosoma coronatum blainvillei</i>)	60-70
California Gnatcatcher (<i>Polioptila californica</i>) (on-site CSS habitat)	70
California Gnatcatcher (restore CSS habitat)	15
California Gnatcatcher (documented pairs & individuals)	52
California Red-legged Frog (<i>Rana aurora draytoni</i>)*	100
Riverside Fairy Shrimp (<i>Streptocephalus woottonii</i>)*	100
Two-Striped Garter Snake (<i>Thamnophis hammondi</i>)	90-100
Least Bell's Vireo (<i>Vireo bellii pusillus</i>)	100
² Plus 56 acres minimum of restored maritime succulent scrub	
³ Percent Preserved standards were not established for most raptor species	
* 100% of HCP/MSCP Standard	

A variety of species designated as federal Category 2 Candidates are not included in Table 10. RMP Policy 2.8 of the RMP requires the onsite preservation of plant and wildlife species recognized as Category 2 Candidates. Unless otherwise specified (e.g., orange-throated whiptail or San Diego horned lizard), the standard for preservation for candidate species is a minimum of 75% of Ranch populations in a Preserve configuration that will ensure their conservation in perpetuity. This standard may be re-evaluated if future studies to demonstrate a greater or lesser need for conservation of any resources. Achievement of this standard may be measured by evaluation of the sensitive plant and animal maps (MBA/RECON 1989, 1990), or as updated by any Phase 2 RMP field mapping efforts which include measured areas of the populations to establish the numbers of individuals within those populations.

The Biota Monitoring Plan identifies the following general monitoring techniques.

- Regularly updated aerial photographs to help detect large-scale changes in the biota (e.g., detecting changes in vegetation communities, disturbances such as new trails and roads, etc.);
- Establishment of permanent photo-documentation stations in study plots to detect more fine-grained changes in vegetation communities and composition;
- Field forms that are the same from survey to survey and consistently utilized by personnel;
- Consistent field techniques for measuring biota (e.g., always percent cover or frequency of a dominant plant species in a transect, bird surveys conducted at the same time of year under consistent survey conditions [weather, time of day], live-trapping on transects or grids using the same bait mixture); and
- Measurement of important environmental variables (e.g., local precipitation).

The Biota Monitoring Plan establishes the following schedule (Table 11) for Otay Ranch habitats (year 1 is the first year after the approval of the initial Otay Ranch SPA).

Below is a discussion of preservation and preserve design considerations for each habitat type.

a. Coastal Sage Scrub/Maritime Succulent Scrub

Policy 2.2 of the RMP states:

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.

Table 11
 Schedule for Monitoring Otay Ranch Habitats

Year	CSS/MSS	Wetlands	Grassland	Alkali Meadow	Woodland	Wildlife Corridor
2009	•			•	•	
2010	•			•		
2011	•	•	•	•		
2012	•			•	•	•
2013	•			•		
2014		•	•	•		
2015				•	•	•
2016	•			•		
2017		•	•			
2018				•	•	•
2019	•					
2020		•	•			
2021				•	•	•
2022	•					
2023		•	•			
2024	•			•	•	•
2025	•					
2026		•	•			
2027				•	•	•
2028	•					
2029		•	•			
2030				•	•	•
2031	•					
2032		•	•			
2033				•	•	•
2034	•					
2035		•	•			
2036				•	•	•
2037	•					
2038		•	•			

The RMP standards for the preservation of coastal sage scrub (CSS) are as follows:

- 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.
- A minimum of 70% of the total acreage of CSS habitat onsite shall be preserved .

The RMP guidelines specify that the following blocks of high quality CSS habitat shall be included in the preserve.

- Salt Creek Canyon
- Wolf Canyon
- Poggi Canyon
- Southwestern Jamul Mountains
- Slopes south and north of the Otay River Valley

Seventy percent (approximately 7,787 acres) of the existing Diegan CSS on-site (approximately 11,125 acres) shall be preserved. For maritime succulent scrub (MSS), 80% (approximately 228 acres) of the existing habitat shall be preserved. An additional 20% (56 acres) of MSS will be restored.

b. Wetlands/Riparian Habitats

Policy 2.10 of the RMP addresses preservation and enhancement of wetlands. The standards for preservation of wetlands, including floodplain scrub, southern willow scrub, and aquatic/freshwater marsh are as follows:

- No net loss of in-kind wetland quality or quantity in accordance with the standards of the U.S. Army Corps of Engineers , implementing Section 404 of the Clean Water Act, the USFWS and CDFW implementing Section 1600 of the California Fish and Game Code.
- If feasible, opportunities and plans for mitigation banks shall be developed in conjunction with preparation of wetlands enhancement plans for the Otay River Valley and the Vernal Pool Preservation and Management Plan in conjunction with the Phase 2 RMP and the first SPA. All revenue generated by wetland mitigation banks shall be used to fund Preserve activities.

To achieve the standards for preservation and enhancement of wetlands, the RMP guidelines are as follows:

- Include at least 90% of identified wetlands within the Preserve.
- Where feasible, preserve wetlands not included within the Preserve within non-preserve open space.

- Conduct a wetland delineation for each SPA development using the methodology appropriate for the permit or approval being sought.
- Compensate for wetlands outside of the Preserve by wetland creation, restoration, and enhancement within the Preserve, primarily in the Otay River Valley.
- When and where feasible, wetland creation, restoration, and enhancement within the Preserve shall be completed prior to actual habitat disturbance for which these activities are considered mitigation.

The implementation guidelines of the RMP (Section 4.3.1 and Figure 21) specify locations for potential wetland/riparian habitat creation, restoration, and enhancement. These activities will be concentrated in the Otay River Valley in areas that currently support disturbed or degraded wetlands, including tamarisk/mule fat scrub, mule fat scrub, tamarisk scrub, and baccharis scrub. Table 11 depicts the schedule for monitoring this habitat.

c. Alkali Meadow

The approved plan requires that the Otay Ranch Preserve include 72% of existing alkali meadow. The EIR Findings of Fact state:

"Impacts shall be substantially lessened through placement and design features (i.e., road location and infrastructure design) and application of a ratio as defined by the appropriate public agency, however, no less than 1:1 based on habitat type and quality and whether pre-establishment of in-kind habitat has occurred. Development shall not occur until compensation has been approved by California Department of Fish and Game through the Streambed Alteration Agreement and/or Corps of Engineers 404 permit process, as required in accordance with their no net loss statement.

Potential indirect impacts shall be mitigated by providing a minimum 100-foot width buffer for all alkali meadow habitat. No development or landscaping shall be allowed within buffer areas. Impacts to alkali meadow from hydrological alterations (including potential displacement of native habitat with exotic and wetland species) shall be mitigated as described herein. The water runoff from surrounding development shall be diverted and controlled to retain the same amount and seasonality of water input existing before development. A study shall be required at the SPA level of analysis to determine existing hydrological conditions of streams containing alkali meadow and what hydrological changes will occur to these streams after development. The results of these studies shall be used to engineer storm drain development to achieve pre-impact hydrological conditions."

