POINT SUR STATE HISTORIC PARK
PRELIMINARY GENERAL PLAN/DRAFT EIR

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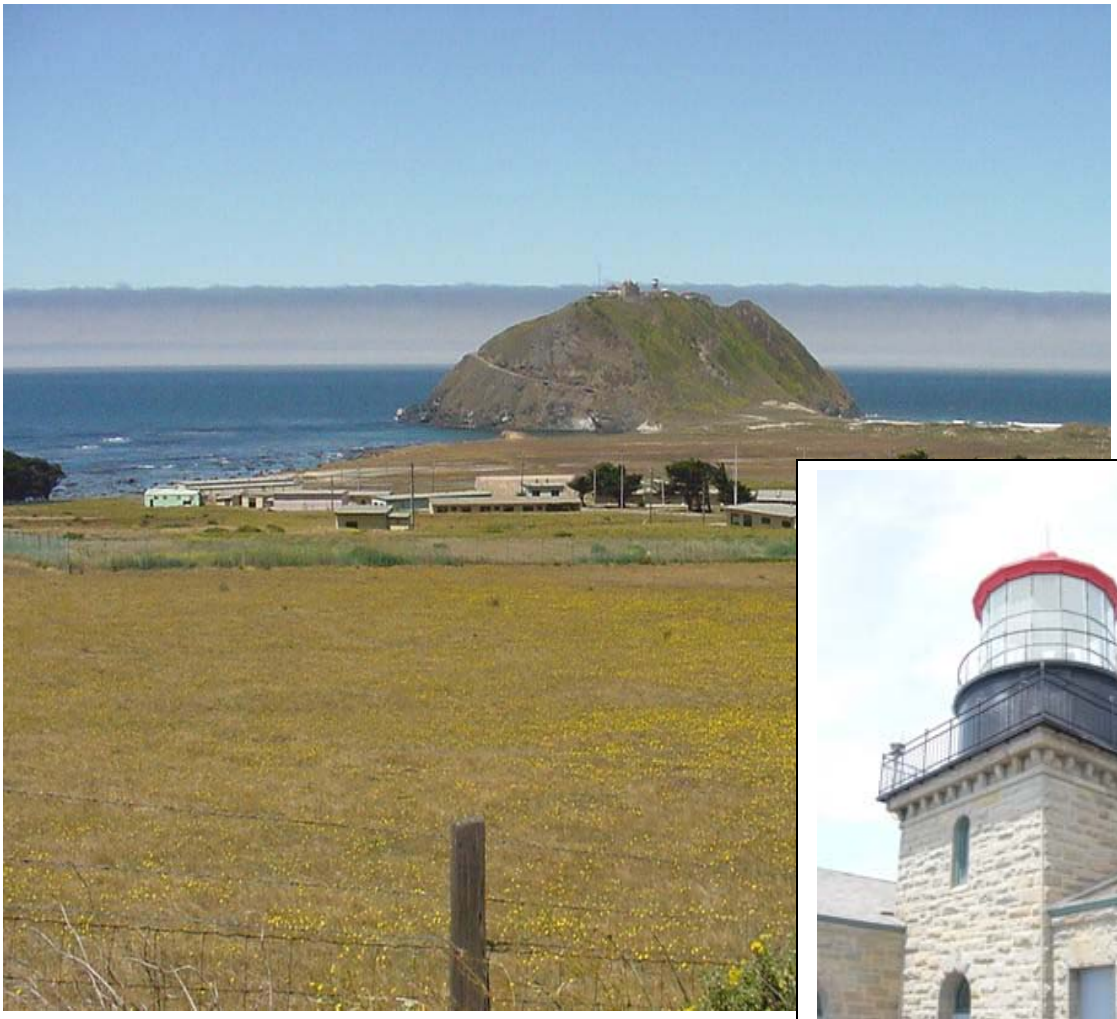
Prepared by California State Parks Central Service Center • Monterey California • February 2004



A view of Point Sur State Historic Park

The Lantern Room

Point Sur State Historic Park Preliminary General Plan/Draft EIR
Department of Parks and Recreation

Executive Summary

Point Sur State Historic Park (SHP) is located on the coast of Monterey County, approximately 23 miles south of the City of Monterey. The Park is currently part of the State Park System's Monterey District. Point Sur SHP is comprised of four parcels including the former Naval Facility (NAVFAC), the Light Station complex (which includes two beaches), the Schoolhouse site, and the Spring site. Associated with the Park are two easements: the road between the Schoolhouse site and the Light Station parcels and the road between Highway 1 and the water storage tanks. This Preliminary General Plan/Draft EIR is focused on the former Naval Facility and the Light Station complex.

Point Sur's distinctive rock, referred to as Moro Rock, has been a navigational landmark on California's central coast for many years. Several renowned shipwrecks have occurred off of the coast nearby. To help mariners navigate this treacherous section of coastline, a lighthouse was established on Moro Rock

in 1889. Today, a functioning Lighthouse still sits on the rock above the surf. The Light Station has remained in continuous operation from 1889 to the present.

Today, Point Sur SHP includes the Light Station buildings (aside from the Lighthouse itself which is owned by the U.S. Coast Guard). The buildings are being preserved and restored as one of the most complete light station complexes in California. The Park contains a Cold War era Naval submarine listening station, the former U.S. Naval Facility Point Sur (NAVFAC), which officially opened in 1958.

