

Elfin Forest Natural Area Resource Management Plan



**Prepared by:
Los Osos/Morro Bay Chapter
Small Wilderness Area Preservation
For
The County of San Luis Obispo
Parks Division**

August 1997



COUNTY OF SAN LUIS OBISPO

Department of General Services

COUNTY GOVERNMENT CENTER • SAN LUIS OBISPO, CALIFORNIA 93408 • (805) 781-5200
DUANE P. LEIB, DIRECTOR

P A R K S

D I V I S I O N

MEMO

To: Concerned Citizens
From: San Luis Obispo County Parks Division
Subject: Elfin Forest Resource Management Plan
Date: September 15, 1997

The following document is a Resource Management Plan for the Elfin Forest Natural Area. It is intended to serve as an internal document for the San Luis Obispo County Parks Division staff. The document identifies guidelines for the Forest's use and protection. The plan is not meant to be interpreted as a concrete course of action that will be implemented over a specific time line. The projects proposed within the plan are only suggestions that could occur as resources (time, money, man hours) permit. The proposed projects are meant to occur in a phased fashion, not all at once. It is possible that some projects might not be completed at all. The purpose of this plan is to help staff visualize the future of the Elfin Forest and serve as an important aid to presenting options to the community.

If you have concerns regarding the issues addressed in, or omitted from, the Resource Management Plan, we encourage you to put your comments in writing and send them to:

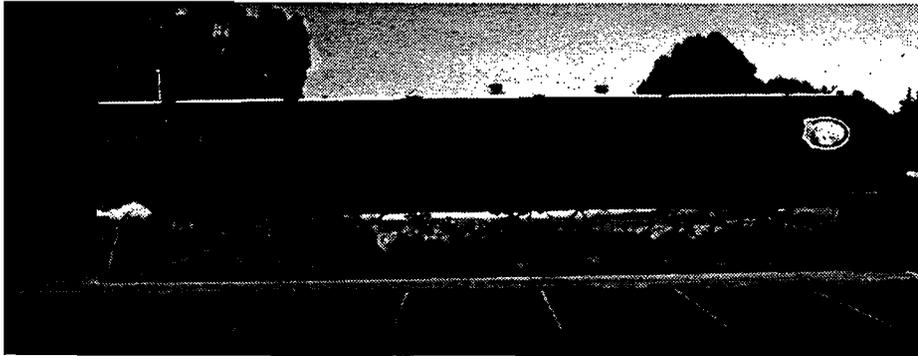
San Luis Obispo County Parks Division
Attn.: Parks Manager
1035 Palm Street, Room 460
San Luis Obispo, CA 93408

We ask that you reference page numbers and paragraphs, if possible, when referring to specific issues. We also welcome comments about our other facilities.

Thank you for expressing your interest in the Elfin Forest Natural Area by reading the attached Resource Management Plan.

TABLE OF CONTENTS

	Page
INTRODUCTION	ii
LIST OF TABLES	iv
LIST OF FIGURES	iv
CHAPTER 1. RESOURCE INVENTORY	
1.0 Physical Resources	1
1.1 Cultural Resources	6
1.2 Biological Resources	7
1.3 Recreational Resources	9
CHAPTER 2. RESOURCE PROTECTION AND USE	
2.0 Protection Guidelines	18
2.1 Restoration and Enhancement	22
2.2 Activities and Uses	24
2.3 Education and Recreation Programs	24
2.4 Priority Projects	30
CHAPTER 3. MANAGEMENT OF THE ELFIN FOREST	
3.0 Community Involvement	31
3.1 Design, Development and Maintenance	32
3.2 Administration	33
DEFINITIONS	39
APPENDICES	
A. Funding of Acquisition	43
B. Animals of the Elfin Forest	44
C. Sensitive Animal Species	47
D. Plants of the Elfin Forest	48
E. Sensitive Plant Species	56
F. Sample Monitoring Form	57
G. Applicable Laws, Regulations and Policies	58



This mural by Barbara Rosenthal at Los Osos Rexall was funded by a 1992 grant from the World Wildlife Fund to support local fund raising efforts.

Introduction

This is a Resource Management Plan for the Elfin Forest Natural Area (Elfin Forest). It is intended to serve as an internal document for SLO County Parks Staff that will create guidelines for its use and protection. The plan is not meant to be interpreted as a concrete course of action that will take place over a specified time line. The projects proposed within the plan are only suggestions that could occur as resources (time, money, man hours) permit. The proposed projects are meant to occur in a phased fashion, not all at once. It is possible that some projects might not be completed at all. The purpose of this plan is to help staff visualize the future of the Elfin Forest and serve as an important aid to presenting options to the community.

Located on the southeastern shore of Morro Bay, the 90 acre Elfin Forest is a diverse and complex assemblage of natural plant communities that includes coastal brackish marsh, riparian woodland fringe, pygmy oak woodland, grassland, coastal dune scrub and oak manzanita association. It supports a documented 25 species of mammals, over 110 kinds of birds, and 11 species of reptiles and amphibians.

The Los Osos Morro Bay Chapter of Small Wilderness Area Preservation (SWAP) was organized in 1985 for the specific purpose of purchasing and preserving the Elfin Forest. In 1987, legislation authored by Assemblyman Eric Seastrand provided funding to purchase 51.2 acres of the Elfin Forest as an addition to Morro Bay State Park. In 1994, as a result of the collaborative efforts of SWAP, San Luis Obispo County, the State Coastal Conservancy and the State Lands Commission, the remaining 38.9 acres were acquired as a natural area.

While three governmental agencies own portions of the Elfin Forest, this management plan treats the Elfin Forest as a single entity. San Luis Obispo County is acting as the lead agency in the administration of the Elfin Forest and development of the Resource Management Plan. SWAP, in signing an "Adopt-A-Park" agreement with San Luis Obispo County, agreed to write a resource management plan for the Elfin Forest to be approved by the Parks and Recreation Commission.

The management plan contains three chapters and seven appendices. Chapter 1 documents the current condition of existing resources within the Elfin Forest. Chapter 2 provides goals, objectives

August 1997

and policies for natural resource protection and compatible uses within the Elfin Forest. Chapter 3 discusses the management of the Elfin Forest. Appendices provide information on applicable laws, regulations and policies affecting management of the Elfin Forest, sensitive and common plant and animal species, a sample monitoring form and local climate information.

This plan provides guidelines for the management and preservation of the Elfin Forest by community volunteers working with county staff and in collaboration with educational institutions and other environmental organizations. The guidelines within this document emphasize that all plans for the Elfin Forest must be in keeping with its size and scale and its status as an ecological reserve.

The final draft of the plan has incorporated public comment received upon review of the working drafts. It is hoped that the preservation of the Elfin Forest Natural Area can serve as a model for other public/private collaborative efforts.

List of Tables

1.	Current Ownership of the Elfin Forest	3
2.	Known Need for Resource Protection and Enhancement Within the Elfin Forest.	19
3.	Land Conservation Groups and Other Organizations to Participate in Protection of the Elfin Forest's Natural Resources and Sensitive Habitat.	20
4.	Compatible and Incompatible Uses	25
5.	Compatible and Incompatible Activities	27
6.	Sign Guidelines	32
7.	Maintenance Guidelines	33
8.	Natural Area Guidelines	34

List of Figures

1.	Elfin Forest Natural Area Location and Current Ownership	2
2.	Elfin Forest Topography	5
3.	Elfin Forest Vegetation Map	8
4.	Existing Trails in the Elfin Forest	11
5.	Proposed Improved Access	16

Chapter 1 - Resource Inventory

1.0 Physical Resources

The Elfin Forest is located on the southeastern edge of the Morro Bay estuary in Los Osos/Baywood Park, an unincorporated community in San Luis Obispo County. It is contiguous with State lands to the north, west and east. The north and western boundaries include bayfront marsh and wetlands. The Land Conservancy of San Luis Obispo County is working to establish a greenbelt around Los Osos from Montaña de Oro State Park to the south of the Elfin Forest and Morro Bay State Park to the north.

Tourism, residential and commercial development, and agriculture are the primary land uses in the vicinity of the Elfin Forest. The Morro Bay State Park general plan indicates that approximately 1.4 million people visit this park each year. There are approximately 700,000 visitors each year to Montaña de Oro State Park.

The Elfin Forest is a vegetationally diverse parcel supporting over 150 species of plants. The unusual multi-trunked pygmy oak, *Quercus agrifolia*, is found in the oak woodlands in the northern portion of the Elfin Forest. The threatened Morro manzanita, *Arctostaphylos morroensis*, *Sulcaria isidiifera*, the only lichen listed federally as an endangered species, and several species of lichens endemic to the southern California coast are found on the property.

Records from informal observations indicate that at least 23 species of mammals, 11 species of reptiles and amphibians, and over 110 species of birds make use of the Elfin Forest. No formal studies have been conducted to determine the relative abundance of any one species or the relative frequency at which any particular species has been observed. Sensitive species that have been seen within, or from, are listed in the Appendix. The riparian fringe provides habitat for the California Black Rail, *Laterallus jamaicensis*. While found primarily in pickleweed habitat in the state park, an extreme high tide might force the species onto the highest fringes of the salt marsh.

The Elfin Forest is a valuable buffer between Morro Bay and residential development. The bay is an important stop-over for migratory birds and home to thousands of year-round residents. A nursery ground for many species of fish and invertebrates, it serves as home to sea otters and harbor seals. The Coastal Dune Scrub Community in the southern portion of the property is an important buffer between residential activities and the more sensitive Pygmy Oak and Oak Manzanita Woodlands of the Elfin Forest.

In addition to the plant communities and wildlife habitat, the Elfin Forest has significant archaeological sites. Because of its natural beauty in close proximity to a community of over 14,000 people, it has a long history of public use for passive recreation. Current projections call for a final build-out of Los Osos to a population of 28,000.

Land Ownership, Use and Current Zoning

Figure 1 shows the location and current ownership of the Elfin Forest. The Elfin Forest was included in the large Rancho Cañada de Los Osos originally granted to Victor Linares in December of 1842

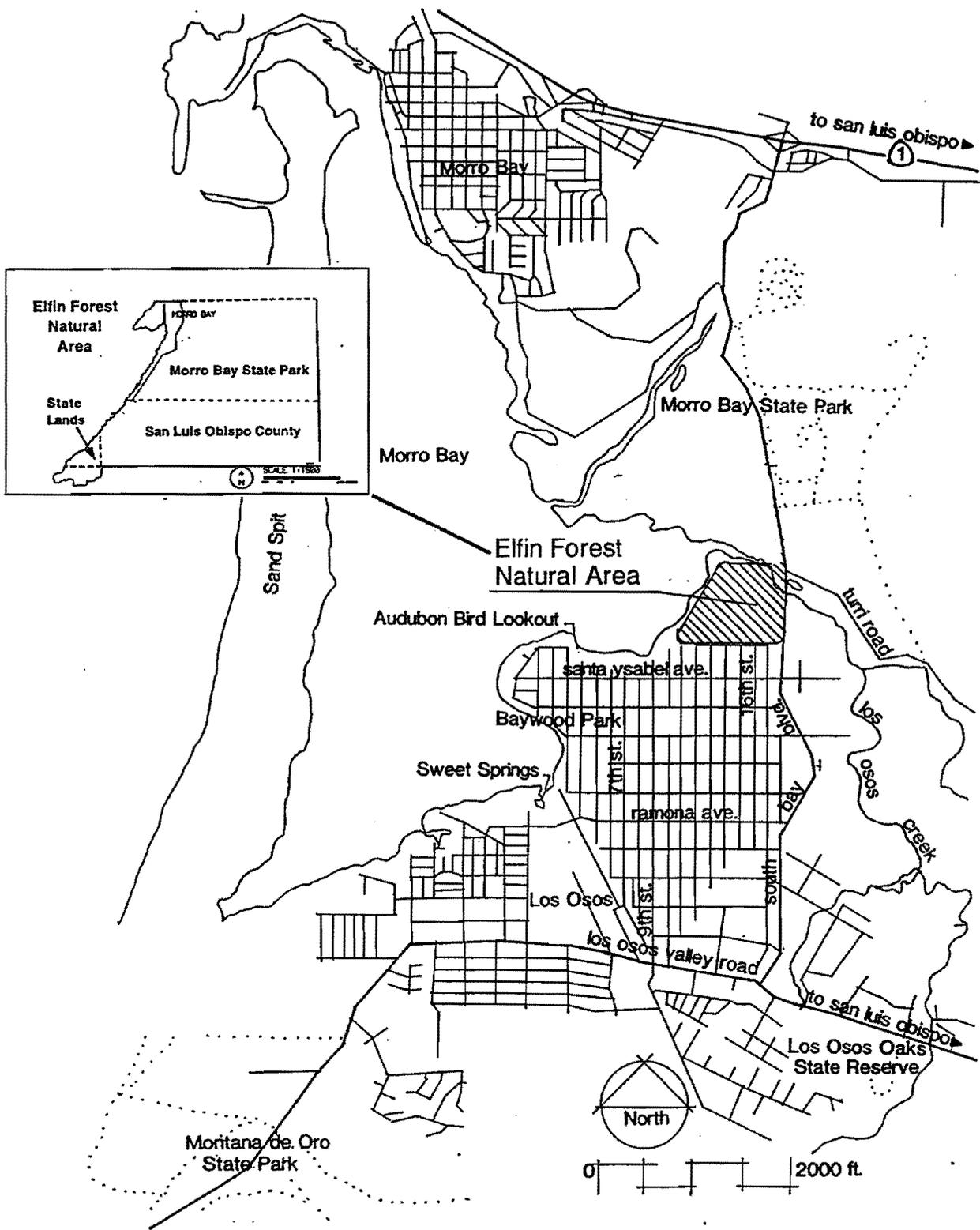


Figure 1. Location and Current Ownership

Table 1. Current Ownership of the Elfin Forest			
Agency	APN (Assessor's Parcel Number)	Number of Acres	Date of Acquisition
California Department of Parks and Recreation	038.781.004	51.6	6/88
San Luis Obispo County	038.781.005	38.7	7/6/94
State Lands Commission	038.781.006	6.0	7/6/94
		96.3	
There is no opportunity for future expansion of the Elfin Forest.			

and regranted on September 24, 1845 to Diego Scott and Captain John Wilson. This grant was confirmed by decree on April 22, 1853 with conditions by the Board of Land Commissions of the United States. It was surveyed in 1858. The survey was examined and approved on July 31, 1860 and finally authenticated on December 26, 1867 by signature of the Surveyor General of the United States.

There were three owners between Wilson and the first subdivision: Wilson's stepson R. Pacheco purchased it in 1859; T. G. Phelps purchased it in 1865; and T. H. Handy purchased it in 1866. The first recorded subdivision of the Wilson grant was recorded in October of 1868 by a W. H. Patterson who had purchased it in 1866. It was then sold to W. W. Stow in 1872.

S. B. Call was the first person to purchase the area that was to become Baywood Park in 1878. J. H. Maddux et. al. purchased it in 1887, created the first map of the town of El Moro (Baywood) in 1888, and then lost it to the County Bank of San Luis Obispo in 1897 due to foreclosure on a secured note. A. Vollmer purchased it in late 1900. Richard S. Otto purchased most of the Elfin Forest in June of 1922. His widow, Shirley Jean Otto, sold the land as shown in Table 1 to California Department of Parks and Recreation, the State Lands Commission, and San Luis Obispo County. The history of funding for the purchase is summarized in Appendix 1. The Elfin Forest is currently zoned as open space, rural residential and single family residential.

Geology & Soils

Elevations range from 127 feet, in the southeast portion, to sea level, along the western and northern edges. While the majority of the property has slopes of less than 10%, portions of the site along the western edge have slopes exceeding 30%. Figure 2 shows the topography of the site.

The geology of the Elfin Forest consists mainly of Pleistocene Dune Sands, called locally Baywood Sand, and a narrow zone of Recent estuarine deposits along the shoreline with Morro Bay. The Dune Sands were deposited during the Wisconsin Ice Age and are probably between 120,000 and 11,000 years old. The Recent estuarine deposits are between a few hundred to a few thousand years in age. Wells drilled nearby indicate that the Dune Sands extend down about 70 feet below sea level and pass into gravels of the underlying Paso Robles Formation which is not exposed at this site.

Chorro Creek and Los Osos Creek are gradually infilling Morro Bay with sediment. The marshland along the northern margin of the Elfin Forest is actually the top surface of the Los Osos Creek deltaic complex, a large sediment fan slowly building into the bay. The sediments of the marsh

consist of clays, silts, and muddy sands interbedded with organic layers of buried marsh plants.

The soils of the Elfin Forest are the very nutrient poor, bleached sands of the Baywood Fine Sand, as defined by the Soil Conservation Service. The soils are covered by an organic mulch beneath the canopy of oak, but the organic content beyond the oak groves is very low. The soils are droughty, somewhat acidic at the surface, and highly acidic at depth. The low available cation level of the soils and low water retention would make them a poor soil for agricultural or horticultural use.

