Draft

Ellwood-Devereux Coast Open Space and Habitat Management Plan

March 2004

City of Goleta

County of Santa Barbara

University of California, Santa Barbara

Electronic copies of this Draft Open Space and Habitat Management Plan can be accessed at www.ellwood-devereux.org

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March 2004

Prepared for:

City of Goleta
City Manager's Office
130 Cremona, Suite B
Goleta, California 93117

County of Santa Barbara
Planning and Development Department
123 East Anapamu Street
Santa Barbara, California 93101

University of California, Santa Barbara
Office of Campus Planning and Design
1325 Cheadle Hall
Santa Barbara, California 93106

Prepared by:

URS Corporation
130 Robin Hill Road, Suite 100
Goleta, California 93117

With assistance from:

Baikal Consulting

Bioregional Planning Associates

Wallace Roberts & Todd, LLC

Acknowledgments

The Ellwood-Devereux Coast Open Space and Habitat Management Plan is a cooperative effort by three sponsoring agencies. Members of the Joint Review Panel and key staff that prepared the Open Space Plan are listed below:

City of Goleta

Fredrick C. Stouder, City Manager

Ken Curtis, Planning and Environmental Services Director

County of Santa Barbara

Dianne Meester, Assistant Director of Planning & Development

David Ward, Supervising Planner

Peter Imhof, Planner III

University of California, Santa Barbara

Everett Kirkelie, Associate Vice Chancellor

Tye Simpson, Director of Office Campus Planning & Design

Robert Silsbee, Planning and Resource Manager

Shari Hammond, Senior Planner

URS Corporation in Goleta, California provided technical and administrative assistance in the preparation of the Open Space Plan. A team of technical experts, GIS specialists, and subcontractors contributed to the preparation of the Open Space Plan, which was managed by Dr. John Gray and Ms. Anne Wells.

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1.0 INTRODUCTION

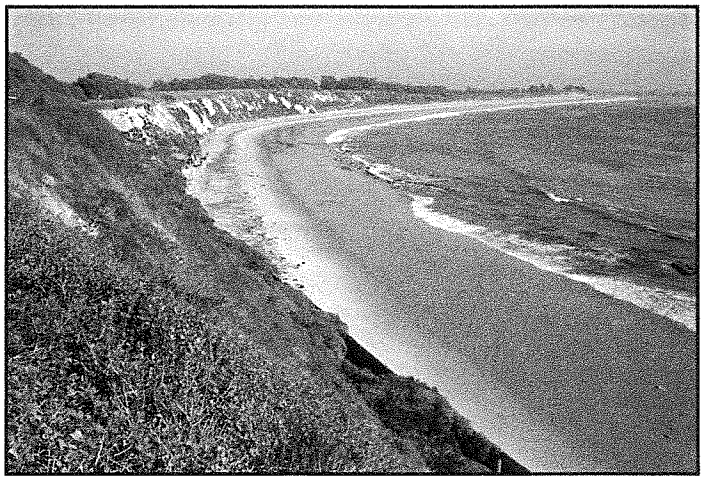
1.1 SCOPE AND GOALS OF THE PLAN

The Open Space and Habitat Management Plan (Open Space Plan) is a collaboration between the City of Goleta, University of California, Santa Barbara (University), and County of Santa Barbara (County) to comprehensively plan the land use of the Ellwood-Devereux Coast to reduce the amount of residential development, relocate development to inland locations away from sensitive coastal resources, and establish a 652-acre contiguous area along the coast that includes open space and natural reserves managed for public access and natural resource protection. The establishment of the Open Space Plan Area and associated public access and habitat improvements are dependent upon approval of the relocated development projects.

The area proposed for inclusion in the Open Space Plan Area is one of scenic beauty, tranquility, and expansiveness. It supports a variety of habitats including grasslands, coastal scrub, beaches, vernal pools, eucalyptus woodlands, and the Devereux Slough. The area has been appreciated as a natural haven by generations of hikers, joggers, surfers, horseback riders, and cyclists. This area currently is comprised of a combination of public and private parcels that are unmanaged as well as preserves/reserves that are actively managed.

Figure 1 shows the boundaries of the proposed Open Space Plan Area, the portion of the Open Space Plan Area that falls within each jurisdiction, and the four currently managed areas within these boundaries: Coronado Preserve, Coal Oil Point Reserve (COPR), Del Sol Vernal Pool Reserve, and Camino Corto Open Space.

The overall goal of the Open Space Plan is to protect and enhance the Ellwood-Devereux Open Space Plan Area and provide for public access compatible with the conservation of its regionally significant coastal resources. The Open Space Plan describes management goals, policies, and actions to guide management of public access and habitat protection. The primary elements of the Open Space Plan are a trail system and a suite of opportunities to restore sensitive coastal habitats.



This Open Space Plan is the result of an unprecedented public-private cooperative effort to guide development of the last remaining open coastal lands in the western Goleta area. The Open Space Plan encompasses 10 properties, which are currently owned by multiple public and private entities within the three jurisdictions. It provides the opportunity to comprehensively plan the preservation, management, and development of the Ellwood-Devereux area, rather than

consider piecemeal project-by-project approvals. This comprehensive planning approach would allow for improved public coastal access, and the preservation and enhancement of 652 acres of recreational, natural land, and coastal resources, including special marine habitat areas. Potential residential development would be reduced from as many as 760 to 570 units, and future University and private residential development would be clustered adjacent to existing development and infrastructure, and employment centers. Given the complexity of the setting and the conflicting policy considerations of such a large scale multi-jurisdictional initiative, the City of Goleta, University, and County believe that the Open Space Plan provides an open space, habitat management, and development plan that is, on balance, most protective overall of sensitive natural and coastal resources.

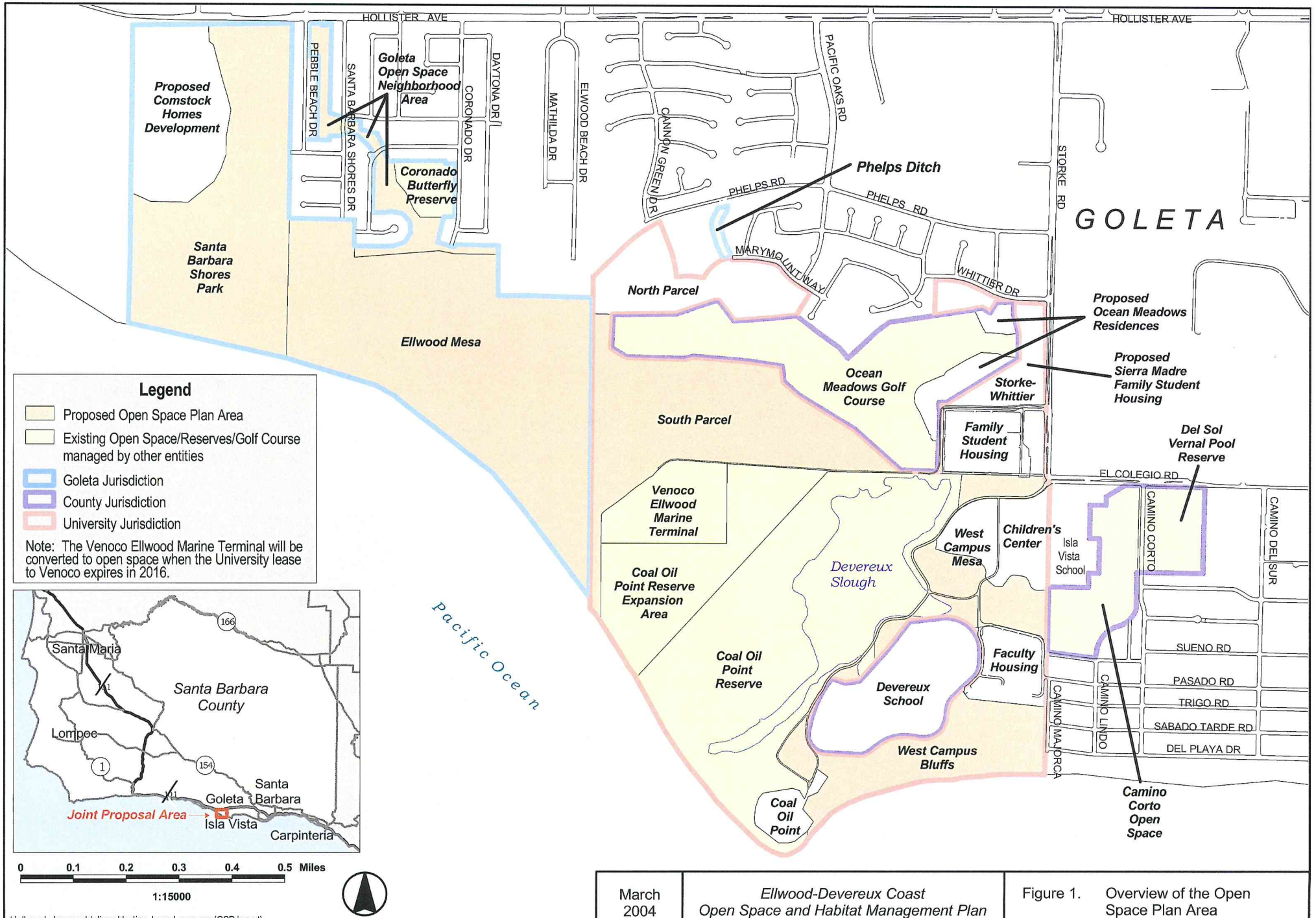
The Ellwood-Devereux Open Space Plan Area is part of the lower Devereux Creek watershed, also known as the greater Devereux Slough regional ecosystem. Development is presently allowed in various locations throughout the area. Under existing plans and regulations, development may occur close to sensitive habitat areas and the most valued recreational lands, while less valuable lands could remain vacant or undeveloped. If development proceeds under existing plans, islands of development could fragment open space and disrupt coastal access, recreational use, and the overall ecosystem in the area.

The Open Space Plan proposes to protect the resources in the area by relocating development away from coastal areas to the northern perimeter of the area where it would be clustered contiguous to existing development, roads, and services. Through the transfer of development rights from the Ellwood Mesa and the South Parcel of University's North Campus, to the areas on the north side of Santa Barbara Shores Park and north of the Ocean Meadows Golf Course, a 652-acre area would be permanently designated as open space and natural reserve. Without the relocation coordinated by the three participating jurisdictions and the cooperation of private property owners, the benefits of preserving contiguous open space and natural areas could not be achieved.

1.2 ORIGIN OF THE PLAN: THE JOINT PROPOSAL AND MOU

The underlying concept of the Open Space Plan originated in discussions between the County and the University in 2001, prior to the formation of the City of Goleta. Working with community representatives, the County and University issued a report describing the concept called the "Joint Proposal" in March 2002 and conducted several public meetings. After incorporation in 2002, the City of Goleta assumed jurisdiction over one of the major development projects in the Joint Proposal and began consideration of the Joint Proposal. In March 2003, a Memorandum of Understanding (MOU) was executed by the City of Goleta, County, and University establishing a Joint Review Panel (JRP) to oversee the preparation of this Open Space Plan and the associated environmental review documents for the three development projects involved in the Joint Proposal.

In brief, the jurisdictions recognize there were proposed residential projects adjacent to sensitive coastal resources that could adversely affect those resources and lead to development of one of the last expansive undeveloped areas in the region. By collaborating, the agencies seek to relocate these projects away from the coast adjacent to less environmentally sensitive inland



March 2004	*Ellwood-Devereux Coast Open Space and Habitat Management Plan*	Figure 1. Overview of the Open Space Plan Area

areas (see Figure 2). This relocation of proposed development would enable the sponsoring agencies to re-zone the vacated parcels as open space. The combined actions of the agencies then would effectively preserve these parcels from future development – as well as those within the managed areas – into one large contiguous coastal open space and natural reserve.

1.3 SUMMARY OF PLAN DEVELOPMENT AND PUBLIC INVOLVEMENT

The starting point for the Open Space Plan was the set of recommendations described in the March 2002 Joint Proposal, as amended by the March 2003 MOU. Preparation of the Open Space Plan began in mid-2003. The JRP, comprised of staff from the City of Goleta, County, and University, managed development of the Open Space Plan.

The Open Space Plan was developed through a systematic planning process including review of the Joint Proposal, the MOU, existing management plans in the area, and relevant technical literature, maps, surveys, aerial photographs, and reports. This review was augmented by focused field investigations, interviews with interested parties and individuals who had worked or studied in the area, and the consideration of public comments. The planning process involved an evaluation of environmental constraints and opportunities in the area, identification of regulatory considerations, formulation of planning principles, and the eventual development of public access and habitat protection goals and policies. This multidisciplinary planning approach incorporated principles of ecosystem science while recognizing public needs and community values.

The development of the Open Space Plan included significant public involvement. The sponsoring agencies conducted a public workshop on June 25, 2003, to elicit public input on the scope of the plan. A website was also developed with information about the planning process and proposed management actions. The sponsoring agencies issued a *Preliminary Concepts* document for public review prior to this Draft Open Space Plan to gather specific input on public access, trails, and habitat protection issues. Two public workshops were held on November 5 and 12, 2003, to receive public comment on the *Preliminary Concepts* document. Written comments were elicited through December 3, 2003. The Goleta City Council provided opportunities for public input at several City Council meetings in 2002 and 2003.

The Open Space Plan continues to generate a great deal of public interest. Over 100 commenters voiced their opinions on the *Preliminary Concepts* document. Many of the comments were favorable, although there were several strong reactions to Open Space Plan specifics. In particular, there were four main public comment themes:

- Habitat protection and restoration should be the primary goal
- Recreation and access must be secondary to resource protection
- Maintain the area's natural setting
- Maintain historic public uses unless substantial conflicts are created

Many comments were very detailed, relating to specific parking areas, trails, and resources. Diverging comments were provided for several issues such as the size and location of new

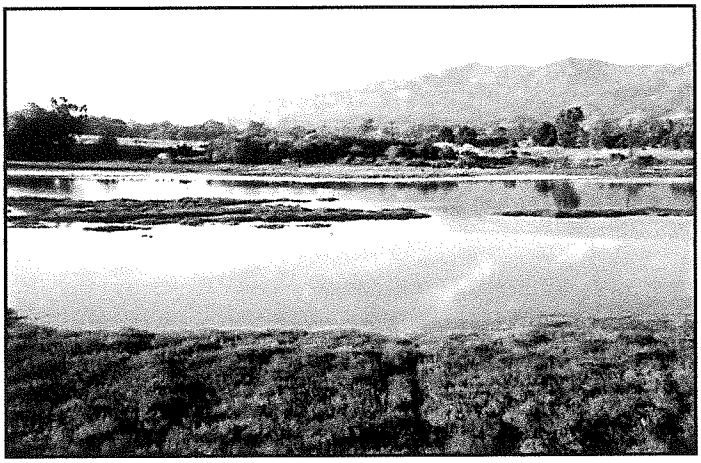
parking facilities, compatibility of pedestrian and equestrian users, and providing an all-weather bike path across the entire Open Space Plan Area.

1.4 RELATIONSHIP TO OTHER OPEN SPACE AREAS AND RESERVES

Several subareas in the Open Space Plan Area are currently managed by other public or private entities:

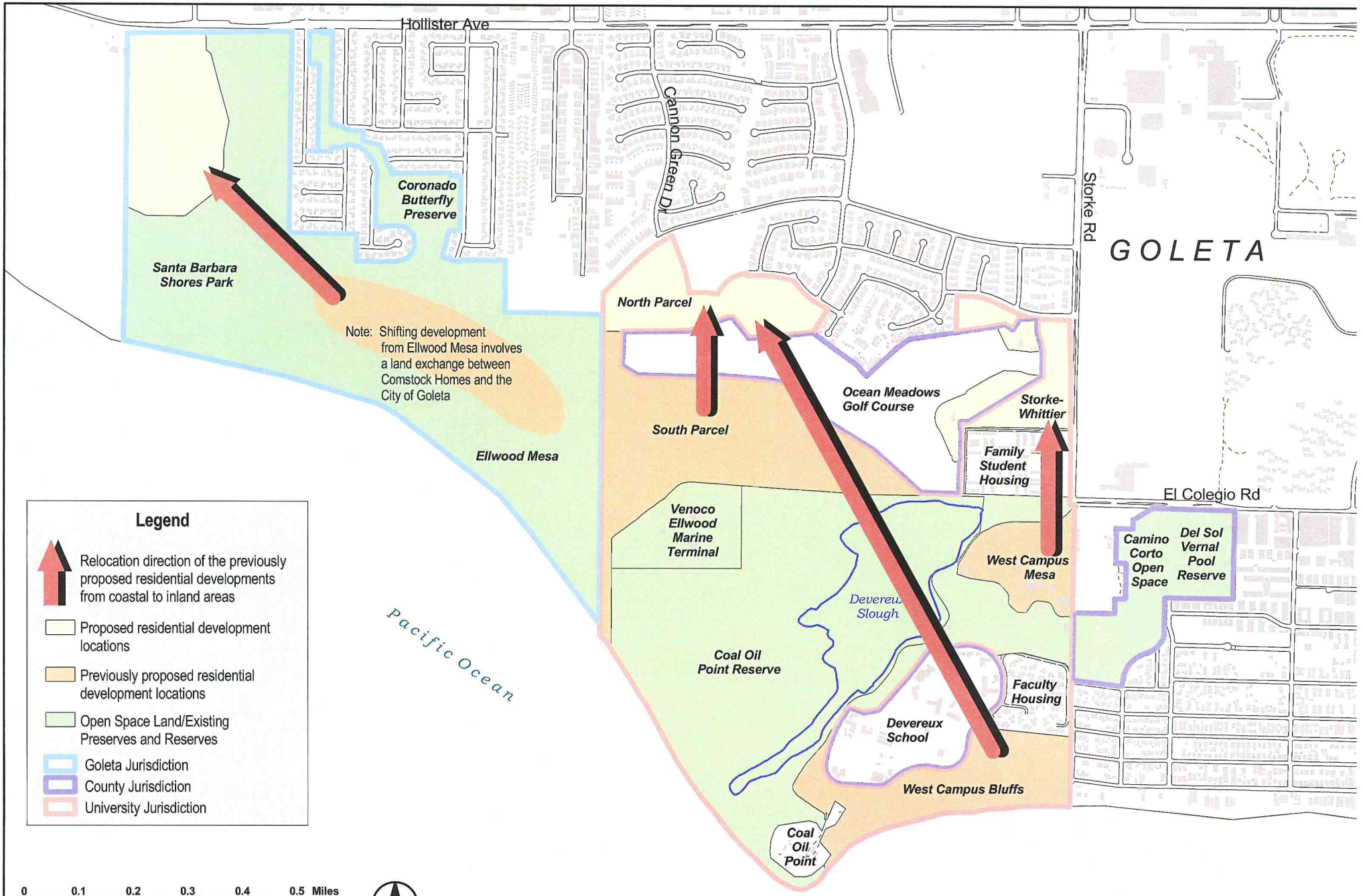
- Coronado Butterfly Preserve – Land Trust of Santa Barbara County
- Ocean Meadows Golf Course – Devereaux Creek Properties
- Coal Oil Point Reserve – University of California Natural Reserve System
- Ellwood Marine Terminal – Venoco
- Camino Corto Open Space – Isla Vista Recreation and Park District
- Del Sol Vernal Pool Preserve – Isla Vista Recreation and Park District

The Open Space Plan will not supplant the existing authorities and management plans for these areas. The Open Space Plan is designed to recognize and complement their management plans (Ferren and Pritchett, 2000; Land Trust of Santa Barbara County, 2000; Sandoval, 2003). Implementation of the Open Space Plan will be coordinated with these entities to ensure compatibility amongst open space areas and existing managed reserves and preserves.