The General Plan establishes an overall long-range purpose and vision for the future of Point Sur SHP. Specific goals and supporting guidelines further clarify the vision for the future of the Park. The goals and guidelines are designed to rectify the currently identified critical issues, described below, while providing a solid foundation for continued resource protection, preservation, and rehabilitation, as well as facility development and resource interpretation at the Park. They also serve as design and implementation guides for subsequent management and development plans within the three planning areas of the Park Unit: Light Station, NAVFAC, and the Beaches:

Declaration Of Purpose

The purpose of Point Sur State Historic Park is to preserve a rare example of an intact and self-sufficient late nineteenth century light station and to utilize and tell the story of one of the few remaining self-sufficient submarine listening stations on the west coast. These facilities present a continuum of maritime and military history at Point Sur. The significant aspects of this history and the Park's unique natural, cultural, and scenic resources will be preserved, protected, and interpreted for visitor enjoyment and education.

The General Plan does not provide a detailed program of specific development or management, but it sets broader goals for the Park's management, resource protection, and provisions for public use. The General Plan is designed as a dynamic document and a programmatic Environmental Impact Report (EIR) that allows managers the opportunity to incorporate newly emerging technologies and improved management concepts for resolving current issues, along with the ability to provide adequate direction for resolving issues that may arise in the future. This General Plan is, by necessity, visionary in nature, although much of its content is driven by currently identified issues.

ISSUES OF KNOWN CONCERN

In order to preserve and interpret the historic Light Station complex and NAVFAC site, the park will allow for public access to both properties. The main visitor access and parking will be provided at the NAVFAC site, where some remaining buildings will be adapted for interpretation, DPR employee housing and administrative purposes. The Park's sensitive natural resources will be preserved and interpreted along with its aesthetic resources.

- Preserve and interpret significant historic, cultural, and natural features;
- Preserve and enhance the unique scenic environment at Point Sur SHP;
- Establish a main Park entrance at the NAVFAC to accommodate visitors and enhance interpretive opportunities;
- Enhance the Highway 1 viewshed and open space corridor, while keeping existing landscape screening features of the NAVFAC;
- Provide safe ingress and egress to and from Highway 1 as well as parking and a tour staging area at the NAVFAC to accommodate Light Station tours as well as self-guided tours of the NAVFAC;
- Provide limited beach access, while preserving and interpreting significant plant and animal life and habitats.

APPROACH TO THE GENERAL PLAN

The two main sections of the General Plan are **The Park Summary** and **The Plan**. **The Park Summary** provides an overview of the Park's attributes. It describes existing land uses, natural and cultural resource values, current recreational and interpretive facilities and activities, and external influences that affect planning for the Park. Additionally, the section **Issues and Analysis** describes the planning issues identified at the beginning of the general planning process, as well as those that were clarified through public involvement.

The Plan section identifies the goals and guidelines that were developed to address or resolve the issues during the planning process. Some goals and guidelines apply Park-wide, while others relate to specific areas identified by the planning team. Comprehensive management plans for natural and cultural resources are proposed. Planning areas have been identified which will guide Park-wide land use decisions and visitor use areas.

Following **The Plan**, **The Environmental Analysis** section, required by the California Environmental Quality Act, identifies the potentially significant impacts of implementing the General Plan and provides general mitigation measures for a first tier of environmental review. A more detailed level of environmental analysis is applied when more specific projects, facility design, or resource management plans are proposed. The analysis in this General Plan document focuses on the environmental effects of the preferred alternative as discussed in **The Plan** section.

For each of the potential impacts identified, **The Plan** guidelines serve as mitigation and when implemented with additional mitigation measures, when necessary, would maintain potential impacts at a less-than-significant level. Specific projects would undergo subsequent CEQA review in the future as appropriate. The Environmental Analysis section also discusses alternatives to **The Plan**, which is presented as the preferred alternative.

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INTRODUCTION

Point Sur SHP view from Highway 1

INTRODUCTION TO THE PARK

Point Sur State Historic Park (SHP) is located on the coast of Monterey County, approximately 23 miles south of the City of Monterey (see Figure 1, Page 1-3). Organizationally, the Park is currently part of the State Park System's Monterey District. The Park is comprised of four parcels including the former Naval Facility (NAVFAC), the Light Station complex, the Schoolhouse site, and the Spring site. Associated with the Park Unit are two road easements: between the Schoolhouse site and the Light Station parcels; Highway 1 and a water storage tank site (see Figure 2, Page 1-4). This General Plan is focused on the NAVFAC, the Light Station complex, and the Schoolhouse site.