Climate & Rainfall

The Morro Bay area has a Mediterranean climate characterized by mild temperatures with little diurnal fluctuation, moist winters, and warm, dry summers. Low cloudiness and fog often occur during the summer with an average frequency of 200-250 hours per month. The average annual temperature ranges from 56°F to 60°F with summer maxima between 65°F and 70°F and winter maxima in the high 50's and low 60's. There are 40 to 50 days per year with measurable precipitation. Approximately 17 inches of rain are measured annually at Morro Bay.

Hydrology

The Elfin Forest is situated in the San Luis Obispo Hydrologic Unit of the Central Coastal Drainage Province that covers 780 square miles on the western slopes of the Santa Lucia Range. Morro Bay, which is in the Chorro and Los Osos Hydrologic Subareas of the San Luis Obispo Subunit, borders the Elfin Forest to the north and west.

There are no ponds within the Elfin Forest. Groundwater beneath the Elfin Forest discharges into the marsh at several points along the edge of the marsh. A 10 gpm spring is found at the extension of 11th Street.

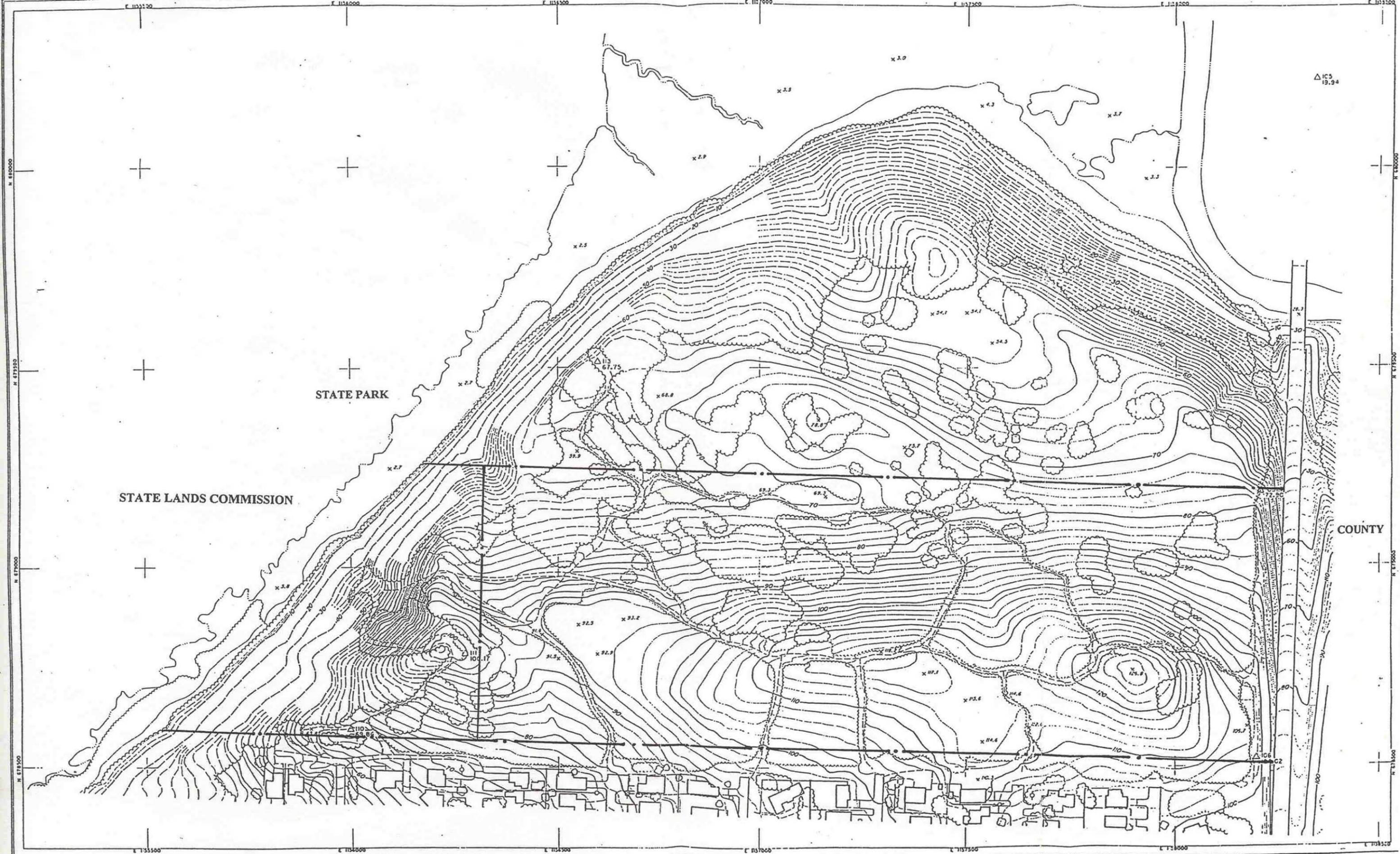
Fire Hazard

The Elfin Forest Natural Area receives fire protection from the County of San Luis Obispo South Bay Fire District and the California Department of Forestry (CDF). The county station is located on Bayview Heights Drive in Los Osos and serves a population of over 14,000. CDF Station #12 is located on Highway 1 and Highland Avenue in the city of San Luis Obispo. The fire department for the city of Morro Bay can respond to requests for assistance.

Prior to the 1920's, fires burned regularly in the vicinity of the Elfin Forest¹. Such fires were ignited by lightning in the late summer and early fall and the intentional or accidental activities of Native Americans and ranchers. The disruption of natural fire processes by wildfire suppression which began in the late 1920's has resulted in the increased likelihood of destructive wildfires due to fuel accumulation. The MBSP general plan calls for the restoration of fire to its natural role in the state park ecosystems and the establishment of an ongoing prescribed Fire Management Program. State Parks and the California Department of Forestry would oversee any such activities within Morro Bay State Park.

There is no comparable county policy concerning controlled burns. The situation is further complicated by the fact that a densely populated residential community is immediately adjacent to the Elfin Forest. It is highly unlikely that a prescribed burn will occur within the Elfin Forest. However, the State Park Plan does make provision for such an activity. An extensive evaluation would be conducted prior to any decision to burn. County Parks would look to the California Department of Forestry as the lead agency.

¹ Information obtained from the Morro Bay State Park General Plan.



GOLDEN STATE AERIAL SURVEYS, INC.
 3195 McMILLAN RD., SUITE E
 SAN LUIS OBISPO, CA 93401
 805 549-0399



PHOTOGRAPHY DATED: 8-30-95
 NOT TO SCALE
 CONTOUR INTERVAL: 2'

Figure 2. Elfin Forest Topography

ELFIN FOREST
 LOS OSOS, CA.

Approximate Property Line

1.1 Cultural Resources

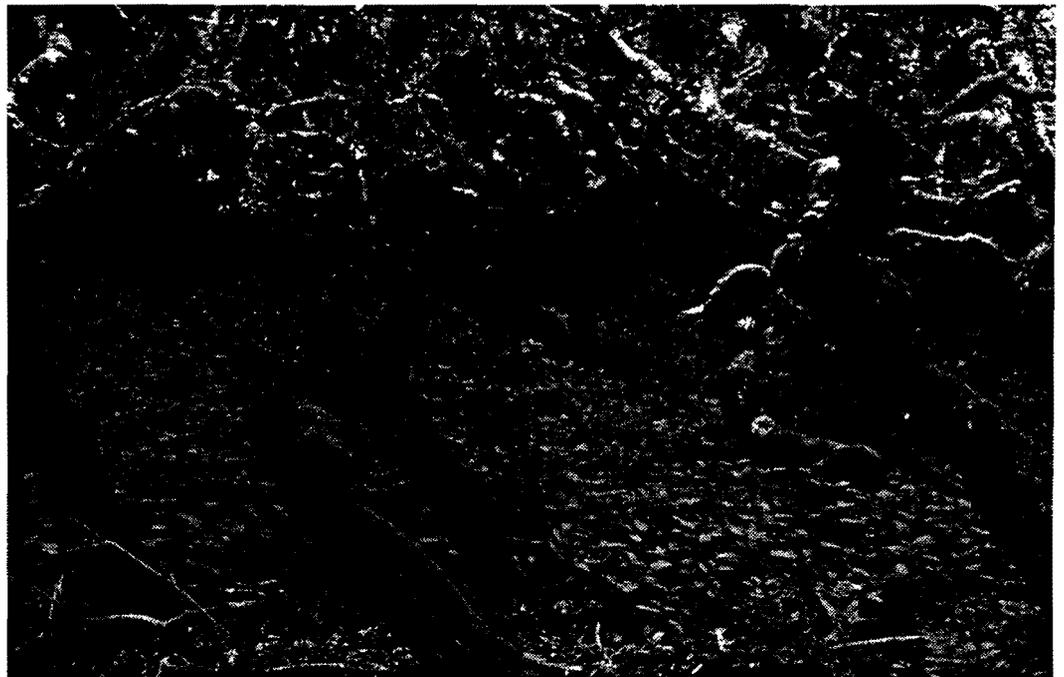
The Chumash and their ancestors lived in the Morro Bay area for over 9,000 years. A surface survey of the Elfin Forest on August 25, 1985 by members of the San Luis Obispo Archaeological Society indicated that the area contains a significant archaeological site. An extensive Chumash midden is clearly visible over a large portion of the property and is heavily concentrated in some areas. A variety of shells, chipping flakes, cores and some artifacts that included a steatite bead and a broken projectile point were recorded. Since no subsurface testing has been done, the depth of the site is not known but extrapolation from other Chumash sites in the immediate area suggests that there would be a considerable time depth. Site CA-4-SLO-AS-1122 and site CA-4-SLO-AS-5014 have been recorded with the state.

During 1990, archaeologist Robert O. Gibson found sea shell fragments, burnt rock, bone, stone tools and flakes. Mr. Gibson indicates that the Elfin Forest is unique and significant because the cultural sites are in their original, undisturbed setting with native plants and animals, soils and views of the bay and surrounding peaks and contain evidence of the internal organization of the native activities that occurred there.

Because of their belief that the spirits of their ancestors continue to inhabit the Elfin Forest, present-day Chumash consider it a sacred site. Pilulaw Khus, a Chumash elder and member of the Northern Chumash Council, conducted a protection ceremony of Mother Earth in the Elfin Forest on Earth Day, April 21, 1991.

While little is known of the specific use of the Elfin Forest from the 1920's to the present, the Wild Rose Trail to Mayhem Point passes by the site of a former shack.

State and federal laws protect cultural sites. Any "development" that would affect such cultural sites will require both CEQA and State Public Resources Code (PRC) Section 5024 review and approval.



*Pygmy Oak
Grove within the
Elfin Forest
Natural Area.*

1.2 Biological Resources

State Parks has designated the upland areas adjacent to the southern boundary of the estuary (which includes the Elfin Forest) as a part of the Morro Bay Estuary Natural Preserve. Classification as a Natural Preserve represents the highest degree of protection offered by the State Park System.

As shown in Figure 3, the Elfin Forest is a diverse and complex assemblage that includes:

Coastal Brackish Marsh The tule marsh scattered around the fringe of Morro Bay and Los Osos Creek is an uncommon plant community that has been listed in the California Department of Fish and Game's Natural Diversity Data Base (NDDB). The coastal brackish marsh extends 10 to 50 feet bayward from the Elfin Forest slightly above the high tide line. Dominated by *Scirpus olneyi* (Bulrush or Tule), it supports *Eleocharis parishii* (Spike Rush), *Juncus actus* var. *sphaerocarpus* (Spiny Rush), *Typha latifolia* (Cattail), and *Phragmites australis* (Common Reed) and is one of the few sites in San Luis Obispo County where *Rumex occidentalis* var. *fenestrata* (Western Dock) occurs.

Riparian Woodland Fringe This narrow band of riparian vegetation extends from the inland edge of the coastal brackish marsh community upland just 1 or 2 trees deep. Characterized by *Myrica californica* (California Wax-myrtle), *Salix lasiolepis* (Arroyo Willow), *Toxicodendron diversiloba* (Poison Oak), and *Rhamnus californica* (Coffee Berry), this riparian fringe probably depends on freshwater seepage.

Pygmy Oak Woodland Nearly one-third of the property consists of Pygmy Oak Woodland and an Oak-Manzanita Complex. The pygmy oaks are an unusual, multi-trunked variety, *Quercus agrifolia* var. *frutescens*. Approximately 200 plants of the threatened Morro Manzanita, *Arctostaphylos morroensis*, have been counted. This plant is limited to a four mile range between Hazard Canyon in Montaña de Oro State Park on the south and the Morro Bay estuary to the north. The 1995/96 Department of Fish and Game Manzanita study is currently characterizing the Morro manzanita populations and habitat in MBSP and Montaña de Oro State Park.

Chaparral Common plants of the chaparral community, beginning at the upland edge of the Pygmy Oak Woodland, are *Adenostoma fasciculatum* (Chamise or Greasewood), *Ceanothus cuneatus* var.

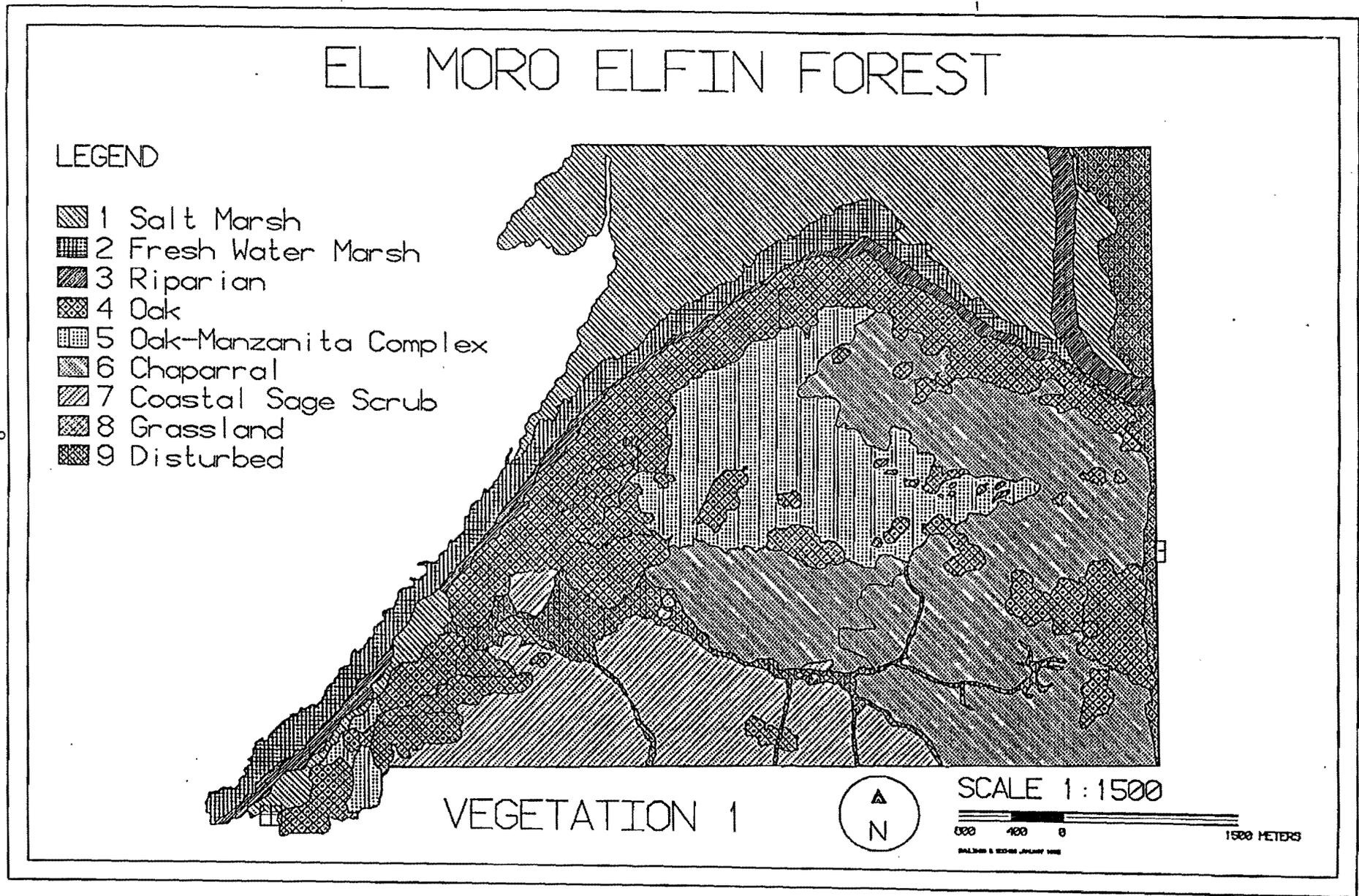


Figure 3. Elfin Forest Vegetation Map

ramulosus (Buckbrush) and *Prunus ilicifolia* (Holly-leaved Cherry).