1.5 JURISDICTION AND IMPLEMENTATION

The sponsoring agencies will implement the Open Space Plan through their individual jurisdictional approvals of the proposed residential developments and the creation of the open space, pursuant to actions of the California Coastal Commission. The agencies will cooperate and work together while maintaining separate authorities to plan, design, fund, permit, and construct the public access, habitat, and other improvements described in this Open Space Plan. Some improvements will be completed in the near future, while other improvements will be implemented over many years as funding allows. The sponsoring agencies will establish a multi-jurisdictional management oversight committee to coordinate the separate, but parallel actions in the Open Space Plan Area.



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March 2004	*Ellwood-Devereux Coast Open Space and Habitat Management Plan*	Figure 2. Proposed Development Relocations and Land Exchange

2.0 PROPOSED LAND USE AND DEVELOPMENT

2.1 GUIDING PRINCIPLES

The guiding principles underlying the Open Space and Habitat Management Plan (Open Space Plan) are twofold:

- Relocate proposed residential developments under the separate jurisdictions of the sponsoring agencies to inland locations away from sensitive coastal resources
- Establish a contiguous open space along the coast managed for public access and natural resource protection

The concentration of development near urban areas and employment centers will reduce environmental impacts that would otherwise occur if the area was developed as currently planned. The establishment of the Open Space Plan Area and associated public access and habitat improvements are dependent upon the approval of the following relocated development projects that are currently undergoing environmental review:

- Comstock Homes Development on a portion of the Santa Barbara Shores Park property in Goleta
- Faculty and Family Student Housing on the University's North Campus, West Campus, and Storke-Whittier properties
- Ocean Meadows Residences on the Ocean Meadows Golf Course in the County of Santa Barbara

Relocation of the first two of these residential developments and re-zoning of the vacated parcels as open space will require each agency to independently obtain requisite approvals from its jurisdiction, and to acquire approvals for the development projects and the Open Space Plan from the California Coastal Commission (see Figures 3 and 4). A brief summary of the involved development projects and required approvals is presented in Section 2.2.

In accordance with the Coastal Act, the Open Space Plan provides integrated access throughout the natural area and avoids fragmentation of habitats by piecemeal development of housing projects, roads, and utilities. Appropriate visitor-serving and recreational opportunities are preserved and expanded through the creation of a contiguous 652-acre open space and natural reserve area. An extensive system of trails and recreational opportunities will also be provided. Natural resources will be protected by channeling public use away from the most sensitive areas and by educating the public through interpretive functions and signs.

Development is sited and designed to be clustered away from sensitive resources and to protect scenic coastal areas. Carrying out the provisions of this Open Space Plan and the related land use policies help resolve resource management issues in a way that is protective of important coastal resources. The broad provisions of this Open Space Plan and other actions will, on

balance, be more protective of environmental resources than more narrow actions focused on one particular habitat or species. This Open Space Plan identifies how resource protection and land issues will be resolved.

2.2 REQUIRED APPROVALS OF THE DEVELOPMENT PROJECTS AND PLAN

2.2.1 City of Goleta

To implement the Open Space Plan, the City of Goleta will:

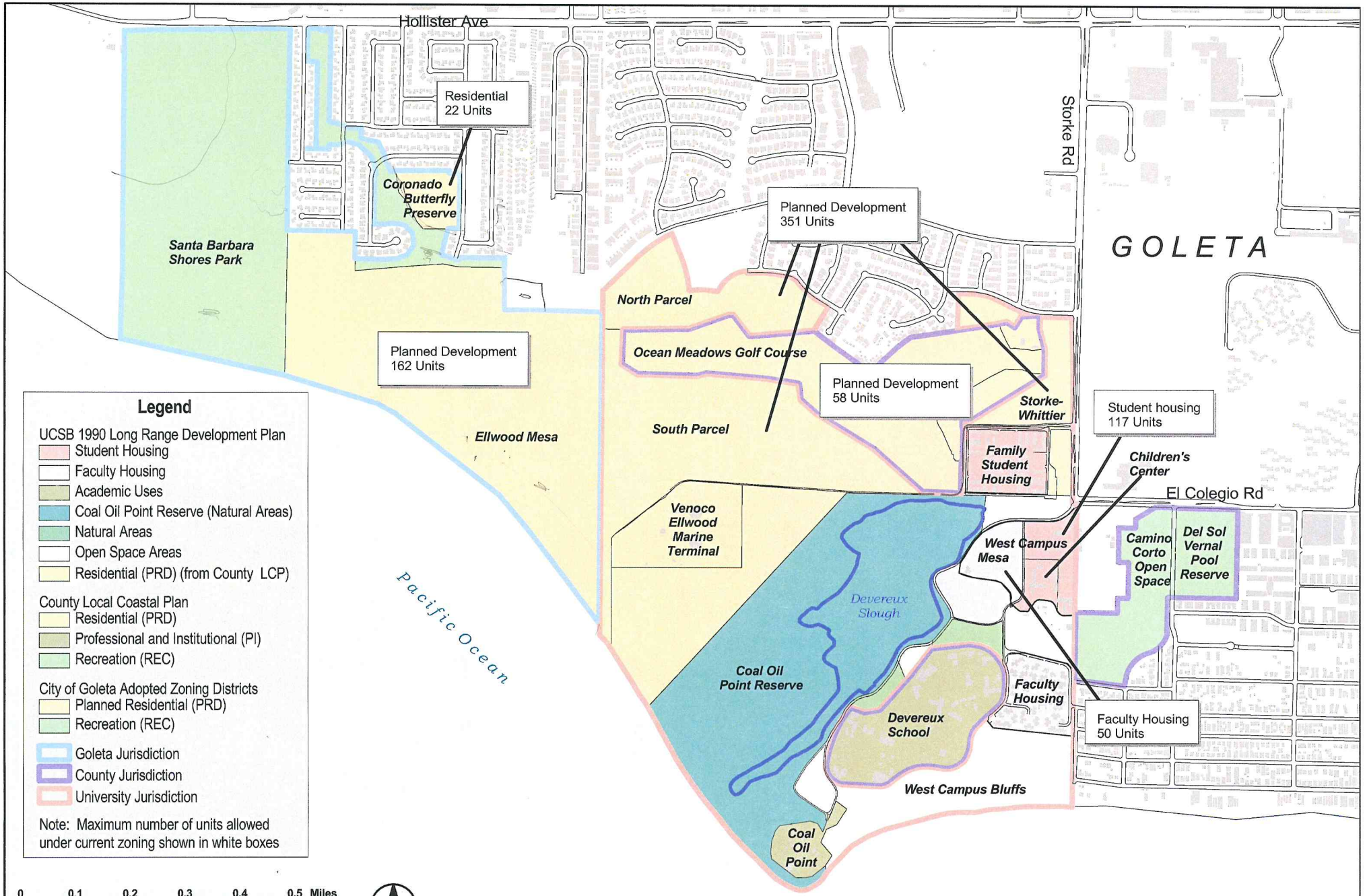
1. Transfer existing private development rights (Santa Barbara Development Partnership and Doty Family) away from privately-owned coastal lands to a 36-acre portion of City-owned park property (Santa Barbara Shores Park). This shift will be accomplished through the purchase of the 136.6-acre Ellwood Mesa property by the Trust for Public Land and transfer of its ownership to the City of Goleta. Part of the purchase price includes the transfer by the City of the title to the 36-acre portion of Santa Barbara Shores Park to Comstock Homes for its development site. These transactions will increase the size of Santa Barbara Shores Park from 116.16 to 230 acres through the expansion of the park into Ellwood Mesa.
2. Approve Comstock Homes Development residential project on the 36-acre parcel.
3. Designate the 230-acre undeveloped portion of the Santa Barbara Shores Park and Ellwood Mesa permanent open space, including a rezone of the Ellwood Mesa from Planned Residential to Recreation District designation and approval of this Open Space Plan.
4. Rezone portions of the Coronado Butterfly Preserve and adjacent City-owned parcels from the Planned Residential to the Recreation District designation.
5. Obtain California Coastal Commission approval.

The proposed Comstock Homes Development, comprised of 78 single-family residences and related subdivision infrastructure, would be located in the existing Santa Barbara Shores Park south of Hollister Avenue in Goleta, California. This area is vacant, undeveloped, public open space that includes an unpaved parking area. The proposed development footprint covers approximately 18 acres with the remaining acres to be privately-owned open space. Refer to Figure 4 for proposed land use designations.

2.2.2 University of California

To implement the Open Space Plan, the University will:

1. Approve the Faculty and Family Student Housing Projects relocated to inland sites adjacent to existing development within the coastal zone, but away from the coast.
2. Designate the South Parcel and West Campus Bluffs as permanent open space, managed as nature parks.
3. Amend the University's Long-Range Development Plan (LRDP).
4. Obtain California Coastal Commission approval.



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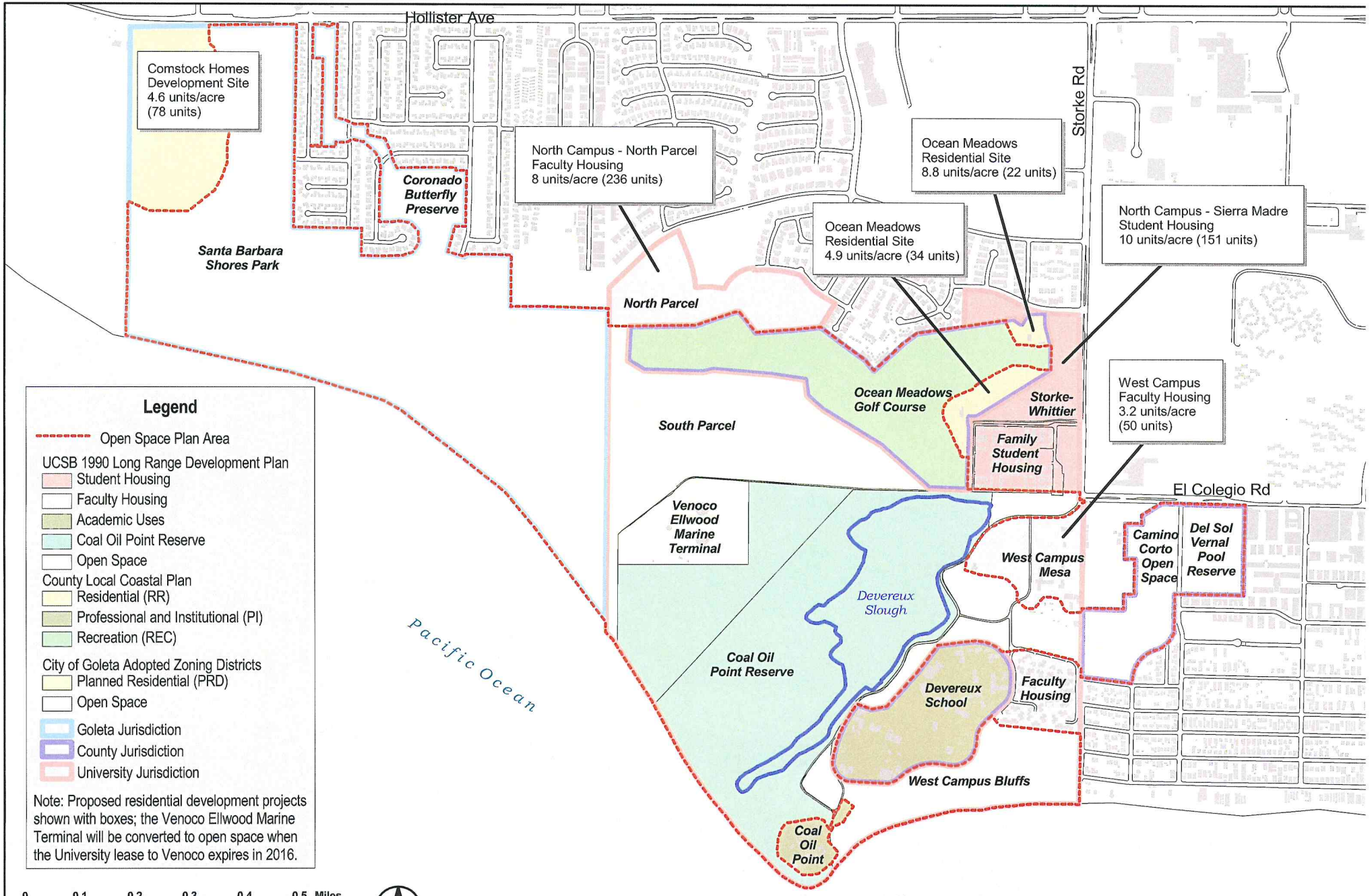
March 2004	*Ellwood-Devereux Coast Open Space and Habitat Management Plan*	Figure 3. Existing Land Use Designations



March 2004	*Ellwood-Devereux Coast Open Space and Habitat Management Plan*	Figure 4. Proposed Land Use Designations

The University seeks to provide needed housing for faculty and student families by relocating planned housing away from the coast, and improving and managing its 314 acres (139.7 acres of currently undeveloped land, 157 acres of existing reserve, and 17.6 acres within the Venoco Ellwood Marine Terminal) within the proposed Open Space Plan Area. The proposed faculty and family student housing development consists of 236 units of faculty housing on the 26-acre University North Campus North Parcel and 151 units of student housing on the 15-acre University Storke-Whittier Parcel. Refer to Figure 4 for proposed land use designations.

2.2.3 County of Santa Barbara

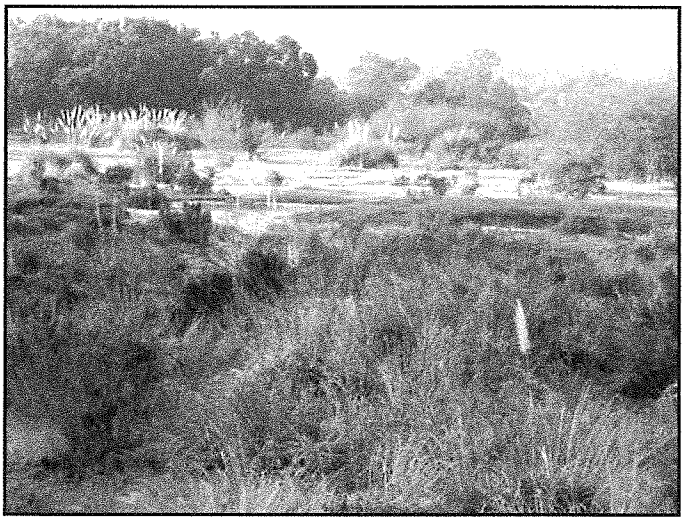
To implement the Open Space Plan, the County will:

1. Approve the Ocean Meadows Residences housing project, located inland adjacent to existing development within the coastal zone, but away from the coast.
2. Rezone the Ocean Meadows Golf Course from Residential Zone District to Recreation Zone District and relocate golf course facilities.
3. Obtain California Coastal Commission approval.

Ocean Meadows Residences is a mixed residential development that would be sited on approximately 9.5 acres of the Ocean Meadows Golf Course. Ocean Meadows Residences includes 32 single-family dwellings, two employee apartments, and a 21-unit condominium development. The remaining 63 acres of the Ocean Meadows Golf Course site would not be developed for residential use and would remain as a privately-owned and commercially-operated golf course. As part of the Ocean Meadows Residences project, the golf course would be rezoned from Residential Zone District to Recreation Zone District and golf course facilities would be improved. Refer to Figure 4 for proposed land use designations.

2.2.4 Open Space and Natural Areas

The Open Space Plan Area encompasses 652 acres of contiguous open space and natural areas, of which about 264 acres (41 percent) are included in existing natural reserves, preserves, and managed open space. The Open Space Plan will not alter the existing management policies or practices in these areas. Refer to Table 1 for a summary of the management acreage in the Open Space Plan Area and Figure 1 for a diagram of the open space and natural area boundary.



A total of 388 acres (59 percent) of existing undeveloped lands will be designated as open space to be managed by the three sponsoring agencies in accordance with the Open Space Plan as

shown on Table 1. The City of Goleta will support the management of 230.2 acres of currently unmanaged areas. The University will manage 139.7 acres under the Open Space Plan in addition to the 157-acre Coal Oil Point Reserve (COPR) and the 17.6-acre Ellwood Marine Terminal to be converted to open space in 2016.

The combination of the existing managed open space and natural reserves and the newly established open space will form a contiguous 652-acre open space and natural area along the Ellwood-Devereux Coast that provides unprecedented opportunities for coastal access and habitat preservation.

Table 1. Estimated Acreage in the Open Space Plan Area, by Jurisdiction and Subarea

	Existing Reserves and Open Space (acres)[1]	Current Undeveloped Lands to be Managed under the Open Space Plan	Total
	City of Goleta		
Coronado Butterfly Preserve	9.3		
Ellwood Mesa		136.6	
Doty Parcel		1.0	
Santa Barbara Shores Park		80.2	
Other City-owned Lands		12.4	
City Total (% within Open Space Plan Area)	*9.3 (1.4%)*	*230.2 (35.3%)*	*239.5 (36.7%)*
	University		
Coal Oil Point Reserve[2]	117.0		
Coal Oil Point Reserve Expansion Area	40.0		
Ellwood Marine Terminal (Leased to Venoco to 2016)		17.6	
South Parcel, West Campus Bluffs		106.7	
Student Gardens, North Slough Finger, and Other Areas[3]		33.0	
University Total (% within Open Space Plan Area)	*157.0 (24.1%)*	*157.3 (24.2%)*	*314.3 (48.3%)*
	County		
Camino Corto Open Space	21.4		
Del Sol Vernal Pool Preserve	12.9		
Ocean Meadows Golf Course	63.4		
County Total (% within Open Space Plan Area)	*97.7 (15%)*		*97.7 (15%)*
Open Space Plan Area Total (% of Total)	***264.0 (40.5%)***	***387.5 (59.5%)***	***651.5 (100%)***

[1] Includes lands that are managed by other entities – Coronado Preserve, Ocean Meadows Golf Course, Camino Corto Open Space, Del Sol Vernal Pool Reserve, and Coal Oil Point Reserve.

[2] Coal Oil Point Reserve is 117 acres, as adopted in the LRDP. Approximately 8.3 acres are currently managed by the Coal Oil Point Reserve and are not included in the adopted acreage. The 8.3 acres are included in the "Other Areas" category.

[3] Other Areas include the Student Gardens located north east of Devereux Slough along Devereux Road, the North Slough Finger, the South Slough Finger downstream of Devereux Road, and areas managed by the Coal Oil Point Reserve that are not accounted for in acreage calculations in the LRDP.