Table 11 depicts the schedule for monitoring this habitat.

d. Woodlands

Policy 2.4 of the RMP stipulates preservation of the following types of woodland habitats: southern interior cypress forest, coast live oak woodland, oak riparian forest, riparian woodland, and sycamore alluvial woodland. The standard of preservation is 100%, and where it is infeasible to include these woodlands in the Preserve, they shall be included in non-preserve open space. Table 11 depicts the schedule for monitoring this habitat.

e. Vernal Pools

A complete discussion of monitoring methods is provided in the Vernal Pool Preservation and Management Plan (Appendix 6).

f. Wildlife Corridors

A wildlife corridor study of the Otay Ranch was conducted by Ogden Environmental and Energy Services, Inc. in 1992 (Ogden 1992). The corridor study concentrated on five focal species: bobcat (*Lynx rufus*), mule deer (*Odocoileus hemionus*), mountain lion (*Felis concolor*), California gnatcatcher, and cactus wren. Ogden also distinguished between regional and local wildlife corridors:

"Regional corridors link two or more large areas of open space and are necessary to maintain demographic and genetic exchange between wildlife populations residing within these geographically disjunct areas. Local corridors allow resident animals access to necessary resources (e.g., water, food, cover, or den sites) within a large habitat patch and they may function as secondary connections to the regional corridor system." (pg 1-1)

Based on the Ogden study, several regional and major local wildlife corridors were identified on all three parcels of the Otay Ranch. Several of these corridors also occur on, or cross, other public and private ownerships.

Regional and local wildlife corridors should be monitored using the same field methodology used in the Ogden study. The methodology utilizes accepted field techniques for detecting signs of wildlife species, including tracks, scat, and, rarely, visual contact. Track surveys may be conducted using several methods: (1) finely raked sand or dirt; (2) graphite powdered cards; (3) layers of lime chalk; (4) soot-coated aluminum scent stations; and (5) combinations of these methods. Infrared triggered cameras also can be used to photograph passing animals.

Monitoring sites should be established in areas where there may be future constraints on wildlife movement because of a reduction of habitat (e.g., a narrowing of habitat links), potential physical barriers (e.g., roadways), and potential edge effects from development (noise and lighting). It is reasonable to assume that if animals use relatively constrained wildlife corridors in the Otay Ranch Preserve, that they also will use less constrained areas (e.g., the Otay River Valley portion of the Otay Ranch Preserve).

Based on the results of the Ogden study, recommended areas for monitoring wildlife corridors include:

- Otay Valley Road where Wolf Canyon meets the Otay River Valley⁷
- The SR 125 crossing of the Otay River Valley
- The confluence of O'Neal Canyon and Otay River
- Buschalaugh Cove-San Ysidro Mountains
- Jamul Mountains-Dulzura Creek at Otay Lakes Road
- Proctor Valley Road near the City boundary
- Little Cedar Canyon at Otay Lakes Road
- Cedar Canyon at Otay Lakes Road

Sites should be monitored quarterly during survey years to establish seasonal use of wildlife corridors. Each site should be monitored every three years, as depicted in Table 11.

g. Steep Slopes

According to the Otay Ranch GDP/SRP Program EIR and the Phase 1 RMP, Otay Ranch contains 7,651 acres of land with gradients of 25% or greater. Of this amount, 5,317 acres (69.5% of Otay Ranch's steep slopes) lie within the Otay Ranch Preserve, and 1,034 acres (13.5%) are within Planning Areas 16 and 17 Limited Development Area (LDA). Thus, the combined total of steep slopes assumed to be preserved by the Otay Ranch GDP/SRP and Phase 1 RMP is 6,350 acres or 83%.

Based on this analysis, the GDP/SRP and the Program EIR impose a requirement that 83% of Otay Ranch's steep slopes must be preserved. The converse is that 17% of the steep slopes (1,301 acres) may be developed.

Subsequent to the adoption of the GDP/SRP, more precise calculations of steep slopes based on better GIS technology were prepared (2013). This analysis demonstrated that there were far more steep slopes within Otay Ranch than originally analyzed. The updated steep slope calculations demonstrated that a total of 9,821 acres of land with gradients of 25% or greater. Applying the 17% factor, a total of 1,669.6 acres of steep slopes may be impacted. However, based on current estimates, only approximately 1,387.1 acres of steep slopes will be impacted.

⁷ The Ogden Study also identified monitoring at the confluence of Wolf and Poggi Canyons, however this area was subsequently deemed developable.

Of particular concern is the need to establish a system to assure that no single entitlement encroaches upon a disproportionately large share of steep slopes, creating an unfair or even impossible preservation burden for subsequent villages. To avoid this problem it is necessary to establish quantifiable limits for the number of acres of steep slopes each village may disturb and still ensure compliance with the 83% preservation standard Ranch-wide.

The GDP/SRP slope analysis did not identify disturbed slopes on a village by village basis. Rather, the GDP/SRP data is based upon an analysis of broad development boundaries (excluding arterials). Table 12 applies the GDP/SRP slope analysis on a village by village basis to calculate slopes within each village. The analysis assumes that all slopes within each village will be disturbed, with the exception that the LDA in Planning Areas 16 and 17 would be preserved. This village by village analysis also excludes impacts caused by Circulation Element roads. As more precise data becomes available through the SPA planning process, application of the preservation standard must be reviewed.

Table 12
Steep Slope Allocation by Parcel

	Existing Steep Slopes (Slope Gradient ≥ 25%)	Steep Slope Impacts	Projected Steep Slope Impacts
		(City of Chula Vista)	(County of San Diego)
Otay Valley Parcel			
<u>SPA Plans:</u>			
Villages 1 and 1 West, 2, Village 3, 4 (Remainder), 4 (Park Portion), 5, 6, 7, 8 West, 8 East, 9, 10, 11, and Planning Area 12 (Eastern Urban Center and Freeway Commercial) University, and Planning Area 18	726.4	538.3	-
<u>Remaining SPA Plans:</u>			
Proctor Valley			
<u>SPA Plans:</u>			
Village 13			166.5
Village 14, Planning Areas 16 & 19			194.30
Sub-totals		-	360.8
San Ysidro Mountains			
<u>SPA Plans:</u>			
Villages 15 & 17			488.0
Sub-totals		-	488.0
Ranch-wide Sub-totals	9,821.3	538.3	848.8
Ranch-wide Totals	9,821.3		1,387.1

Notes:

¹ Slope impacts are based on best available data including currently proposed projects (SPA Plans/Tentative Maps) and current Otay Ranch GDP/SRP development areas.