Coastal Dune Scrub This plant community, occupying much of the southerly portion of the Elfin Forest, is dominated by shrubs such as *Salvia mellifera* (Black Sage), *Artemisia californica* (California Sagebrush), and *Ericameria ericoides* (Mock Heather). Two species, *Erysimum capitatum* var. *lompopense* (San Luis Obispo Wallflower) and *Prunus fasciculata* var. *punctata* (Dune Almond), are included on the CNPS List 4, Plants of Limited Distribution.

Animal Use of the Elfin Forest While at the time of the writing of this plan no formal study had been done for the Morro shoulderband snail (banded dune snail), *Helminthoglypta walkeriana*, its widespread occurrence in Los Osos suggests that this species, which is a federally listed endangered species, probably occurs within the Elfin Forest.

The native plant communities described above provide important habitat for terrestrial vertebrates. At least 23 species of mammals, over 110 species of birds, and 11 species of reptiles and amphibians have been observed in the Elfin Forest. The majority of animal species are year-round residents. Mule Deer, Opossum, Cottontail Rabbit, Dusky-footed Woodrats and Grey Foxes are seen frequently. The Elfin Forest provides a variety of cover and food supplies for transient birds as well as a wintering habitat for others. Sensitive species that have been observed within, or from, the Elfin Forest include the Ringtail raccoon, *Bassariscus astutus*, the Brown Pelican, *Pelecanus occidentalis*, the California Brown Pelican, *Pelecanus occidentalis californicus*, Osprey, *Pandion haliaetus*, and Peregrine Falcons, *Falco peregrinus*.

The riparian fringe provides habitat for the endangered California Black Rail, *Laterallus jamaicensis coturniculus*. Both the Sharp-shinned Hawk and the Northern Harrier, listed as "species of special concern" by California Department of Fish and Game, have been observed in the Elfin Forest. A day roost for as many as 40 to 50 of the nocturnal Black Crowned Night Heron (*Nycticorax nycticorax*) is found at the west end of the site. The site is also important habitat for the California Legless Lizard and the Coast Horned Lizard.

Sensitive and common species of plants and animals are listed in Appendices B, C, D and E.

1.3 Recreational Resources



Present Uses

The Elfin Forest is readily accessible to local residents – many of whom are within easy walking distance. There are no neighborhood parks in the immediate vicinity. Bird watchers, naturalists and stargazers, joggers and casual strollers, painters and photographers, children and adults have made frequent use of the area. SWAP membership data and sign up sheets from SWAP walks and special events in the Elfin Forest indicate significant use by visitors to the area. SWAP has sponsored poetry readings, an early music concert, folk concerts, string band concerts, a Chamber of Commerce

Mixer, an artists day in the forest, and an art show in the Elfin Forest.

Such activities involving large crowds are now much reduced and are not compatible with the conservation of fragile resources. Continued off-trail use is not encouraged. Any organized events would require a special use permit from the County and/or State Parks and would be evaluated for compatibility.

August 1997.

The variety of habitats found within a relatively small area and access to the Bay enhance the educational and interpretive value of the Elfin Forest. Its close proximity to local schools makes it an ideal outdoor classroom in which to study plant and animal communities, terrestrial and marine food chains, and the ecology of the Morro Bay estuary. Local schools, Cuesta Community College and California Polytechnic State University have made use of the Elfin Forest for outdoor education. The open area known as the "Celestial Meadow" offers star gazing unimpeded by residential lighting. SWAP has prepared a free 63 page guide for teachers containing specific lesson plans prepared by a panel of educators in compliance with the California Framework for Science Education.

Facilities

At the time of the writing of this management plan, water meters are the only facilities. The extensive network of existing trails are all unimproved sand created by local use (see Figure 4). Successful preservation of Elfin Forest resources will require closing some of these trails. The oak groves and viewpoints are the major attractions within the Elfin Forest. There are no structures and no source of power within the Elfin Forest.

The **Street Access Trails**, approximately 0.1 mile in length, provide access from the north ends of 11th, 13th, 14th, 15th, 16th and 17th Streets. The steepest trails are from 14th and 15th Streets. The easiest access is from 16th, 13th and 11th Streets. The trails cross a buffer zone between residences and more natural plant communities. All are well used. While there has been considerable invasion by veldt grass and other non-native plants, the trails provide good examples of native plants such as deerweed, coffeeberry, *Eriastrum*, Black Sage, California Buckwheat, *Pholisma* and the San Luis Obispo Wallflower.

11th Street - Chumash Trail - This trail has been cut through a grove of oaks with very low canopy to intersect the 13th Street Trail, and intersects in 150 feet with the Fairbanks Trail. A short side trail extends 215 feet to provide access to Chumash Point.

13th Street - Bush Lupine Trail - This trail provides access to Bush Lupine Point and the Fairbanks Trail and intersects the Chumash Trail. It passes through an area heavily disturbed by off-road vehicle use in the mid 1980's.

14th Street - This trail provides direct access to the Fairbanks Trail.

15th Street - This is the most heavily used access to the Fairbanks Trail as 15th Street has been used as a meeting point for walks and other events and persons attending such events tend to return to this access to the Elfin Forest.

16th Street - This trail provides direct access to the Fairbanks Trail.

17th Street - This trail provides direct access to the Fairbanks Trail.

The **Fairbanks Trail**² is an easy, 0.37 mile trail that extends along a ridge from the Orchid Trail to Bush Lupine Point. It passes across the highest point of the Elfin Forest, provides a vista of Morro Bay, the sandspit, and the Morros. Docents leading walks through the Elfin Forest use this vantage point to discuss the influence of the Chorro and Osos Creek watersheds on sedimentation in the Bay and other physical features of the Bay.

A short trail extends north and downslope from the Fairbanks Trail in the vicinity of the 14th Street Access Trail.

² This trail was named for the late Jeff Fairbanks, editor of the Telegram Tribune newspaper, who was an advocate for the preservation of the Elfin Forest Natural Area.

Elfin Forest Trails

From aerial photo August 30, 1995

- A - Fairbanks Trail
- B - Don Klopfer Trail
- C - Orchid Trail
- D - Chaparral Habitat Trail
- E - Celestial Meadow Trail
- F - Dudleya Trail
- G - Wildrose Trail
- H - Mayhem Point Trail

Street End Trails
 11 - 13 - 14 - 15 - 16 - 17

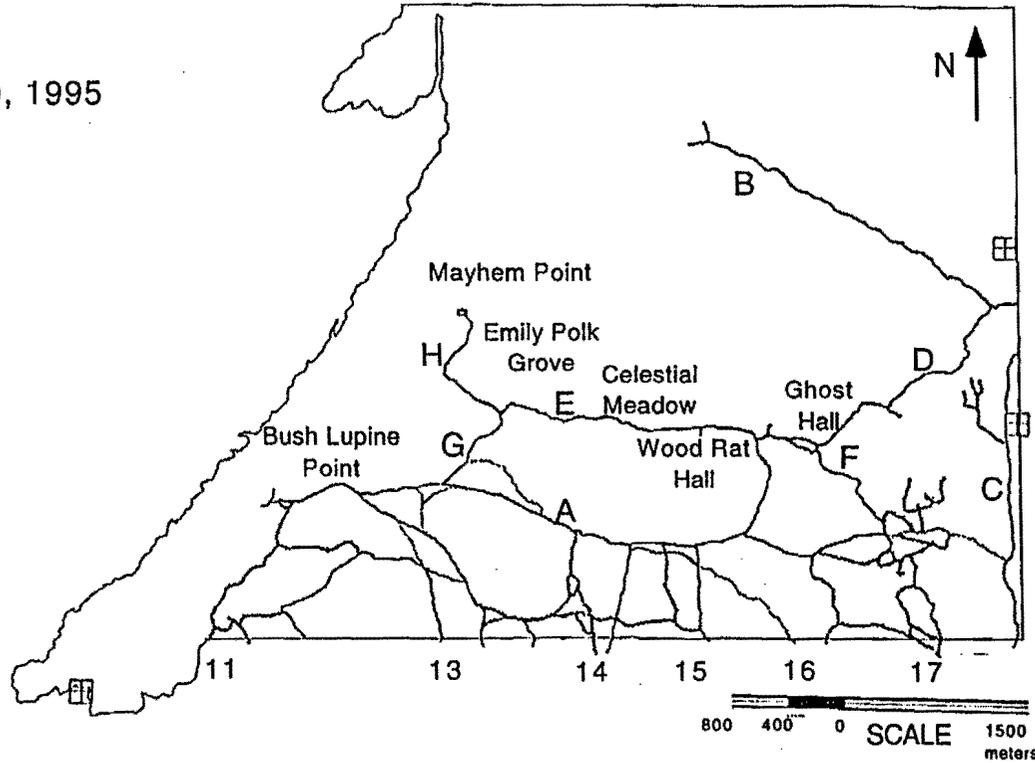


Figure 4. Existing Trails in the Elfin Forest

Bush Lupine Point is a popular vantage point offering a view of the bay, Morro Rock and the sandspit. There is an extensive arch-shaped eroded area approximately 105 ft x 55 ft. at Bush Lupine Point.

The **Don Klopfer Trail**³ is an easy, 0.24 mile trail that extends from South Bay Boulevard through an extensive grove of large Coast Live Oak into hard chaparral and out to the bay. Trail access is south of the bridge over Los Osos Creek. It provides the only access to freshwater marsh (horsetails, willows, wax myrtle) and saltwater marsh (pickleweed). There are good opportunities to see many different types of lichens and fungi.

The **Orchid Trail** (along South Bay Boulevard) is an easy, 0.2 mile trail except for steep incline along the first 50 feet of trail where steps are needed. One of two links between the upper and lower oak groves, this extends from the east end of Santa Paula Avenue to the Don Klopfer Trail. Green Rein Orchids can be seen during spring and summer. This trail has educational value as an example of a ruderal habitat with non-native plants along the road cut (ice plant, veldt grass) in contrast to undisturbed native plant community elsewhere. The trail is currently used by mountain bikers to avoid South Bay Boulevard.

The 0.2 mile **Chaparral Habitat Trail** begins at the Don Klopfer Trail in the lower oak grove and ends at the Celestial Meadow Trail. This is an easy trail except for a 150 foot section of trail with a steep drop from an introduced Monterey Pine down into the lower grove. This is the only pine in the Elfin Forest.

This trail provides a second link between the lower and upper oak groves that allows users to make a loop without repeat. At present, this is the least used trail in the Elfin Forest. It provides the best overview of the Oak/Manzanita complex, a good view of Hollister and the Los Osos Valley, a good example of hard chaparral, and an alternate entrance to the grove known as "Ghost Hall."

The trail passes by the "Dudleya Oak," a landmark oak that survived vandalism and has supported the growth of a Dudleya in a notch between trunks for at least fifteen years.

Ghost Hall is an older grove of oaks with very heavy growth of lace lichen.

The **Celestial Meadow Trail** is an easy, level 0.15 mile trail between the Down Hill Trail and the Wild Rose Trail. It provides access to Wood Rat Hall, a large grove used for small gatherings, to a specimen manzanita over 15 feet tall, and to the Celestial Meadow.

The **Celestial Meadow** is a good demonstration of succession. Cleared as a result of harvesting oaks during the Depression, it shows the pattern of regrowth that will take place naturally (ceanothus, coffee berry). It is an excellent location for astronomy presentations as the ridge to the south of the meadow blocks out residential light.

The grove known as **Wood Rat Hall** has been used most frequently for special events. The effect of use on soil compaction and tree roots is a matter of concern.

A steep 0.1 mile trail connects the Fairbanks Trail with the eastern end of the Celestial Meadow Trail.

The **Dudleya Trail** is a moderately steep 0.1 mile trail between the Up-Hill/Down-Hill Trail and the Orchid Trail that connects the Fairbanks Trail in the vicinity of the 17th Street access with the Chaparral Habitat Trail in the vicinity of the Dudleya Oak. Black sage, Chamise, California Sage, Monkey Flower, Ceanothus, and Mock Heather are abundant along this trail.

³This trail was named for MBSP docent Don Klopfer who led the first docent walks in the Elfin Forest.

The **Wild Rose Trail** is a gently sloped, 320 ft. trail between the western end of the Fairbanks Trail and the Celestial Meadow Trail. Damage caused by off-highway vehicles (OHV's) in the mid-80's is still visible. Fuchsia-flowered gooseberry, Monkey-flower, Coffeeberry, Indian Pink, oak groves and killdeer nests are seen along this trail.

The **Mayhem Point⁴ Trail** is an easy 400 ft. trail that extends from the junction of the Wild Rose Trail and the Celestial Meadow Trail to a dead end at Mayhem Point. The trail passes by a boundary marker between County and State land, shows a good example of succession at a site of a former shack, and crosses Chumash Middens. California wild roses, Fiddleneck, Yarrow, Nightshade, California Peony, Hedge Nettle and other soft-stemmed plants are more common along this trail.

The trail provides access to the **Emily Polk Grove⁵** which is distinctive due to the low-to-the-ground, thick-trunked, moss-covered trees with a particularly low canopy. The grove shows evidence of previous abuse (nails in trees, limbs sawed, burned areas).

Mayhem Point provides the best overview of the alluvial fan built up by Chorro Creek sediments. A bowl-shaped eroded area with a diameter of 66 ft. is completely surrounded by oaks suggesting that the open area is man-made and the possible site of a previous camp or homestead.

The entire site can be walked in two hours.

Future Uses and Facilities

All future development must be in keeping with the size and scale of the Elfin Forest and policies for management of natural areas. While recreational and educational uses are encouraged, the primary focus is preservation of the high diversity of the plant communities of the Elfin Forest with particular concern for the oak groves, the Morro Manzanita, the federally listed lichen *Sulcaria isidiifera*, and the San Luis Obispo Wallflower.

All human use of the Elfin Forest must take into consideration its value as habitat for wildlife. To do so may require the exclusion of people from certain areas to insure use by wildlife, particularly during the breeding seasons of sensitive species.

The following are proposed future activities. Any proposed project will be subject to environmental determination in accordance with the California Environmental Quality Act guidelines. Any archaeological and historical resources will be documented and avoided by projects.

1. Post informational signs at each of the street ends to identify the Elfin Forest as a natural area and present information on appropriate use. Such signs are necessary to enforce county ordinances and proper open space treatment.
 - Signs should be constructed according to County and State Park standards.
 - Place information boxes under the signs at the main entrance points at 16th Street and South Bay Boulevard to contain trail maps and appropriate pamphlets.

⁴ The name originates from the fact that feathers and fur are often found here indicating predation on small mammals and birds.

⁵ Emily Polk founded SWAP in 1972 and was responsible for the purchase of the Los Osos Oaks Reserve on Los Osos Valley Road by California Department of Parks and Recreation.

2. Establish a buffer between residences and the Elfin Forest along the 80 ft. wide Santa Paula Avenue (also shown on some maps as Santa Lucia Avenue) which runs parallel to the southern boundary of the Elfin Forest and Santa Ysabel Avenue. Santa Paula Avenue is a "paper road" that has not been accepted into the County Maintained Road System. The numbered streets (11th through 17th) that extend from Santa Ysabel to Santa Paula are in the County Maintained System and are shown on the map filed as the Town of El Moro.
 - Place low split-rail fences along Santa Paula between the street access trails to encourage use of the street-end trails and discourage "short cuts."
 - Revegetate along Santa Paula with native plants to provide a buffer between Santa Paula and the Elfin Forest.
 - Develop a plan to provide for non-motorized east-west transportation along Santa Paula to accommodate pedestrians and bicycles.
3. Establish designated parking and provide for safe access.
 - Place bike racks at entrance trails. Bikes will not be allowed within the Elfin Forest.
 - Establish handicapped parking at the north end of 16th street to provide access to the planned "universal access" (see item 5 below).
 - Establish parking for vehicles within the 80 ft. x 80 ft. intersections of Santa Paula Avenue and the north ends of 11th through 17th streets.
 - Create a standard sign for street ends stating that overnight camping is prohibited and that parking is restricted to certain hours within the existing county curfew.
 - Develop an environmental interpretive area. Such an area could include parking, benches, interpretive signs, informational kiosks, restrooms, and trash receptacles. Use landscaping to provide a visual buffer around the interpretive area.
 - If parking from the street ends proves inadequate, evaluate construction of safe pedestrian access to the Elfin Forest from the South Bay Day Use Area to be developed by State Parks.
 - Provide safe access for field trips from schools and for planned group activities within the Elfin Forest. This is a particularly important safety concern when encouraging participation in Elfin Forest restoration and maintenance projects by groups such as scout troops, 4-H, and other youth organizations.
4. Improve the established trails. All trails are currently exposed sand subject to wind and water erosion as well as erosion caused by current use. The surrounding vegetation is also affected as the use of the unimproved trails leads to widening of the trails with a loss of vegetation. Trail improvement would channel use and may include replanting, trail closure, and erosion control.
 - Control erosion and use low rail fences as necessary to discourage off-trail access along the Fairbanks Trail. Erect a temporary barrier to restrict access to maintenance purposes only to the short trail extending north from the Fairbanks Trail in the vicinity of the 14th Street Access Trail.
 - Erosion control, bank stabilization and replanting are a priority at Bush Lupine Point and Mayhem Point. Use of plants such as *Ribes* would discourage human access.
 - Place rail fence within the Ghost Hall grove to limit the amount of soil compaction caused by visitors. Groom the south-east trail leading into this grove.
 - Place exclosures around oak and manzanita seedlings in the Celestial Meadow.