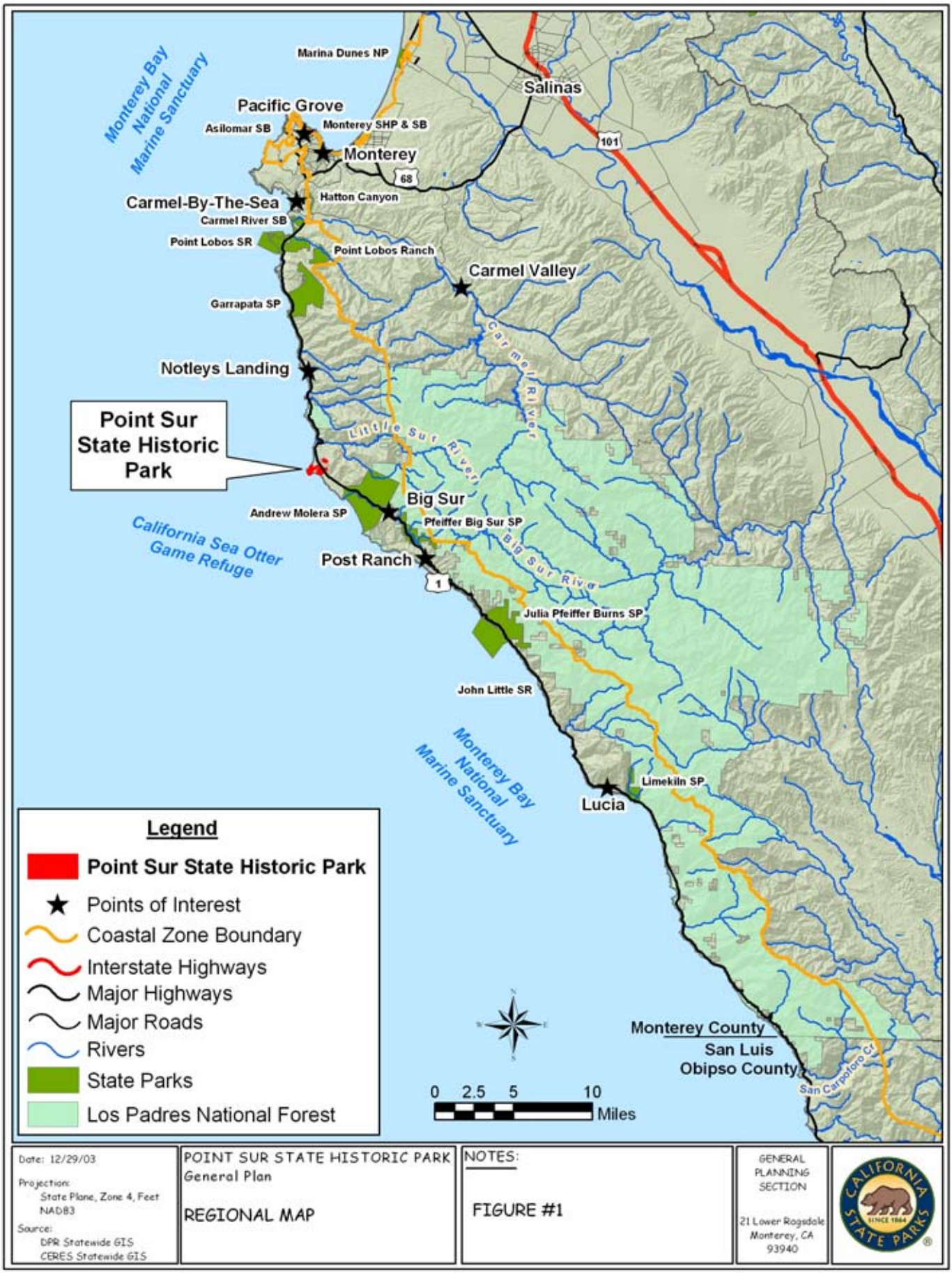
Point Sur's distinctive rock, referred to as Moro Rock, has been a navigational landmark on California's central coast for many years. Several renowned shipwrecks have occurred off of the coast nearby. To help mariners navigate this treacherous section of coastline, a lighthouse was established on the Moro Rock in 1889. Today, a functioning Lighthouse still sits on the rock above the surf. The Light Station remained in continuous operation from 1889 to the present. Prior to the Lighthouse being automated, up to four lighthouse keepers and their families lived on the rock at one time.

Today, Point Sur SHP encompasses the remaining Light Station buildings (aside from the Lighthouse itself which is owned by the U.S. Coast Guard). The buildings are being preserved and restored as one of the most complete light station complexes in California. The Park contains a Cold War era Naval submarine listening station, the former U.S. Naval Facility Point Sur (NAVFAC), which officially opened in 1958. During its peak operation, this Cold War era submarine listening station housed over 160 civilian and naval personnel.