² Excludes acreages associated with Wildlife Agency conservation acquisitions that would no longer be developable:

^a 108 acres within Proctor Valley

^b 72.1 acres within San Ysidro Mountains

³ Assumes development will impact 100% of steep slopes (slope gradient ≥ 25%) within current Otay Ranch GDP/SRP development areas.

5. Conceptual Infrastructure Plan

The Otay Ranch GDP/SRP and Phase 1 RMP contain the following Policy language:

RMP Policy 6.6: 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.

RMP Policy 6.6 includes the following guidelines for siting and design of infrastructure facilities within the Otay Ranch Preserve.

- Infrastructure facilities shall be sited and designed to minimize visual and other impacts to Preserve resources.
- Infrastructure plans and their implementation shall be subject to review and comment by the appropriate jurisdictions in coordination with the POM.
- CEQA mitigation requirements for impacts associated with infrastructure shall be reviewed by the appropriate jurisdictions and the POM if such improvements are located within the Preserve.
- When feasible, place infrastructure in roadways or outside the Preserve.
- Mitigation measures for facilities shall conform to restoration/mitigation proposals of the RMP.

As part of this Conceptual Infrastructure Plan, information presented in Figures 13-18 of the Phase 1 RMP has been refined and updated to reflect new data. Updated conceptual infrastructure maps have been prepared and are presented in Figures 13 through 19 of this document. These Conceptual Infrastructure Plans are consistent with the infrastructure maps contained in the City of Chula Vista MSCP Subarea Plan. Updated information reflects the following:

- The Salt Creek sewer system has been constructed as illustrated in Figure 13;
- Updated reclaimed water facility information is shown and generally indicates less potential effect on preserve resources than previously anticipated (compare Figure 14 of this document with Figure 26 of the adopted RMP);
- Updated water facility information is shown and generally indicates less potential effect on preserve resources than previously anticipated (compare Figure 15 of this document with Figure 16 of the adopted RMP);
- Assumptions regarding anticipated urban runoff facilities have not changed (compare Figure 16 of this document with Figure 28 of the adopted RMP);
- CWA Pipeline 4E has been constructed and traverses preserve resources in Salt Creek as illustrated in Figure 16 of this document;
- SDG&E Pipeline 2000, a high pressure gas line, is planned within existing SDG&E easements in the Salt Creek area as illustrated in Figure 17 of this document.
- SR-125 has been completed as established in Figure 18;

Since approval of the Phase 1 RMP, more specific criteria regarding siting and design of utilities and infrastructure has been developed as part of the Multiple-Species Conservation Program (MSCP).

Otay Ranch is located within the study area of the MSCP Plan. Utilities and infrastructure (“Facilities”) to be located within the Otay Ranch Preserve should be consistent with the final MSCP siting and design criteria presented below. The siting of Facilities within the Otay Ranch Preserve shall be controlled by the jurisdiction within which the Facilities are to be located. However, before approving the siting of Facilities, the jurisdiction in which the Facilities are to be located shall request and consider written comments from the POM on the proposed location.

Each jurisdiction’s MSCP Subarea Plan contains facility siting criteria applicable to the portions of Otay Ranch within their jurisdiction. Portions of the City MSCP Subarea Plan applicable to infrastructure in Otay Ranch within City jurisdiction are contained in Section 6.3 of the City Subarea Plan.

Portions of the County MSCP Subarea Plan applicable to infrastructure in Otay Ranch within County jurisdiction are contained in Sections 1.9.3.2 and 1.9.3.3 of the County Subarea Plan.