- Limit and control access to Woodrat Hall by requiring a special use permit. Close the side entrance with moveable rail fence to allow staff access only.
- As necessary, establish low wooden rail fencing to discourage off-trail short cuts.
- Groom trails as necessary.

All described activities will need to undergo CEQA review and will also require project coordination with DPR if the activities occur on State Park Property.

5. Address the issues of "universal access" to the Elfin Forest. The Americans with Disabilities Act states that parks must include barrier-free access unless it would not be financially practical or such access would fundamentally alter the nature of the service, program or activity.

Meeting ADA requirements was a specific condition for the award of the \$500,000 Transportation Activities Grant applied toward the purchase of the Elfin Forest

Natural Area.

- Establish a looped universal access with turnouts wide enough to allow 2 wheelchairs to pass. It is important that such access provide a real sense of the diversity of the Elfin Forest and not simply be an improved surface. Availability, performance, and cost will determine the materials to be used.

Preliminary surveys suggest that such a trail could extend from handicapped parking at the end of 16th Street along a gentle slope to the Fairbanks Trail and Bush Lupine Point, down a modified route along the Wild Rose Trail to Mayhem Point and connect with the Celestial Meadow Trail (see Figure 5).

- Establish an alternative senses "Touch/Smell/Hear Trail" along the boardwalk for the visually impaired that provides such persons with a sense of the Elfin Forest. Begin with a short segment, see how it holds up and ask for feedback from users.
6. Place benches at appropriate locations along the improved access and at overlooks to provide an opportunity to rest and to enjoy the vistas offered.
 - Use natural-looking materials with low visual impact that are in keeping with the character of the Elfin Forest.
 - Select locations for benches on the basis of scenic value as well as providing good locations for persons to stop and rest who might be finding the trails difficult.



An example of a low impact improved access can be seen at Asilomar State Beach.

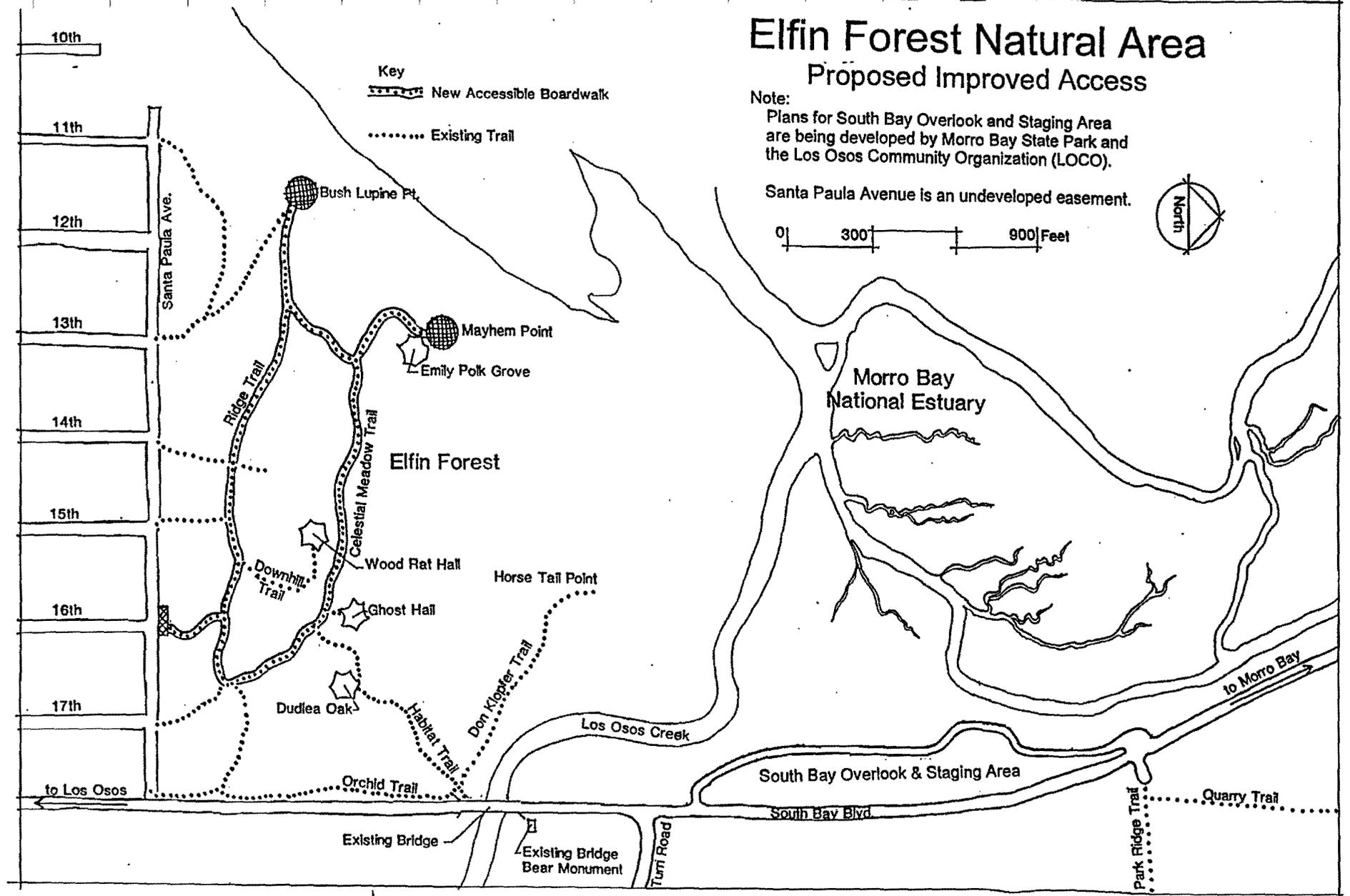


Figure 5. Proposed improved access.

7. Build observation decks to provide a place from which binoculars could be used for bird watching. The decks would serve the secondary purpose of providing a barrier to slopes which have been severely eroded due by public use.

- Build observation decks at Bush Lupine Point and Mayhem Point.
- Install railings to prevent visitors from continuing down steep slopes to the marsh.
- Additional observation decks will be considered in the future if they prove to be effective erosion control measures and effective barriers to slope access which promotes erosion.



Benches at improved access to Asilomar State Beach.

8. Develop a self-guided nature walk and accompanying trail guide.
 - Write a self guided pamphlet providing information for each area marked by a trail marker.
 - The trail guide should indicate the level of difficulty and length of each trail.
 - Use directional signs to provide locational information.
 - Use informational signs to identify resources.
9. County ordinance requires that dogs must be leashed.
 - Post signs to remind owners that dogs must be on leashes and to clean up after their pets.
 - Develop a plan for disposal of dog waste.
 - Post signs on trails leading onto state park property stating that dogs are not allowed beyond this point.
10. Establish an agreement with MBSP to cover liability issues so that Docents can lead walks through the entire Elfin Forest. At present, MBSP docents are restricted to that portion of the Elfin Forest that is part of Morro Bay State Park.

Future Expansion

There are no plans for the future expansion of the Elfin Forest.



Chapter 2 - Resource Protection and Use

Introduction

This chapter provides guidelines for the protection and use of the Elfin Forest. The goals, objectives and policies contained in this resource management plan are consistent with the San Luis Obispo County Natural Areas Plan¹. The objectives and policies contained in this chapter define these goals and provide mechanisms to meet these goals. The goals, objectives and policies are meant to direct future activities in the Elfin Forest for years to come.

Goal: Preserve the Elfin Forest resources and guarantee that permitted activities and uses are compatible with resource protection. At all times, there must be a proper balance between the desire to maintain the Elfin Forest as a "natural area" and concerns over safety, fire hazard, and liability issues.

2.0 Protection Guidelines

Objective:

- A. Protect natural resources and be sensitive to the factors which allow these resources to remain viable. Table 2 identifies known areas of need within the Elfin Forest.

Implementing Policies:

- 2.0.1 Work with the California State Department of Parks and Recreation, land conservation groups and organizations expert in natural resources protection to protect the Elfin Forest's natural resources and sensitive habitats.

¹ Adopted in 1992, the San Luis Obispo County Natural Areas Plan represents a commitment by the County of San Luis Obispo to (a) protect, restore and enhance lands designated as natural areas and (b) provide resource education through passive recreation. The intent of the Board of Supervisors action was to protect the County's natural resources.

Table 2. Known Need for Resource Protection and Enhancement Within the Elfin Forest

1. Maintain the high diversity and viability of all communities within the Elfin Forest to provide opportunities for interpretation of natural cycles and processes.
2. Maintain the value of the Elfin Forest as habitat for wildlife. Provide for exclusion of certain areas from use during breeding season of sensitive species.
3. Protect the oak groves and sensitive species such as the Morro Manzanita, the federally listed lichen *Sulcaria isidiifera*, the San Luis Obispo Wallflower and *Pholisma*.
4. Prevent compaction of soil under the oaks due to overuse.
5. Control invasive, non-native plants that pose a threat to native plant communities. These include veldt grass, German ivy, *Smilax*, and the long-leaf ice plant.
6. Remedy erosion at Bush Lupine Point, Mayhem Point and along the trails. Investigate the use of snow fence, jute mats or other materials to stabilize the sand until revegetation takes place.
7. Provide that all usage is in keeping with the size and scale of the Elfin Forest. Horses and other domestic animals (with the exception of leashed dogs on County property) are prohibited within the Elfin Forest.

- Develop a committee with representation from the groups listed in Table 3. Obtain commitment from each group for suggested activities and develop a mechanism for supervision of activities.
- 2.0.2 Protect the Elfin Forest resources in essentially a natural state to safeguard the water quality of the bay, wildlife diversity, aesthetic values, and recreation opportunities. Only those site alterations which are consistent with the natural area guidelines in Table 8 will be allowed.
- 2.0.3 Avoid removal of native species within the Elfin Forest. Development, maintenance and brush removal should be consistent with the natural area guidelines in Table 8. Plants will be removed only as necessary for safety reasons. Proposed projects would not require the removal of trees.
- 2.0.4 Protect native wildlife and habitats by:
- Providing areas of suitable size to serve as habitat for small mammals, bird, reptiles, and amphibians into which human use does not intrude.
 - Limiting or prohibiting domesticated animals in the Elfin Forest. All dogs must be on leash at all times and will be allowed in designated areas on county property only. Residents adjacent to the Elfin Forest should be encouraged to keep cats at home. Horses will not be allowed. There are no areas suitable for grazing by livestock.
- 2.0.5 Protect the Elfin Forest's scenic resources by careful design of any trail modifications, trail trimming where appropriate, and placement of signs so that no sign obstructs a view and that all signs are wheelchair viewable.
- 2.0.6 As a first priority, protect cultural resources by avoiding disturbance.
The extensive Chumash middens will be maintained in an "as is" state. Vegetation will be allowed to grow over exposed areas. See Table 8 for guidelines for projects or activities near cultural resources.

Table 3. Land Conservation Groups and Other Organizations to Participate in Protection of the Elfin Forest's Natural Resources and Sensitive Habitat

<u>Organization</u>	<u>Activities</u>
San Luis Obispo County	<p>Coordinate all activities within the Elfin Forest.</p> <p>Serve as a central information clearinghouse to keep records of all use and activities within the Elfin Forest.</p> <p>Grow plants for revegetation projects in County nursery.</p> <p>Construct boardwalks.</p>
California State Department of Parks and Recreation	<p>Consult with San Luis Obispo County on all policies and planning concerning the Elfin Forest.</p> <p>Continue docent led activities in the lower Elfin Forest (MBSP property).</p>
California Conservation Corps	<p>Provide input on trail design.</p> <p>Assist in trail maintenance where skills are needed (such as construction of water bars).</p>
SLO Honor Farm	<p>Provide labor to build benches, signs and fences.</p>
California Men's Colony	<p>Provide labor to build benches, signs and fences.</p> <p>Assist with trail maintenance.</p>
SWAP	<p>Coordinate school field trips to the Elfin Forest.</p> <p>Provide SLO Parks with a monthly log of group use of the Elfin Forest.</p> <p>Provide rewards and recognition for volunteer services and other types of support.</p> <p>Obtain funding to support an offsite public mural similar to the Elfin Forest Mural at Los Osos Rexall to which names are added on an annual basis.</p> <p>Provide public recognition in SWAP's newsletters and at SWAP's public meetings.</p> <p>Send out press releases that highlight volunteer services.</p> <p>Create a "for neighbors only" newsletter and develop an "Elf Watch" (neighborhood watch) program.</p> <p>Place information on the Elfin Forest and Elfin Forest activities and items for purchase in the gift shop of the Natural History Museum Museum in Morro Bay State Park.</p> <p>Publish an Elfin Forest Coloring book, pocket guide to the plants and animals of the Elfin Forest, a pamphlet to accompany the self-guided tour, and updated Teacher's Guide.</p>

Table 3. Land Conservation Groups and Other Organizations to Participate in Protection of the Elfin Forest's Natural Resources and Sensitive Habitat (continued)

Organization	Activities
Santa Lucia Chapter of the Sierra Club	<p>Serve as legislative watchdogs over any legislation that may affect activities or resources within the Elfin Forest.</p> <p>Publish information about the Elfin Forest in the Sierra Club Newsletter and the Sierra Club guide to Hiking Trails of San Luis Obispo County.</p> <p>Ask the Sierra Club "Paddlers" to organize a cleanup along the edge of the marsh and to help with monitoring efforts.</p>
California Native Plant Society	<p>Set up a monitoring program for endangered species.</p> <p>Provide information for Self-Guided Trail.</p> <p>Provide advice on planting strategies and weed control. Collect seed and acorns, make cuttings, start plants, and help with off-site growing of plants for revegetation efforts.</p> <p>Include the Elfin Forest in the annual Wildflower Weekend.</p>
Morro Coast Audubon Society	<p>Continue to make bird population estimates (Christmas Bird Count)</p> <p>Provide advice on steps that can be taken to improve habitat for birds.</p> <p>Provide information on possible areas (and times of year) to avoid due to nesting of sensitive species.</p> <p>Spot locations for bird watching.</p>
Natural History Association	<p>Provide information about the Elfin Forest in the NHA museum.</p>
Cal Poly Wildlife Club	<p>Sponsor habitat restoration projects.</p>
Morro Bay High School	<p>Work with teachers to develop student conservation and research projects.</p>
Achievement House	<p>Employ woodshop to build benches, signs and fencing.</p> <p>Employ clients to assist with planting, clean-up, trail trimming and other tasks.</p>
Mental Health Association: Growing Gardens Farms	<p>Grow plants for the Elfin Forest.</p> <p>Hire clients to assist with planting.</p>

Table 3. Land Conservation Groups and Other Organizations to Participate in Protection of the Elfin Forest's Natural Resources and Sensitive Habitat (continued)

Organization	Activities
Land Conservancy	Integrate Elfin Forest efforts with the Land Conservancy's Green Belt for Los Osos.
Nature Conservancy	Share information and experience in the areas of resource management, education, and public access.

2.1 RESTORATION AND ENHANCEMENT

Objective:

- B. Monitor and evaluate the Elfin Forest to guarantee adequate resource protection.
- C. Restore and enhance the resources of the Elfin Forest.
- D. Plan for revitalization of heavily used areas.

Implementing Policies:

2.1.1 Work with local agencies and organizations that are qualified to monitor and evaluate Elfin Forest resources. Such groups may provide monitoring, research and recommendations for protecting Natural Area resources at little or no cost. These may include, but are not limited to:

- California Department of Fish and Game
- U. S. Fish and Wildlife Service
- California Department of Parks and Recreation (Morro Bay State Park in particular)
- U. S. Soil Conservation Service
- Resource Conservation District
- The Bay Foundation
- California Native Plant Society

2.1.2 An initial baseline botanical survey of the Elfin Forest was submitted by V. L. Holland to San Luis Obispo County in December of 1995 (see Appendix B). A supplemental survey was completed in December of 1996.

At a minimum, the condition of the Elfin Forest should be monitored on an annual basis to assess resource protection. The condition of the Elfin Forest should be evaluated as a function of its individual parts as well as the whole. Evaluation forms should be completed by qualified personnel (volunteers or paid staff). Resource status and recommendations recorded in these evaluations should be used to determine levels of appropriate use and resource protection mechanisms for the following season.