3.0 HABITAT PROTECTION AND MANAGEMENT ELEMENT

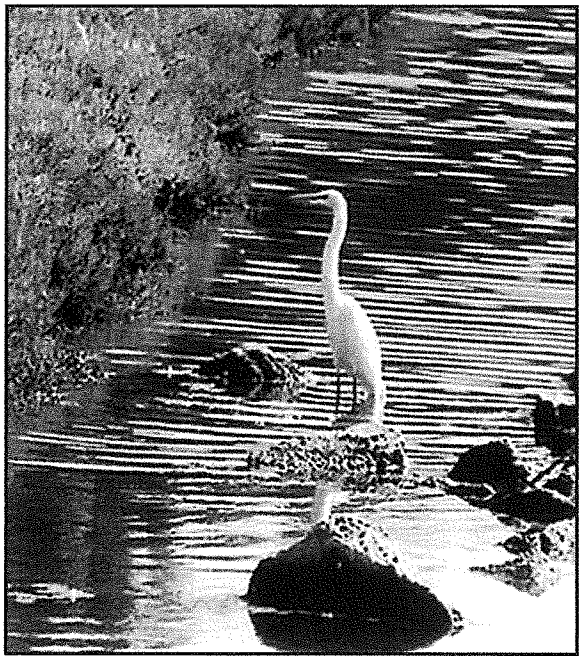
3.1 OVERVIEW

3.1.1 Habitats in the Open Space Plan Area

The Open Space Plan Area comprises 652 acres of open space and natural reserves/preserves. It is one of the largest undeveloped open space areas along the Santa Barbara coast and includes a diverse assemblage of plant and wildlife species. As such, it is a remarkable resource that deserves careful protection and management. The Open Space Plan Area is characterized by coastal mesas and steep coastal bluffs bisected by Devereux Creek and Devereux Slough. Eucalyptus woodlands form a dense canopy surrounding Devereux Creek. Salt marsh habitat parallels the margin of the slough. Coastal bluff, dune scrub, and foredune habitats dominate the coastal bluffs. Native grassland, non-native annual grassland, and coyote bush scrub dominate habitats on the mesas. Vernal pools are abundant in topographic depressions on the mesas. Habitat quality is limited due to the presence of numerous trails, human and domestic animal uses, past oil development, and the presence of ornamental and invasive exotic plants. Soil compaction and increased soil erosion are widely evident, due in part to previous land uses and ongoing recreation.

The Devereux Slough ecosystem is rich in biological resources and contains a continuum of open, undeveloped lands connecting the West Campus Bluffs to the east with Ellwood Mesa to the west. These intact, contiguous habitats enable passage for resident wildlife, and contribute to the maintenance of genetic diversity of both plant and animal populations. Devereux Slough is part of Coal Oil Point Reserve (COPR). At the mouth of the slough, within COPR, is an overwintering and breeding population of the federally threatened western snowy plover.

Avian resources are diverse, as woodlands provide perching, nesting, and roosting habitat, and grasslands provide foraging resources for a number of bird species. The eucalyptus woodlands on Ellwood Mesa support the largest overwintering aggregation site for the monarch butterfly in Santa Barbara County (Meade, 1999). The expanse of open grassland supports small mammals and birds, creating prime foraging territory for birds of prey. Reptiles and amphibians are comparatively limited in diversity. The estuarine and intertidal habitats are host to a rich diversity of migrating and wintering shorebirds, such as the western snowy plover. For a complete review of habitats and wildlife use within the Open Space Plan Area, refer to Appendix A.



The area has biological significance for several reasons. One, it is a large undeveloped coastal resource with examples of many native habitats that were once more abundant. Two, the abundance and diversity of plant and wildlife species are very high because of the mixture of marine, estuarine, and terrestrial habitats. Three, the Open Space Plan Area includes several biological resources that have regional significance due to their rarity and vulnerability to human disturbances – the monarch butterfly groves, Devereux Slough (one of a few remaining coastal salt marshes in Santa Barbara County), vernal pools, and beach dune habitats.

A summary of the acreage of habitats that occur in the 652-acre Open Space Plan Area is provided in Table 2. Refer to Table 1 for total acreages by subarea. A total of 264 acres (41 percent) of the area occurs in existing reserves, preserves, and open space with management plans, the largest of which is COPR. The lands to be managed under the Open Space Plan encompass 387.5 acres (59 percent) of the total area and include the Santa Barbara Shores Park, Ellwood Mesa, Doty Parcel, South Parcel Nature Park, West Campus Bluffs Nature Park, portions of the West Campus Mesa, a portion of the South Slough Finger, and the North Slough Finger. Of the 388 acres, 17.6 acres (2 percent) is the Ellwood Marine Terminal and will be converted to open space in 2016 following the expiration of the lease. The dominant habitat on these lands is non-native terrestrial habitats, which account for 69 percent of the area. Non-native grassland (45 percent) and eucalyptus woodland (20 percent) dominate the non-native terrestrial habitats with the land to be managed under the Open Space Plan.

Native habitats comprise a relatively small percentage (about 24 percent) of these lands due to past disturbances. The most abundant native habitats are native grassland, coyote brush scrub, and coastal bluff scrub. Wetlands account for about 4 percent of the lands to be managed.

3.1.2 Environmentally Sensitive Habitat Areas

The Open Space Plan Area supports several environmentally sensitive areas. The Coastal Act provides specific protection for "environmentally sensitive areas" (ESHAs). These are defined as areas in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activities and developments. Refer to PRC § 30107.5 for the full citation.

ESHAs are to be protected against any significant disruption of habitat values. Only uses dependent on resources within an ESHA are allowed. Development in areas adjacent to ESHAs and parks and recreation areas must be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas. Refer to PRC § 30240 for the full citation.

Wetlands, estuaries, streams, and riparian habitats are considered to be ESHAs because of the especially valuable role of these habitats in maintaining the natural ecological functioning of many coastal habitat areas. Only certain types of development are allowed in a wetland. Of these, the most relevant are uses such as public access improvements and habitat restoration. Habitat types defined as ESHAs in the Open Space Plan Area are based on determinations in the Goleta Community Plan (GCP) and the Long-Range Development Plan (LRDP), and include the following: monarch butterfly groves, raptor nests and roosts, native grasslands,

riparian habitat and/or corridors, vernal pools, other freshwater wetlands, salt marsh, mudflats, estuary, dune scrub, and areas occupied by threatened species such as the western snowy plover.

Table 2. Estimated Acreage in the Open Space Plan Area, by Habitat Type

	Existing Reserves and Open Space*	Current Undeveloped Land to be Managed under the Open Space Plan	
Habitat Type	**Acres**	**Acres**	**Percentage of Total**
Aquatic Habitats			
Freshwater Marsh	7.8	1.5	
Riparian Forest	3.1	2.7	
Riparian Scrub	3.1	5.2	
Salt Marsh	14.1	3.3	
Vernal Pool	4.6	3.3	
Total	*32.7*	*16.0*	*4.1%*
Native Terrestrial Habitats			
Coastal Bluff Scrub	4.8	14.6	
Coastal Sage Scrub	1.2	2.3	
Coyote Bush Scrub	16.2	20.8	
Dune Scrub	20.1	0.4	
Foredune	10.6	3.8	
Native Grassland	0.0	33.2	
Oak Woodland	0.4	0.4	
Total	*53.3*	*75.5*	*19.5%*
Non-Native Terrestrial Habitats			
Eucalyptus Woodland	8.5	73.6	
Non-Native Grassland	55.4	174.4	
Ornamental	10.2	7.1	
Ruderal	2.2	12.5	
Total	*76.3*	*267.6*	*69.1%*
Other Areas			
Sand	14.3	18.1	
Open Water	33.0	0.0	
Golf Course	50.2	0.0	
Disturbed	4.2	2.6	
Developed	0.0	5.3	
Paved Roads	0.0	2.4	
Total	*101.7*	*28.4*	*7.3%*
Open Space Plan Total	***264.0***	***387.5***	***100 %***

* Includes lands that are managed by other entities – Coronado Preserve, Ocean Meadows Golf Course, Camino Corto Open Space, Del Sol Vernal Pool Reserve, and Coal Oil Point Reserve.

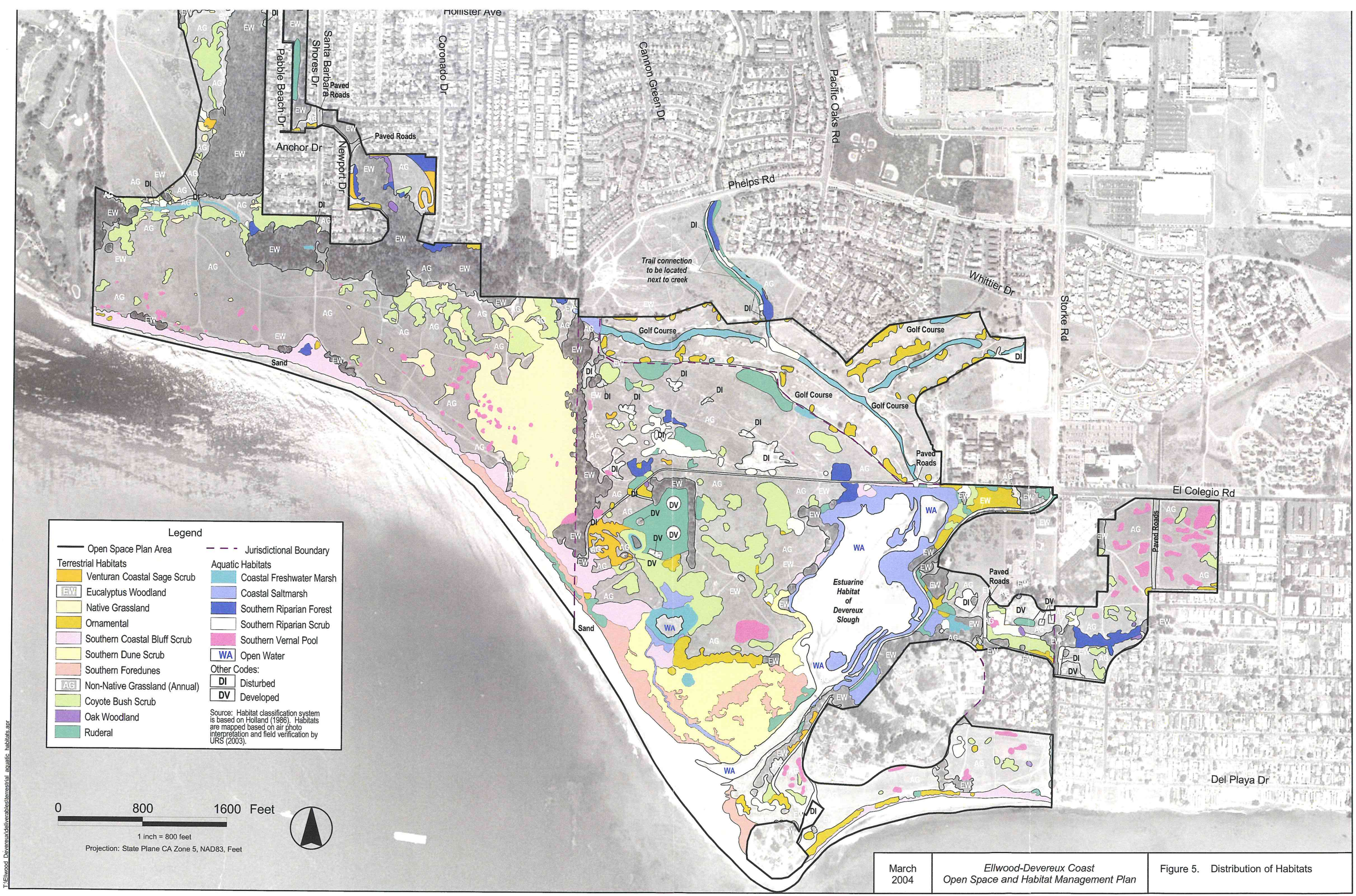
Wetlands and other habitats in the Open Space Plan Area and COPR are shown on Figure 5. Boundaries of ESHAs in the Open Space Plan Area and COPR are presented on Figure 6. These boundaries on these figures reflect recent field work conducted by a professional biologist, and are more up-to-date and accurate than the wetland and ESHA maps in the Santa Barbara County GCP and LRDP.

The GCP, which applies to the unincorporated areas of the County, contains a list of ESHAs that occur in the Open Space Plan Area. Key policies related to ESHAs are as follows:

- **GCP Policy BIO-GV-2.** ESHAs and riparian corridors within the Goleta Planning Area shall be protected and, where feasible and appropriate, enhanced.
- **GCP Policy BIO-GV-5.** Native woodlands designated as environmentally sensitive habitats shall be preserved and protected.
- **GCP Policy BIO-GV-6.** Monarch butterfly roosting habitats shall be preserved and protected.
- **GCP Policy BIO-GV-10.** To the greatest extent feasible, natural stream channels shall be maintained in an undisturbed state in order to protect banks from erosion, enhance wildlife passageways, and provide natural greenbelts.
- **GCP Policy BIO-GV-11.** Wetland areas and surrounding habitats that have been damaged by pollution and artificial stream channelization shall be restored to their natural condition to the maximum extent feasible.
- **GCP Policy BIO-GV-14.** To the maximum extent feasible, areas of native grasslands shall be preserved.
- **GCP Policy BIO-GV-16.** To the maximum extent feasible, "protected trees" shall be preserved. Protected trees are defined for the purposes of this policy as mature native trees that are healthy and structurally sound and have grown into the natural stature particular to the species.
- **GCP Policy BIO-GV-18.** Trees serving as known raptor nesting or key raptor roosting sites shall be preserved to the maximum extent feasible.
- **GCP Policy BIO-GV-19.** Pollution of streams, sloughs, drainage channels, underground water basins, estuaries, the ocean, and areas adjacent to such waters shall be minimized.

The Coastal Act Element of the University's 1990 LRDP includes a range of policies related to the protection of ESHAs. Key policies are listed below, including several designed specifically to protect ESHAs on COPR:

- **LRDP Policy 30210.10.** The University will, subject to the availability of funding from the State Coastal Conservancy, provide interpretive signs on West Campus to highlight environmentally sensitive areas which could be damaged by excessive or unauthorized access.


Hollister Ave
Pebble Beach Dr
Santa Barbara Shores Dr
Coronado Dr
Cannon Green Dr
Pacific Oaks Rd
Phelps Rd
Whittier Dr
Storke Rd
El Colegio Rd
Del Playa Dr
Anchor Dr
Newport Dr
Paved Roads
Trail connection to be located next to creek
Golf Course
Sand
Estuarine Habitat of Devereux Slough
Legend
Open Space Plan Area
Jurisdictional Boundary
Terrestrial Habitats
Venturan Coastal Sage Scrub
Eucalyptus Woodland
Native Grassland
Ornamental
Southern Coastal Bluff Scrub
Southern Dune Scrub
Southern Foredunes
Non-Native Grassland (Annual)
Coyote Bush Scrub
Oak Woodland
Ruderal
Aquatic Habitats
Coastal Freshwater Marsh
Coastal Saltmarsh
Southern Riparian Forest
Southern Riparian Scrub
Southern Vernal Pool
Open Water
Other Codes:
Disturbed
Developed
Source: Habitat classification system is based on Holland (1986). Habitats are mapped based on air photo interpretation and field verification by URS (2003).
0
800
1600 Feet
1 inch = 800 feet
Projection: State Plane CA Zone 5, NAD83, Feet
T:\Ellwood Devereux\deliverables\terrestrial aquatic habitats.apr
March 2004
Ellwood-Devereux Coast
Open Space and Habitat Management Plan
Figure 5. Distribution of Habitats

Ellwood North
Hollister Ave
Pebble Beach Dr
Santa Barbara Shores Dr
Coronado Dr
Cannon Green Dr
Pacific Oaks Rd
Anchor Dr
Newport Dr
Phelps Rd
Sandpiper Aggregation
Ellwood West
Ellwood Main
Whittier Dr
Storke Rd
Ocean Meadows Roost
El Colegio Rd
Globose Dune Beetle
Devereux School Aggregation
Sandy Beach Tiger Beetle
Del Playa Dr
EXTENT OF BREEDING SNOWY PLOVER HABITAT
EXTENT OF WINTERING SNOWY PLOVER HABITAT

Legend

Special-Status Species Locations:
- Southern Tarplant
- Red-Tailed Hawk Nest
- Red-Shouldered Hawk Nest
- Cooper's Hawk Nest
- Kite Nest
- Vulture Roost
- Invertebrate
- Monarch Butterfly Aggregation
- Ellwood Main Monarch Grove

- Open Space Plan Area
- Jurisdictional Boundary
- Critical habitat for the Western Snowy Plover
- Environmentally sensitive habitat overlay
- Monarch butterfly and/or raptor roosting habitat
- Aquatic Habitats
- Open Water
- Native Grassland
- Southern Coastal Bluff Scrub
- Southern Dune Scrub
- Southern Foredune

Source: Special-status species locations are based on field surveys in 2003 by URS, a review of the California Department of Fish and Game Natural Diversity Database, a review of monarch butterfly occurrences as mapped by Meade (1999), and a review of special-status species maps from the Santa Barbara County Comprehensive General Plan. Special-status species occurences in the COPR are based on the COPR Draft Management Plan and URS communications with Cristine Sandoval.

ESHA boundaries are based on a review of the California Coastal Act (2003), Santa Barbara County Local Coastal Plan and Goleta Community Plan (1993), and the University Long-Range Development Plan (1990). Mapped ESHAs are revised by URS in the Open Space Plan Area to reflect the current distribution of aquatic habitats, native grasslands, and special-status species locations.

0 800 1600 Feet

1 inch = 800 feet

Projection: State Plane CA Zone 5, NAD83, Feet

T:\Ellwood_Devereux\deliverables\species_maps.apr

March 2004

Ellwood-Devereux Coast Open Space and Habitat Management Plan

Figure 6. Environmentally Sensitive Habitat Areas

- **LRDP Policy 30210.15.** The campus shall continue to maintain and improve bicycle and pedestrian access ways to the beach as necessary to protect sensitive habitat areas and public safety.
- **LRDP Policy 30251.7.** In order to preserve existing native trees and significant stands of trees which pre-date University acquisition of the campus, native trees are encouraged to be retained within the overall site area of new development.
- **LRDP Policy 30240(a)2.** Existing fences, signs, and information maps around the perimeter of COPR shall be maintained to restrict unauthorized access by pedestrians, dogs, motor vehicles (except service and emergency vehicles), and off-road bicycles.
- **LRDP Policy 30240(a)4.** To preserve roosting habitat for birds, eucalyptus, pine, and other trees and brush located on the bluff east of COPR outside of the faculty housing development and outside of the Coal Oil Point development will not be removed except where necessary to accommodate new structures or infrastructure.
- **LRDP Policy 30240(a)5.** To preserve roosting habitat for birds, mature trees in and around the Student Garden on West Campus will not be removed except where necessary to accommodate new structures or infrastructure.
- **LRDP Policy 30240(a)1.** The Campus shall implement the Wetlands Restoration and Management Plan for Storke Wetlands and Devereux Slough as approved by the Campus Wetlands Management Committee and the University. This wetland management plan includes various restoration recommendations for protecting and enhancing these wetlands, focusing on reducing sedimentation of Devereux Slough, management of public access near sensitive habitat areas, and restoration of the North Finger of the slough.

As a recently-incorporated city, as of the date of this Open Space Plan the City of Goleta has not yet adopted a General Plan and does not have a certified Local Coastal Program. Therefore, the policy standards applicable to the lands within the City of Goleta are the provisions of the California Coastal Act and the administrative regulations of the California Coastal Commission. Habitat types considered ESHAs in the Open Space Plan Area are based on the determinations in the County's GCP, the University's LRDP, and the standards of the Coastal Act. They include the following: monarch butterfly groves, raptor nests and roosts, native grasslands, riparian habitat and/or corridors, vernal pools, other freshwater wetlands, salt marsh, mudflats, estuary, dune scrub, and areas occupied by threatened or endangered species such as the western snowy plover. The LRDP identifies all habitats within COPR as an ESHA.

3.1.3 Habitat Protection and Management Approach

General Approach

The acreage estimates presented in Table 2 indicate that the lands to be managed directly under the Open Space Plan are dominated by non-native habitats. The condition of native habitats on these lands ranges from highly disturbed and isolated habitats (e.g., riparian habitats) to intact and relatively high functioning habitats (e.g., native grasslands). In addition, these lands contain a

non-native habitat – eucalyptus woodland – that supports a monarch butterfly population of regional biological significance and is of tremendous local interest.