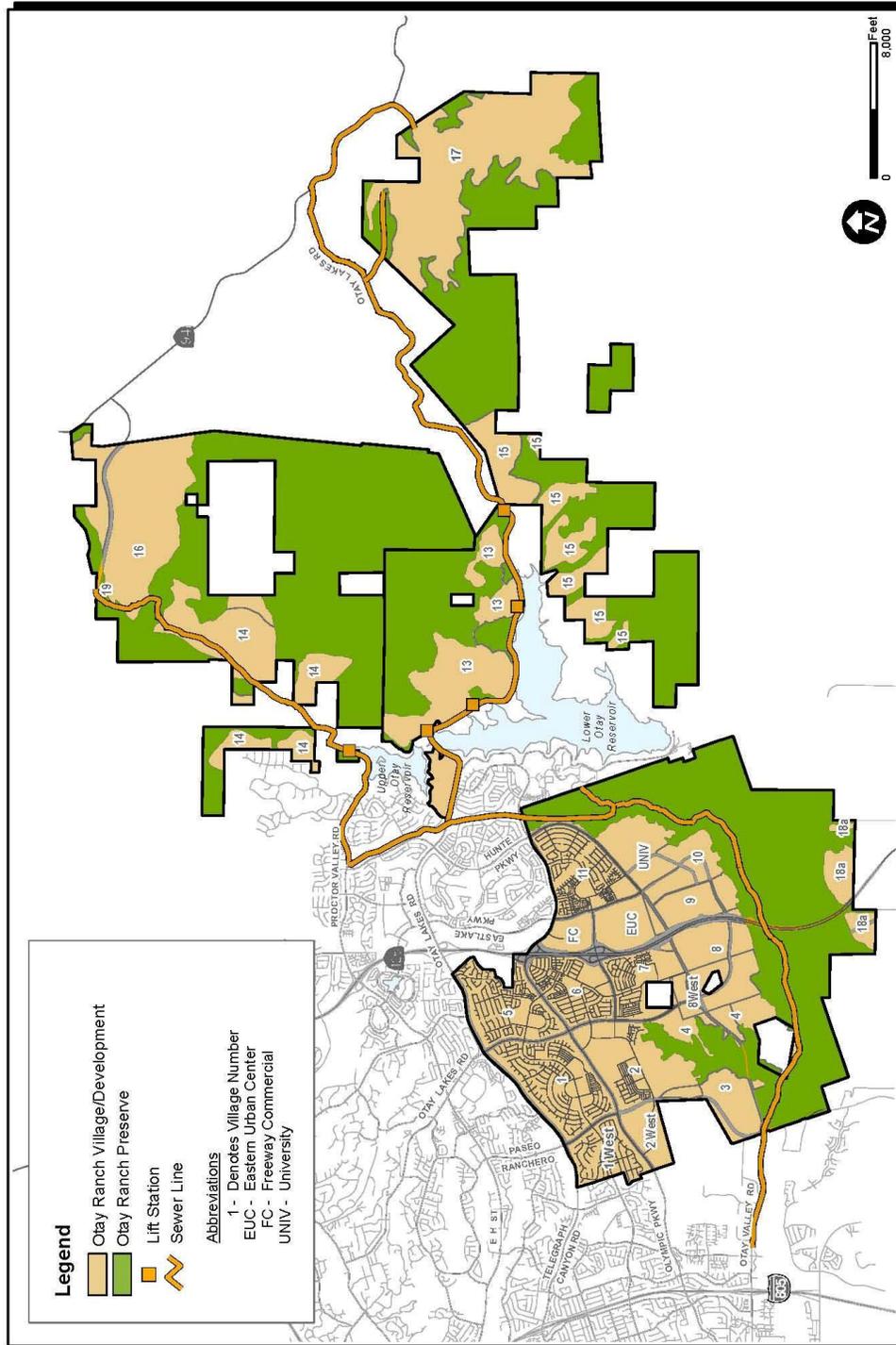


FIGURE 13

Sewerage Facilities

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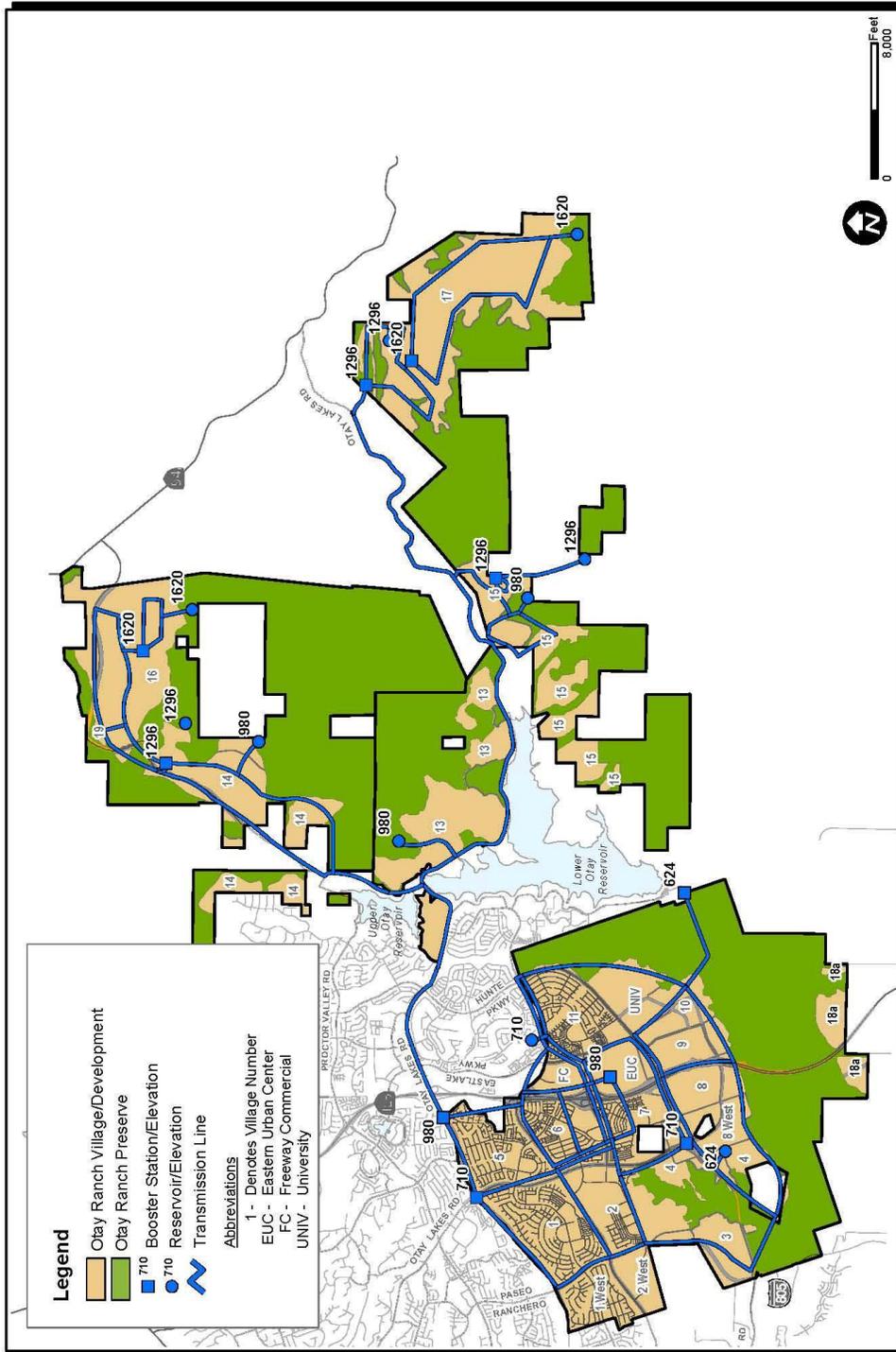