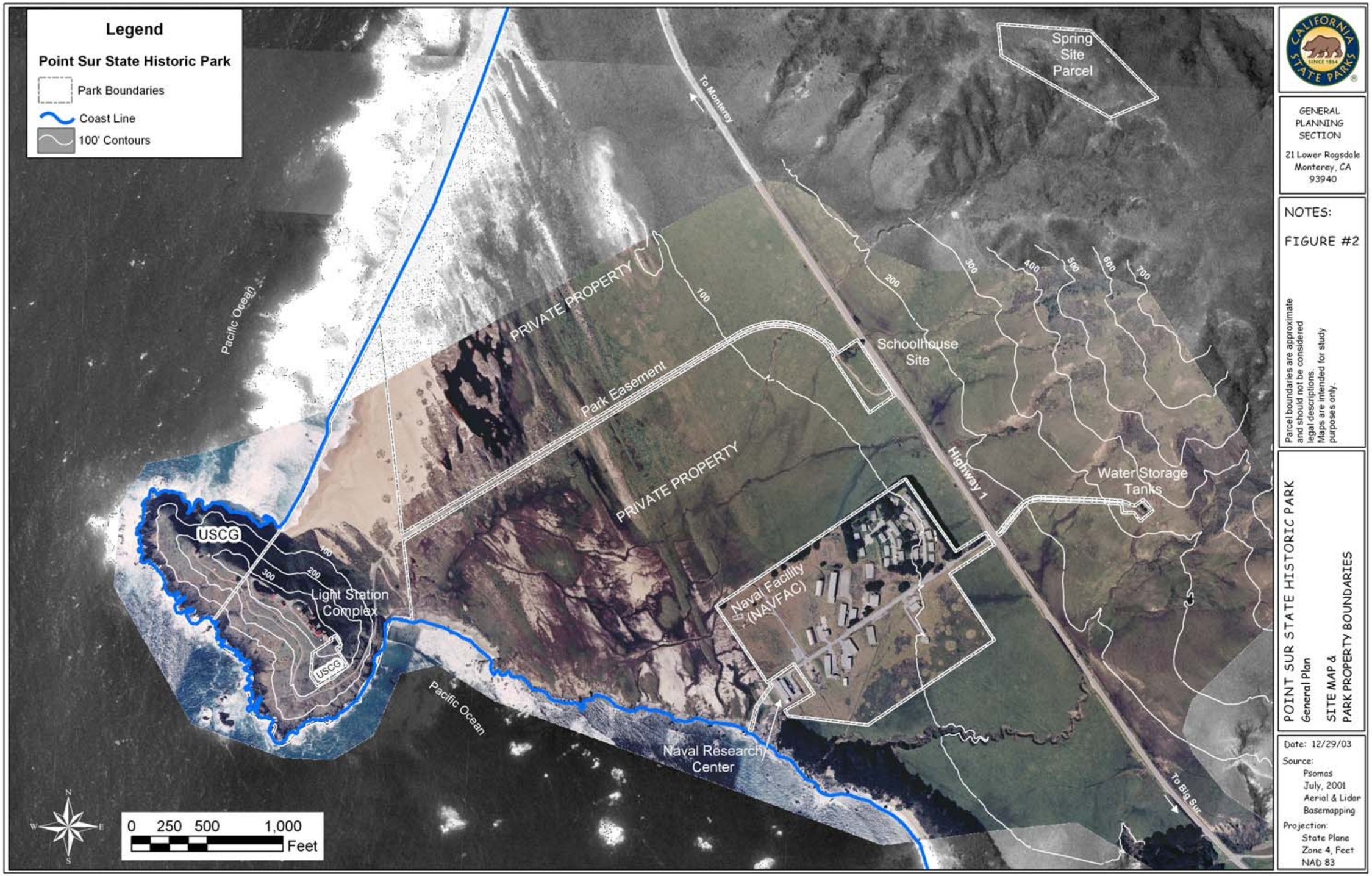
Purpose Acquired

Point Sur SHP was first acquired by the State of California in 1984 to preserve and protect a self-sufficient, late nineteenth century light station in California with the full complement of its associated facilities. In 1980, this complex was listed on the National Register of Historic Places, and it was identified as an historic district in 1990. Situated on a prominent coastal morro, the site of this historic complex offers the visitor dramatic coastal vistas and good opportunities to view both resident and migratory marine mammals. In addition to the Park's significant cultural resources, it contains habitat for sensitive plants and animals.

The original acquisition included 24.58 acres on and around the base of the rock, known as Moro Rock, a two acre parcel adjacent to State Highway 1, a 6.5 acre parcel to the east of the highway, and a right of way connecting the first two of these parcels. The Unit was classified in 1987 as a State Historic Park in order to recognize and protect the historic Light Station and associated structures.



Date: 12/29/03 Projection: State Plane, Zone 4, Feet NAD83 Source: DPR Statewide GIS CERES Statewide GIS	POINT SUR STATE HISTORIC PARK General Plan REGIONAL MAP	NOTES: FIGURE #1	GENERAL PLANNING SECTION 21 Lower Rogsdale Monterey, CA 93940


Legend
Point Sur State Historic Park
Park Boundaries
Coast Line
100' Contours
Spring Site Parcel
To Monterey
Pacific Ocean
PRIVATE PROPERTY
Park Easement
PRIVATE PROPERTY
Schoolhouse Site
Highway 1
Water Storage Tanks
USCG
Light Station Complex
USCG
Naval Facility (NAVFAC)
Pacific Ocean
Naval Research Center
To Big Sur
100
200
300
400
500
600
700
0 250 500 1,000 Feet
N
S
E
W
GENERAL PLANNING SECTION
21 Lower Ragsdale
Monterey, CA
93940
NOTES:
FIGURE #2
Parcel boundaries are approximate and should not be considered legal descriptions.
Maps are intended for study purposes only.
POINT SUR STATE HISTORIC PARK
General Plan
SITE MAP &
PARK PROPERTY BOUNDARIES
Date: 12/29/03
Source:
Psomas
July, 2001
Aerial & Lidar
Basemapping
Projection:
State Plane
Zone 4, Feet
NAD 83

In 2000, the 38.54 acre NAVFAC parcel was acquired. At the time, the identified acquisition purposes were to:

- Provide a safe staging area for the Point Sur Light Station
- Provide employee housing for full-time and seasonal State Park employees and allow removal of current employee housing inappropriately located in critical resource areas within other Big Sur State Parks.
- Improve the critical viewshed by removing unneeded structures from the Highway 1 viewshed.