The habitat protection and management approach in this Open Space Plan was developed through a systematic process that began with a review of the Joint Proposal, the Memorandum of Understanding (MOU), existing management plans, and relevant technical literature to identify potential opportunities for habitat management. The review was augmented by focused field investigations, interviews with interested parties who have worked in the area, and input from public comments at public meetings and workshops.

The overall goal of the habitat protection and management element of this Open Space Plan is to maintain, enhance, and, where grants or other funding are available, increase the acreage and improve conditions of ESHAs in the Open Space Plan Area. Habitat management approaches vary by jurisdiction. The City and University approaches are described below and relate to those lands that are currently unmanaged. The County jurisdiction includes existing managed lands only and, therefore, an approach to habitat management is unnecessary.

City of Goleta Approach

On City of Goleta land, the habitat management approach is to protect the existing habitats by establishing a consolidated trail system designed to avoid sensitive resources where feasible, to enhance some habitats, and protect the monarch butterfly aggregations and roosts. Trail design, habitat enhancements, and butterfly protection will occur, as funding sources are available.

University Approach

On University land, the habitat management approach on the western portion of the South Parcel Nature Park is habitat restoration and enhancement of vernal pools, native grasslands, and riparian habitats, by setting this area aside as a mitigation site for University Faculty Housing development impacts on the North Parcel. This will result in an overall increase in acreage and improvement of habitat function and extent of these habitats in this area.

The habitat management approach on the remainder of the South Parcel Nature Park is to maintain, enhance, and obtain grants or other funding to increase the acreage and improve conditions of ESHAs. Removal of the most pervasive accumulations of invasive exotic plants would occur on the South Parcel Nature Park, and check dams and other erosion control measures would be introduced to reduce or eliminate sedimentation of the Devereux Slough. These measures would result in an overall increase in acreage and extent of grassland habitats, thus enhancing raptor foraging habitat.

The habitat management approach on the West Campus Bluffs Nature Park is to maintain, enhance, and obtain grants or other funding to increase the acreage and improve conditions of ESHAs. The West Campus Bluffs Nature Park may also be used by the University as a potential mitigation site for future University development projects on the West Campus, Storke Campus, or Main Campus. These measures, and removal of the most pervasive accumulations of invasive exotic plants, may occur on the West Campus Bluffs Nature Park, resulting in an overall increase in the acreage and extent of grassland habitats, and thus an enhancement of raptor foraging habitat.

The habitat management approach on the remainder of the University Open Space Plan Area, including COPR, is to maintain, enhance, and obtain grants or other funding to increase the acreage and improve conditions of ESHAs, including vernal pools, native grasslands, riparian, coastal bluff or dune scrub, and western snowy plover habitats.

The habitat management approach for eucalyptus groves, dune scrub, and raptor nesting sites throughout the remainder of the Open Space Plan Area is to maintain the current habitats, which are generally in good condition.

Habitat management will be achieved through both passive and active methods. Passive methods include low-impact, non-invasive actions to enhance habitats such as removal of invasive exotics to allow native or desirable species to re-colonize on their own. Active methods include modifying landforms, grading, soils, improving drainage to create conditions suitable for new habitats, reseeding, and planting native species.

Adaptive Management

The habitat management element includes both protection, enhancement (the manipulation of an ecosystem to improve one or more of its structural or functional attributes), and restoration (the creation or re-creation of an ecosystem to an approximation of its previously existing condition). A fundamental component to successful habitat enhancement and restoration is adaptive management. Under this approach, habitat management is modified to improve success and achieve desired results based on monitoring of the initial habitat management efforts.

Where appropriate, adaptive management of the Open Space Plan Area enables resource managers to change, adapt, and intervene as needed to protect sensitive resources. The respective jurisdiction will review the results of monitoring data, evaluate problems, and resolve issues related to public access, where feasible.

The habitat protection and management element will incorporate the principles of ecosystem management in several ways. Habitat enhancement and restoration will be focused on functions, not just the presence of native or desirable plants or wildlife species. Hence, the requisite physical and biological conditions required to ensure a self-sustaining ecosystem with the desired habitats will be developed. The habitat restoration and management element will be implemented within a broad ecosystem context in which habitat management priorities will consider the role of the targeted habitats in the watershed, and the interrelationships with other habitats in the open space. This broader view is important for identifying subtle ecosystem

functions in the Open Space Plan Area such as relationships between predator-prey and pollinator-host plants; disease vectors; energy pathways; food chains; and hydrologic connections and water balance.

3.1.4 Habitat Enhancement and Restoration Initial Improvements and Opportunities

Habitat enhancement and restoration will occur as either initial improvements or opportunities for future implementation as grant or other funding becomes available. Initial improvements are priority projects and include the enhancement and restoration activities at the South Parcel Nature Park Mitigation Site. All other enhancement and restoration activities are opportunity sites.

Opportunity sites, such as enhancing the West Campus Nature Park and restoring riparian habitat along trail closures on Devereux Creek, west of the eucalyptus woodlands on Santa Barbara Shores, represent potential projects to be implemented in the future by individual sponsoring agencies as funding allows. Initial improvements and opportunities are identified in the Open Space Plan because they will address a severe biological impairment or will provide a significant biological benefit for a modest effort. A description of the funding, implementation, and phasing of habitat restoration and enhancement opportunities is provided in Section 6.

3.1.5 Coordination with Other Managed Areas

Several existing natural reserves, preserves, and unmanaged lands in the Open Space Plan Area are actively managed for natural resource protection, research, education, open space, or passive recreation. Although these areas are not directly managed under this Open Space Plan, the sponsoring agencies will coordinate with other management entities to ensure habitat enhancement and restoration activities in this Open Space Plan will complement other efforts, and not create biological conflicts. A summary of the habitat management focus in these areas is presented below in Table 3.

Table 3. Habitat Management Focus in Currently Managed Portions of the Open Space Plan Area

Area	Primary Habitat Management Focus
Coronado Preserve	Monarch butterflies
Coal Oil Point Reserve	All habitats on the reserve are managed
Camino Corto Open Space	Vernal pools, native grasslands
Del Sol Vernal Pool Preserve	Vernal pools, native grasslands

The currently managed reserves, preserves, and open spaces within the Open Space Plan Area will be managed separately from the areas to be managed under this Open Space Plan. The sponsoring agencies will seek to share information with other managing entities to improve the technical basis of habitat management in the Open Space Plan Area and existing managed reserves/preserves.

3.1.6 Exotic Species Management Approach

"Invasive exotics" are insects, plants, or wildlife species that exhibit rapid and aggressive ability to colonize suitable areas and that displace native species by competitive abilities or predatory actions. Invasive exotics can cause adverse impact to habitats through various means besides physical displacement. They can hybridize with native stock and cause undesirable traits in native plants, support other invasive species, and create new microclimates and alter physical conditions in the ecosystem.

The habitat protection and management element is designed to reduce the extent of, and if feasible, eradicate, invasive exotic species. This will be accomplished by targeted removal of invasive exotics with or without associated habitat restoration. The primary objectives of invasive exotic species management are to protect the various biological, hydrological, and geophysical functions of ESHAs in the Open Space Plan Area, as well as to protect the genetic integrity and reproductive capability of native species populations in the Open Space Plan Area.

Control and eventual eradication of the following invasive exotic species will be an opportunity throughout the implementation of the Open Space Plan:

- Long-horned beetle (which attack eucalyptus trees)
- Fennel (*Foeniculum vulgare*). Fennel is scattered through non-native grasslands, along the Devereux Creek drainage, and in large patches on the South Parcel Nature Park.
- Pampas Grass (*Cortaderia selloana*). Pampas grass occurs in dense patches on the South Parcel Nature Park.
- Harding Grass (*Phalaris aquatica*). Harding grass occurs in scattered locations on Ellwood Mesa, the South Parcel Nature Park, and West Campus Bluffs Nature Park.
- Hottentot Fig (*Carpobrotus edulis*). Hottentot fig (a species of iceplant) occurs in dense patches on the coastal bluffs and dunes in the Open Space Plan Area.

- Tamarisk (*Tamarix aphylla*). Tamarisk occurs in patches on the West Campus Bluffs Nature Park.

Eucalyptus trees on the City of Goleta's Ellwood Mesa and Santa Barbara Shores and the University's large ornamental pine and cypress trees on the West Campus will not be removed as part of the habitat protection and management plan. These trees provide important monarch butterfly aggregation and roosting habitat and also serve as raptor roost and nest sites.

Areas where the vegetation and soil have been disturbed by humans or domestic animals are more susceptible to invasion of exotic species. Previous grazing activity, uncontrolled recreation uses, and other land disturbances within the Open Space Plan Area support the conditions to sustain exotic species. A more complete list of invasive exotic species occurring within the Open Space Plan Area and a description of the species' general location is provided in Appendix A.

The phrase "native species" used in this Open Space Plan refers to plants, insects, fish, and wildlife indigenous to the South Coast and/or southern California. "Non-native species" refers to species that are from areas outside of the region, state, or continent. "Naturalized species" refers to non-native species which have become common since the European settlement of California, and which now are integral elements of the coastal ecosystem. Examples of naturalized species include the annual grasses that dominate most of the grassy foothills and meadows of the South Coast (e.g., wild oats, plantain, Italian ryegrass, filaree, ripgut brome), and eucalyptus trees.

3.1.7 General Policies for Habitat Protection and Management

The following goal and associated policies guide the overall implementation of the Habitat Protection and Management Element of the Open Space Plan.

Habitat Goal 1. Protect, enhance, and, where feasible, restore ESHAs in the Open Space Plan Area.

Habitat Policy 1. Focus high priority habitat enhancement and restoration initial improvements and opportunities on invasive exotic species control in wetlands, enhancement and restoration of riparian and non-riparian wetlands, ensuring the long-term vitality of the monarch groves, and enhancement and restoration of native habitats that are under-represented in the Open Space Plan Area.

Habitat Policy 2. Enhance and restore native habitats to be self-sustaining and not reliant on long-term human management and intervention.

Habitat Policy 3. Control and, where feasible, eradicate invasive exotic species within the Open Space Plan Area in a manner that protects ESHAs from adverse impacts.

Habitat Policy 4. Avoid enhancing or restoring an ESHA if it will result in significant adverse impacts on another ESHA.

Habitat Policy 5. Minimize the use of herbicides for the management of invasive exotic plant species. Use herbicides only when other non-chemical methods have been attempted or determined to be infeasible.

Habitat Policy 6. Use genetic stock for seeds and plants from the Ellwood-Devereux watershed in all native habitat enhancement and restoration on University-owned lands. Use genetic stock for seeds and plants from the South Coast from Carpinteria to Gaviota in City of Goleta- and County-owned lands.

Habitat Policy 7. Coordinate with the Coastal Vector Control District to use mosquito control methods with the least effect on non-target native organisms, such as the monarch butterfly.

3.2 MONARCH BUTTERFLY POPULATION AND HABITAT

3.2.1 Existing Resources

The Ellwood Mesa/Santa Barbara Shores Park area contains significant autumnal and over-wintering habitat for the monarch butterfly (*Danaus plexippus*). Each fall, monarch butterflies in the western United States migrate to the coast of California from various locations throughout western North America. The butterflies arrive at the coast in mid-September in small numbers. As more arrive, they form temporary bivouacs (encampments) and as winter approaches, they form permanent roosts, often called overwintering or wintering colonies. The butterflies remain until about mid-February, when they generally disperse inland.

A typical wintering site for the monarch butterfly is a grove of trees within a mile of the ocean in creek drainages. Butterflies may roost in a number of different tree species including, but not limited to, pines, oaks, sycamores, cypresses, palms, and willows. However, eucalyptus trees are used as wintering sites 90 percent of the time. Eucalyptus groves create suitable microclimates due to the protection from winds afforded by the large trees, a relatively constant mild temperature, canopy openings that allow penetration of sunlight, and a nectar source. A well-developed understory typically surrounds the occupied grove, providing additional insulation from outside temperatures, and creating a "thermal blanket."

Within the Open Space Plan Area, large stands of eucalyptus woodland form windrows on the western and eastern perimeter of City of Goleta property. These woodlands are located along Devereux Creek and its tributary through the Coronado Butterfly Preserve. Smaller eucalyptus windrows are present elsewhere in the Open Space Plan Area, such as a windrow on the southern edge of the South Finger of Devereux Slough and the small stands of wind-sculpted trees on the bluff tops. Three species of eucalyptus occur within the Open Space Plan Area including the more dominant blue gum (*Euclyptus globules*), the less dominant lemon-scented gum (*E. maculata* var. *citriodora*), and red ironbark (*E. sideroxylon*). Due to the build-up of eucalyptus bark and leaf matter, the dense shade created by the eucalyptus canopy, and the chemicals produced by the bark and leaf matter, understory vegetation is mostly absent.

Ellwood Complex Sites

The eucalyptus groves in the City of Goleta's portion of the Open Space Plan Area are called the Ellwood Complex. Five monarch butterfly overwintering sites occur in the complex – Sandpiper Aggregation, Ellwood North, Ellwood West, Ellwood Main, and Ocean Meadows Roost (see Figure 6). Approximately 50 acres of eucalyptus woodland in the Ellwood Complex support overwintering monarchs on a regular basis. A summary of the individual groves is provided below:

- The Sandpiper Aggregation is located on the western edge of the Santa Barbara Shores property of the Open Space Plan Area and borders the Sandpiper Golf Course. Butterflies cluster in eucalyptus woodland formed along Devereux Creek.
- Ellwood North is located on the Santa Barbara Shores property south of Hollister Avenue. Butterfly clusters are found throughout the grove. Once colder weather arrives, the butterflies concentrate in larger clusters that have been near the same spot for the past 10 years.

- Ellwood West is located immediately south of Ellwood North along Devereux Creek. This site usually harbors a significant group of butterflies in the fall.
- The Ellwood Main site is located along Devereux Creek and consistently harbors a large number of overwintering butterflies. It is the most populous overwintering site in Santa Barbara County, consisting of hundreds of thousands of individuals in some years. The site receives butterflies that move from less desirable aggregation sites as the season progresses. The combination of dense eucalyptus groves and specific topographic features of Devereux Creek produce the desired conditions for butterfly aggregations. A factor that contributes to the high numbers in the Ellwood Main site is the extensive woodland that surrounds the actual overwintering site (Meade, 1999). Trees are mostly healthy with limited signs of beetle infestation. However, the site is subject to ongoing damage from foot traffic which crushes understory vegetation and causes erosion on the banks of the creek.
- The Ocean Meadows Roost is located in a shallow depression at the edge of the golf course in a eucalyptus windrow on the border of the City of Goleta and the University.

Devereux School Site

The Devereux School site is an important overwintering and autumnal aggregation site and is located on the bank of the South Finger of Devereux Slough. This site is located immediately adjacent to but outside of the Open Space Plan Area boundary within the Devereux School property. Clusters of monarch butterflies form in eucalyptus trees in a depression that flows from the school into the South Finger. The site is relatively open and harbors a large number of butterflies early in the season. As weather conditions become more extreme towards winter, the site is abandoned in favor of more protected locations, such as the Ellwood Main site (Meade, 1999).

3.2.2 Management Issues

The monarch butterfly groves have been subject to past and ongoing human impacts due to unmanaged access by pedestrians, bicyclists, equestrian users, and pets. Unmanaged and

excessive access has compacted soils, destroyed the layer of litter (dead leaves and small twigs), and trampled vegetation. Evidence of damaging public access is very evident in the Ellwood Main site. The loss of the litter layer exposes soils to erosion. Compaction of soil can cause stress to the trees and hinders natural regeneration by seedling and saplings in the understory. In some experts' opinions, the absence of a diverse size and age structure of trees in the Ellwood Main site makes the groves vulnerable to disease.

Another major management issue is the growing number of eucalyptus pests that have arrived in California, including the long horned beetle (*Phoracantha semipunctata*), several species of psilid (*psilids*), and at least two species of weevils. The long horned beetle is probably the best known of these pests and can kill a eucalyptus tree in a matter of months. There are few tools presently available to control this pest. The best defense is healthy trees free of stress by drought, soil compaction, or overcrowding. The Ellwood Main site exhibits limited signs of beetle infestation (Meade, 1999).

Eucalyptus trees are very vulnerable to fire because of the abundance of oil within their leaves. In the long-term, fire may be beneficial to a eucalyptus grove because it regenerates old groves. However, in the Open Space Plan Area, fire is not an acceptable management tool due to obvious public safety concerns to adjacent residences.

Finally, a number of educational and scientific organizations and community groups monitor monarchs in the Ellwood Complex. Many times these efforts include tagging or handling the butterflies. The high level of interest and direct interaction with this species from school children to scientists could harm the population if not properly managed and coordinated.

3.2.3 Regulatory Considerations

Monarch butterfly overwintering sites in the Open Space Plan Area are considered ESHAs because the occupied groves meet the definition of an ESHA in Section 30107.5 of the Coastal Act. As such, autumnal and overwintering sites are afforded the protection under the Coastal Act described in Section 3.1. Unoccupied eucalyptus groves within the City of Goleta in areas adjacent to the overwintering sites that contain suitable conditions to support overwintering butterflies are also considered ESHAs because they could be used at any time in the future, and because they provide additional habitat in the event that the occupied groves are damaged.

3.2.4 Management Goals and Policies

The following goal and policies will guide the overall implementation of the monarch butterfly Habitat Protection and Management Element of this Open Space Plan. The three sponsoring agencies will formally adopt these goals and policies into their local coastal programs. Management actions and projects by each agency associated with the implementation of the Open Space Plan within their jurisdiction must be consistent with these goals and policies.

Monarch Goal 1. Protect and maintain existing monarch butterfly populations in the Open Space Plan Area, and manage the habitats to be self-sustaining.

Monarch Policy 1. Manage public access to protect butterflies and their habitat, while promoting public enjoyment, education, and scientific research.

Monarch Policy 2. Conduct scientifically sound studies using appropriate and cautious methods to maintain and improve habitat conditions to ensure long-term viability of the population.

Monarch Policy 3. Implement phased habitat improvements in a manner, using pilot programs, small-scale projects, and adaptive management.

3.2.5 Resource Protection and Management

Trail and Public Access Plan in Butterfly Groves

During the peak overwintering season, especially on weekends and during holidays, a large number of people visit the Ellwood Main site which can cause adverse impacts to the habitat. To reduce the impact, access in the Ellwood Main site would be managed by closing certain duplicative trails and placing low-profile barriers such as post and cable fences or logs to direct foot traffic and discourage bicycle use in sensitive or eroded areas. The fencing and other barriers would be similar to the existing onsite barriers in the Ellwood Main site.

The trail system for the Open Space Plan Area is presented on Figure 12 (as presented in Section 4.0 of this plan). Trail closure opportunities would occur within all of the monarch butterfly overwintering sites, as summarized below:

- Public access in the Sandpiper Aggregation would be reduced as a result of elimination of the north-south connecting trail as a result of the Comstock Homes Development. A 500-foot-long trail that connects the Comstock Homes Development site with the grove would be closed. Pedestrian access would be maintained on Trail 24, located along the perimeter of the aggregation.
- Within the Ellwood West site, a small trail connector, approximately 200 feet in length, would be closed. Pedestrian access would be allowed; bicyclists and equestrians would not be allowed.