FIGURE 14
Water Facilities

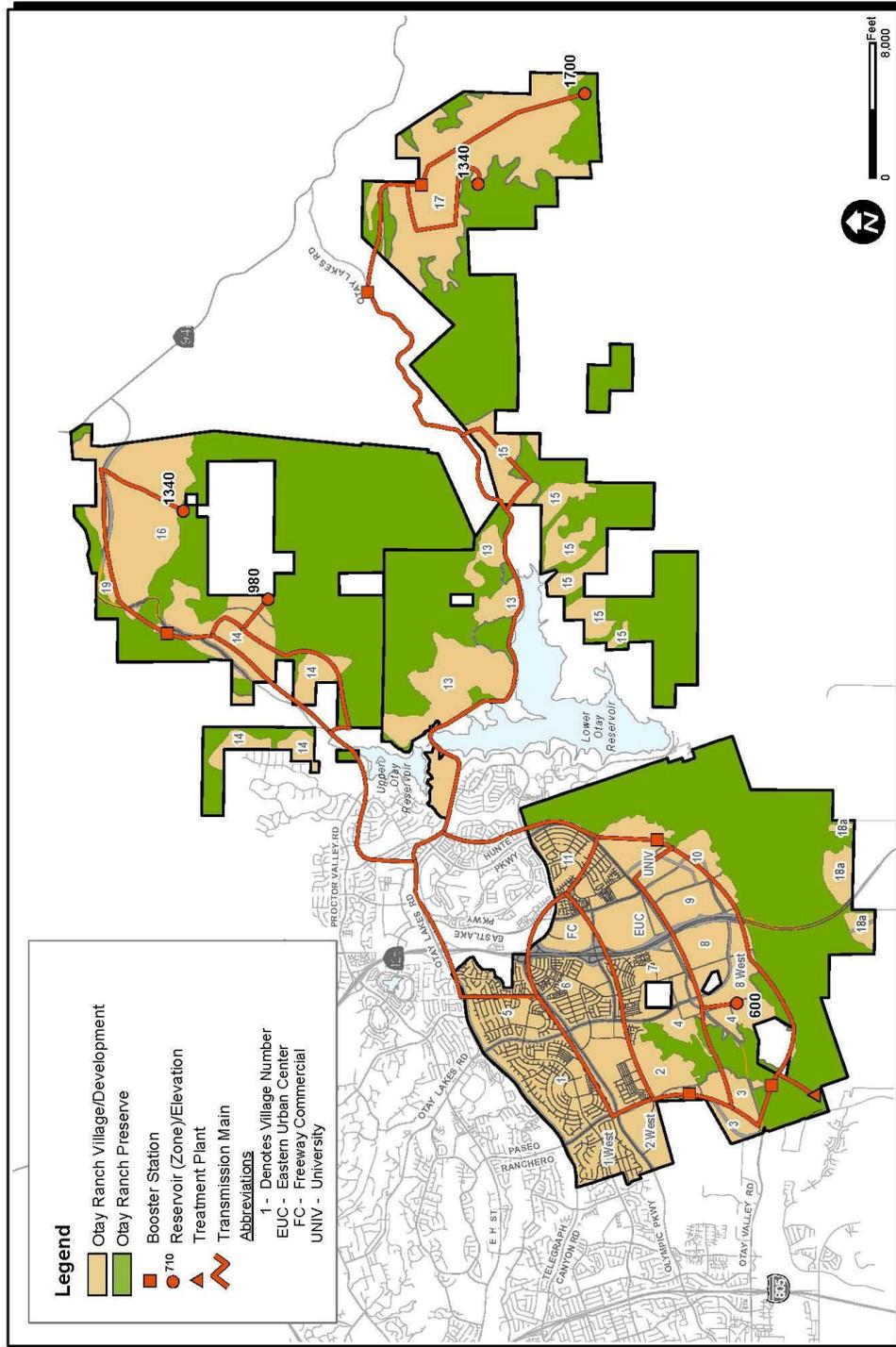


FIGURE 15
Reclaimed Water Facilities

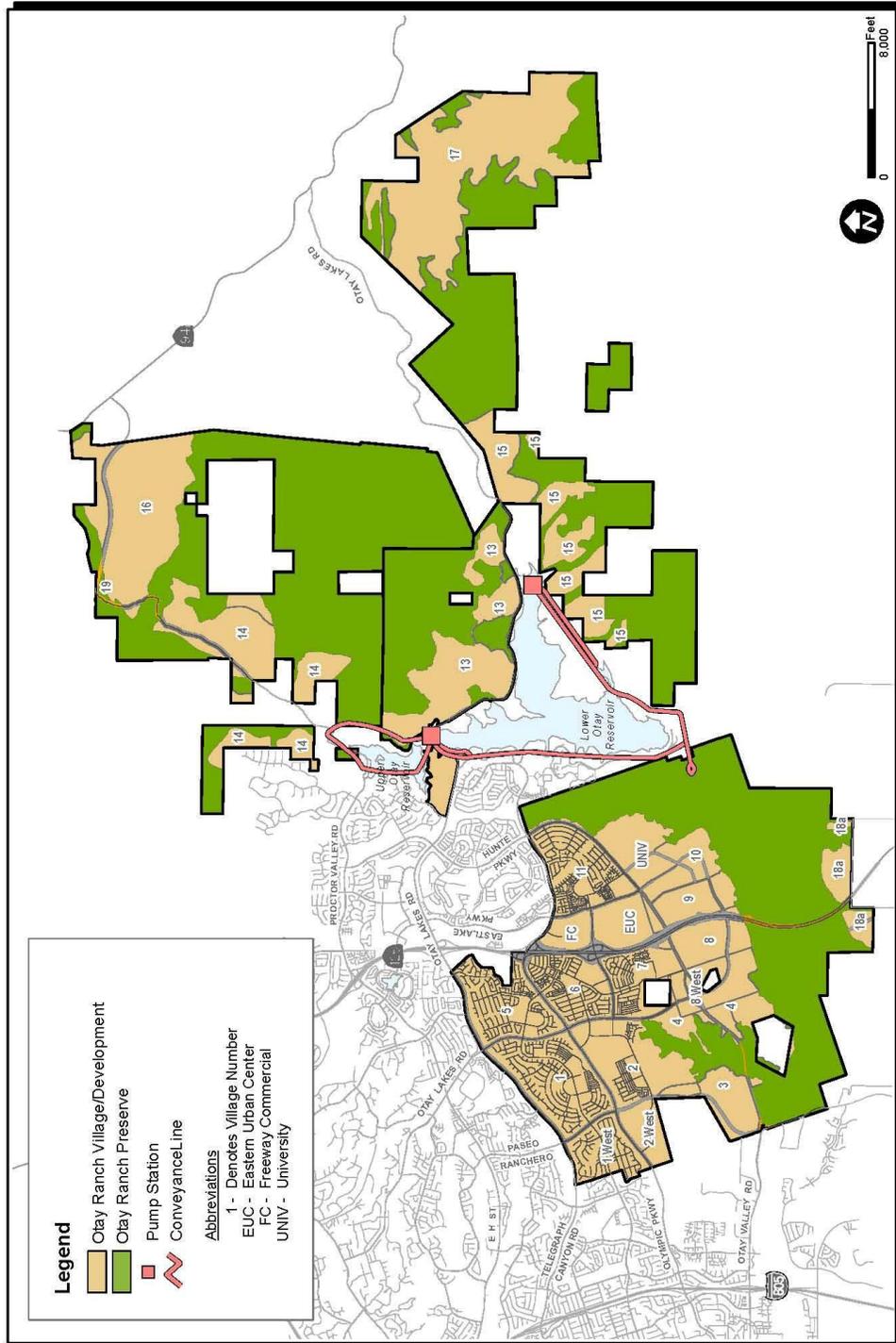


FIGURE 16

Urban Runoff Facilities

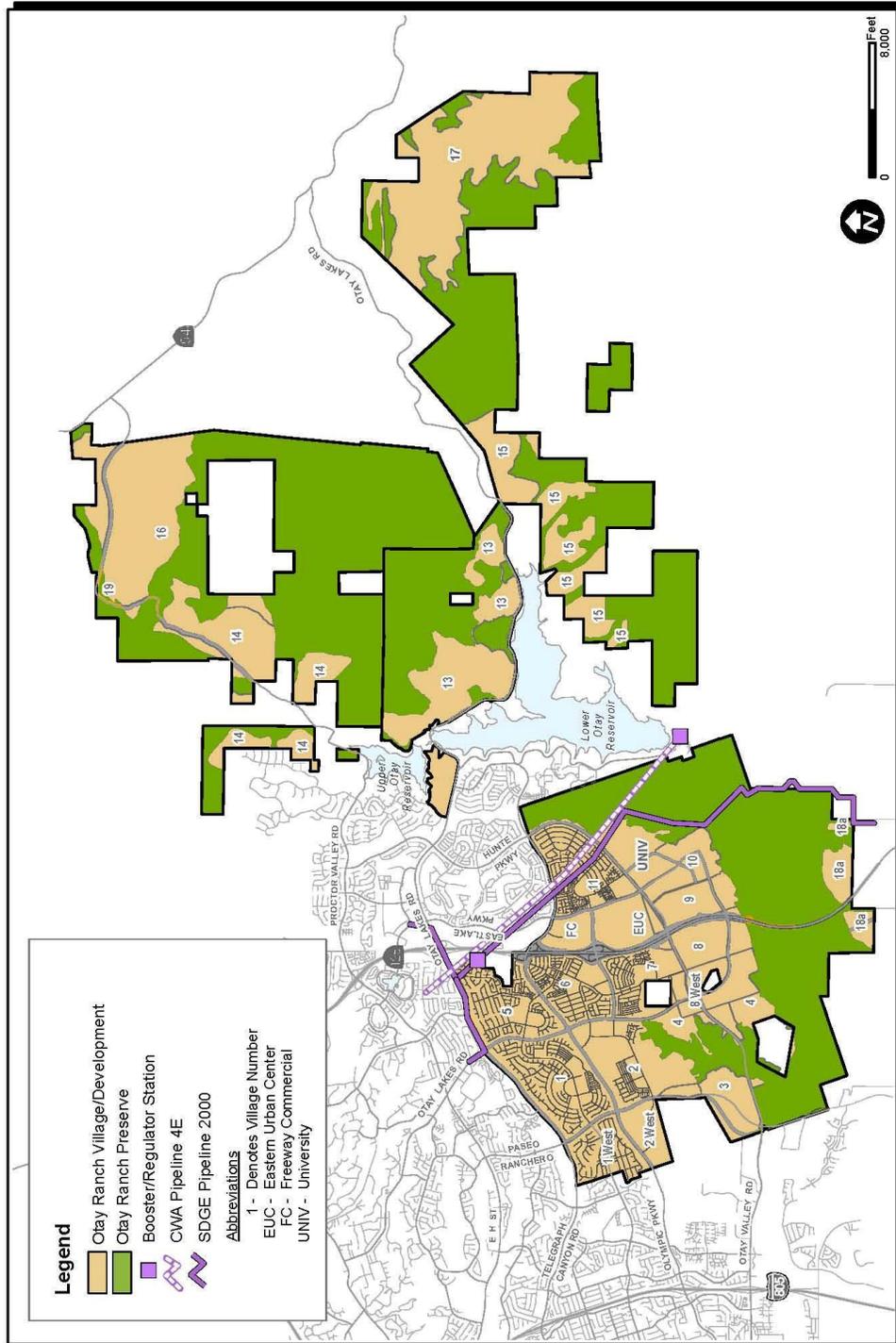


FIGURE 17

Utility Corridors

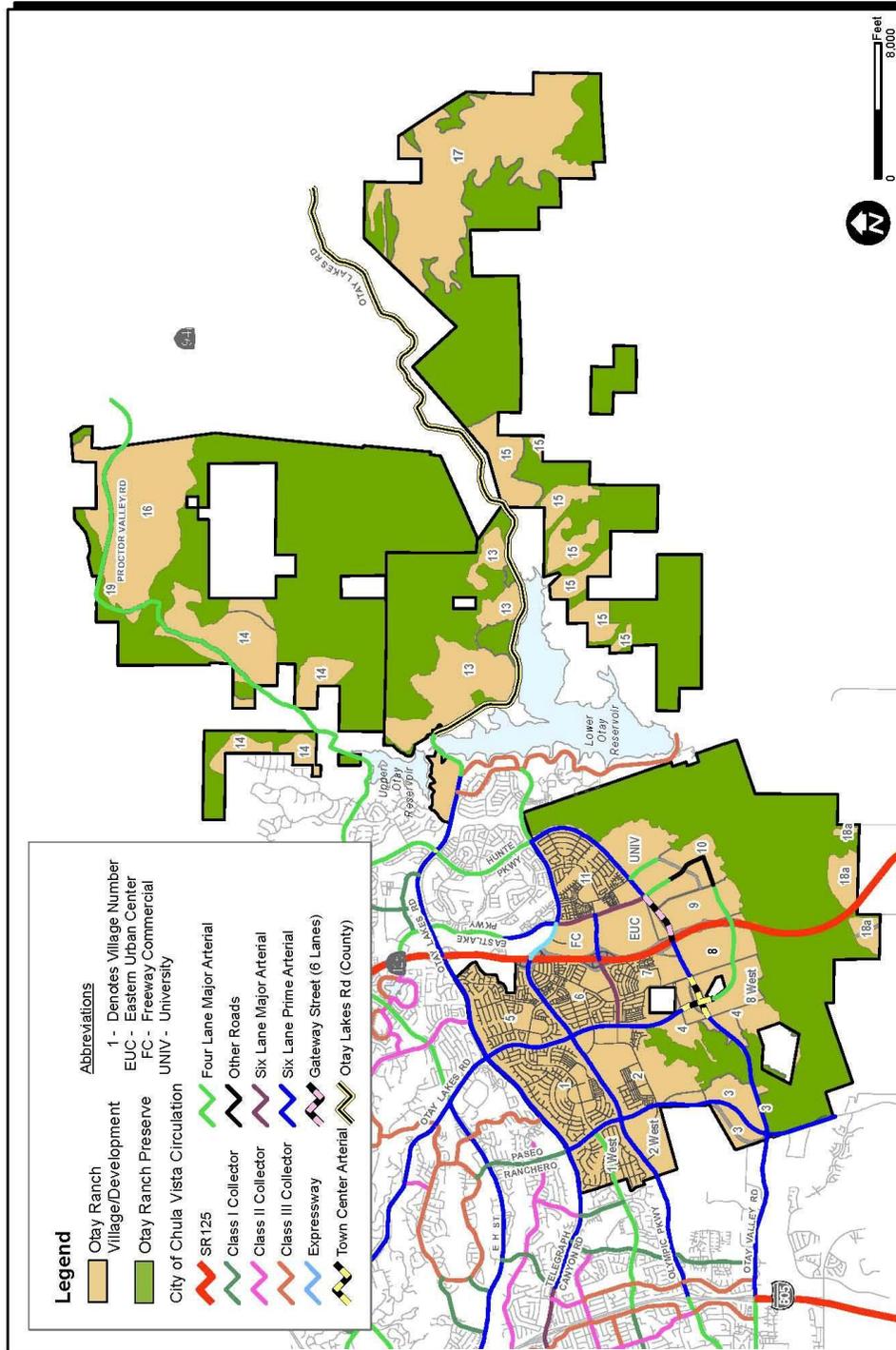


FIGURE 18
Roadway Map

6. Nature Interpretive Center Site Alternatives

The Otay Ranch GDP/SRP and Phase I RMP contain the following Policy language:

RMP Policy 5.11: As part of the Phase 2 RMP, identify the potential locations of a nature interpretive center within the Preserve.