Since acquisition and incorporation of this parcel into Point Sur SHP, there has been increased awareness of the cultural significance of the site itself.

Spirit of Place

The dramatic sight of the Point Sur Light Station atop the massive rock at the ocean's edge has long been a visual beacon for residents and travelers in Big Sur. Connected to the mainland by a tapering wedge of sand, Moro Rock at Point Sur is a peninsula that can appear as an island to passing ships and motorists. From the rock one has a panoramic view of both the ocean and the coast, where little development is visible other than the NAVFAC.

Point Sur SHP presents a continuum of maritime history. The Light Station was constructed in 1889 in a distinctive architectural style, and it is an important symbol of Monterey County's maritime past. The NAVFAC was one of a number of submarine listening stations that proved vital to national defense for several decades during the Cold War.

The Light Station itself is set on an ecologically and aesthetically significant Moro Rock. Several sensitive plant and animal species occur in the area. Birds nest on the rock and the beach below, and marine life flourishes offshore.

PURPOSE OF GENERAL PLANS

A General Plan is the primary management document for a park unit of the State Park System. The plan provides a purpose, vision, and long-term goals and guidelines. It defines a broad framework for Park development, ongoing management, public use, and future direction. General plans set the direction of park development and management for the future. The plan must be consistent in its vision for the Park Unit and general in its scope. Because the plan will be in place for a long time, it must also be flexible in its proposals for solving future management problems and issues that are certain to arise.

The development of a General Plan for Point Sur SHP became a priority when the California Department of Parks and Recreation (DPR) acquired the decommissioned NAVFAC in 2000. The acquisition raised questions about how to manage and use the property, existing buildings, and infrastructure. These issues are best addressed through the General Plan process. In addition, the Light Station's preservation goals and objectives had to be reviewed and refined in light of the new acquisition, as part of a program of Park-wide maintenance.

While general plans define an overall framework for a park's future resource stewardship, visitor use and services, and interpretation, more focused planning must follow to address the details that a general plan cannot. Management plans identify more definite objectives and methods and/or designs for attaining the goals set in general plans. The degree of specificity at this second level of planning is shaped by the complexity of the issues being addressed, regulatory and legal requirements, and departmental standards. Management plans are prepared as funding and staffing are available and as opportunities or events dictate to carry a specific management program or project forward.

The development of the Point Sur SHP General Plan is a coordinated effort of the Statewide Planning, Policy, and Programming Committee, the Central Service Center, the Northern Service Center, and the Monterey District. The development and adoption of the General Plan required the participation of these groups, as well as input provided from stakeholders and the general public.

Organization of This General Plan

The two main sections of the General Plan are the **Park Summary** and **The Plan**. The Park Summary provides an overview of the Park's attributes. It describes existing land uses, natural and cultural resource values, current recreational and interpretive facilities and activities, and external influences that affect planning for the Park. The next section, *Issues and Analysis*, describes the planning issues identified at the beginning of the general planning process, as well as those that were clarified through public involvement.

The Plan section identifies the goals and guidelines that were developed to address or resolve the issues during the planning process. Some goals and guidelines apply Park-wide, while others relate to specific areas identified by the planning team. Following **The Plan**, the Environmental Analysis section, required by the California Environmental Quality Act, evaluates the potential impacts of the General Plan.