- Approximately 400 feet of existing trail between Trails 18 and 23 would be closed in the Ellwood West site. This trail closure would include a Devereux Creek crossing.
- Three trail closures totaling approximately 1,050 feet are proposed within the Ellwood Main site. Trail closures include approximately 300 feet between Trails 18 and 16; approximately 350 feet between Trails 19 and 17; and 400 foot between Trails 18 and 17. Pedestrian access would be allowed. Bicyclists and equestrians would not be allowed.
- Two trail closures totaling 200 feet are proposed within the Ocean Meadows Roost. These small spur trails diverge off Trail 14 and connect to the golf course. Pedestrian access would be allowed; bicyclists and equestrians would not be allowed. The southern edge of this roost would be accessed via an existing improved trail (Trail 8) on University property that would connect with the unimproved trail (Trail 17) on City of Goleta property.

Eucalyptus Woodland Enhancement Opportunities

The following opportunities to enhance the six monarch overwintering sites in the Open Space Plan Area will be considered during the implementation of the Open Space Plan. The objective of these opportunity projects is to ensure that the eucalyptus groves that provide overwintering habitat remain viable, self-sustaining, and protected from stress factors such as disease, drought, senescence, fire, and storm damage. The sponsoring agencies recognize there is scientific debate and uncertainty about habitat enhancement approaches and methods for monarch groves. Hence, the opportunity projects would only be pursued after consultation with experts, a careful consideration of the scientific and empirical observations concerning the habitat enhancement issues, and input from the public. The following opportunity projects will not be implemented without public involvement and additional environmental review where applicable. Any eucalyptus enhancement and management actions would be implemented in a phased and incremental manner over time, as funding allows. In addition, pilot projects and field experiments would be pursued to evaluate the effectiveness of the opportunity projects.

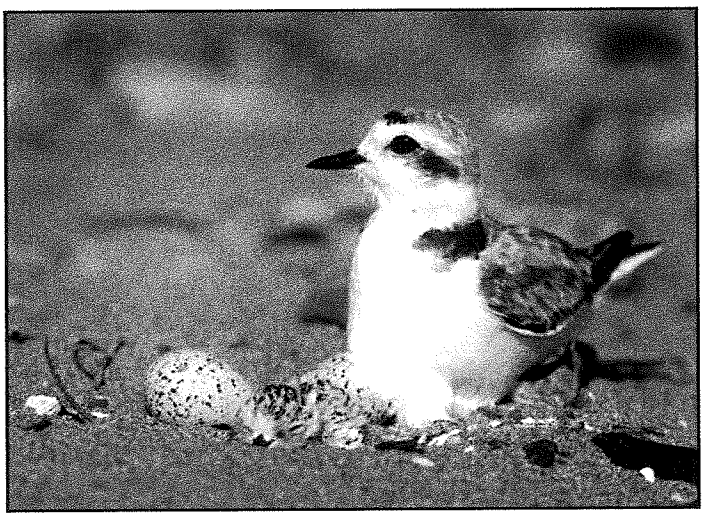
1. Monitor insect infestation within the monarch butterfly aggregations, overwintering sites, and roosts within the Ellwood Complex. Once infected trees are identified, they should be removed to prevent other trees from being infected. Tree removal would occur under the approval and supervision of a monarch biologist and at the appropriate time of year to avoid impacts to the butterflies.
2. Replace insect-infested trees with blue gum saplings within and outside the occupied areas as determined by the arborist and monarch biologist in order to prevent spread of the insect.
3. Plant eucalyptus trees in the understory of the occupied groves to offset the effects of trampling by visitors, under the direction of a monarch biologist.
4. Allow the natural build-up of leaf litter and downed-wood within the Ellwood Complex sites, per the direction of a monarch biologist. Consultation with the County Fire Department would be required.

Monarch Inventory and Monitoring

A monarch inventory and monitoring program could be implemented for the Open Space Plan Area in order to evaluate the condition of the population and groves; detect trends in butterfly health, number, and behavior; and to support awareness of butterfly migration. The program will be implemented as funding allows. The program could include the following activities at the Ellwood Complex sites:

- Existing and historic monarch overwintering sites in the Open Space Plan Area would be surveyed each year by a qualified biologist. Site surveys would occur at least three times a year, in the fall (late October), in mid-winter (December), and in late winter (late January).
- An annual inventory of the monarch population would be conducted. Monarch tagging would not occur as part of the population inventory.
- A comprehensive inventory of current monarch roosting trees would be conducted to map and characterize the occupied trees, including general information about size, density, and health.
- The sponsoring agencies would designate a monarch specialist who would coordinate all monarch research and inventory work in the Open Space Plan Area by educational and scientific entities. The sponsoring agencies would implement a monarch research and education permit program which would require groups or individuals interested in research or educational programs to apply for a permit. Educational programs involving contact with butterflies or off-trail activity would not be allowed unless a permit is obtained.

3.3 COAL OIL POINT RESERVE/DEVEREUX SLOUGH



COPR is a part of the University of California Natural Reserve System (Reserve) and consists of 157 acres of protected coastal habitats. COPR is managed by Reserve staff in accordance with a recently completed COPR Draft Management Plan (Sandoval, 2003). The primary purpose of COPR is to support University research and education concerning natural habitats. The use of COPR is regulated. Outside educational groups may use COPR by permit. There are two public trails in COPR that provide access through the fenced reserve property: (1) the interpretive Dune Pond Trail that transects COPR from its northern boundary to the beach, and (2) the short trail through the northeast corner of COPR that connects the west campus trails to Venoco Road. However, passive recreation is not permitted on the Reserve. The management policies and actions described in this Open Space Plan do not apply to COPR. The sponsoring agencies will coordinate to ensure

that public access, recreation, and habitat management in the Open Space Plan Area will not adversely affect resources and activities at COPR. In turn, reserve staff will share technical information about resource management and restoration to assist in the success of this Open Space Plan.

The following summary of COPR is presented in this Open Space Plan because the Reserve is located within the center of the Open Space Plan Area, and because COPR management activity on the beach regarding western snowy plovers will affect users of the Open Space Plan Area as they traverse the beach and COPR.

3.3.1 Existing Resources

The dominant habitat is Devereux Slough, a coastal estuary with saltmarsh, open water, and mudflats that supports a variety of waterfowl and shorebirds. COPR also includes coastal scrub, dune scrub, native grasslands, riparian scrub, and non-native grassland habitats surrounding the slough. The beach and dunes at COPR provide over-wintering and breeding habitat for the threatened western snowy plover, as well as habitat for the endangered least tern and rare invertebrates such as the globose dune beetle, the dune spider, and the sandy tiger. COPR has one of the most pristine remnants of coastal dune scrub in Santa Barbara County, and contains a number of rare plant species. Several types of wetlands are present such as vernal pool, dune swale, salt flat, and salt marsh.

As noted above, COPR is managing habitat on University property that supports a breeding population of the western snowy plover. This species was listed as threatened by United States Fish and Wildlife Service (USFWS) in 1993. Critical habitat was designated in 1999, and includes the beaches and dunes adjacent to the West Campus Bluffs Nature Park, Coal Oil Point, COPR, and Ellwood Beach below Ellwood Mesa. The mouth of Devereux Slough and the beaches to the east and west are major wintering localities and nesting sites for this species. COPR manages the western snowy plover habitat within the Reserve, and can advise on practices on other University property.

3.3.2 Management Issues

Management issues identified in the COPR Management Plan are briefly noted below.

- **Public Access.** Public access in COPR must be managed to prevent impacts to sensitive habitats. Pedestrian, bike, and horse traffic can erode trails and spread weeds. Beach recreation tramples dune vegetation and special-status species.
- **Protection of the Western Snowy Plover.** COPR must protect the western snowy plover from harm due to public access on the beach and dunes because of the legal protection afforded this species under the Endangered Species Act. Public recreation has been the primary threat to the population on the beach at COPR. People unknowingly disturb wintering plovers and may trample eggs or chicks. Unleashed dogs can further threaten the success of nesting plovers.

- **Exotic Species.** Invasive exotic plants are present at COPR due to past human disturbance. These species degrade the native habitats and displace native species at the reserve.
- **Sedimentation.** COPR is located at the bottom of the Devereux Creek Watershed and is subject to excessive sedimentation due to man-made changes in the watershed. Sedimentation threatens the long-term viability of the slough because it results in conversion of wetlands to uplands over time.

3.3.3 Summary of COPR Draft Management Plan

The COPR Draft Management Plan provides overall guidance on the management of the resources and public access at the Reserve. The COPR Draft Management Plan describes the following programs: Users, Habitat Conservation, Stewardship, and Administration. A summary of the major management objectives and actions is provided below.

The User Program outlines policies for access by official users, researchers, university classes, and K-12 and other public groups, who must fill out an application and have it approved by the COPR Director to use the Reserve.

The Habitat Conservation Program provides for the protection of native ecosystems. Management actions in this program include removal of exotic plants, restoration and enhancement of native habitats, erosion control, trash removal, and the reduction of impacts from public access and recreation.

The Habitat Conservation Program also includes the Western Snowy Plover Management Plan prepared by COPR at the request of the USFWS. The plan to protect wintering plovers was approved by the California Coastal Commission in November 2001. Under the Western Snowy Plover Management Plan, disturbance to plovers is reduced by public awareness efforts, diverting beach users away from plover habitat, and enforcing the leash policy for the campus beach. The protected plover habitat on Sands Beach is delineated with a post-and-rope fence and signs. COPR has closed the "Delta Trail," which traversed the plover roost area, and implemented a western snowy plover docent program for public outreach and education. COPR works with the University Police Department to promote compliance with the leash law on the COPR beach. The Western Snowy Plover Management Plan has been amended to include protection of breeding plovers and will be submitted for approval by the California Coastal Commission in winter 2004.

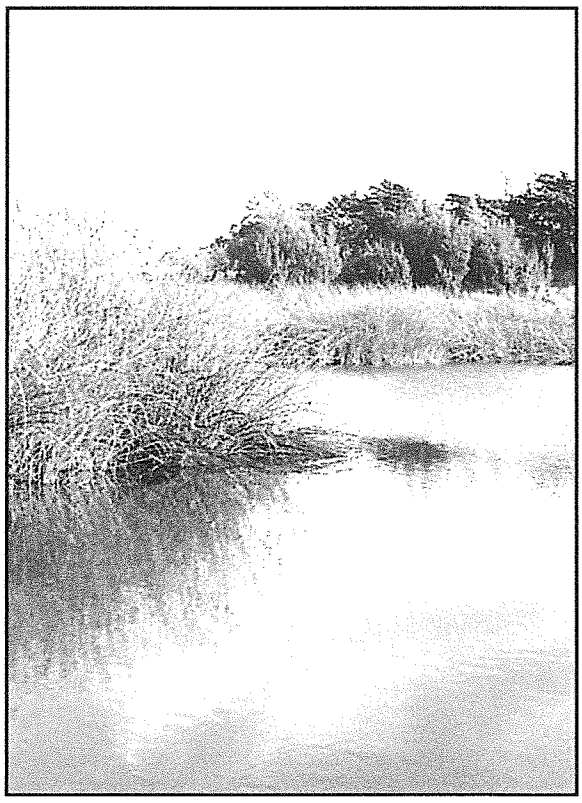
The COPR Stewardship Program includes the Access Plan, which identifies areas of public access through COPR that are compatible with its conservation and stewardship goals. Public trails that COPR visitors can access without an official application approved by the Reserve Director include: (1) the interpretive Dune Pond Trail that traverses COPR from Venoco Road to Sands Beach, (2) the short trail through the northeast corner of COPR that connects West Campus Mesa and Venoco Road, and (3) a perimeter trail along the east, north, and western boundaries of the COPR. The public may also access Sands Beach outside the fenced plover areas.

The public trails and Sands Beach are open to visitors for nature study and passive recreation that will not disturb wildlife (e.g., walking, jogging, painting, etc. are permitted; kite flying and active sports are prohibited). Motorized vehicles (with the exception of emergency vehicles) are not allowed anywhere on COPR. Cyclists and equestrians are allowed only on the perimeter trail and the short trail connecting West Campus Mesa and Venoco Road. Only pedestrians are permitted on the Dune Pond Trail. Pedestrians with dogs on leash are not permitted on the Dune Pond Trail, but are permitted on the other public trails and Sands Beach. The Reserve works to improve these routes with respect to their safety, beauty, preservation, boundary designation, and educational value. COPR provides two turnouts for bird watchers along Slough Road. There are three access points to the beach from the bluffs in the area of COPR: (1) at Coal Oil Point near the Cliff House, (2) via the Dune Pond Trail, and (3) along the western boundary of COPR. Sands Beach is also accessible by walking along the beach from the east or west.

3.4 RIPARIAN HABITATS

3.4.1 Existing Resources

Riparian habitat occurs along the drainages in the Open Space Plan Area. Refer to Figure 7 for a map of drainage locations. The major drainage is Devereux Creek, which traverses the western half of the Open Space Plan Area and Ocean Meadows Golf Course before discharging to Devereux Slough at Venoco Road. The major tributary to Devereux Creek is Phelps Ditch/El Encanto Creek (Figure 7). Several other smaller drainages occur around the perimeter of Devereux Slough.



Drainage gullies were previously constructed on the South Parcel Nature Park that drain into Devereux Slough (Figure 7). The habitats associated with these drainages are briefly described below and shown on Figure 5.

Riparian habitats within the Open Space Plan Area include freshwater marsh, riparian scrub, and riparian forest. Freshwater marsh occurs along drainages where there is seasonal winter flows and prolonged soil moisture. Dominant plant species within the Open Space Plan Area include bulrush *(Scirpus californicus),* narrowleaved cattail (*Typha domingensis*), umbrella sedge *(Cyperus eragrostis*), rush (*Juncus* sp.), ditch grass (*Paspalum* spp.), creeping bentgrass (*Agrostis stolonifera* var. *palustris*), rabbitsfoot grass, and alkali rye (*Leymus triticoides*).

Riparian scrub occurs on creek banks, forming dense thickets. Dominant riparian scrub species within the Open Space Plan Area include arroyo willow (*Salix lasiolepis*) shrubs with occasional patches of mule fat (*Baccharis salicifolia*), Himalaya blackberry (*Rubus discolor*), and canary grass (*Phalaris canariensis*).

Riparian forest consists of tall, mature winter-deciduous trees such as arroyo willow, Fremont cottonwood (*Populus fremontii*), and western sycamore (*Platanus racemosa*). This habitat is poorly developed within the Open Space Plan Area.

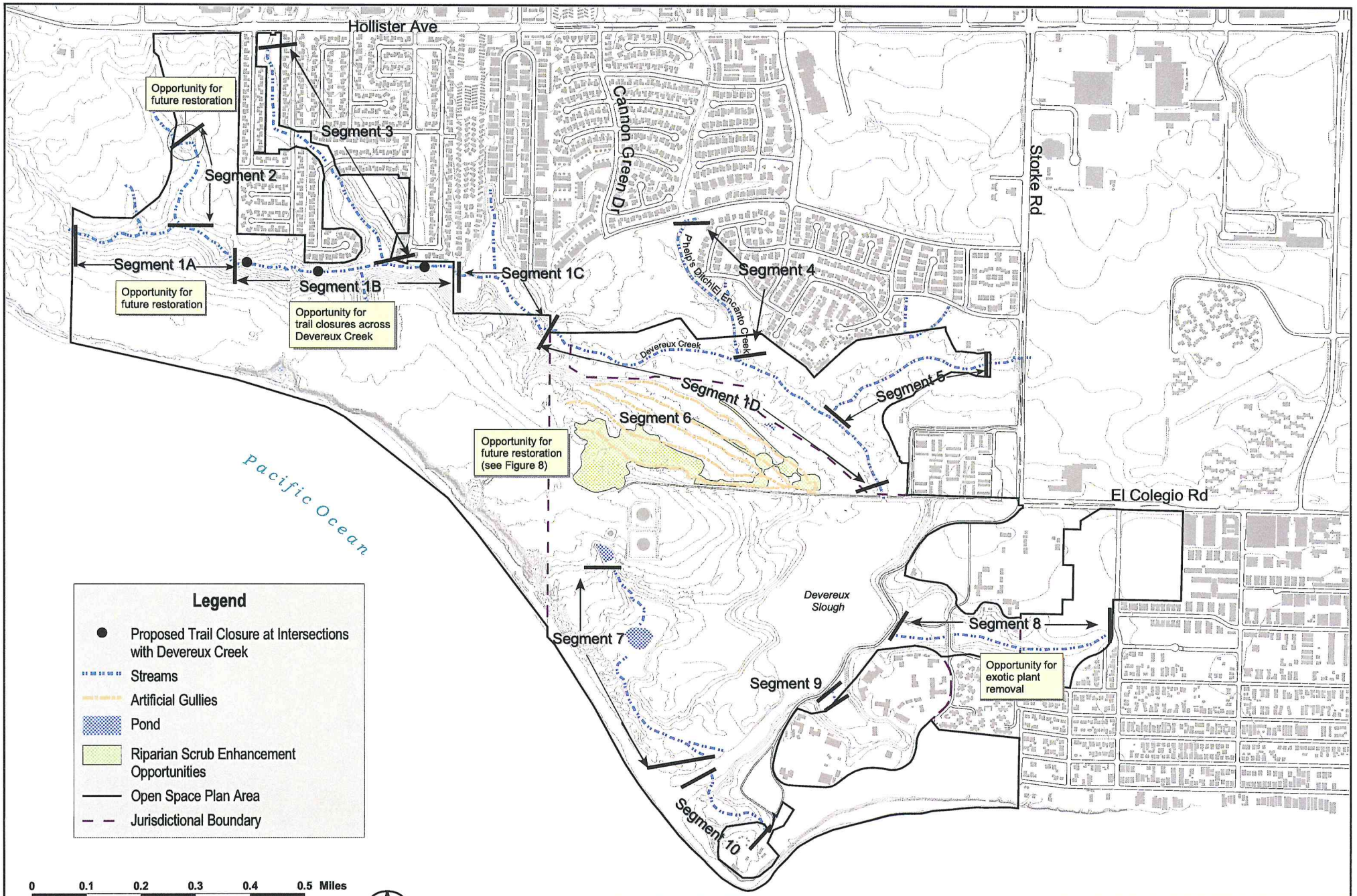
Drainage features in the Open Space Plan Area are described by segment. A segment is a length of the creek that has a similar geomorphology, traverses similar land uses, and has no major tributaries. Segments within the Open Space Plan Area range from 800 to 3,000 feet in length and are mapped on Figure 7.

Devereux Creek Segments

Four segments characterize Devereux Creek. Segment 1A represents the western-most portion of Devereux Creek on Santa Barbara Shores in the City of Goleta. This segment is approximately 1,200 feet long. It is partially channelized with steep banks and a flat creek bottom and is generally straight. Vegetation is sparse, with small patches of freshwater marsh, riparian scrub, and riparian forest habitats. The surrounding vegetation is mostly grassland and scrub habitats. Segment 1B is approximately 2,000 feet long and includes the shallow and eroded drainage through the butterfly groves on Ellwood Mesa in the City of Goleta. A dense eucalyptus canopy shades the creek and limits understory vegetation to small patches of freshwater marsh and riparian forest in canopy openings. Segment 1C is approximately 900 feet long and is located beyond the boundary of the Open Space Plan Area in a flat depression west of the Ocean Meadows Golf Course and is not reviewed in this Open Space Plan. Segment 1D traverses the Ocean Meadows Golf Course in the County of Santa Barbara. This 3,000-foot segment of Devereux Creek is represented by a well-defined channel with sloped banks and dense patches of freshwater marsh and riparian scrub habitats growing on the flat creek bed. Ponded water habitat is present in this segment.