- The Nature Interpretive Center should be located in a previously disturbed, non-sensitive areas.
- The Nature Interpretive Center should be readily accessible from existing and planned public roads and should not intrude into core areas within the Preserve.
- The design of the Nature Interpretive Center should be compact to minimize the extent of the edge between the Nature Interpretive Center use and sensitive resources within the Preserve.
- Siting and design of the Nature Interpretive Center shall be compatible with the overall RMP goal of resource protection.
- Trails associated with the Nature Interpretive Center shall be designed in accordance with RMP Policy 6.3 of the RMP.

Based on the policies and criteria above, Figure 19 identifies three potential alternative sites for the Nature Interpretive Center.⁸

⁸ Cost estimates for a Nature Interpretive Center range from \$400,000 to \$6,000,000.

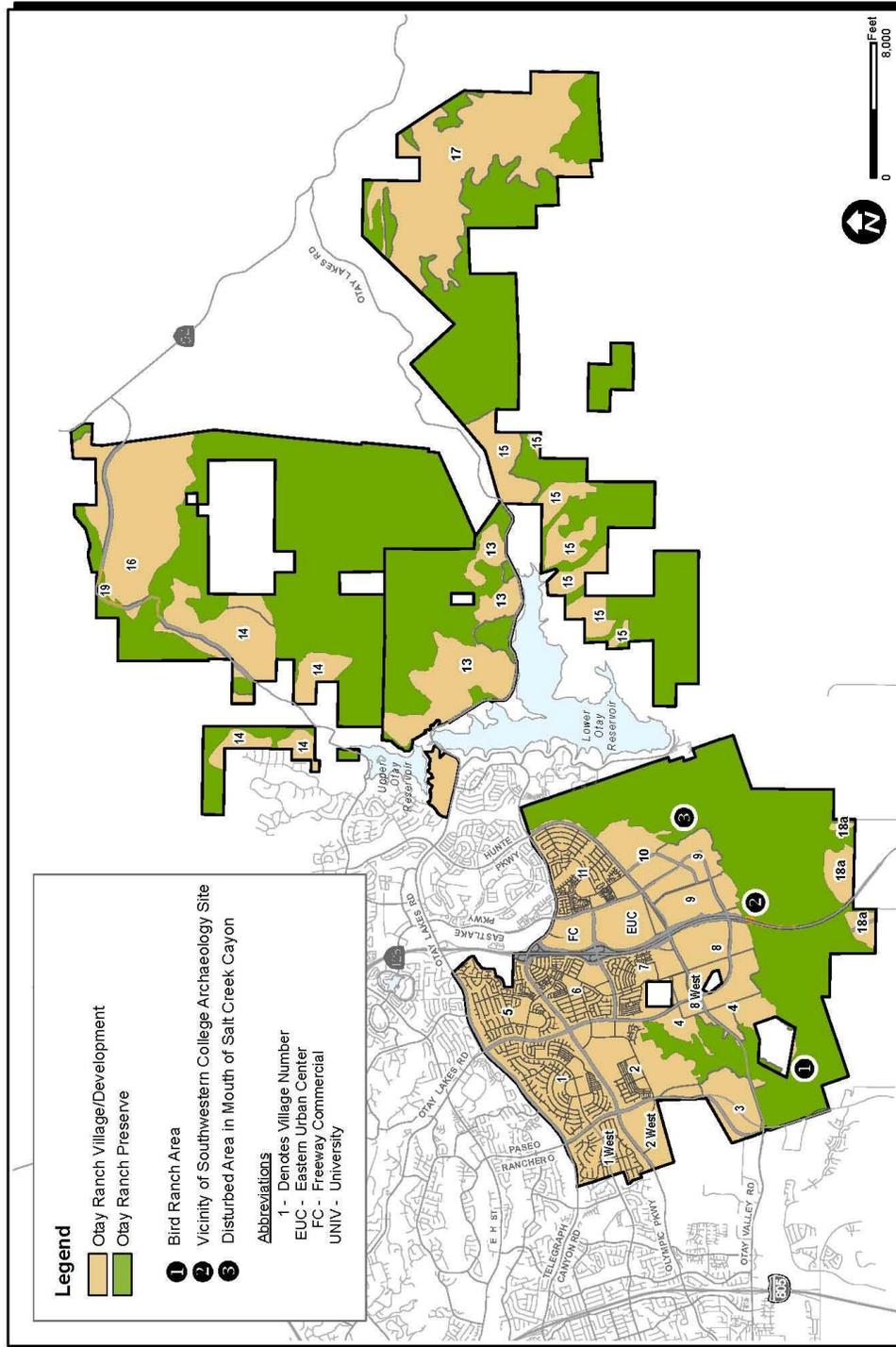


FIGURE 19

Potential Alternative Sites for Nature Interpretive Center

IV. Tasks Performed Later

The following are tasks identified in the Phase 1 RMP for which it is unnecessary and impractical to until the OVRP planning is completed.

A. Otay Valley Riparian Habitat Restoration Plan

The GDP/SRP and Phase 1 RMP contain the following Policy language:

RMP Policy 2.10: If feasible, opportunities and plans for mitigation banks shall be developed in conjunction with preparation of wetlands enhancement plans for Otay 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.

The Otay Valley portion of this task will be pursued upon the completion of the OVRP JEPa park planning effort. The vernal pool portion of this task is addressed in the Vernal Pool Study (Appendix 2) and the Vernal Pool Management Plan (Appendix 6).

B. Demonstration Agricultural Plan

The GDP/SRP and Phase 1 RMP contain the following Policy language:

RMP Policy 2.14: Provide opportunities for demonstration agricultural activities within the Preserve. 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 POM and/or the OVRP 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.

This plan will be prepared concurrent with the conveyance of this area to the POM, prior to adoption of the last SPA on the Otay Valley Parcel or as part of the OVRP planning process.

C. OVRP Active Use Plan

The GDP/SRP and Phase 1 RMP contain the following Policy language:

RMP Policy 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, and reflect with the following criteria.

- Active recreation areas should be located in previously disturbed, non-sensitive areas.

- Active recreational uses should be readily accessible from existing and planned public roads and should not intrude into core areas within the Preserve.
- Active recreation uses should be clustered to minimize the extent of the edge between active recreation uses and sensitive resources within the Preserve.
- Limited commercial uses/activities related to active recreation may be allowed within the 400 acres designated for active recreation.
- Public parks and recreation facilities may be operated commercially by private operators within active recreation areas.
- Emphasis shall be placed on providing the majority of the active recreation in the Otay Valley, to the extent that this is consistent with an OVRP Plan, as may be adopted.

RMP Policy 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.