PARK SUMMARY

Light Station Complex

EXISTING CONDITIONS

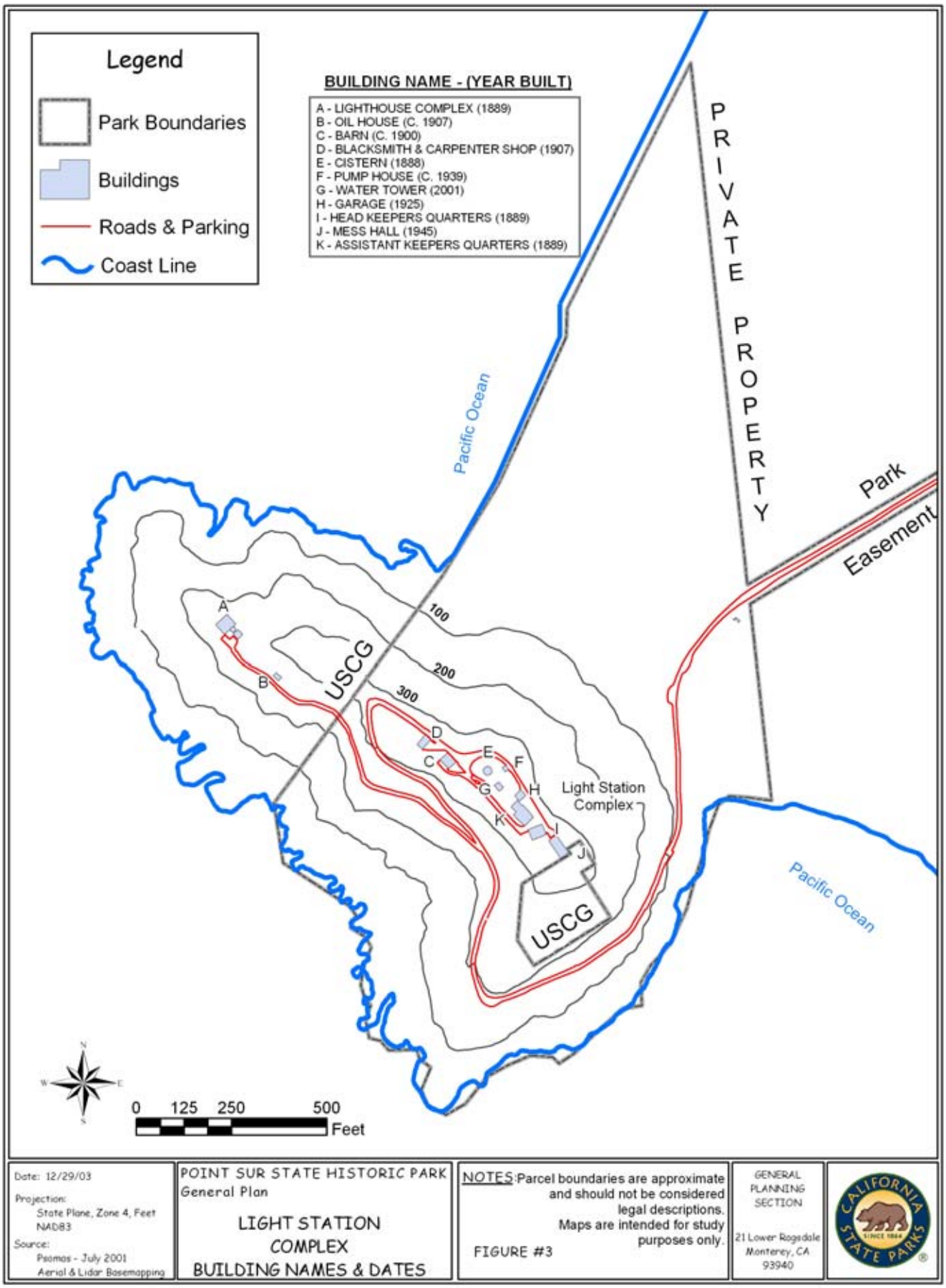
Existing Land Uses

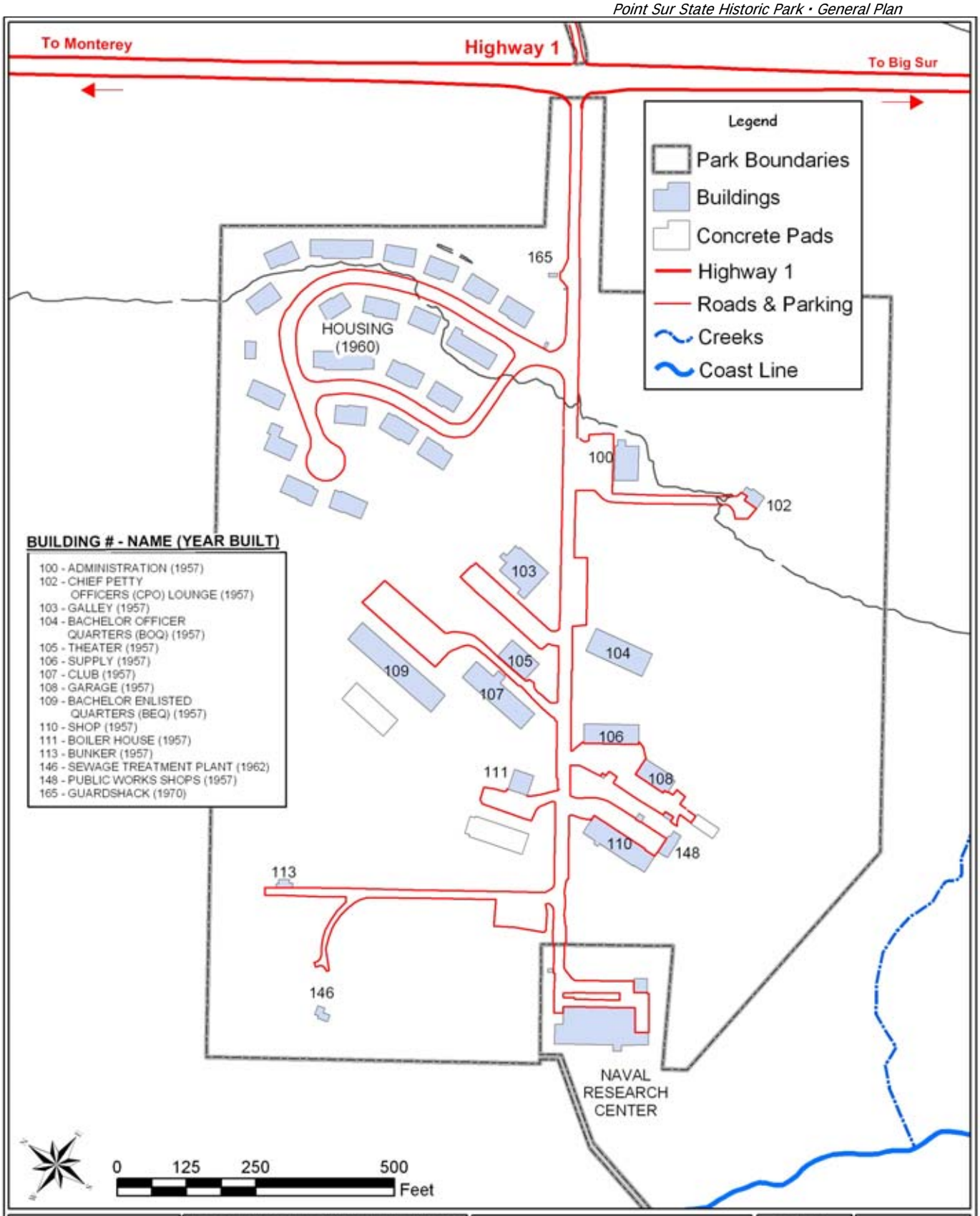
Although Point Sur SHP is composed of several parcels, the majority of the Park falls within two distinct areas see Figure 2, Page 1-4. Moro Rock (commonly referred to as "the rock") contains the Light Station complex (Figure 3, Page 2-3). The second area includes the 38.54 acre NAVFAC on the coastal terrace (Figure 4, Page 2-4).