Tributaries to Devereux Creek Segments

Four segments characterize tributaries to Devereux Creek. Segment 2 is located on the Santa Barbara Shores property in the City of Goleta. It drains north to south through eucalyptus woodland where it discharges to Devereux Creek. This 800-foot segment is a narrow and incised drainage at the upstream end immediately before it enters the eucalyptus woodland. Within the woodland canopy, the drainage is unvegetated and eroded. Segment 3 represents a north-south tributary to Devereux Creek and intersects the Coronado Butterfly Preserve. This approximately 2,500-foot segment includes a shallow and meandering channel through a flat to gently sloping floodplain. A dense eucalyptus canopy shades the creek and limits understory vegetation. Patches of riparian forest are present as a result of revegetation efforts in the Coronado Butterfly Preserve. Segment 4, also known as Phelps Ditch/El Encanto Creek, traverses approximately 1,100 feet of the Open Space Plan Area. Freshwater marsh, riparian scrub, and riparian forest habitats are dense within the creek bed of Segment 4. Segment 5 drains the eastern arm of the


Hollister Ave
Opportunity for future restoration
Segment 3
Segment 2
Cannon Green Dr
Storke Rd
Segment 1A
Opportunity for future restoration
Segment 1B
Opportunity for trail closures across Devereux Creek
Segment 1C
Phelp's Ditch/El Encanto Creek
Segment 4
Devereux Creek
Segment 1D
Segment 5
Segment 6
Opportunity for future restoration (see Figure 8)
Pacific Ocean
El Colegio Rd
Devereux Slough
Segment 7
Segment 8
Segment 9
Opportunity for exotic plant removal
Segment 10
Legend
Proposed Trail Closure at Intersections with Devereux Creek
Streams
Artificial Gullies
Pond
Riparian Scrub Enhancement Opportunities
Open Space Plan Area
Jurisdictional Boundary
0 0.1 0.2 0.3 0.4 0.5 Miles
1:15000
T:\Ellwood_Devereux\deliverables\riparian_system.apr (Riparian System layout)
March 2004
Ellwood-Devereux Coast Open Space and Habitat Management Plan
Figure 7. Overview of Riparian System and Future Restoration Opportunities

Ocean Meadows Golf Course and is a shallow, straight channel with a defined bed and bank. It traverses approximately 1,800 feet of the Open Space Plan Area. Freshwater marsh dominates the bed of Segment 5.

Other Drainage Segments

Aside from Devereux Creek and its tributaries, five segments characterize additional drainage features discharging to Devereux Slough on COPR. Segment 6 occurs on the South Parcel Nature Park within the jurisdiction of the University and includes 5l straight, steep-banked, eroded gullies that drain west to east, cross under Venoco Road, and discharge directly to Devereux Slough. These approximately 1,500-foot-long gullies were constructed in the 1960s to direct surface flow away from the Ocean Meadows Golf Course. Riparian scrub and forest habitats are dominant within the base of the gullies. Segment 7 occurs on COPR within the jurisdiction of the University. This approximately 2,500-foot segment connects a pond on the Ellwood Marine Terminal property to the Dune Pond and discharges via a small shallow tributary to Devereux Slough. Freshwater marsh dominates the ponded water areas, and the connecting drainage is vegetated with salt marsh species reflecting the marine influence.

Segment 8, also known as the North Slough Finger, includes a deep drainage and connects the Del Sol Reserve and drains west to Devereux Slough for approximately 2,000 feet. The bed of the drainage is typically wide and the banks are gently sloping. Riparian scrub and forest habitats dominate the upper section in the Del Sol Reserve (County jurisdiction) and freshwater marsh, riparian scrub, and salt marsh habitat is the dominant feature in the lower section (University jurisdiction) where the drainage connects to Devereux Slough. Segment 9, also known as the South Slough Finger, includes a wide, steep gully draining from Devereux School (County) west to Devereux Slough for approximately 800 feet. Riparian scrub and forest occur at the top of the drainage, and salt marsh dominates the lower stretch of Segment 9 where the drainage connects to Devereux Slough. Segment 10 includes a short, steep drainage discharging surface flow from the western edge of Coal Oil Point, through a densely vegetated restoration site on COPR, and discharging directly to Devereux Slough. This approximately 800-foot drainage is vegetated with riparian scrub and forest along the lower stretch of the drainage.

3.4.2 Management Issues

Management issues related to the protection and sustainability of riparian habitats within the Open Space Plan Area are summarized by segment in Table 4. In general, erosion and sedimentation issues are the greatest impairment. Exotic plants and habitat fragmentation from road crossings also impair drainage functions.

3.4.3 Regulatory Considerations

As discussed in Section 3.1.2, riparian habitats meet the Coastal Act definition for an environmentally sensitive area. They also meet the definition for sensitive coastal resources, which are "identifiable resources within the coastal zone of vital interest and sensitivity including special marine and land habitat areas, wetlands, lagoons, and estuaries" (PRC §30116).

Table 4. Riparian Habitat Management Issue Summary

Segment	Jurisdiction	Management Issue
Devereux Creek		
Segment 1A	City of Goleta	Erosion, sedimentation, exotic plants
Segment 1B (Eucalyptus Woodland)	City of Goleta	Erosion, compacted soil, lack of riparian habitat
Segment 1C (Mathilda Parcel)	City of Goleta	Not applicable
Segment 1D (Ocean Meadows Golf Course)	County	Sedimentation, fragmentation from road crossings
Devereux Creek Tributaries		
Segment 2 (Santa Barbara Shores)	City of Goleta	Erosion, heavy recreation use off-trail
Segment 3 (Coronado Preserve)	City of Goleta	Sewer line maintenance
Segment 4 (Phelps Ditch)	City of Goleta/University	None
Segment 5 (Ocean Meadows Golf Course)	County	Fragmentation from numerous road crossings
Other Drainages		
Segment 6 (South Parcel Nature Park Gullies)	University	Erosion, heavy recreation uses, habitat disturbance
Segment 7 (Dune Pond Drainage)	University (COPR)	Fragmentation from trail crossings
Segment 8 (North Slough Finger)	University/County	Fragmentation from trail crossings, exotic plants
Segment 9 (South Slough Finger)	University/County	Exotic plants
Segment 10 (COPR Drainage)	University (COPR)	Existing onsite restoration is addressing issues

Riparian habitats provide valuable shelter and forage areas for a variety of wildlife species. Plants found in riparian habitats can act as water quality filters, removing sediment and other debris from storm water runoff. By providing essential support to valuable species and by enhancing water quality, they are deemed valuable and are afforded special protection.

Other regulatory agencies have jurisdiction over riparian-related habitats in the Open Space Plan Area. The Corps of Engineers regulates the discharge of fill or dredge material into natural drainages with or without riparian habitat under Section 404 of the Clean Water Act. The Corps regulatory program includes restrictions on fill, and requirements to minimize adverse impacts to aquatic sites and habitats.

The California Department of Fish and Game (CDFG) regulates any work in natural creeks or drainages that would alter the bank, bed, or vegetation of the drainage under Section 1600 of the Fish and Game Code. The Code provides CDFG with the authority to impose conditions to protect fish and wildlife resources in creeks and streams.

The Open Space Plan program for riparian habitat management includes goals, policies, and management actions designed to maintain consistency with ESHA designations and other state and federal riparian habitat protection regulations.

3.4.4 Management Goals and Policies

The following goal and policies will guide the overall implementation of the riparian Habitat Protection and Management Element of the Open Space Plan. The three sponsoring agencies will formally adopt these goals and policies into their local coastal programs. Management

actions and projects by each agency associated with the implementation of the Open Space Plan within their jurisdiction must be consistent with these goals and policies.

Riparian Goal 1. Protect and enhance riparian habitats and watershed functions along drainages in the Open Space Plan Area.

Riparian Policy 1. Manage public access to protect and enhance riparian habitat and ecosystem functions.

Riparian Policy 2. Seek opportunities to enhance and restore riparian habitats provided they do not conflict with other existing ESHAs and monarch butterfly groves.

Riparian Policy 3. Initial riparian enhancement and restoration should focus on invasive plant removal, increasing native plant cover, improving habitat connectivity along drainages, reducing channel erosion, increasing bio-filtering functions of drainages, and increasing the diversity of native riparian plant species.

Riparian Policy 4. Management actions in the upland portions of the Open Space Plan Area should consider methods to reduce upland erosion that causes sedimentation of drainages.

3.4.5 Resource Protection and Management

Trail and Public Access Plan

The designated trail system (see Section 4.2) would protect riparian habitat by closing trails that cross creeks. Trail closures across the creek would reduce sedimentation and erosion sources and offer potential restoration opportunities. Pedestrians would be urged to use other less damaging routes as some existing informal trails would be removed and revegetated. Trail closure opportunities would occur at three locations along Segment 1B as shown on Figure 7. These closures are designed to both minimize impacts to Devereux Creek and control public access in the monarch butterfly groves as designed in Section 3.2. Trails in the eucalyptus woodland paralleling Devereux Creek (Segments 1B and 2) will be limited to pedestrians. Signs at trailheads will urge visitors to remain on designated trails. The signs will also clarify trails within the eucalyptus groves are designed for pedestrian use only to both protect the butterflies and reduce erosion and sedimentation within Devereux Creek.

Habitat Enhancement and Restoration Opportunities

Initial opportunities for enhancement and restoration are proposed on the South Parcel Nature Park as follows:

- **Segment 6.** The University is proposing riparian habitat enhancement and restoration on a portion of the South Parcel Nature Park, to be implemented in phases over several years, as shown on Figure 7 and in more detail on Figure 8. The project includes repair of eroded gullies using check dams and stabilizing banks and planting of native riparian species within

an identified mitigation site for North Campus Faculty Housing development impacts. Invasive exotics will be removed from the drainages at the South Parcel Nature Park prior to grading and planting. Approximately 1,500 linear feet (totaling about 8 to 15 acres depending on availability of funds) of riparian habitat would be enhanced and restored on the South Parcel Nature Park. Enhancement and restoration opportunities are also available for re-vegetation of bare eroded areas with a dense cover of native plants to greatly reduce runoff volume and erosion by promoting increased soil absorption.

In addition to the above riparian restoration, the following opportunities to enhance and restore riparian habitat in the Open Space Plan Area will be considered during the implementation of the Open Space Plan as funding allows (see Figure 7 for locations):

- **Segment 1A.** Existing riparian habitats could be enhanced and restored through selective weeding and replanting with native riparian species on the banks of Devereux Creek. Removal of invasive, non-native species would precede vegetation restoration efforts. Unvegetated and eroded areas would be replanted with herbs, shrubs, and tree species. Erosion control matting would be used to protect the banks. This opportunity site includes approximately 800 linear feet of the creek.
- **Segment 2.** The steep and eroded banks where this tributary connects with the boundary of the Comstock Homes Development and the eucalyptus woodland could be restored through recontouring the banks, installing erosion control matting, and replanting with herbs, shrubs, and trees. This opportunity site is approximately 50 feet long.
- **Segments 8 and 9.** Existing riparian habitats could be enhanced through selective removal of invasive exotics and replanting with native riparian species on the bed and banks of the North and South Slough Fingers. The ice plant patches at the border of Devereux Road and the slough fingers are the focus of this opportunity site and include approximately 0.5 acre of riparian habitat enhancement.

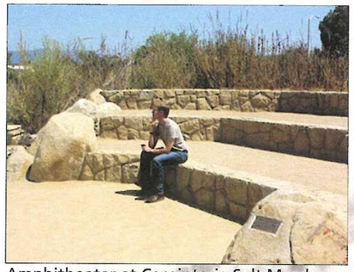
For all opportunity projects, the restoration and enhancement sites would be protected from public access using low-profile barriers, fencing, and informational signs. Signs and fencing would be removed when restoration is complete. Riparian restoration and enhancement is not identified within Segments 3 through 5 and 7 at this time.

3.5 VERNAL POOLS

3.5.1 Existing Resources

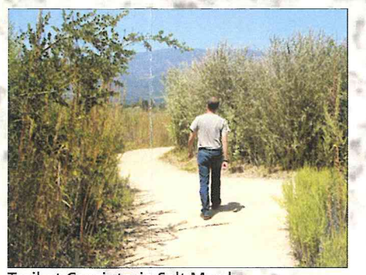
The vernal pools of coastal southern Santa Barbara County occur on More Mesa, Isla Vista Mesa, and Ellwood Mesa. Vernal pools form as winter rains fill topographic depressions where underlying claypan layers prevent the water from percolating through to the subsurface. Eventually these pools become dry due to subsurface drainage, evaporation, and plant evapotranspiration, remaining dry throughout the summer, until late fall and winter rains again initiate pool formation. Vernal pool habitat is characterized by a particular plant association that is adapted to this alternating process of wet and dry. Such plant species characterizing vernal pools include coyote thistle (*Eryngium vaseyi*), wooly heads (*Psilocarphus brevissimus*), and popcorn

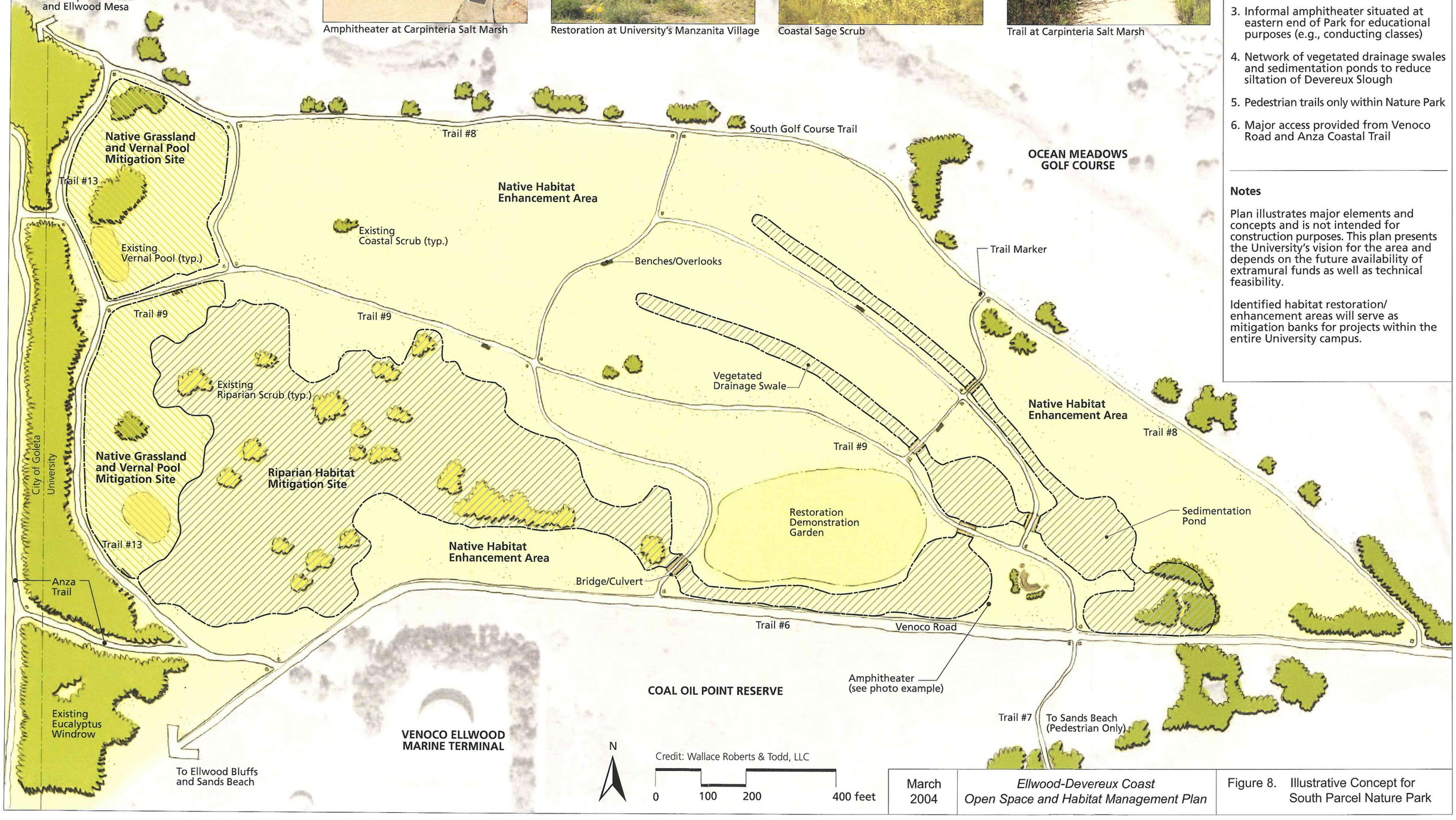
Examples of the University's habitat enhancement and site improvements at the Carpinteria Salt Marsh Reserve and Manzanita Village on-campus residence hall


Amphitheater at Carpinteria Salt Marsh


Restoration at University's Manzanita Village


Coastal Sage Scrub


Trail at Carpinteria Salt Marsh



Summary of Concepts

1. Native habitat enhancements include riparian scrub, coastal scrub, native grassland/vernal pools, and perennial grasslands
2. Restoration demonstration garden will be an educational/interpretive facility to demonstrate techniques for repairing highly disturbed sites
3. Informal amphitheater situated at eastern end of Park for educational purposes (e.g., conducting classes)
4. Network of vegetated drainage swales and sedimentation ponds to reduce siltation of Devereux Slough
5. Pedestrian trails only within Nature Park
6. Major access provided from Venoco Road and Anza Coastal Trail

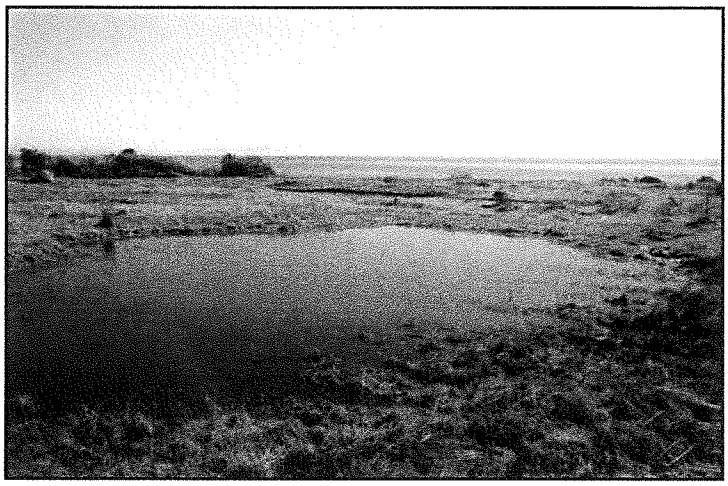
Notes

Plan illustrates major elements and concepts and is not intended for construction purposes. This plan presents the University's vision for the area and depends on the future availability of extramural funds as well as technical feasibility.

Identified habitat restoration/ enhancement areas will serve as mitigation banks for projects within the entire University campus.

March 2004	*Ellwood-Devereux Coast Open Space and Habitat Management Plan*	Figure 8. Illustrative Concept for South Parcel Nature Park

flower (*Plagiobothrys undulatus*). These species generally decrease in abundance toward the outer margins of pools where grasses become dominant.