Impaction due to use could be shown by excessive numbers of broken branches, compacted

soils, failure of seedlings to thrive, stressed appearance of plants, invasion by non-native species, reduction of the oak canopy, decrease in leaf litter under the oaks, compaction of soil around roots, noticeable decrease in overall diversity, the noticeable absence or significant deterioration of characteristic species, and/or vandalism.

- 2.1.3 An initial baseline wildlife survey of the Elfin Forest was prepared by Roger Gambs for San Luis Obispo County in the Spring of 1997.
- Impactation due to use could be shown by the noticeable absence of, or significant deterioration of habitat for, characteristic species; abandonment of wood rat nests (indicating too intrusive usage); and/or a decrease in number of bird and small mammal nests.
- 2.1.4 Use questionnaires to obtain additional data on conditions within the Elfin Forest. The same boxes used to provide trail guides and SWAP brochures at street ends and at the staging area at the head of the Don Klopfer Trail will hold the questionnaires.
- Periodically survey users of the Elfin Forest by placing volunteers at the start of street access trails.
- 2.1.5 Be aware of current legislation (Federal, State and County) affecting the Elfin Forest to maintain consistency with such laws and policies. (See Appendix F.) In addition, maintain current sensitive species lists from United States Fish & Wildlife Service, the California Department of Fish and Game, and the California Native Plant Society to provide proper resource protection within the natural area. (See Appendices B and D for a current list.)
- 2.1.6 Periodically close impacted areas (particularly the oak groves) to allow revegetation and regrowth. It may be necessary to recommend the seasonal closure of certain areas due to weather conditions being too wet or too dry.
- 2.1.7 Restore and enhance degraded areas and monitor the results of the restoration projects. Areas in need of restoration include:
- (a) eroded areas near bay overlooks at Bush Lupine Point and Mayhem Point;
 - (b) degraded areas caused by off-road vehicle use in the area bordered by the Fairbanks Trail, the 13th Street Access and Chumash Trail and the area between the Fairbanks Trail and the Wild Rose Trail;
 - (c) eroded areas along the trails (the Fairbanks Trail in particular);
 - (d) degraded areas due to "short cuts" through chaparral; and
 - (e) degraded areas along Santa Paula Avenue due to long-term, uncontrolled usage near residential development.

The above listing serves only to identify areas of need and does not assign any particular priority to the proposed project areas.

Restoration and enhancement projects should remove invasive, non-native plants and replace these plants with appropriate native species where invasive vegetation is adversely affecting the plant communities of the Elfin Forest. Specific invasive species include *Smilax*, veldt grass, German ivy, and long-leaf ice plant. Since this is a natural area, non-native species will not be used for plantings.

- 2.1.8 Observe established policy concerning the removal of dead plant material.
- Down and decaying vegetation should be left in place as it provides important habitat for birds and small animals.
 - The area should be posted as a non-smoking area.

2.2 Activities and Uses

Objectives:

- E. Provide activities and uses which are compatible with resource protection.
- F. Augment the community's awareness and appreciation of Elfin Forest resources.

Implementing Policies:

- 2.2.1 Resource protection should be the primary purpose for management of the Elfin Forest. Provision of resource education and recreation are secondary purposes.
- 2.2.2 Allow compatible uses and activities within the Elfin Forest provided adequate resource protection is maintained. Prohibit incompatible uses and activities in the Elfin Forest that are in conflict with the Natural Area's setting or with Natural Area resource protection policies. Partial listings of compatible and incompatible activities are found in Tables 4 and 5. However, if an activity or use not listed in these tables is similar to a compatible activity or use that is listed in Tables 4 and 5, that activity or use may be permitted provided the use or activity is consistent with the guidelines in the Resource Management Plan.
- 2.2.3 Design, develop, and maintain activities within the Elfin Forest consistent with the standards in Table 4.

2.3 Education and Recreation Programs

Objectives:

- G. Focus recreational uses to provide an educational experience.
- H. Provide educational programs for all sectors of the community.

Implementing Policies:

At all times, be concerned that encouraging use of the Elfin Forest will not create an abuse of the Elfin Forest.

All use must be in keeping with the size and scale of the Elfin Forest and its acquisition as a natural area.

- 2.3.1 Encourage public participation in Elfin Forest programs to gain public interest and involvement.
- 2.3.2 Group activities should be restricted and will require a special use permit from the County.

Table 4. Compatible and Incompatible Uses

Use	Compatible	Comment/Constraints
Campgrounds	No	Not appropriate for natural areas of this scale and scope; not appropriate due to closeness to residential development.
Conservation	Yes	Conservation includes the preservation and protection of soil, vegetation, water, fish and/or wildlife. Certain areas within the Elfin Forest may need to be protected for their biological or cultural sensitivity by exclusion of human intrusion.
Docks/ Fishing Piers	Not Applicable	There is no reasonable direct access to the Bay or Los Osos Creek from within the Elfin Forest.
Viewing Platforms	Yes	Viewing platforms will provide the opportunity to observe scenic areas and resources while at the same time limiting human intrusion downslope into the bay or out into the marsh from such platforms. Viewing platforms are proposed for Bush Lupine Point and Mayhem Point.
Benches	Yes	Benches will be built at appropriate places along the boardwalk and at observation decks.
Boardwalk or other improved surface	Yes	An improved surface access should be built to provide access to the mobility impaired and to protect sensitive resources.
Information Center	Yes	An information center would be appropriate. The information center could provide visitors with information about the history and appropriate use of the Elfin Forest, serve as an assembly point for educational programs, and provide telephone and restroom facilities. Designated parking areas must be provided. Access must include all users of all levels of ability. Additional information would be made available at the Natural History Museum in Morro Bay State Park.
Interpretive Display	Yes	Signs will be installed to provide public education on the history of the Elfin Forest, its value as a natural area, and appropriate use. As the Elfin Forest will be an unstaffed facility, all displays will be self-interpretive, placed for easy viewing by all persons and set back from sensitive resources.

Table 4. Compatible and Incompatible Uses (continued)

Use	Compatible	Comment/Constraints
Off Road Vehicles	No	Such use is not acceptable within the Elfin Forest due to severe adverse impacts on plant communities and wildlife. Only motorized wheelchairs will be permitted on designated boardwalks.
Mineral or Resource Extraction	No	Such activities are not compatible with preservation and enhancement of the plant and animal communities within the Elfin Forest.
Grazing	No	Such activities are not compatible with preservation and enhancement of the plant and animal communities within the Elfin Forest.
Grazing	No	Such uses are not compatible with the Elfin Forest Natural Area.
Residential, Commercial and/or Industrial Development	No	Such programs which may include vegetation restoration or habitat improvement may result in site alterations that enhance or restore the Elfin Forest and may include restrictions on public access.
Restoration or Enhancement Programs	Yes	Such facilities may include restrooms and trash receptacles at the South Bay Day Use Area, parking, staging areas, universal access, and similar facilities that support compatible uses and activities. Other options should be explored.
Support Facilities	Yes	Nature trails will allow the visitor to interact with the Elfin Forest's natural setting. Trails will avoid sensitive resource areas and provide an appreciation of the Elfin Forest while minimizing user impact. Equestrian and mountain bike use will be excluded. Informational signs at major trail heads will indicate acceptable use. Trail junctions will be marked with directional signs.
Trails	Yes	Fire controls may be necessary to reduce public safety hazards (particularly in consideration of closeness to residential development). See Table 8 for guidelines.
Wildland Fire Controls	Yes	

Table 5. Compatible and Incompatible Activities

<u>Activity</u>	<u>Compatible</u>	<u>Comment/Constraints</u>
Boating, Canoeing, Kayaking, Sailing Speedboats, Water and Jet Skiing, Swimming Wind Surfing	No	There is no access to the bay for any type of boating or other water related recreational activity from the Elfin Forest.
Sky Diving	No	There are no safe landing areas of sufficient size within the Elfin Forest.
Fishing	No	There is no access to the bay for fishing from the Elfin Forest.
Camping	No	No overnight camping of any type will be allowed within the Elfin Forest due to the scope and scale of the Elfin Forest and the nearness to residential development.
Walking, Hiking, Jogging	Yes	These activities are permitted on designated trails. Discourage any use that would result in the destruction of habitat such as walking off trails, climbing on trees, or building "forts."
Horseback Riding	No	Trails are not long enough for horseback riding. Large staging areas are not available.
Hunting	No	There are no areas within the Elfin Forest where hunting would be safe or appropriate.
Nature Study and Envi- ronmental Education	Yes	Such programs allow individuals or institutions to study natural resources. Such programs may intrude into sensitive habitat areas. Prior to site usage, the extent and type of nature study must be determined in order to be able to apply adequate safeguards. Valid permits must be obtained from California Department of Fish and Game for any sampling, trapping or collecting activities. SWAP has prepared a 63 page guide to educational activities within the Elfin Forest that are in keeping with the California State Department of Education Framework for Science Education.

Table 5. Compatible and Incompatible Activities (continued)

Activity	Compatible	Comment/Constraints
Photography, Painting, other Artist Activities	Yes	Such activities can be conducted at any point within the Elfin Forest to which humans are allowed access. No vegetation may be removed to create a better "view."
Picnicking, Group	Yes with Restrictions	Group activities should be held in areas of lower ecological value. Such activities are now much reduced and are not compatible with the conservation of fragile resources. Continued off-trail use is not encouraged. Groups desiring to plan an event must obtain a use permit from SLO County Parks. No fires or barbecues will be allowed. Alcohol will be permitted upon issuance of a special use permit.
Picnicking, Individual	Yes with Restrictions	The current practice of small groups picnicking within the Elfin Forest will be permitted with monitoring of usage to determine if any adverse impacts occur.
Walking Dogs	Yes with Restrictions	In accordance with county regulations, dogs must be on leashes at all times and will be permitted in designated areas on county land only. Dogs will not be permitted on the state park land.

Persons designing educational and recreational programs should avoid problems such as those listed below when implementing programs within the Elfin Forest.

- Over scheduling an activity area or allowing too many people to intrude into a sensitive habitat area.
- Locating programs in areas without adequate support facilities (e.g. offering a very popular program at a location with inadequate parking).
- Implementing too many programs.
- Situations involving "volunteer abuse" / firing volunteers.
- Bad relations with neighbors due to misinformation.

2.3.3 Develop, monitor, maintain and update educational programs and displays.

Design displays to supplement a self-guided tour of the Elfin Forest. Keep displays up-to-date so that new information is included (for example, effect of the Dominghini Flats Sediment Basin and/or the replacement of Twin Bridges on sedimentation in bay). Avoid a negative visual impact caused by too many displays or too complicated displays. Make sure that all displays are accessible to all users (age groups and physical capabilities) and are in compliance with County specifications and standards.

Develop informational signs for the parking area in the South Bay Day Use Area.

2.3.4 All programs will be in keeping with the size and scale of the Elfin Forest. Since most of the use of the Elfin Forest is unsupervised, there is a need to educate the community on the appropriate use of sensitive habitat and to explain why conservation and stewardship are important. Potential Elfin Forest educational programs include:

a. School or Groups Tours. Resource tours could be offered to local schools through the County El Chorro Environmental Center.

The Elfin Forest Teacher's Guide will be updated to make it possible for teachers or group leaders to lead tours of the Elfin Forest unassisted.

b. Nature Study. Work with teachers at Baywood, Sunnyside and Monarch Elementary Schools, Los Osos Middle School, and Morro Bay High School (in close proximity to the Elfin Forest) to develop programs to extend community awareness of the Elfin Forest as a sensitive resource.

c. Nature Classes. Offer short classes through adult education in local schools with field trips to the Elfin Forest.

d. Volunteer Monitoring. Involve Cal Poly, Cuesta College and Alan Hancock College in yearly monitoring of resources. Establish a series of ongoing senior projects in coordination with faculty at Cal Poly. Solicit students to work on specific projects.

e. Competition and Community Events. Encourage events such as photo competitions that are aimed at raising community awareness and will also serve to raise funds to support natural area education, maintenance and restoration activities.

f. Brochures, Newsletter and Articles. SWAP will continue to publish a quarterly newsletter, place brochures on the Elfin Forest in businesses, libraries, and Chamber of Commerce information centers, continue to submit press releases and articles to the local media on events and activities within the Elfin Forest, take advantage of requests for programs by local service organizations, solicit appearances on local radio talk shows, and submit information for publication in local visitor guides.

g. Natural Area Trails. Develop a self-guided tour that identifies the resources along each trail.

h. Docent Tours. SWAP will continue to lead educational walks through the Elfin Forest on a regular basis that will be advertised in the local media, newsletters of other organizations, and the County Park newsletter, the *Mariposa*. Walks will also be led by SWAP on a by-arrangement basis. All tours will be led by persons knowledgeable with Elfin Forest resources, attendance lists will be taken, and a second support person will be present.

i. Interpretive Displays. These displays will provide specific information (e.g. areas temporarily closed to usage) as well as general information (e.g. history of the area, sedimentation of the bay) and information about natural features that a person can relate to his/her own personal experiences. All displays should be in keeping with the aesthetics of the Elfin Forest (natural materials used for seats, earthtone colors, and low-scale). Displays should be relatively simple and direct the reader to sources of additional information.

j. Information Center. Provide informational displays on the Elfin Forest and the Morro Bay Watershed at the South Bay Day Use Area.

- k. **Adoption and Watch Programs.** SWAP signed a 10 year Adopt-A-Park agreement with SLO County in July of 1994. Make use of an "Elf Watch" (Neighborhood Watch) Program to involve the local community with resource protection of the Elfin Forest. Encourage local schools, community members, service organizations and businesses to raise funds for specific Elfin Forest projects such as litter pick-up, trail maintenance, and other activities. Under such programs, participants agree to a specific service commitment for a predetermined length of time. SWAP will work to solicit such agreements with other service organizations. Training workshops may be necessary for specific projects.

2.4 Priority Projects²

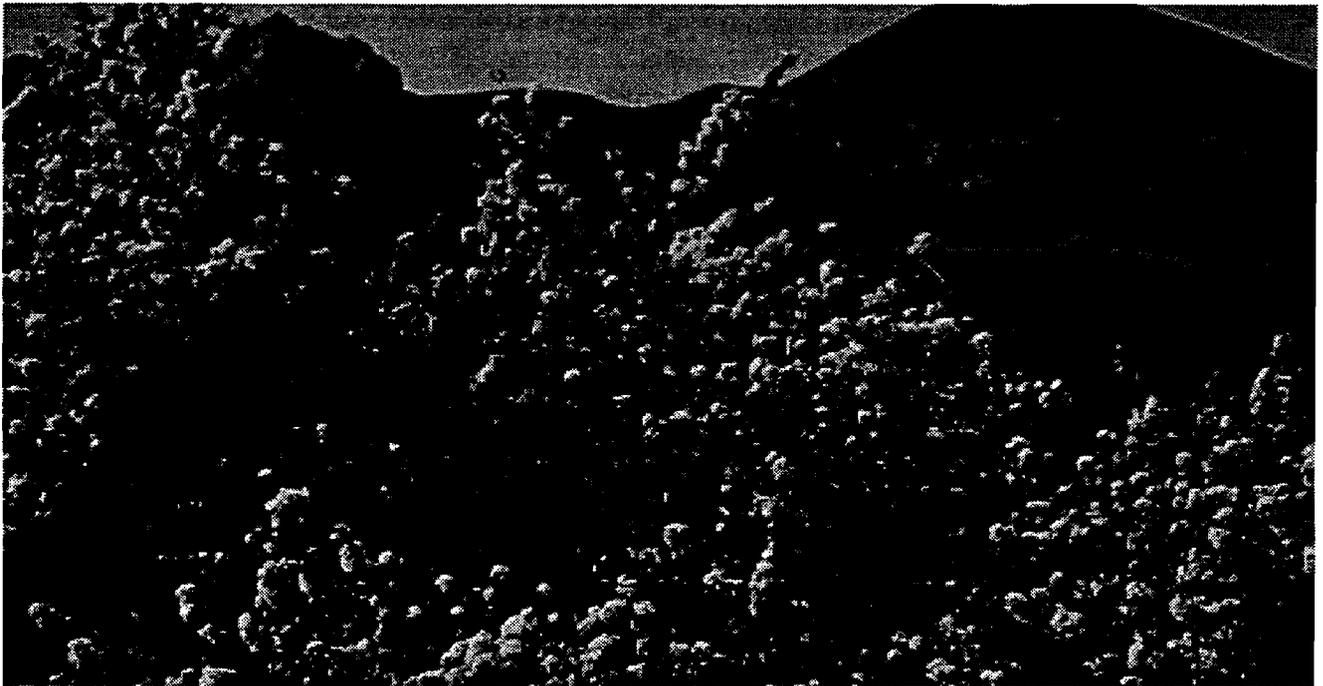
Objectives:

- I. Implement priority projects according to their safety or habitat liabilities.
- J. Incorporate education components as part of priority projects.