Light Station tour

Ownership of Moro Rock is shared by DPR and the U.S. Coast Guard. The Coast Guard retains ownership of the Lighthouse itself, along with the Oil House, Mess Hall, and an antennae tower. The remainder of the historic Light Station complex is owned by DPR. The Coast Guard owned property has been identified as surplus property, and DPR submitted an application in June, 2003 for its acquisition through the National Historic Lighthouse Preservation Act.

Public access is limited to the Light Station complex. Guided tours are currently the only means by which the public is permitted access. While the NAVFAC is closed to the public, some of its buildings are utilized by Park staff.


Legend
Park Boundaries
Buildings
Roads & Parking
Coast Line
BUILDING NAME - (YEAR BUILT)
A - LIGHTHOUSE COMPLEX (1889)
B - OIL HOUSE (C. 1907)
C - BARN (C. 1900)
D - BLACKSMITH & CARPENTER SHOP (1907)
E - CISTERN (1888)
F - PUMP HOUSE (C. 1939)
G - WATER TOWER (2001)
H - GARAGE (1925)
I - HEAD KEEPERS QUARTERS (1889)
J - MESS HALL (1945)
K - ASSISTANT KEEPERS QUARTERS (1889)
PRIVATE PROPERTY
Pacific Ocean
Park Easement
USCG
100
200
300
Light Station Complex
Pacific Ocean
USCG
0 125 250 500 Feet
Date: 12/29/03
Projection: State Plane, Zone 4, Feet NAD83
Source: Psomas - July 2001 Aerial & Lidar Basemapping
POINT SUR STATE HISTORIC PARK
General Plan
LIGHT STATION COMPLEX BUILDING NAMES & DATES
NOTES: Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.
FIGURE #3
GENERAL PLANNING SECTION
21 Lower Ragsdale
Monterey, CA 93940
CALIFORNIA STATE PARKS



Date: 12/29/03
Projection: State Plane, Zone 4, Feet NAD83
Source: Psomas - July 2001 Aerial & Lidar Basemapping

POINT SUR STATE HISTORIC PARK
General Plan

NAVAL FACILITY (NAVFAC) BUILDING NUMBERS, NAMES, & DATES

NOTES: Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

FIGURE #4

GENERAL PLANNING SECTION
21 Lower Ragsdale
Monterey, CA
93940

Existing Facilities

Over 6,000 people visit the Park each year. Visitors join a guided tour up the steep road of Moro Rock to the Light Station. From there they are afforded spectacular views along central California's rugged Big Sur coast. The Big Sur area is delineated by the Carmel River in Monterey County to the north and San Carpoforo Creek in San Luis Obispo County to the south. Atop the rock sits the Light Station complex, where the two most prominent buildings, previously used by the head and assistant lighthouse keepers, are vacant. Other buildings at the Light Station are used for storage and limited interpretive displays. The Mess Hall, constructed in the 1940s, currently houses a small museum and gift shop operated by the Central Coast Lighthouse Keepers, the non-profit cooperating association associated with the Park.

A combination of overhead and underground electrical lines are used to provide the site with electricity. The water system at the Light Station has not operated since approximately 1970. Portions of the historic water system are present but currently unused. The existing fire protection and water supply systems are inadequate. Fire protection at the Light Station is limited to pressurized water carts and hoses located outside the buildings. Water is delivered by truck. Portable pump-out toilets are maintained for staff and visitors.

The building inventory at the NAVFAC includes 24 employee housing units. Eleven of the employee housing units have been rehabilitated and are occupied by State employees. The thirteen remaining employee housing units are in need of utility upgrades and renovation and are currently vacant. Several buildings in the maintenance area of NAVFAC are currently used by DPR for restoration and maintenance activities to support the Light Station complex and the Sector's trails program. The remaining buildings at NAVFAC are unoccupied and lack functional utilities.

To improve the viewshed and reduce hazards, a demolition contract was completed in 2003 at the NAVFAC. Three severely deteriorated metal buildings were removed, and asbestos was removed from five additional buildings.