In addition to the GDP/SRP, Phase 1 RMP and Phase 2 RMP, there are several other public documents that address the OVRP. The following is a brief summary of each such regulation, lands plan and conceptual or advisory documents.

OVRP Concept Plan The OVRP Concept Plan is a conceptual plan, adopted by the OVRP Joint Exercise of Powers Agreement (JEPA) members (the Cities of San Diego and Chula Vista and the County) in February 1997, providing an overview for the development of the OVRP.

OVRP Trails Guidelines: The OVRP Trails Guidelines were adopted by the OVRP JEPA in October, 2003 to serve as a conceptual guide to the development of the OVRP trails system.

City of Chula Vista Greenbelt Master Plan: The Greenbelt Master Plan is a Policy document adopted by the City in September 2003 to provide guidance for planning open space and constructing and maintaining trails around the City, including the Otay River Valley.

The Otay River Watershed Management Plan (ORWMP): The ORWMP is an advisory document for the management of the Otay River watershed. Adopted by the Cities of Chula Vista and San Diego and the County from 2006 to 2008, this plan is intended to advise decision-makers on the watershed's future.

MSCP Subarea Plans: The MSCP is a habitat conservation plan which meets the requirements of the California Natural Community Conservation Planning (NCCP) Act of 1991. The Chula Vista Subarea Plan was adopted the City in February 2003. This plan governs land within the City including most of the Otay River Valley. The County MSCP South County Subarea Plan governs land within the unincorporated portions of the OVRP planning area. Portions of the southern slopes

of the Otay River Valley, within the City of San Diego, lie within the City of San Diego MHPA Boundary and are therefore subject to the City of San Diego MSCP Subarea Plan.

The City MSCP contains the following provisions related to the OVRP active recreation areas:

- Active recreation areas are identified in the OVRP Concept Plan and this Subarea Plan. These areas are not a part of the Preserve⁹, and include both existing and proposed active and passive recreation sites. Active recreation uses are identified in the Otay Ranch GDP/SRP as allowed uses in the Otay Ranch Preserve and are not subject to the 100-foot Edge Plan requirements.
- Two hundred forty-six acres are identified by this Subarea Plan for active recreation uses in the OVRP, within the Chula Vista Subarea.
- The total usable area of active recreation will not be reduced below 246¹⁰ acres. It is understood that if designated active recreation area is eliminated in order to avoid Narrow Endemic Species, additional Preserve land may be designated for active use in order to retain equivalent functional recreational values.

The Chula Vista MSCP Subarea Plan and Chula Vista General Plan identify potential active recreation areas within the OVRP as depicted in Figure 20.

⁹ This reference to "Preserve" is to the MSCP Preserve not the Otay Ranch Preserve.

¹⁰ The 2005 Chula Vista General Plan Update converted 52 acres of active recreation to 100% Conservation Area in the MSCP Preserve. As a result, the total amount of active recreation identified by the Chula Vista MSCP is 194 acres.

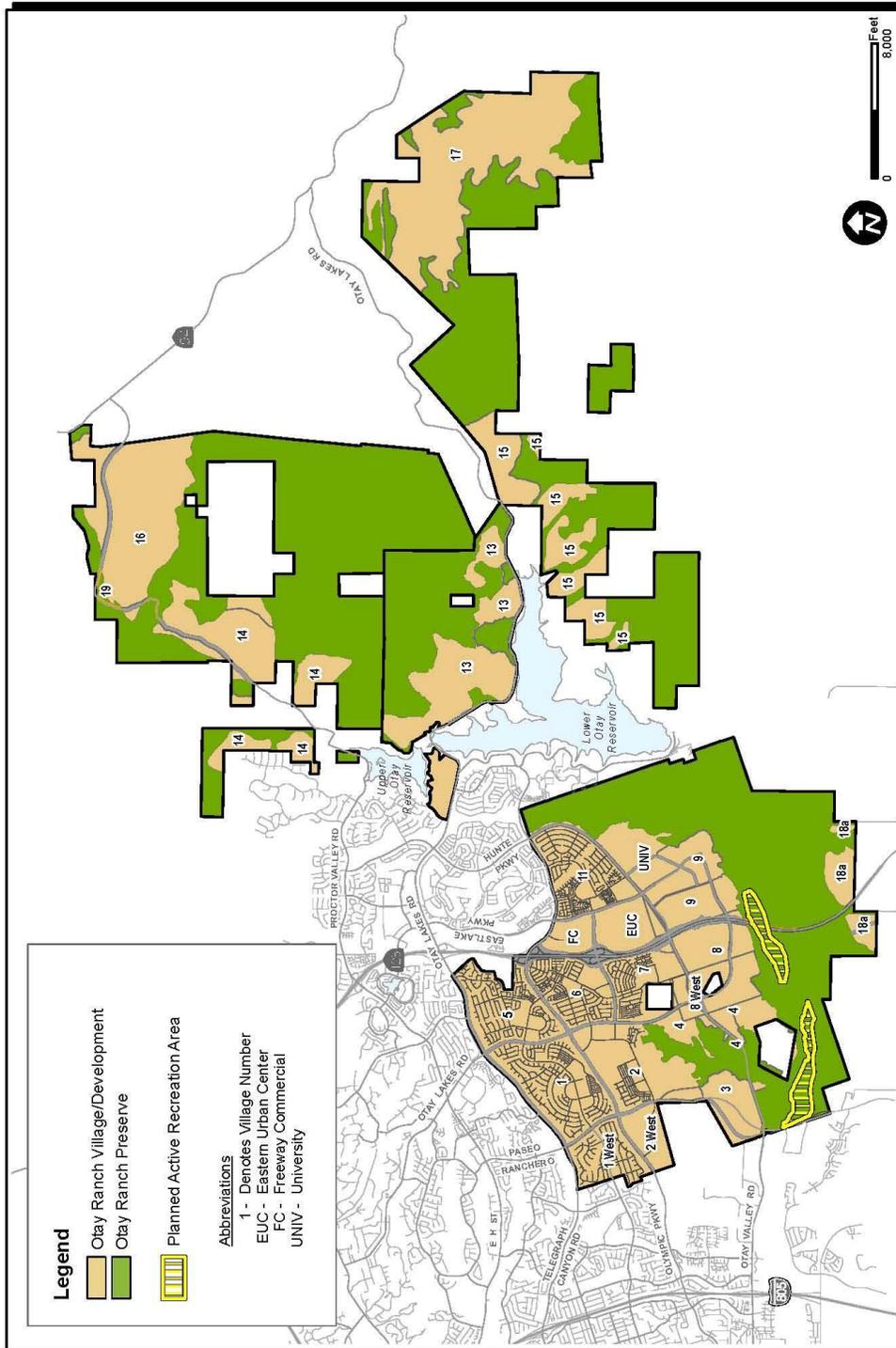


FIGURE 20

Planned Active Recreation Area