Implementing Projects:

- 2.4.1. **Resource Protection.** Build exclosures around Manzanita and oak seedlings, create island at intersection of Celestial Meadow and Wild Rose Trail to protect wild roses, place barriers along trails and within oak groves to prevent human intrusion into native plant communities, and place vehicle barriers such as large rocks at street ends.
- 2.4.2 **Resource Enhancement Through Revegetation and Erosion Control.**
Develop a freshwater source for Elfin Forest management activities.
Establish policies for planting within the Elfin Forest. Address the issue of genetic diversity versus maintaining the integrity of the gene pool, particularly in the case of the oaks and manzanitas. Evaluate sources for seeds and plants.
- 2.4.3 **Trail Improvement.**
- 2.4.4 **Provision for Universal Access.**

²Priority projects are identified on the basis of current conditions within the Elfin Forest. New projects may occur within the life of this plan. Such projects, although not listed here, may have a high priority for completion due to public safety or habitat concerns, and may take precedent over listed projects.



Chapter 3 - Management of the Elfin Forest

This chapter provides guidelines for the management of the natural resources of the Elfin Forest. The goals, objectives and policies contained in this section emphasize community involvement and awareness and resource protection through appropriate designs, development, maintenance, and enforcement. All management activities within the Elfin Forest must be approved by County Parks and the Division of General Services.

Goal: Manage the Elfin Forest and its resources in a responsible manner.

3.0 Community Involvement

Objective:

- A. Use the assistance of various community and local groups to help manage and maintain Elfin Forest resources and facilities.

Implementing Policies:

- 3.0.1. Work with willing adjacent property owners, local conservation organizations, community organizations (including CSA 9 Advisory Board and Los Osos Community Advisory Council), schools and local businesses to assist in the conservation, maintenance and restoration of the Elfin Forest.
- 3.0.2. Coordinate with willing adjacent property owners and members of the community.
 - a. Provide neighbors with information on any proposed changes that are likely to have (or are perceived as having) an impact on the adjacent community (such as provision of parking at street ends).
 - b. Protect critical interface areas. Work with the community on issues relating to domestic cats and dogs.
- 3.0.3. Work with organizations, community groups and individuals to solicit donations and volunteer labor to support Elfin Forest activities. Develop a donation catalog to encourage the public to make donations. Donations must meet County Park's standards and follow

Table 6. Sign Guidelines

Encourage

- Signs that are positive and concise. Stress mottos and ideas such as:
“Tread lightly!”
“Pack it in and Pack it out!”
“Take only photos, leave only footprints.”
- Symbols
- Use the street end signboards to post information on allowed and prohibited uses. Restrict other signs to key areas only.
- Simple, legible sign designs that are easy to read and easy to maintain and assemble.
- Use of natural colors and materials in construction of the signs.
- Adoption of state park sign guidelines and coordination between County and State Parks when designing signs.

Avoid

- Signs that have a negative impact due to use of wording such as:
No!
Do not...
Unless necessary for regulatory signs.
- Numerous signs and repeating messages in one location or throughout the Elfin Forest.
- Bare metal or flashy signs.
- Signs when the information would be more appropriate in a brochure about the Elfin Forest.
- Sign designs that are difficult to maintain or sign materials which are expensive or hard to obtain.

established policy for acceptance.

3.1 Design, Development and Maintenance

Objective:

- B. Provide designs, construction and maintenance which are environmentally sound.

Implementing Policies:

- 3.1.1 Coordinate the design and implementation of Elfin Forest recreation with Morro Bay State Park and adjacent residential properties to guarantee the availability of regional recreation and to identify potential neighborhood concerns.
 - a. Use Santa Paula Avenue as a buffer between developed residential areas and the Elfin Forest to minimize conflicts.
 - b. Place low split rail fencing at the southern boundary along Santa Paula Avenue to direct visitors to enter the Elfin Forest by using the trails at the street ends and to discourage shortcuts and prohibited or incompatible uses within the Elfin Forest.
 - c. There will be no construction of roads or new accesses into the Elfin Forest.
- 3.1.2 Elfin Forest signs should be in accordance with County and State standards. Signs should be located at the street access points, at the entrance to the lower Elfin Forest (Don Klopfer Trail), at trail intersections, and as appropriate along the self guided trail. See Table 6 for general sign guidelines. Signs will be limited so as not to be intrusive.
- 3.1.3 Design, construct and maintain any Elfin Forest facilities such as compost piles, telephone, or parking consistent with guidelines in Table 8.

Table 7. Maintenance Guidelines

Facility	Maintenance Conducted	
	Peak Season	Non Peak Season
Interpretive Displays	Weekly	Monthly
Staging Area Day Use Area	Weekly	Monthly
Staging Area at 16th Street		
Trails	Quarterly	
Litter Removal and Trash Cleanup	Daily	Weekly

- 3.1.4 Elfin Forest maintenance by County Park and Open Space employees should provide inspections and maintenance in keeping with Table 7.
- More frequent upkeep should be provided in (1) heavily used areas and (2) problem areas to diminish liability or safety concerns or if future maintenance would be considerably reduced by more frequent care. A maintenance activity log will be kept to predict future maintenance concerns and costs. The log should identify problem areas (sections requiring excessive maintenance) and areas that will require additional monitoring.
 - Volunteers should be used for maintenance activities whenever possible. Peak season is taken to mean May through October.

3.2 Administration

Objective:

- C. Provide adequate mechanisms to protect the natural resources within the Elfin Forest.

Implementing Policies:

- 3.2.1 San Luis County Parks shall be responsible for dealing with typical park infractions (such as keeping people on trails, keeping dogs on leash) within the Elfin Forest. The County Sheriff shall provide enforcement for all serious offenses within the Elfin Forest.
- 3.2.2 A Watch Program composed of participating neighbors, community users and members of other groups (Fish & Game, local businesses, community groups and members of SWAP) will assist County Parks with protection of the natural resources of the Elfin Forest and security within the Elfin Forest. The residents of the 1100 blocks between 11th and 17th streets will be informed of how they may assist County Parks with resource protection and the County Sheriff with enforcement.
- 3.2.3 Periodically assess whether Natural Area rules and enforcement are adequate. As necessary, modify the existing policy to accommodate specific issues or concerns.
- 3.2.4 Enforcement actions may include activity barriers to keep prohibited uses out of sensitive areas.
- 3.2.5 Use fire safety mechanisms to reduce public safety concerns. This could include brush clearing as necessary.

Table 8. Natural Area Guidelines

Project Design and Maintenance Standards

(boardwalk, viewing platforms, parking)

Should

Should Avoid

Minimize site alterations and visual impacts by using:

- Sound natural resource management practices.
- Proper erosion control methods.
- New plantings of native trees and shrubs to soften visual impact and stabilize cut and fill.
- Designs which are compatible with the scale and character of the Elfin Forest.
- Primarily natural or recycled construction materials and earthtone colors.

Provide:

- Adequate natural resource protection.
- Uses and activities consistent with Tables 4 and 5, CEQA, PRC 5024, and ADA guidelines.
- Trash and recycling containers at the South Bay Boulevard Day Use Staging Area.
- Signs consistent with Table 6.
- Trails consistent with this document and the County's Trail Manual.

Designs which:

- Are out of scale with the character of the Elfin Forest.
- Require extensive maintenance or are prone to vandalism.
- Adversely impact Elfin Forest resources.
- Result in public safety concerns or increase hazards on site.
- Result in finished graded slopes greater than 3:1 (exception for decks and viewing platforms)
- Would result in the creation of habitat islands.

Grading & Construction

(boardwalk, viewing platforms, parking)

Should

Should Avoid

Be consistent with the design guidelines noted above.

During construction or grading require:

- Erosion control methods. Revegetate disturbed areas as soon as possible.
- Contractors to protect sensitive species and provide reimbursement for any damage.
- Perform such activities so as to minimize neighborhood impacts. Schedule weekend work projects to be able to use volunteers.

Grading or construction:

- In areas where the proposed alteration would cause or worsen erosion.
- Near sensitive areas during mating or nesting season or if such activities will result in significant impacts to resources.

Table 8. Natural Area Guidelines (continued)

Grading & Construction (continued)
(boardwalk, viewing platforms, parking)

Should:

During construction or grading require:

- Any construction equipment must use noise mufflers, spark arrestors, and have appropriate emission controls (to reduce noise and air quality concerns).

After construction and grading:

- Monitor revegetated areas for a minimum of 5 years.

Maintenance

Should

Should Avoid

Be consistent with the guidelines noted elsewhere in this table. For example:

- Major changes in a visually sensitive area, use the Design Guidelines. Park and Recreation Commission approval may be required.
- Follow guidelines under Construction and Grading.
- Follow the guidelines under Trees and Vegetation if removal becomes necessary for safety reasons. Proposed projects will not require the removal of trees.

Significant impacts to sensitive resources (such as native vegetation, cultural resources, and sensitive habitat). If impacts will occur, determine appropriate mitigation and only pursue the project with proper mitigation in place.

Sensitive areas during nesting or mating season.

Removal of trees or large areas of native vegetation.

Fire Safety

Should

Should Avoid

Work with:

- California Department of Forestry and the South Bay Fire Department to provide adequate fire protection and safety. CDF should provide fire management plans.
- Adjacent property owners to provide adequate protection on their land and to assist Elfin Forest protection in accordance with County Specifications. Make specifications available to adjacent property owners.

Table 8. Natural Area Guidelines (continued)

Fire Safety (continued)

Should

Within the Elfin Forest:

- Close certain areas to the public during high fire season if such areas represent a fire hazard.
- Prohibit fires at all times.
- Prohibit smoking.
- Reduce fuel loads after careful consideration of alternatives.
- Consult with CDF and DPR to investigate the possibility of control burns.

Projects Near Native Trees

Should

Protect native trees by:

- Using protective fencing during construction and grading to prevent soil compaction around the tree's root zone. Fencing should be placed at the dripline (typically at the extent of the canopy).
- Only planting within a native tree's root zone if the additional plants have the same water requirements as the specimen tree.
- Maintaining existing grades within the tree's dripline.
- Using qualified personnel to inspect and treat trees for disease, pests and to prune trees.
- Limiting removal and trimming. If trees are removed, they should be replaced by native trees on a minimum 4:1 ratio (for every tree removed, 4 native trees should be planted in the Elfin Forest in an appropriate location.) Use the Elfin Forest Plant List for appropriate replacement plantings.

Note: the proposed projects will not require tree removal.

Should Avoid

Raising the soil level around the trunk.

Paving over roots.

Severe pruning such as heading back

Changing the moisture level, i.e. drainage changes (such as directing drainage water toward the tree trunk).

Trenching within the tree's dripline. The dripline approximates the canopy of the tree. All trenching is to be done by hand and directed to avoid major roots.

Attaching signs or fencing to trees.

Planting new trees in rows or equally set apart. Such planting does not appear natural and does not provide the same habitat value.

Paved surfaces within the Elfin Forest to prevent compaction of soil around roots.

Table 8. Natural Area Guidelines (continued)

Projects Near Native Plants

Should

Should Avoid

Protect native vegetation by:

- Limiting removal to the smallest area possible. If vegetation is removed, stabilize graded areas as soon as possible to reduce erosion concerns. Only use plants native to the Elfin Forest as replacement vegetation.
- Annually planting native vegetation suitable to individual areas and periodically closing and/or restoring areas that have become degraded. New plantings should be provided in natural appearing or random clusters.
- Controlling the spread of harmful non-native species when non-natives are or will adversely impact Elfin Forest resources.
- Limiting the removal of Poison Oak. Control Poison Oak only in areas where it affects public safety (such as along trails). Clear Poison Oak on trails only.
- Using biological controls or other environmental methods to control invasive species. Work with the County Agricultural Commissioner's Office to determine the best method of removal.
- Considering the type of habitat area before providing new plantings. Do not adversely alter a habitat by providing inappropriate native vegetation.
- Replacing vegetation consistent with DFG ratios when impacting such environments.
- Growing plants from seed collected in the Elfin Forest in the county nursery.

Planting new vegetation in rows and equally set apart. Such plantings may not appear natural or provide the same habitat value.

The widespread removal of plants such as poison oak and blackberry. Such plants provide habitat and help keep visitors on established trails.

Planting of non-native plants.

Removing vegetation or performing grading without proper erosion control methods.

Table 8. Natural Area Guidelines (continued)

Projects Near Cultural Resources
(as affecting Chumash Middens)

Should

Should Avoid

Protect cultural resources by:

- Reviewing cultural resource locations prior to designing boardwalks and viewing platforms.
- Incorporating adequate mitigation as part of a project's design and construction.

Development, construction or grading near cultural resources unless adequate mitigation has been incorporated into the project's design.

Public exposure to sensitive cultural resources and/or sites without appropriate site protection.

Projects Near Sensitive Habitat

Should

Should Avoid

Protect sensitive resources by:

- Limiting site alterations and access into sensitive habitats.
- Maintaining setbacks and buffers in primarily a natural state (downslope area along Santa Paula between homes and ridge)
- Using erosion control methods when constructing boardwalks or viewing platforms near sensitive resources or the bay. Erosion controls should be left in place until disturbed areas are stabilized.

Alterations that will result in the need for hard bank stabilization (walls) or the removal of sections of riparian vegetation.

Construction or maintenance within or near sensitive habitats during mating and nesting season. Human intrusions, noise and other impacts should be considered before maintenance occurs in or near such areas.

Severely limit the use of herbicides, pesticides, or other poisons within or near sensitive habitat. When herbicides or other poisons are used, they should be hand applied and only to the species identified as appropriate to remove.

Projects which would individually or cumulatively significantly impact sensitive habitat. Redesign such projects to adequately mitigate impacts.

Excessive access into sensitive habitat areas. Plan access near such areas and monitor impacts. Close or limit access if impacts occur.

Definitions

Active recreation means recreation typical of urban parks, including play fields (such as soccer or softball), a swimming pool, tennis courts, picnic areas (group and individual), golf courses and golf-related facilities, recreation resorts, community centers, and similar facilities.

Adopt-a-Park program is a program used in parks and natural areas to maintain or provide services (such as trail maintenance, litter control, docent lead tours and similar activities). Such programs use community groups or volunteers to provide maintenance or services.

CEQA - California Environmental Quality Act.

CDF - California Department of Forestry.

CNPS - California Native Plant Society

Compatible activities and uses include operations, activities or uses in harmony with the site's natural resources. Such activities or uses do not change the character or feeling of the resource or the locality where the resource is located. Compatible uses emphasize humans as visitors, allowing human presence; however, this presence does not dominate the surroundings or change the site's character.

Cultural resources consist of prehistoric and historic archaeological deposits; structures of historic or archaeological importance; and Native American traditional ceremonial, ethnographic, and burial sites. Analysis of cultural resources can provide valuable information on the cultural heritage of local citizens and regional populations. Cultural resources are nonrenewable resources which are afforded protection by Federal, State and local laws, ordinances and guidelines.

Development refers to the creating or expanding of an area for one's benefit. Habitat development is the creation or expansion of a habitat for the benefit of the plants and animals. Residential, commercial and/or industrial development benefits humans. However, it also has negative impacts on natural areas such as the Elfin Forest.

DFG - California Department of Fish and Game.

Elfin Forest refers to the Elfin Forest Natural Area to be maintained in essentially a natural state for the purpose of providing natural resource protection.

Goals are very broad, often immeasurable statements of purpose.

Hazards include landslides, soil creep, flooding, potentially active or active earthquake faults, liquefaction areas, and wildland fires.

Implementing policy is a specific statement that guides decision making and suggests actions to be carried out in meeting objectives and accomplishing goals.

Infrastructure is a facility or facility improvement typically of a public nature such as roads, sidewalks, water and sewer pipelines, drainage ditches, retention basins and similar facilities.

MBSP Morro Bay State Park.

MDO Montaña de Oro State Park.

Midden. Area of extensive deposition of shells and artifacts giving evidence of long term usage by the Chumash.

MOU - memorandum of understanding.

Native plants are those plant species present in California before the arrival of European explorers/settlers and indigenous to the Elfin Forest.

Natural resources are resources which are native or inherent to the Elfin Forest such as the native plant communities, the riparian fringe bordering the Elfin Forest, cultural resources, and scenic resources.

Natural state means similar to how it would be found in nature (not altered appreciably by humans). Providing an essentially natural state would allow (a) some non-native vegetation to remain and (b) passive recreation (such as trails and viewing platforms).

Objectives are measurable goals or a specific condition which is an intermediate step in accomplishing a goal. Several objectives may relate to a goal.

Passive recreation means low intensity recreational activities such as multi-use trails, bird watching, nature photography, nature study and similar uses. Facilities may include trails (paved or dirt), boardwalks, individual picnic tables, benches, viewing platforms, interpretive areas, and similar uses depending on the sensitivity of the resource area.

Practical alternatives shall mean (a) the project's basic purpose could still be accomplished either through a redesign or a reduction in massing, scale, or density, or (b) if changes are required to the project's design, scale, or density, reasonable use of the subject property could still occur. Reasonable use of the property in the case of new development may include less development than indicated by zoning. In the case of additional development on an already developed site, reasonable development may mean that no additional development is reasonable considering site constraints and the existing development's scale, design or density.