Approximately 70 vernal pools are present on Ellwood Mesa, three on the western perimeter of the South Parcel Nature Park, one large pool on the COPR, 10 on West Campus Bluffs Nature Park, and 20 in the combined Del Sol/Camino Corto Reserves (Figure 5). These pools encompass about 8 acres in total. Vernal pools within the Open Space Plan Area are generally small in area, only a few inches deep, and are dominated by ephemeral annual and perennial hydrophytes such as wooly heads, coyote thistle, common spikerush (*Eleocharis macrostachya*), lowland cudweed (*Gnaphalium palustre*), southern tarplant (*Hemizonia parryi* ssp. *australis*), curly dock (*Rumex crispus*), toad rush (*Juncus bufonius* var. *bufonius*), loosestrife (*Lythrum hyssopifolia*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), Italian ryegrass (*Lolium multiflorum*), and rabbitsfoot grass (*Polypogon monspeliensis*). All of the ponds in the unmanaged portion of the Open Space Plan Area appear to have been naturally formed. Vernal pools in the Open Space Plan Area intergrade with the non-native annual grassland and native grassland habitats.

3.5.2 Management Issues

Vernal pools in the Open Space Plan Area have been substantially degraded as a result of the following factors which have resulted in soil compaction, altered hydrologic connection, and exotic species establishment.

- **Historic Land Uses.** Several prior land uses have damaged or destroyed vernal pools, including horse grazing in the Ellwood Mesa/Santa Barbara Shores area, topsoil removal on the North Parcel and South Parcel Nature Park to create the Ocean Meadows Golf Course, and oil development throughout the Open Space Plan Area. Much of the Open Space Plan Area was disturbed from previous remediation activities that left the ground surface uneven and obscured boundaries between the pools.
- **Trails.** Trails have destroyed or significantly modified the natural hydrologic regime of the vernal pool complexes on Ellwood Mesa/Santa Barbara Shores and West Campus Bluffs Nature Park. Ground disturbances associated with unmanaged trail use contribute to habitat and hydrologic fragmentation. The vernal pools within the Open Space Plan Area are very small and isolated.
- **Invasive Exotics.** There is an abundance of non-native species in the vernal pool habitat. These species prevent the development of native habitats by natural processes, convert native habitats to non-native habitats over time due to competition, reduce forage for native

insects and wildlife, and provide a source of non-native seeds and propagules that can colonize in adjacent habitats.

3.5.3 Regulatory Considerations

Vernal pools in the Open Space Plan Area are considered wetlands and ESHAs because they meet the definition of wetlands and ESHA in the Coastal Act. As such, vernal pools are afforded protection under the Coastal Act as described in Section 3.1.

The Open Space Plan program for vernal pool management includes goals, policies, and management actions designed to maintain consistency with wetland and ESHA designations in the Coastal Act.

3.5.4 Management Goals and Policies

The following goal and policies will guide the overall implementation of the vernal pool Habitat Protection and Management Element of the Open Space Plan. The three sponsoring agencies will formally adopt these goals and policies into their local coastal programs. Management actions and projects by each agency associated with the implementation of the Open Space Plan within their jurisdiction must be consistent with these goals and policies.

Vernal Pool Goal 1. Protect and enhance vernal pools and other non-riparian wetlands in the Open Space Plan Area.

Vernal Pool Policy 1. Manage public access to protect and enhance vernal pools, particularly the integrity of their hydrologic and floristic characteristics.

Vernal Pool Policy 2. Seek opportunities to enhance and restore vernal pools, provided they do not conflict with other existing ESHAs or key public access corridors.

Vernal Pool Policy 3. Initial vernal pool enhancement and restoration should focus on protecting major existing pools, increasing the number and diversity of vernal pool plant species in the Open Space Plan Area, and expanding vernal pools on University and City of Goleta lands.

3.5.5 Resource Protection and Management

Trail and Public Access Plan

Vernal pools on Ellwood Mesa/Santa Barbara Shores Park and West Campus Bluffs Nature Park are degraded from ongoing trail use and unmanaged recreational activities. The trail closures associated with the planned trail system (see Section 4.2) would reduce these impacts and provide an opportunity to re-establish habitat and hydrological connections between pool complexes. Trail closures in vernal pool complexes are summarized below by jurisdiction:

- **City of Goleta – Ellwood Mesa/Santa Barbara Shores Park.** Approximately 3,500 linear feet of closed trails on Ellwood Mesa/Santa Barbara Shores Park would reconnect approximately 35 vernal pools.
- **University – South Parcel Nature Park.** Approximately 15,800 linear feet of closed trails on the South Parcel Nature Park would restore partial buffers on two existing pools and create opportunities for restoration of new pools.
- **University – West Campus Bluffs Nature Park.** Approximately 5,000 linear feet of trail closures would create opportunities for restoration of new pools that would mimic historic vernal pool distribution on the bluffs.

Vernal pool degradation in the Open Space Plan Area would also be reduced by directing visitors onto a designated trail system through signs, brochures, and public information programs. It should be noted that trail closures in and of themselves would only partially restore the vernal pool connections. Without active restoration, only partial benefits would be achieved. Active restoration within the reconnected vernal pools may occur in the future as funding allows.

Potential Habitat Enhancement and Restoration Opportunities

Initial opportunities for enhancement and restoration are proposed on the South Parcel Nature Park as follows:

- **University – South Parcel Nature Park.** The University is proposing a restoration opportunity for the South Parcel Nature Park Mitigation Site as shown on Figures 8 and 9. The projects include restoration of existing vernal pools and possible creation of new vernal pools.

In addition to the above vernal pool initial opportunities, the following future opportunities to enhance existing vernal pools elsewhere in the Open Space Plan Area will be considered during the implementation of this Open Space Plan:

- **City of Goleta – Ellwood Mesa/Santa Barbara Shores Park.** Trail closures on Ellwood Mesa/Santa Barbara Shores would enhance the habitat and hydrologic connections amongst approximately 35 vernal pools (Figure 9). Additional enhancement opportunities include creating small berms at the margins of vernal pools with degraded hydrologic conditions, phased invasive exotic plant species removal, and revegetation with vernal pool plant species. Characteristic vernal pool species such as coyote thistle, wooly heads, and popcorn flower would be seeded and/or planted using local genetic material. Native grasses would be seeded and/or planted on the pool buffers.
- **University – West Campus Bluffs and South Parcel Nature Parks.** The University proposed vernal pool enhancement, restoration, and creation opportunities for the remainder of the South Parcel and West Campus Bluffs Nature Parks (Figure 10). These opportunities would be implemented as grant or other funding allows, or as a mitigation site

for development-related impacts from future West Campus, Storke Campus, or Main Campus projects.

3.6 NATIVE GRASSLANDS

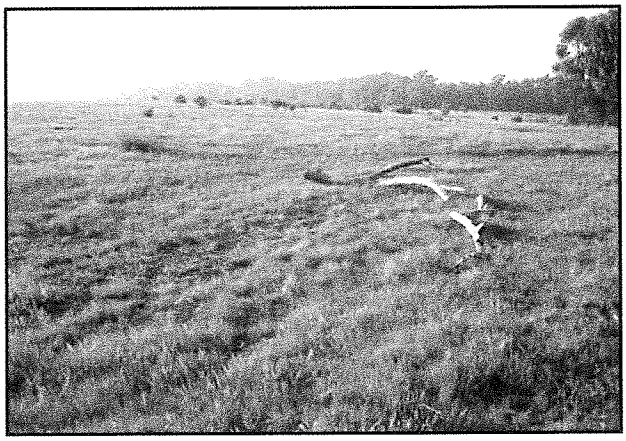
3.6.1 Existing Resources

Native grasslands have very limited distribution in Santa Barbara County. The introduction of non-native grasses and herbs, livestock grazing, and modification of the natural fire regime have caused them to be displaced by non-native annual grasslands. Native grasslands in the Open Space Plan Area are restricted to Ellwood Mesa which is one of the largest stands of native grasslands in Santa Barbara County. Five native grass species occur in the Open Space Plan Area – alkali rye (*Leymus triticoides*), purple needlegrass (*Nassella pulchra*), meadow barley (*Hordeum brachyantherum*), blue wild rye (*Elymus glaucus*), and California brome (*Bromus carinatus*). Purple needlegrass is the most common native grass and generally grows in relatively pure stands, occasionally intermixing with other native grass species, particularly meadow barley (see Figure 5 for existing native grassland areas).

3.6.2 Management Issues

Native grasslands in the Open Space Plan Area have been substantially degraded as a result of the following factors:

- Prior horse grazing – favored the colonization of non-native annual plants
- Fire suppression – has disrupted the natural reproduction and regeneration of native grasslands
- Trail establishment and use – trails have fragmented habitats, compacted soils favoring exotic species, and creates ground disturbance that allow invasive plant colonization



- Invasive exotics – displaced native plant species due to competitive advantage

These management issues are addressed in Open Space Plan goals and policies, and opportunities for restoration and enhancement are suggested for future improvements.

3.6.3 Regulatory Considerations

Native grasslands in the Open Space Plan Area are generally considered ESHAs if they exhibit a predominance of native species, appear to be self-sustaining and viable, and are not isolated or fragmented but comprise a part of a larger native grassland complex. With such characteristics, they meet the definition of an ESHA in PRC § 30107.5 of the Coastal Act. As such, native grasslands are afforded the protection under the Coastal Act described in Section 3.1.

Hollister Ave
Pebble Beach Dr
Santa Barbara Shores Dr
Coronado Dr
Cannon Green Dr
Pacific Oaks Rd
Anchor Dr
Newport Dr
Coronado Butterfly Preserve: Potential Future Vernal Pool Restoration
Phelps Rd
Devereux Creek
Phelps Ditch/El Encanto Creek
Whittier Dr
Storke Rd
Vernal Pool Enhancement Opportunities
Native Grassland and Vernal Pool Mitigation Site
South Parcel Nature Park
Native Habitat Enhancement Opportunity (as grant or other funding becomes available)
Access Point F
Minor Grading
Pedestrians Only
Access Point E
Repair Potholes in Pavement
Pedestrians Only
El Colegio Rd
Coal Oil Point Reserve: Restoration Areas for Various Habitats
Del Sol Open Space and Vernal Pool Reserve: Ongoing Vernal Pool Restoration
Camino Corto Reserve: Ongoing Vernal Pool Restoration
Devereux Slough
Access Point D
Rustic Beach Stairs
Pedestrians, Equestrians and Bicycles
Access Point C
Boardwalk
Pedestrians Only
Native Habitat Enhancement Opportunity (as grant or other funding becomes available)
West Campus Bluffs Nature Park
Del Playa Dr
Access Point B
Rustic Beach Steps
Pedestrians Only
Rustic Bluff Stairs
Beach Access Alternative
Access Point A
Existing Stairs

Legend

- Existing or Planned Restoration in or near COPR
- University Nature Parks

Initial Phase Opportunities

- Native Grassland and Vernal Pool Restoration and Enhancement Opportunities

Future Opportunities

- Existing Vernal Pool Enhancement Opportunities on City of Goleta Jurisdiction*
- Existing Vernal Pool Enhancement Opportunities on University Jurisdiction*
- Proposed Trails
- Existing Trails to be Closed
- Open Space Plan Area
- Streams

*Note: Future vernal pool opportunities could occur as grant or other funding becomes available

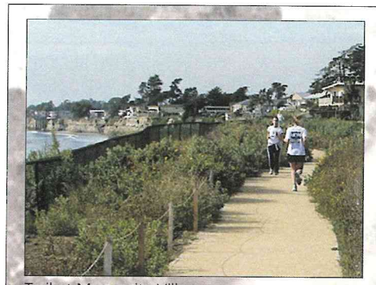
0 800 1600 Feet

1 inch = 800 feet

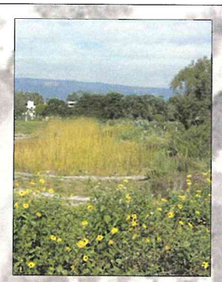
Projection: State Plane CA Zone 5, NAD83, Feet

T:\Ellwood_Devereux\deliverables\restoration_opportunities.apr

March 2004	*Ellwood-Devereux Coast Open Space and Habitat Management Plan*	Figure 9. Vernal Pool Opportunities



Trail at Manzanita Village



Habitat Restoration

Habitat Restoration

Trail with View towards Ocean

Examples of the University's habitat enhancement and site improvements at Manzanita Village on-campus residence hall

Note

Plan illustrates major elements and concepts and is not intended for construction purposes. This plan presents the University's vision for the area and depends on the future availability of extramural funds as well as technical feasibility.

WEST CAMPUS POINT FACULTY HOUSING

DEVEREUX SCHOOL

DEVEREUX SLOUGH

ISLA VISTA

Trail #2

Existing Vernal Pools

Planting to Screen Parking from Views

Existing Riparian Scrub

West Campus Bluffs Parking See Figures 23, 24 and 25 for Detailed Parking Concepts

Native Habitat Enhancement Area

Existing Vernal Pool

Existing Vegetation (typ.)

Coastal Trail / #1

Native Habitat Enhancement/ Visual Buffer

Existing Vernal Pools

Existing COPR Native Grassland and Vernal Pool Habitat Enhancement

Native Habitat Enhancement Area

Coastal Trail / #1

Benches/Overlooks

Coal Oil Point See Figure 22 for Detailed Parking Concept

Trail #5

Trail #5

West Campus Beach

Existing Bluff Stairs

COAL OIL POINT RESERVE

Trail #1

Relocated Cliff House 10,000 sq.ft Maximum

Restroom

New Bluff Stairs by "Jailhouse"

Native Habitat Enhancement Area

Bluff Stairs to Sands Beach

Native Habitat Enhancement Area

Removal of Tamarisk and other Non-Native Trees on Bluff Top and Face

Existing Cliff House

Pacific Ocean

Summary of Concepts

1. Habitat enhancement includes coastal bluff scrub, coastal sage scrub and native grasslands/vernal pools
2. Major access to Nature Park provided from Coal Oil Point and Camino Majorca
3. Reconfigured parking at Coal Oil Point
4. New parking on west side of Camino Majorca
5. Improved beach access at Coal Oil Point
6. New bluff stairs by the "Jailhouse"
7. New permanent restroom facility at Coal Oil Point
8. Improved trail network throughout Nature Park

N

0 100 200 400 feet

Credit: Wallace Roberts & Todd, LLC

March 2004

Ellwood-Devereux Coast Open Space and Habitat Management Plan

Figure 10. Illustrative Concept for the West Campus Nature Park

The Open Space Plan program for native grassland management includes goals, policies, and management actions designed to maintain consistency with the ESHA designation in the Coastal Act.

3.6.4 Management Goals and Policies

The following goal and policies will guide the overall implementation of the native grassland Habitat Protection and Management Element of the Open Space Plan. The three sponsoring agencies will formally adopt these goals and policies into their local coastal programs. Management actions and projects by each agency associated with the implementation of the Open Space Plan within their jurisdiction must be consistent with these goals and policies.

Native Grassland Goal 1. Protect and enhance native grasslands in the Open Space Plan Area.

Native Grassland Policy 1. Manage public access to protect and enhance native grasslands.

Native Grassland Policy 2. Seek opportunities to enhance and restore native grasslands, provided they do not conflict with other existing ESHAs or key public access corridors.

Native Grassland Policy 3. Initial native grassland enhancement and restoration should focus on the Ellwood Mesa, South Parcel Nature Park, and West Campus Bluffs Nature Park.

3.6.5 Resource Protection and Management

Trail and Public Access Plan

Native grasslands on Ellwood Mesa/Santa Barbara Shores Park are degraded from ongoing trail and recreational activities. Trail closures associated with the trail system (see Section 4.2) will occur on Ellwood Mesa/Santa Barbara Shores Park as shown on Figure 11. These closures are designed to minimize impacts to existing native grasslands to promote their regeneration.

Native grassland intergrades with vernal pools and degradation to these complexes in the Open Space Plan Area would also be reduced by directing visitors onto a designated trail system through signs, brochures, and public information programs.

Potential Habitat Enhancement and Restoration Opportunities

The University is proposing enhancement and restoration of the South Parcel Nature Park Mitigation Site, as shown on Figure 8. The project includes enhancement or creation of native grasslands in the buffers of newly created vernal pools on the South Parcel Nature Park within an identified mitigation site for North Campus Faculty and Student Housing development impacts. Invasive exotics will be removed and native grasses will be seeded and/or planted on the pool buffers.

The following future opportunities to create native grasslands elsewhere in the Open Space Plan Area will be considered during the implementation of the Open Space Plan (see Figure 11 for locations):

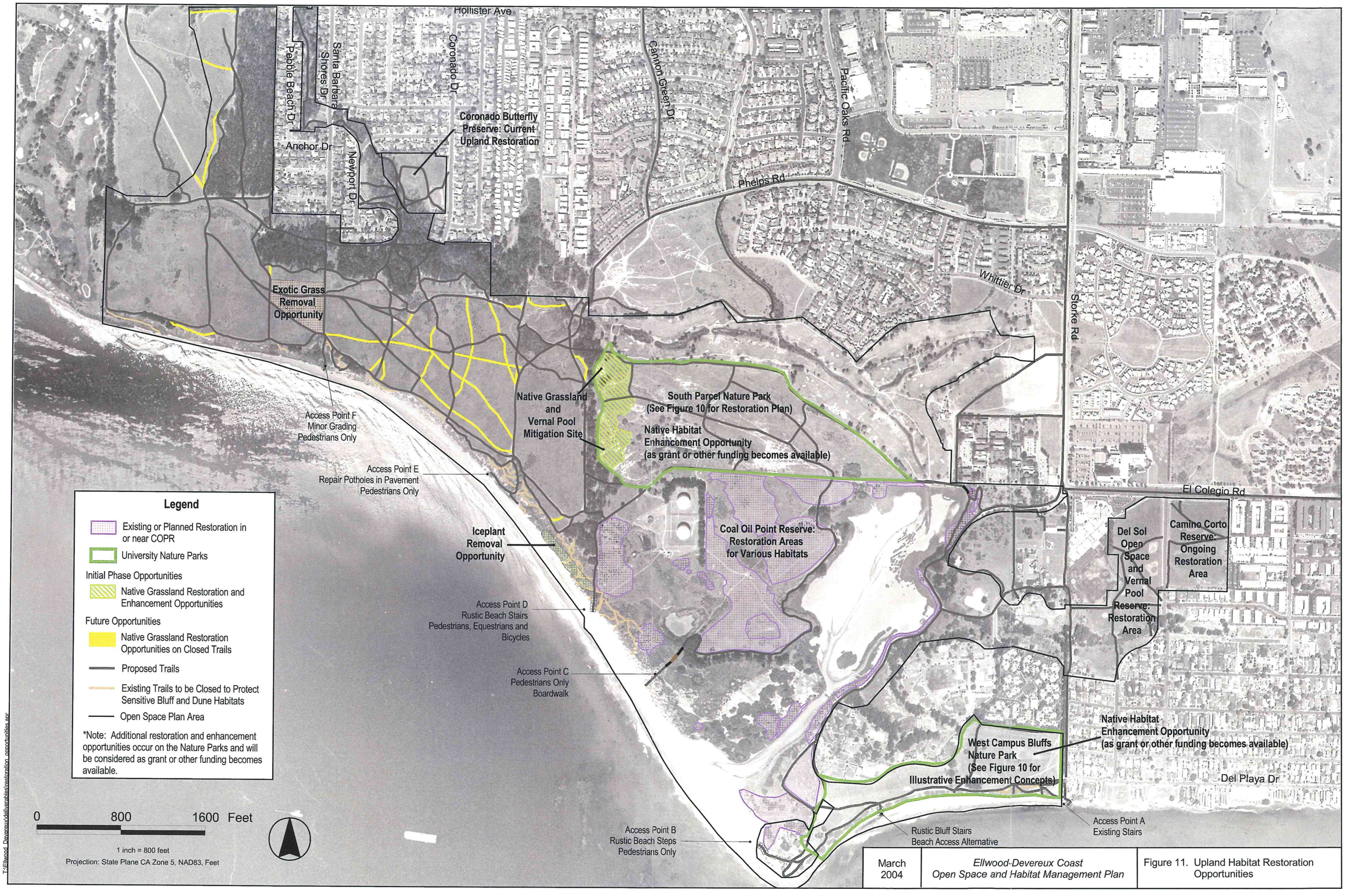
- **City of Goleta Ellwood Mesa – Trail Closure.** Trail closures on Ellwood Mesa/Santa Barbara Shores would allow for restoration activities in the closed trail footprint. The soil surface on the abandoned trails would be broken up so that the soil would be loose enough to support plant growth. Following the preparation of the seed bed, native grass seeds and/or plugs would be planted such as alkali rye, purple needlegrass, meadow barley, blue wild rye, and California brome. The goal of establishing native grasses in the closed trail footprint is two-fold: (1) to create new native grasslands in existing unvegetated trail surfaces; and (2) to encourage the spread of the restored native grasses into the adjacent non-native grasslands. Monitoring of the revegetated closed trails would identify the success of the restoration effort and the need for adaptive management.
- **City of Goleta Ellwood Mesa – Exotic Removal.** A large patch of Harding grass is present on Ellwood Mesa, as shown on Figure 9. This invasive exotic plant species would be removed. Following its removal, the affected areas would be seeded or planted with native grasses. This opportunity site would support the creation of 4 acres of native grassland.
- **University – West Campus Bluffs and South Parcel Nature Parks.** Enhancement and restoration opportunities for native grasslands in the buffers of existing or newly created vernal pools is also proposed on the remainder of the South Parcel Nature Park (Figure 8) and West Campus Bluffs Nature Park (Figure 11). These opportunities would be implemented as grant or other funding may allow, or as a mitigation site for development-related impacts from future West Campus, Storke Campus, or Main Campus projects.