Programs are actions which the County intends to take in pursuit of its goals and policies.

Restoration is the process of returning a resource to a more natural state. Restoration includes planting vegetation native to that area, removing wildlife barriers, removing debris and trash, removing invasive non-native plant species, and other similar activities. Restoration is not considered development.

Riparian vegetation means vegetation characteristic of creeks or their edge.

Ruderal vegetation means the non-native, weedy plants found in areas of disturbance.

Scenic resources are resources which have high aesthetic qualities such as hills and mountains; creeks and other wetland resources; areas containing major viewsheds or unique topography; and similar lands or areas.

Sensitive areas are areas which are typically considered sensitive by county, state or federal regulations. Such areas include (a) waterways (i.e. creek corridors, wetlands, river corridors, and lakes); (b) woodlands (such as riparian and oak); (c) cultural resources; (d) geologically unstable areas; (e) scenic resources and (f) sensitive habitats.

Sensitive species are plants or animals which meet the criteria noted in 1, 2, 3, 4, or 5 below:

1. Classed by U. S. Fish and Wildlife Service (USFWS) as:
 - a. Endangered: In danger of extinction throughout all or a significant portion of its range.
 - b. Threatened: Likely to become endangered without protection and management.
 - c. Proposed Endangered or Threatened: Presently being considered for endangered status.
 - d. Candidate, category 1: USFWS has sufficient data to support listing as endangered.

2. Classified by California Department of Fish and Game (DFG) as:
 - a. Endangered: Prospects for survival are in immediate jeopardy.
 - b. Threatened: Likely to become endangered without protection and management.
 - c. Species of Special Concern: Are not rare on a state scale but are found in limited locations.
3. Classified by California Native Plant Society (CNPS - plants only) as:
 - a. (List 1A) Plants of Highest Priority: Presumed extinct in California.
 - b. (List 1B) Plants of Highest Priority: Plants rare and endangered in California and elsewhere.
 - c. (List 2) Plants rare and endangered in California, common elsewhere.
4. A species not listed by USFWS, DFG or CNPS but can be shown to meet the criteria in CEQA Section 15380.
5. Habitat required to support the species listed in 1, 2, 3, or 4 above.

Significant means a substantial, or potentially substantial, adverse change in the environment (as defined by CEQA).

Site Alterations include any change or modification made to an area.

SLOCAS - San Luis Obispo County Archaeological Society.

Sound Soil Conservation Service Practices include minimizing impacts by (a) limiting grading to the smallest area possible, (b) limiting land exposure to the shortest practical amount of time, (c) replanting graded area to insure establishment of plant cover before the next rainy season; (d) natural contours to minimize cut and fill operations, and (e) creating grading contours that blend with the natural contours on site or look like contours that would naturally occur.

Staging Areas are assembly areas set aside for educational use during docent led activities.

Standards are a measurable rule establishing a level of quality or quantity that must be complied with or satisfied.

SWAP - The Los Osos/Morro Bay Chapter of Small Wilderness Area Preservation.

Tree - 6 inches in diameter 4-1/2 feet from ground.

USFWS - United States Fish and Wildlife Service.

Watch Program is a program that may be used to provide natural area security and education.

Such programs use neighbors or community groups to watch for and report illegal activities such as hunting and shooting.

Wetland means an area where one or more of the following attributes exist:

1. At least periodically, in years of normal rainfall, the plants supported by the land are predominantly hydrophytes (thrive only in water or saturated soil).
2. The substrate is predominantly undrained hydric soil as defined by the United States Soil Conservation Service.
3. The substrate is nonsoil and is at least periodically saturated with water or covered by shallow water at some time during the growing season of each year in years of normal rainfall.

Where less than all three of the attributes specified above exist, delineation of an area as wetland

August 1997

shall be supported by the demonstrable use of wetland area by wetland associated fish and wildlife resources, related biological activity, and wetland habitat values.

Wildlife corridor is a corridor used for wildlife migration. Such corridors may include drainage courses, but should also include upland areas. Drainage courses as wildlife movement areas tend to create long, narrow corridors, with the direction of wildlife flow dictated by the course of the stream. While this could be appropriate for some species (fish), upland corridors are equally important for species not normally associated with riparian habitat. Consideration must be given to the combination of vegetation, water sources, topography, barriers, and destinations.

Appendix A. Funding of Acquisition.

- June 1988. Assemblyman Eric Seastrand authored legislation to purchase and add 52 acres of the Elfin Forest to Morro Bay State Park.
- SWAP and San Luis Obispo County Parks collaborate on grant writing and fund raising to purchase the remaining 38 acres.
- April 1991 Asking price for remaining 38 acres is \$3 million.
- June 1992 A proposal for \$500,000 in funding from the California Department of Transportation Environmental Enhancement and Mitigation Program was ranked #1 in the state. The proposal is based on mitigation of the 1990 construction of a bridge over Los Osos Creek at Los Osos Valley Road and the planned widening of Los Osos Valley Road. Benefit is shown in terms of increased mitigation and enhancement, sustainability, public access for passive recreational use, opportunities for outdoor education, and economic value to the community.
- April 1993. An appraisal by Schenberger, Taylor, McCormick and Jecker, Inc. places a fair market value of \$1.6 million on the 38 acres.
- June 1993. SWAP has raised \$100,000 in matching funds.
- August 1993. The California Transportation Commission approves \$500,000 in funding from the Federal Transportation Enhancement Authority on the basis of regional and community enhancement, access to passive recreation, opportunities for outdoor education, potential for filling deficiencies in the regional transportation system for bicyclists and pedestrians, and plans for access in compliance with the Americans with Disabilities Act.
- The State Lands Commission agrees to fund \$100,000 toward the purchase and preservation of 6 acres of wetlands.
- December 1993 The Coastal Conservancy makes a grant of \$250,000 on the basis of protection of resources and provision of public access for passive recreation.
- April 1994. SWAP raises an additional \$84,000 in local matching funds. The San Luis Obispo County Board of Supervisors provides the necessary \$53,000 to complete the purchase. SWAP agrees to assist in the development and implementation of a natural resource management plan for the Elfin Forest Natural Area.
- June 1994. The remaining 38 acres are acquired by San Luis Obispo County Parks as an ecological reserve.

Appendix B. Animals of the Elfin Forest

Mammals

Virginia Opossum
Ornate Shrew
Broad-footed Mole
Brazilian Free-tailed Bat
Hoary Bat
Myotis Bat
Brush Rabbit
Black-tailed Jackrabbit
Western Gray Squirrel
Valley Pocket Gopher
California Pocket Mouse
Western Harvest Mouse
California Mouse
Deer Mouse
Brush Mouse
Dusky-footed Woodrat
California Vole
Grey Fox
Coyote
Raccoon
Striped Skunk
Long-Tailed Weasel
Bobcat
Black-Tailed Mule Deer

Amphibians

California Slender Salamander
Arboreal Salamander
Western Toad
Pacific Treefrog

Reptiles

California Legless Lizard
Southern Alligator Lizard
Coast Horned Lizard
Western Fence Lizard
Western Skink Lizard
Striped Racer
Red-sided Garter Snake
Gopher Snake
California King Snake

Birds

Loons

Red-throated Loon
Common Loon

Grebes

Pied-billed Grebe
Horned Grebe
Eared Grebe
Western Grebe
Clark's Grebe

Pelicans and Allies

American White Pelican
Brown Pelican
Double-Crested Cormorant

Hérons and Allies

American Bittern
Great Blue Heron
Great Egret
Snowy Egret
Tricolored Heron
Cattle Egret
Green-backed Heron
Black-crowned Night-Heron

Swans and Geese

Greater White-fronted Goose
Snow Goose
Brant
Canada Goose

Ducks

Green-winged Teal
Mallard
Northern Pintail
Cinnamon Teal
Northern Shoveler
Gadwall
American Wigeon
Eurasian Wigeon
Canvasback
Greater Scaup
Lesser Scaup
Surf Scoter
Common Goldeneye
Bufflehead
Red-Breasted Merganser
Ruddy Duck

Vultures

Turkey Vulture

Hawks and Allies

Osprey
White-tailed Kite
Northern Harrier
Sharp-shinned Hawk
Cooper's Hawk
Red-shouldered Hawk
Red-tailed Hawk

Appendix B. Animals of the Elfin Forest (continued)

Falcons

American Kestrel
Merlin
Peregrine Falcon

Quail

California Quail

Cranes, Rails and Allies

Black Rail
Virginia Rail
Sora
American Coot

Plovers

Black-bellied Plover
Semipalmated Plover
Killdeer

Stilts and Avocets

Black-necked Stilt
American Avocet

Sandpipers and Allies

Greater Yellowlegs
Lesser Yellowlegs
Willet
Spotted Sandpiper
Whimbrel
Long-billed Curlew
Marbled Godwit
Red Knot
Western Sandpiper
Least Sandpiper
Dunlin
Short-billed Dowitcher
Long-billed Dowitcher
Common Snipe

Gulls

Bonaparte's Gull
Ring-billed Gull
California Gull
Herring Gull
Western Gull
Glaucous-winged Gull

Terns and Skimmers

Caspian Tern
Royal Tern
Elegant Tern
Forster's Tern

Pigeons and Doves

Rock Dove
Mourning Dove
Cuckoos and Roadrunners
Greater Roadrunner

Owls

Barn Owl
Great-Horned Owl

Swifts

Vaux's Swift
White-throated Swift

Hummingbirds

Anna's Hummingbird
Rufous Hummingbird
Allen's Hummingbird

Kingfishers

Belted Kingfisher

Woodpeckers

Nuttall's Woodpecker
Downy Woodpecker
Hairy Woodpecker

Tryant Flycatchers

Western Flycatcher
Black Phoebe
Say's Phoebe
Western Kingbird

Swallows

Tree Swallow
Violet-green Swallow
Rough-winged Swallow
Cliff Swallow
Barn Swallow

Jays, Magpies and Crows

Western-Jay
American Crow

Titmice and Bushtits

Chestnut-backed Chickadee
Plain Titmouse
Bushtit

Nuthatches and Creepers

White-breasted Nuthatch

Wrens

Bewick's Wren
House Wren
Marsh Wren

Kinglets and Gnatcatchers

Ruby-crowned Kinglet
Blue-gray Gnatcatcher

Thrushes and Allies

Western Bluebird
Swainson's Thrush
Hermit Thrush
American Robin

Appendix B. Animals of the Elfin Forest (continued)

Wrentits

Wrentit

Thrashers and Allies

Northern Mockingbird

California Thrasher

Waxwings

Cedar Waxwing

Shrikes

Loggerhead Shrike

Starlings

European Starling

Vireos

Hutton's Vireo

Warbling Vireo

Wood Warblers

Orange-crowned Warbler

Yellow Warbler

Yellow-rumped Warbler

Townsend's Warbler

Common Yellowthroat

Wilson's Warbler

Tanagers

Western Tanager

Grosbeaks and Allies

Black-headed Grosbeak

Sparrows and Allies

Spotted Towhee

California Towhee

Lark Sparrow

Savannah Sparrow

Fox Sparrow

Song Sparrow

Lincoln's Sparrow

Golden-crowned Sparrow

White-crowned Sparrow

Dark-eyed Junco

Blackbirds and Allies

Red-winged Blackbird

Brewer's Blackbird

Brown-headed Cowbird

Hooded Oriole

Bullock's Oriole

Finches

Purple Finch

House Finch

American Goldfinch

Lesser Goldfinch

Old World Sparrows

House Sparrow

Appendix C. Sensitive Animal Species

CLASS: MAMMALIA
ORDER: CARNIVORA Carnivores
FAMILY: PROCYONIDAE - Racoons and Relatives
Ringtail - *Bassariscus astutus* CP

CLASS AVES
ORDER: PELICANIFORMES-Tropic birds, Pelicans, and Relatives
FAMILY: PELECANIDAE - Pelicans
Brown Pelican - *Pelecanus occidentalis* FE CE CP
California Brown Pelican - *Pelecanus occidentalis californicus* FE CE CP

ORDER: FALCONIFORMES - Vultures, Hawks, and Falcons
FAMILY: ACCIPITRIDAE - Hawks, Old World Vultures, and Harriers
Osprey - *Pandion haliaetus* FS
FAMILY: FALCONIDAE - Caracaras and Falcons
Peregrine Falcon - *Falco peregrinus* FE CE CP

ORDER: GRUIFORMES - Cranes, Rails, and Relatives
FAMILY: RALLIDAE - Rails, Gallinules, and Coots
Black Rail - *Laterallus jamaicensis* CR CP

STATUS LEGEND

CE Designated an endangered species by the California Fish and Game Commission
CR Designated a rare species by the California Fish and Game Commission
CP Fully protected species in California
FE Designated an endangered species by the federal government
FS Forest Service sensitive

Appendix D. Plants of the Elfin Forest

From Holland, V.L. 1995. A Botanical Survey of the El Moro Elfin Forest. Prepared for The County of San Luis Obispo Department of Planning and Building.

TREES

- Alnus rhombifolia*white alder
BETULACEAE
- Myrica californica*California wax-myrtle
MYRICACEAE
- Pinus radiata*Monterey Pine
PINACEAE
- Platanus racemosa*sycamore
PLATANACEAE
- Populus balsamifera* var. *trichocarpa*.....black cottonwood
SALICACEAE
- Quercus agrifolia*coast live oak
FAGACEAE
- Salix lasiolepis*arroyo willow
SALICACEAE
- Salix lucida*.....yellowwillow
SALICACEAE

SHRUBS

- Adenostoma fasciculatum*chamise
ROSACEAE
- Arctostaphylos morroensis*Morro manzanita
ERICACEAE
- Artemisia californica*California sagebrush
ASTERACEAE
- Baccharis pilularis*coyote bush
ASTERACEAE
- Ceanothus cuneatus*buckbrush
RHAMNACEAE
- Croton californicus*Croton
EUPHORBIACEAE
- Eriastrum densifolium*.....wooly gilia
POLEMONIACEAE
- Ericameria ericoides*false heather
ASTERACEAE [*Haplopappus ericoides*]
- Eriogonum parvifolium*coastal buckwheat
POLYGONACEAE

Appendix D. Plants of the Elfin Forest (continued)

- Eriophyllum confertiflorum*Common golden yarrow
 ASTERACEAE
- Eriophyllum staechadifolium*common golden yarrow
 ASTERACEAE
- Helianthemum scoparium*Rush-rose
 CYSTACEAE
- Isocoma menziesii* var. *vernoniodes*.....goldenbus
 ASTERACEAE
- Lessingia filaginifolia*California aster
 ASTERACEAE [*Corethrogyne filaginifolia*]
- Lotus junceus*rush deerweed
 FABACEAE
- Lotus scoparius*deerweed
 FABACEAE
- Lupinus arboreus*tree lupine
 FABACEAE
- Lupinus chamassonis*coastal silver lupine
 FABACEAE
- Mimulus aurantiacus*sticky monkey-flower
 SCROPHULARIACEAE
- Myrica californica*California wax-myrtle
 MYRICACEAE
- Prunus fasciculata* var. *punctata*dune almond
 ROSACEAE
- Prunus ilicifolia*holly-leaved cherry
 ROSACEAE
- Quercus agrifolia*coast live oak
 FAGACEAE
- Rhamnus californica*California coffeeberry
 RHAMNACEAE
- Rhamnus crocea*redberry
 RHAMNACEAE
- Ribes menziesii*bristly gooseberry
 GROSSULARIACEAE
- Ribes speciosum*fuchsia-flowered gooseberry
 GROSSULARIACEAE
- Ribes* spp.fuchsia-flowered gooseberry
 GROSSULARIACEAE
- Rosa californica*California wild rose
 ROSACEAE
- Rubus ursinus*blackberry
 ROSACEAE
- Salix lasiolepis*arroyo willow
 SALICACEAE
- Salvia mellifera*black sage
 LAMIACEAE
- Solanum douglasii*black nightshade
 SOLANACEAE
- Solanum xanti*purple nightshade
 SOLANACEAE
- Toxicodendron diversilobum*poison-oak
 ANACARDIACEAE [*Rhus diversiloba*]

Appendix D. Plants of the Elfin Forest (contined)

HERBS AND GROUND COVER

<i>Abronia maritima</i>	purple sand-verbena
NYCTAGINACEAE	
<i>Abronia umbellata</i>	beach sand-verbena
NYCTAGINACEAE	
<i>Achillea millefolium</i>	yarrow
ASTERACEAE	
<i>Amsinckia spectabilis</i>	fiddleneck
BORAGINACEAE	
<i>Anagallis arvensis</i>	scarlet pimpernel
PRIMULACEAE	
<i>Anaphalis margaritacea</i>	pearly everlasting
ASTERACEAE	
<i>Asparagus aperagoides</i>	smilax
LILIACEAE	
<i>Astragalus pomonensis</i>	locoweed, milk-vetch
FABACEAE;	
<i>Atriplex patula</i>	saltbush
CHENOPODIACEAE	
<i>Atriplex watsonii</i>	saltbush
CHENOPODIACEAE	
<i>Avena barbata</i>	slender wild oats
POACEAE	
<i>Avena fatua</i>	common wild oats
POACEAE	
<i>Brachypodium distachyon</i>	false brome
POACEAE	
<i>Brassica</i> spp.	mustard
BRASSICACEAE	
<i>Bromus carinatus</i>	brome grass
POACEAE	
<i>Bromus diandrus</i>	ripgut brome
POACEAE	
<i>Bromus hordaceus</i>	soft chess brome
POACEAE [<i>Bromus mollis</i>]	
<i>Bromus madritensis</i> var. <i>rubens</i>	red brome
POACEAE [<i>Bromus rubens</i>]	
<i>Calystegia macrostegia</i>	wild morning-glory
CONVOLVULACEAE	
<i>Camissonia</i> spp.	sun cups
ONAGRACEAE	
<i>Cardamine oligosperma</i>	bitter-cress
BRASSICACEAE	
<i>Cardamine californica</i>	bitter-cress
BRASSICACEAE	
<i>Cardaria draba</i>	hoary cress
BRASSICACEAE	
<i>Cardionema ramosissimum</i>	sand-mat
ILLECEBRACEAE	
<i>Carduus pycnocephalus</i>	Italian thistle

Appendix D. Plants of the Elfin Forest (continued)

ASTERACEAE	
<i>Carex</i> spp.	sedge
CYPERACEAE	
<i>Carpobrotus chilensis</i>	Chilean ice-plant, sea-fig
AIZOACEAE	
<i>Carpobrotus edulis</i>	ice-plant, Hottentot-fig
AIZOACEAE	
<i>Castilleja</i> spp.	owl's clover
SCROPHULARIACEAE	
<i>Centaurea melitensis</i>	Tocolote
ASTERACEAE	
<i>Centaurea solstitialis</i>	Yellow star thistle
ASTERACEAE	
<i>Cerastium glomeratum</i>	chickweed
CARYOPHYLLACEAE	
<i>Chenopodium californicum</i>	California goosefoot
CHENOPODIACEAE	
<i>Chorizanthe</i> spp.	spineflower
POLYGONACEAE	
<i>Cirsium vulgare</i>	thistle
ASTERACEAE	
<i>Cirsium occidentale</i> var. <i>occidentale</i>	cobwebby thistle
ASTERACEAE	
<i>Claytonia perfoliata</i>	miner's lettuce
PORTULACAEAE [<i>Montia perfoliata</i>]	
<i>Conicosia pugioniformis</i>	slender-leafed ice plant
AIZOACEAE [<i>Conicosia elongata</i>]	
<i>Cotula coronopifolia</i>	brass buttons
ASTERACEAE	
<i>Crassula connata</i>	pigmy-weed
CRASSULACEAE [<i>Crassula erecta</i> , <i>Tillaea erecta</i>]	
<i>Croton californicus</i>	Croton
EUPHORBIACEAE	
<i>Cryptantha clevelandii</i>	cryptantha
BORAGINACEAE	
<i>Cuscuta salina</i>	saltmarsh dodder
CONVOLVULACEAE	
<i>Cynodon dactylon</i>	Bermuda grass
POACEAE	
<i>Daucus pusillus</i>	Wild carrot
APIACEAE	
<i>Descurainia pinnata</i>	tansy mustard
BRASSICACEAE	
<i>Dichelostemma capitatum</i>	blue-dicks
AMARYLLADACEAE [<i>Dichelostemma pulchellum</i>]	
<i>Distichlis spicata</i>	saltgrass
POACEAE	
<i>Dudleya lanceolata</i>	dudleya
CRASSULACEAE	
<i>Ehrharta calycina</i>	Vet grass, African sand grass
POACEAE [<i>Ehrharta arenaria</i>]	
<i>Eleocharis</i> spp.	spikerush
CYPERACEAE	
<i>Epilobium ciliatum</i>	willow-herb

Appendix D. Plants of the Elfin Forest (continued)

- ONAGRACEAE [syn. *E. watsonii*]
Equisetum telmateiahorsetail, scouring-rush
 EQUISETACEAE
Eriastrum densifolium.....wooly gilia
 POLEMONIACEAE
Eriophyllum multicaulewooly daisy
 ASTERACEAE
Erodium botrysstorkbill filaree
 GERANIACEAE
Erodium cicutariumred-stem filaree
 GERANIACEAE
Erysimum insulare ssp. *suffrutescens*Suffrutescent wallflower
 BRASSICACEAE [*Erysimum suffrutescens*]
Eschscholzia californicaCalifornia poppy
 PAPAVERACEAE
Euphorbia peplusPetty spurge
 EUPHORBIACEAE
Eucrypta chrysanthemifolia.....eucrypta
 HYDROPHYLLACEAE
Festuca californica.....California fescue
 POACEAE
Festuca arundinaceatall fescue
 POACEAE
Festuca pratensismeadow fescue
 POACEAE
Foeniculum vulgareFennel
 APIACEAE
Frankenia salinaalkali heath
 FRANKENIACEAE [syn. *Frankenia grandifolia*]
Galium nuttallii.....bedstraw
 RUBIACEAE
Geranium dissectum.....cut-leaf geranium
 GERANIACEAE
Gnaphalium bicolorEverlasting
 ASTERACEAE
Gnaphalium californicum.....California everlasting
 ASTERACEAE
Gnaphalium ramosissimum.....pink everlasting
 ASTERACEAE
Gnaphalium spp.....everlasting
 ASTERACEAE
Hesperocnide tenella.....dwarf stinging nettle
 URTICACEAE
Heterotheca grandiflora.....telegraph weed
 ASTERACEAE
Hirschfeldia incanaperennial mustard
 BRASSICACEAE
Hordeum murinumfoxtail barley
 POACEAE [*Hordeum leporinum*]
Horkelia cuneata var. *cuneata*.....horkelia
 ROSACEAE
Hydrocotyle verticillata.....marsh pennywort
 APIACEAE
Hypochoeris glabrasmooth cat's ear

Appendix D. Plants of the Elfin Forest (contined)

	ASTERACEAE	
<i>Jaumea carnosa</i>		fleshy jaumea
	ASTERACEAE	
<i>Juncus acutus</i>		giant rush
	JUNCACEAE	
<i>Juncus bufonius</i>		toad rush
	JUNCACEAE	
<i>Juncus</i> spp.		rush
	JUNCACEAE	
<i>Lamarckia aureum</i>		goldentop
	ASTERACEAE	
<i>Layia hieracoides</i>		layia
	ASTERACEAE	
<i>Layia platyglossa</i>		tidy tips
	ASTERACEAE	
<i>Lepidium lasiocarpum</i>		pepper-cress
	BRASSICACEAE	
<i>Limonium californicum</i>		sea lavender
	PLUMBAGINACEAE	
<i>Lobularia maritima</i>		Sweet alyssum
	BRASSICACEAE	
<i>Lolium perenne</i>		ryegrass
	POACEAE [<i>Lolium multiflorum</i>]	
<i>Lotus corniculatus</i>		bird's foot trefoil
	FABACEAE	
<i>Lupinus bicolor</i>		annual bicolor lupine
	FABACEAE	
<i>Madia sativa</i>		coast tarplant
	ASTERACEAE	
<i>Malvia parviflora</i>		cheeseweed, mallow
	MALVACEAE	
<i>Marah fabaceas</i>		man-root, wild cucumber
	CUCURBITACEAE	
<i>Medicago polymorpha</i>		bur-clover
	FABACEAE	
<i>Melilotus albus</i>		white sweet-clover
	FABACEAE	
<i>Melilotus indica</i>		yellow sweet-clover
	FABACEAE	
<i>Mesembryanthemum crystallinum</i>		crystalline iceplant
	AIZOACEAE	
<i>Mucronea californica</i>		California spineflower
	POLYGONACEAE	
<i>Oenanthe sarmentosa</i>		marsh-parsley
	APIACEAE	
<i>Orobanche californica</i>		broomrape
	OROBANCHEACEAE	
<i>Paeonia californica</i>		peony
	RANUNCULACEAE	
<i>Parietaria hespera</i>		pellitory
	APIACEAE	
<i>Phacelia</i> spp.		phacelia
	HYDROPHYLLACEAE	
<i>Pholistoma auritum</i>		fiesta flower

Appendix D. Plants of the Elfin Forest (continued)

	HYDROPHYLLACEAE	
<i>Piperia elegans</i>		rein orchid
	ORCHIDACEAE	
<i>Plagiobothrys nothofulvus</i>		popcorn flower
	BORAGINACEAE	
<i>Plantago lanceolata</i>		plantain
	PLANTAGINACEAE	
<i>Polycarpon depressum</i>		polycarpon
	CARYOPHYLLACEAE	
<i>Polygonum aviculare</i>		knotweed
	POLYGONACEAE	
<i>Polygonum</i> spp.		smartweed
	POLYGONACEAE	
<i>Potentilla anserina</i>		silverleaf
	ROSACEAE [syn. <i>Potentilla egedii</i>]	
<i>Pteridium aquilinum</i>		bracken fern
	DENNSTAEDTIACEAE	
<i>Raphanus sativus</i>		wild radish
	BRASSICACEAE	
<i>Rumex acetosella</i>		sour-dock [<i>Rumex angiocarpus</i>]
	POLYGONACEAE	
<i>Rumex crispus</i>		curly dock
	POLYGONACEAE	
<i>Rumex</i> spp.		dock
	POLYGONACEAE	
<i>Salicornia virginica</i>		pickleweed
	CHENOPODIACEAE	
<i>Sanicula arguta</i>		sanicle
	APIACEAE	
<i>Scirpus acutus</i>		tule, bulrush
	CYPERACEAE	
<i>Scirpus americanus</i>		Americasn threesquare
	CYPERACEAE[syn. <i>Scirpus olneyi</i>]	
<i>Scirpus californicus</i>		tule, bulrush
	CYPERACEAE	
<i>Scirpus cernuus</i>		dwarf bulrush
	CYPERACEAE	
<i>Scirpus microcarpus</i>		small-headed bulrush
	CYPERACEAE	
<i>Scirpus robustus</i>		bulrush
	CYPERACEAE	
<i>Scrophularia californica</i>		figwort
	SCROPHULARIACEAE	
<i>Scutellaria tuberosa</i>		skullcap
	LAMIACEAE	
<i>Senecio californicus</i>		groundsel
	ASTERACEAE	
<i>Seteria viridis</i>		green bristlegrass
	POACEAE	
<i>Silene gallica</i>		Windmill pink
	CARYOPHYLLACEAE	
<i>Silene laciniata</i>		Indian pink
	CARYOPHYLLACEAE	
<i>Solanum douglasii</i>		black nightshade

Appendix D. Plants of the Elfin Forest (continued)

SOLANACEAE	
<i>Solanum xanti</i>	purple nightshade
SOLANACEAE	
<i>Solidago californica</i>	California goldenrod
ASTERACEAE	
<i>Sonchus asper</i>	prickly sow-thistle
ASTERACEAE	
<i>Sonchus oleraceus</i>	common sow-thistle
ASTERACEAE	
<i>Sorghum halepense</i>	Johnsongrass
POACEAE	
<i>Spergularia marina</i>	maritime sand-spurry
CARYOPHYLLACEAE	
<i>Stachys bullata</i>	hedge-nettle
LAMIACEAE	
<i>Stephanomeria tenuifolia</i>	wire lettuce
ASTERACEAE	
<i>Stephanomeria virgata</i>	twiggy wreath plant
ASTERACEAE	
<i>Triglochin concinna</i>	arrowgrass
JUNCAGINACEAE	
<i>Typha latifolia</i>	cattail
TYPHACEAE	
<i>Urtica dioica</i>	stinging nettle
URTICACEAE	
<i>Urtica urens</i>	dwarf stinging nettle
URTICACEAE	
<i>Vulpia myuros</i>	rattail fescue
POACEAE [<i>Festuca megalura</i> , <i>F. myuros</i>]	
<i>Vulpia octoflora</i>	six-weeks fescue
POACEAE [<i>Festuca megalura</i> , <i>F. myuros</i>]	
<i>Zostera marina</i>	eel grass, ribbongrass
ZOSTERACEAE	

Appendix E. Sensitive Plant Species

SHRUBS

ERICACEAE

Arctostaphylos morroensis - Morro manzanita - MB

ROSACEAE

Prunus fasciculata var. *punctata* - Dune almond - CNPS4

TREES

FAGACEAE

Quercus agrifolia var. *frutescens* - Multi-trunked pygmy oak - SLO

HERBS and GROUND COVER

BRASSICACEAE

Erysimum suffrutescens var. *lompocense* - San Luis Obispo Wallflower - CNPS4

POLYGONACEAE

Rumex occidentalis var. *fenestrata* - Western Dock - SLO

LICHEN

Sulcaria isidiifera - Lichen FE

STATUS LEGEND

- | | |
|-------|--|
| SLO | Limited distribution within San Luis Obispo County |
| MB | Distribution limited to area between Morro Bay and Hazard Canyon in Montana de Oro State Park; under study by California Department of Fish and Game |
| CNPS4 | California Native Plant Society List 4 Plants of Limited Distribution |
| FE | Designated an endangered species by the federal government |

Appendix F. Sample Monitoring Form

Elfin Forest Natural Area

Date Evaluated: _____ Date of Last Evaluation: _____

Person Conducting the Evaluation. If not a park ranger, qualifications should be attached:

Recommendations Overall: _____

Recommendations Regarding Specific Sections: _____

Recommended Date Next Evaluation: _____

Indicate why if an earlier or later date is set. _____

PROVIDE PHOTOS DOCUMENTING THE SITE'S CONDITION

Appendix G. Applicable Laws, Regulations and Policies

Federal, State and Local Laws for Protection of Plants and Animals			
Law	Jurisdiction (Resource Protected)	Protection Afforded	Comments
<p>Federal Endangered Species Act of 1973, as amended (Public Law 93-295)</p>	<p>Federal, United States Fish & Wildlife Service (USFWS) (Plants & Animals)</p>	<p>Species protected by this law include plants and animals that are listed as "endangered" or "threatened" by the Federal government. Species that are candidates for listing are not afforded protection by the Act; however, the USFWS encourages project proponents to consider them in their long-range environmental planning.</p>	<p>Federally listed and candidate plant species that have been reported to occur, or could potentially occur, in the region of the Elfin Forest are included in Appendix C and E.</p>
<p>Clean Water Act, Section 404, Executive Order 11990</p>	<p>Federal, Army Corps of Engineers (ACOE) (Wetlands)</p>	<p>If construction or grading activities result in the discharge of fill materials within watercourses, waterbodies, and/or wetlands, such excavation activities within "waters" will require consultation with the ACOE. An "Individual Permit" or an official letter from the ACOE stating the proposed action is authorized under the conditions of existing general permits ("Nationwide Permits") will likely be required.</p>	<p>If a proposed action jeopardizes the existence of a federally listed species and/or its habitat, permit issuance or denial by the ACOE will be subject to a "Biological Opinion" rendered by the USFWS.</p>
<p>Fish and Game Code, Section 1601-1603</p>	<p>State, California Department of Fish & Game (DFG) (Plants & Animals)</p>	<p>Streambed alterations, watercourses or waterbody embankment alterations, the removal of creek or lake vegetation (typically riparian vegetation), and/or the diversion of water flow from a creek or lake may require a "Streambed or Lake Alteration Agreement" by the DFG. DFG's concern is whether such actions may impact the habitats of fish and wildlife resources.</p>	<p>Watercourses and/or bodies including rivers, lakes and creeks may be considered wildlife habitat by DFG. Consultation with the DFG prior to construction, grading, or vegetation removal within or adjacent to watercourses is required.</p>

**Federal, State and Local Laws
for Protection of Plants and Animals (continued)**

Law	Jurisdiction (Resource Protected)	Protection Afforded	Comments
<p>Land Use Element, County of San Luis Obispo General Plan</p>	<p>County Planning (Wildlife, Aesthetics, Geology)</p>	<p>The Elfin Forest Natural Area is designated in the Land Use Element of the San Luis Obispo General Plan for the Estero Bay Planning Area as a "white hole" area that will require formal designation by the California Coastal Commission prior to being rezoned to allow an open space designation.</p>	
<p>County Policy, County of San Luis Obispo Environmental Review Guidelines and Rural Tree Ordinance</p>	<p>County Planning (Oak Woodlands)</p>	<p>Oak woodlands are considered sensitive by the County of San Luis Obispo primarily due to their limited acreage, high wildlife value, gradual loss as a result of development and low regeneration rates. Impacts to oak woodlands in San Luis Obispo County typically require stringent review during the planning process. San Luis Obispo County's tree ordinance is applicable to the Elfin Forest Natural Area.</p>	