3.7 COASTAL SAGE SCRUB, COASTAL BLUFF SCRUB, AND DUNE HABITATS

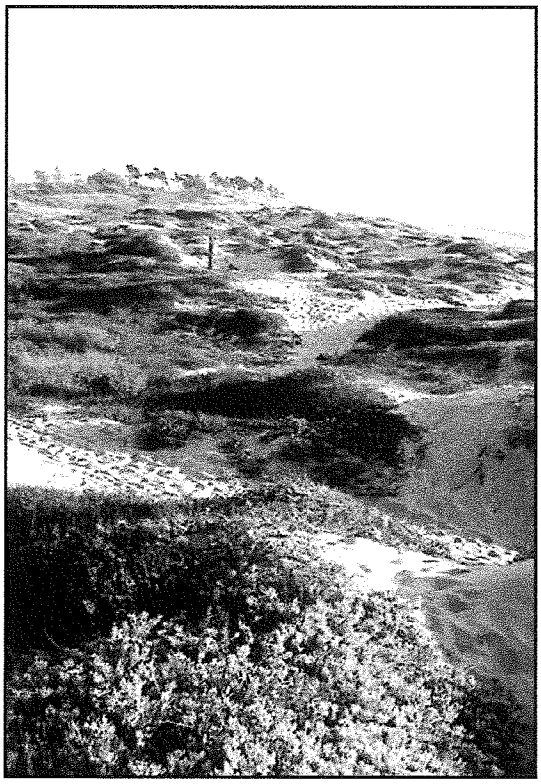
3.7.1 Existing Resources

Coastal sage scrub, coastal bluff scrub, and dune habitats occur in various locations of the Open Space Plan Area. Small isolated patches of coastal sage scrub frequently intergrade with native and non-native annual grassland and coyote bush. The most characteristic species found within the Open Space Plan Area are coyote brush (*Baccharis pilularis*, ssp. *consanguinea*), California sagebrush (*Artemisia californica*), bush sunflower (*Encelia californica*), and giant rye grass.

Coastal bluff scrub occurs on the exposed coastal bluffs of the Open Space Plan Area. Dominant species include Brewer's saltbush (*Atriplex lentiformis* ssp. *breweri),* lemonade berry (*Rhus integrifolia*), and seashore blight *(Suaeda californica* var. *taxifolia).* Other representative native species of this community include coyote brush, sagebrush, and seacliff buckwheat *(Eriogonum parvifolium* var. *parvifolium).* Disturbed areas support non-native species of which fennel, pampas grass *(Cortaderia jubata),* hottentot fig, and New Zealand spinach are the most common.



March 2004	*Ellwood-Devereux Coast Open Space and Habitat Management Plan*	Figure 11. Upland Habitat Restoration Opportunities



Dune habitats include both dune scrub and foredune types. Dune scrub occurs in areas of sand accumulation along the coast, but usually farther back than the foredune species. Characteristic species within the Open Space Plan Area include saltbush (*Atriplex lentiformis*), croton (*Croton californicus*), happlopappus (*Haplopappus venetus*), lemonade berry, coyote bush, morning glory (*Calystegia macrostegia*), and California sagebrush, while non-natives such as iceplant, fennel (*Foeniculum vulgare*), black mustard (*Brassica nigra*), non-native grasses, and vetch (*Vicia* spp.) are common in disturbed areas. Dune scrub occurs near the base of the coastal bluffs in the Open Space Plan Area (see Figure 5 for existing habitats).

Foredune habitat consists of perennial herbs and low-growing shrubs that occupy eolian (wind-blown) beach sand. It occurs along the immediate coast and intergrades with open beach sand on the ocean side and dune scrub on the coastal bluffs landward. Dominant species of the foredunes habitat in the Open Space Plan Area include sand verbena (*Abronia umbellata*) and beach bursage (*Ambrosia chamissonis*). Exotic species such as hottentot fig (*Carpobrotus edulis*), sea fig (*C. chilensis*), and New Zealand spinach (*Tetragonia tetragonoides*) are common in the Open Space Plan Area. This habitat occurs at the sandy beach-coastal bluff transition zone in the Open Space Plan Area.

3.7.2 Management Issues

Coastal sage scrub, coastal bluff scrub, and dune habitats in the Open Space Plan Area have been degraded as a result of unmanaged public access and recreational activities. These factors result in the loss of these habitats, the fragmentation of habitat, and the establishment of invasive exotic species. For example, trails have fragmented the original stands of scrub and dune habitats along the coast. The scrub and dune habitats within the Open Space Plan Area, with the exception of the large patches on the COPR, are bisected by trails, which make them vulnerable to exotic species invasion. There is an abundance of exotic plant species in the scrub and dune habitat along the bluffs, with the exception of the COPR where ongoing restoration efforts are reestablishing these habitats. Exotic species prevent the development of native habitats by natural processes, convert native habitats to non-native habitats over time due to competition, reduce forage for native insects and wildlife, and provide a source of non-native seeds and propagules that can colonize in adjacent habitats.

3.7.3 Regulatory Considerations

The coastal bluff scrub and dune habitat in the Open Space Plan Area are considered ESHAs because they meet the definition of an ESHA in PRC § 30107.5 of the Coastal Act, particularly

because of the use of these habitats by the threatened western snowy plover. As such, coastal bluff scrub and dune habitat are afforded the protection under the Coastal Act described in Section 3.1.

The Open Space Plan program for coastal bluff scrub and dune habitat management includes goals, policies, and management actions designed to maintain consistency with the ESHA designation in the Coastal Act.

3.7.4 Management Goals and Policies

The following goal and policies will guide the overall implementation of the native grassland Habitat Protection and Management Element of this Open Space Plan. The three sponsoring agencies will formally adopt these goals and policies into their local coastal programs. Management actions and projects by each agency associated with the implementation of the Open Space Plan within their jurisdiction must be consistent with these goals and policies.

Scrub Goal 1. Protect and enhance coastal bluff scrub and dune habitats in the Open Space Plan Area.

Scrub Policy 1. Manage public access to protect and enhance coastal bluff scrub and dune habitats.

Scrub Policy 2. Seek opportunities to enhance and restore coastal bluff scrub and dune habitats, provided they do not conflict with other existing ESHAs.

3.7.5 Resource Protection and Management

Trail and Public Access Plan

Coastal bluff scrub and dune habitats on the Ellwood Mesa and West Campus Bluffs Nature Park are degraded from trail use and recreational activities. Trail closures will occur in these areas in accordance with the trail system (Section 4.2), as shown on Figure 11. Trail closures are summarized below:

- **Ellwood Mesa.** As funding allows, approximately 500 linear feet of planned trail closures on Ellwood Mesa bluffs would reduce trail-associated impacts to bluff scrub and dune habitat. In addition, proposed future beach access upgrades at Access Points E and F (see Figure 12 in Section 4.0 for access point locations) would reduce bluff erosion and adverse impacts to coastal bluff scrub due to unmanaged access.
- **University Lands West of COPR.** Beach ramps or stairs will be installed at Access Point D on University lands outside COPR. The new access will reduce impacts to adjacent dune scrub from pedestrians and equestrians.
- **West Campus Bluffs Nature Park.** Approximately 200 linear feet of trails will be closed on the West Campus Bluffs Nature Park that will reduce trail-associated impacts to bluff scrub and dune habitat.

The COPR Draft Management Plan calls for the construction of a new ramp or stairs at Access Point B and a beach boardwalk at Access Point C (refer to Figure 12 in Section 4.0 for access point locations) that will reduce ongoing impacts to dune scrub habitat.

Potential Habitat Enhancement and Restoration Opportunities

The University is proposing future opportunities for enhancement and restoration of the South Parcel and West Campus Bluffs Nature Parks, as shown on Figure 11. The identified opportunity includes enhancement or creation of coastal sage scrub and coastal bluff scrub habitat, as grant or other funding may allow, or as a mitigation site for development-related impacts from future West Campus, Storke Campus, or Main Campus projects. Trail closure areas along the bluff would be actively restored as part of West Campus Nature Park re-vegetation. Closed trails would be restored with appropriate shrubs and herbs.

The City of Goleta's future opportunities for coastal bluff scrub habitat are identified on Figure 11. A large patch of non-native ice plant occurs near the base of the bluffs near the City of Goleta's boundary with the COPR. Ice plant (hottentot fig) eradication would be accomplished by hand removal. Periodic maintenance would occur to ensure that all exotic species regrowth is removed. Revegetation is not proposed at this time because it is anticipated that adjacent native dune species would colonize the area. Low-profile, natural looking signs would be discretely located in habitat restoration areas. This opportunity would be implemented as grant or other funding allows.

3.8 SENSITIVE PLANTS AND WILDLIFE SPECIES

3.8.1 Existing Resources

Several special-status plant species are known to occur along the Goleta-Gaviota coast, including the southern tarplant (*Hemizonia parryi* ssp. *australis*), Coulter's saltbush (*Atriplex coulteri*), Davidson's saltbush (*Atriplex serenana* var. *davidsonii*), Plummer's baccharis (*Baccharis plummerae* ssp. *plummerae*), Contra Costa goldfields (*Lasthenia conjugens*), Coulter's goldfields (*Lasthenia glabrata*), dunedelion (*Malacothrix incana*), estuary seablite (*Suaeda esteroa*), and wooly seablite (*Suaeda taxifolia*). Of these, only the southern tarplant and wooly seablite are known to occur in the Open Space Plan Area. The southern tarplant occurs in several small to large populations within the vernal pool, grassland, and scrub habitats in the COPR, Del Sol Reserve, and Camino Corto Open Space (refer to Figure 6 for locations). Wooly seablite is present on the Ellwood Mesa and West Campus Bluffs Nature Park.

The most notable special-status wildlife species in the Open Space Plan Area is the western snowy plover. The western snowy plover was listed as threatened by USFWS in 1993 and critical habitat was designated in 1999, which includes the beaches along the Open Space Plan Area. Western snowy plover nests on sandy beaches and dunes by creating a shallow depression as a nest, using driftwood, rocks, or bushes as cover; nests may also be entirely out in the open. One of the largest wintering populations in the state and a restored breeding population occurs along the beach and dunes adjacent to the West Campus Bluffs Nature Park, Coal Oil Point, and COPR.

The Belding's savannah sparrow is a small, brown, resident songbird. It is a state-listed endangered species. This sparrow occurs in coastal areas of southern California and Baja California where it is a year-round resident of coastal salt marshes and associated mudflats and salt flats. It nests in dense pickleweed located above high tides. Territorial pairs and adults with fledglings have been observed in saltmarsh vegetation around Devereux Slough since spring 1990.

Numerous special-status raptors are common in the Open Space Plan Area including the following species:

- The Cooper's hawk is a resident breeder and winter visitor in Santa Barbara County. It is observed annually in eucalyptus trees at the Venoco Ellwood Marine Terminal.
- The white-tailed kite is also a resident breeder in the Open Space Plan Area. Kites are recorded nesting in the eucalyptus and cypress trees bordering the Ellwood Marine Terminal and in eucalyptus trees west of the South Parcel Nature Park, and are frequently observed foraging over grasslands throughout the Open Space Plan Area. Observations suggest that open, undeveloped areas south of the Ocean Meadows Golf Course and west of Devereux Slough are the primary foraging territory for kites nesting in the Devereux Slough area.
- Turkey vultures are resident breeders in the Open Space Plan Area. These birds roost in the eucalyptus groves on Ellwood Mesa and forage throughout the Open Space Plan Area.
- Red-tailed hawks are also resident breeders and nest in the eucalyptus woodlands on Ellwood Mesa. This raptor is frequently observed foraging throughout the grasslands in the Open Space Plan Area.
- As resident breeders and winter visitors, red-shouldered hawks nest in the eucalyptus woodlands on Ellwood Mesa and in the cypress trees bordering the Ellwood Marine Terminal. This raptor, like the red-tailed hawk, is frequently observed foraging throughout the grasslands.

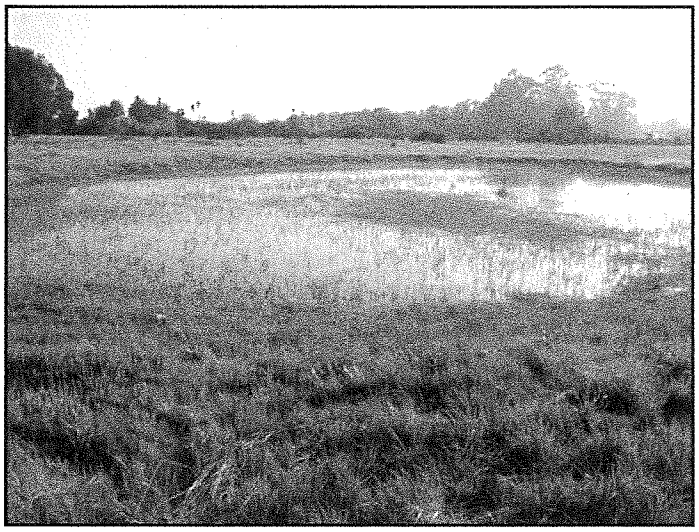
Other raptors occur as uncommon to rare transients in and near the Open Space Plan Area, including golden eagle (resident in County, but very rare visitor to South Coast), sharp-shinned hawk (fall and winter visitor to area), osprey (nests in interior of County and may occasionally forage for fish in nearshore waters south of area), peregrine falcon (nests on south slope of Santa Ynez Mountains and may occasionally forage for shorebirds on beaches south of area), prairie falcon (nests in interior mountains and may occasionally forage for shorebirds and passerines in area), merlin (nests in interior mountains and is an uncommon fall and winter visitor to South Coast of Santa Barbara County), and short-eared owl (a rare fall and winter transient to South Coast, including Devereux and Goleta Sloughs).

Another special-status species that occurs in COPR is the globose dune beetle. The Ventura salt-marsh milkvetch was introduced into COPR (Sandoval, 2003). These species are actively managed by the COPR staff and management actions are not included in this Open Space Plan. Refer to Section 3.3 of this Open Space Plan for a review of the COPR management plan.

3.8.2 Regulatory Considerations

Special-status species are plant, fish, and wildlife species that have limited distribution or abundance, are particularly vulnerable to human disturbances, or have special educational, scientific, or cultural/historic interest. The categories of special-status species are summarized below, in decreasing order of sensitivity:

- Plant, fish, and wildlife species that have been officially designated as rare, threatened, or endangered by the state government (CDFG) or federal government (USFWS and National Oceanic and Atmospheric Administration Fisheries)
- Plant, fish, and wildlife species that have been officially proposed as rare, threatened, or endangered by the state or federal governments, and are undergoing public review
- Plant species that have been included on List 1B (Rare and Endangered) of the California Native Plant Society Rare Plant Inventory of California
- Fish and wildlife species that have been designated as "Species of Special Concern" by the CDFG



In addition to the above categories, there are many plant species of local botanical interest due to their relative rarity in the County, although they may be abundant outside the County. These species include: (1) plant species that have been included on List 4 (Plants of Limited Distribution – A Watch List) of the California Native Plant Society Rare Plant Inventory of California; and (2) plant species included in the list of Rare Plants of Santa Barbara County prepared by the Central Coast Center for Plant Conservation, Santa Barbara Botanic Garden.

The western snowy plover and Belding savannah sparrow are protected by the provisions of the federal and state endangered species acts, respectively. Hence, management policies and actions for the Open Space Plan must ensure that these species and their habitats are protected from adverse impacts of public access, recreational uses, and restoration activities.

Raptors in the Open Space Plan Area are protected by the provisions of the state Fish and Game Code that protect raptors and other non-game birds, as well as by the federal Migratory Bird Act. All species of raptors and their nests are protected from harm and harassment by human activity.

Habitat that supports special-status species in the Open Space Plan Area meets the definition of an ESHA in PRC § 30107.5 of the Coastal Act. As such, these habitats are afforded the protection under the Coastal Act as described in Section 3.1.

The Open Space Plan program for special-status species includes goals, policies, and management actions designed to maintain consistency with the ESHA designation and other state and federal laws and regulations.

3.8.3 Management Goals and Policies

The following goal and policies will guide the overall implementation of the special status species element of this Open Space Plan. The three sponsoring agencies will formally adopt these goals and policies into their local coastal programs. Management actions and projects by each agency associated with the implementation of the Open Space Plan within their jurisdiction must be consistent with these goals and policies.

Species Goal 1. Protect and enhance habitat for special-status species in the Open Space Plan Area.

Species Policy 1. Coordinate with COPR in implementing measures to protect the western snowy plover on beaches in the Open Space Plan Area outside of COPR.

Species Policy 2. Protect raptor roosting and nesting trees, including non-native trees; protect and expand foraging areas.

Species Policy 3. To the extent feasible, re-introduce special-status plant species to the Open Space Plan Area as part of habitat enhancement and restoration projects.

3.8.4 Resource Protection and Management

Species Protection and Enhancement Opportunities

The following future opportunity to enhance special-status plant species in the Open Space Plan Area will be considered during the implementation of the Open Space Plan:

- Include special-status plants in habitat restoration projects in the Open Space Plan Area using seed from local sources. Species to be included, as feasible, are southern tarplant, Coulter's saltbush, Davidson's saltbush, Plummer's baccharis, Contra Costa goldfields, Coulter's goldfields, dunedelion, estuary seablite, and wooly seablite.

Raptor Habitat Enhancement Opportunities

Raptor foraging habitat would be maintained in the Open Space Plan Area by preserving relatively large contiguous areas of grassland that are near or adjacent to suitable roost and nest sites. Trail closures would reduce impacts to foraging habitat by consolidating users on a network of trails, thereby enabling the expansion of foraging habitat through native grassland restoration.