The NAVFAC utilities include water, septic, electricity, telephone, and roads. Many of these utilities are sub-standard and deteriorating rapidly. The maintenance and employee housing areas have electrical service. The employee housing area also has telephone service, a central propane gas system, sewer mains connected to a central septic system, and a water system. The water system consists of a well and pump near the Big Sur River in Andrew Molera State Park, a supply line from the well to the hillside east of NAVFAC, two redwood storage tanks on the hillside east of NAVFAC, and distribution water lines from the tanks to the employee housing area. The water system also supplies fire hydrants in the employee housing area. The water storage tanks

for NAVFAC are located on a separate parcel of land on the hillside east of the highway. Easements owned by the department connect the noncontiguous parcels to the main parcels.

A non-functioning sewage treatment plant is located near the westerly edge of the NAVFAC including an abandoned offshore sewage outfall. Storm water drains and ditches collect water from paved areas throughout NAVFAC and convey water to an outfall near the ocean. NAVFAC has asphalt paved access roads and parking areas. Abandoned underground steam lines connect an old steam plant to other vacant buildings at the site.

Adjacent Land Uses

The U.S. Navy still owns and retains use of the Terminal Equipment Building (currently called the Naval Research Center) at NAVFAC. This building is the primary data collection and processing facility for the undersea acoustic array associated with NAVFAC at Point Sur SHP. The facility is currently operated by the Naval Postgraduate School in Monterey. The building and immediate grounds are off-limits to the public.

The land surrounding Point Sur SHP is privately owned by El Sur Ranch and is used for cattle grazing. An easement across the El Sur Ranch allows limited guided public access from Highway 1 through the Schoolhouse Site to Moro Rock. Agencies and organizations that are adjacent or have local jurisdiction in the Big Sur area include the California Department of Transportation (Caltrans), U.S. Coast Guard, U.S. Forest Service, Monterey Bay National Marine Sanctuary, California Coastal Commission, California Department of Fish and Game, and the County of Monterey.

Park Support

State Park volunteers at Point Sur SHP are essential to the Park's operations. They donate almost 20,000 hours annually staffing the visitor center, leading public tours, conducting research, training new volunteers and performing preservation and maintenance work at the Light Station. They serve approximately 6,000 visitors annually. There are approximately 60-80 active volunteers at the Park.

The Central Coast Lighthouse Keepers (CCLK) is a non-profit cooperating association and has been a key partner in helping DPR achieve its interpretive and restoration objectives at the Light Station. Established in 1993, CCLK's financial and administrative support has been critical for projects as well as the volunteer program.

Visitor Use

Docents lead a three-hour walking tour from the base of Moro Rock up to the Light Station complex, a rise of almost 360 feet in elevation, and back. The tour group meets at the gate along the west side of Highway 1 prior to entering the Park.

Scheduled tours vary seasonally. Weekend tours are offered year round, and additional tours are offered during the summer. Moonlight tours are offered in the summer and fall. Visitors must follow the tour rules which include no pets, no picnicking, no large motor homes or campers, no strollers or baby carriages, no beach access, and no smoking.

Tour Accessibility

California State Parks does not discriminate against individuals with disabilities. Prior to arrival, visitors who need assistance can contact the Park office to determine how their specific needs can be accommodated.

The Beaches

Point Sur SHP includes approximately 13 acres of beach and dunes to the north and south of Moro Rock. This portion of the Park is only a fraction of a larger, privately owned beach and dune complex. The entire beach complex at Point Sur is visually appealing to the thousands of people that drive by it each day. (According to Caltrans, the average daily vehicle load on this section of Highway 1 is 4,200.) It stretches ¾ to one mile in length (more than ¾ of which is in private ownership above the mean high tide line) and varies in width, tapering off at the north end. None of the beach and dune complex is open to the public.

Sandy beaches are uncommon along the rocky Big Sur coastline. Point Sur SHP is located approximately 19 miles south of Carmel. The closest beach that is open to the public is a few miles south of Point Sur at Andrew Molera State Park. The beaches in the area that are open to the public are listed in Table 1 below.

Table 1. Beaches in the Big Sur area (*mileage is approximate*).

BEACH	LOCATION
Carmel City Beach	in Carmel
Carmel River State Beach	in Carmel
Beach at Garrapata SP	9 miles north of Point Sur
Beach at Andrew Molera SP	2 miles south of Point Sur
Pfeiffer Beach (USFS)	8 miles south of Point Sur
Beach at Limekiln SP	33 miles south of Point Sur
Mill Creek Beach (USFS)	34 miles south of Point Sur
Kirk Creek Beach (USFS)	35 miles south of Point Sur
Sand Dollar Beach (USFS)	40 miles south of Point Sur
Jade Cove (USFS)	41 miles south of Point Sur
Willow Creek Beach (USFS)	43 miles south of Point Sur

SIGNIFICANT RESOURCE VALUES
Physical Resources

Topography

Point Sur is located at the base of the northern end of the Santa Lucia Range, which is a prominent feature within the Coast Ranges Geomorphic Province. The Santa Lucia Mountains stretch for about 100 miles following the orientation of the coastline, northwest to southeast. A single main ridge, the Coast Ridge, fronts much of the immediate coastline, and it forms the steepest coastal slope in the contiguous United States. For most of the length of the Coast Ridge, the mountains drop abruptly into the ocean, but periodically, the coastal ridges give way to coastal terraces. Almost as rare along the Big Sur Coast as the coastal terraces are sandy beaches, both of which are found at Point Sur SHP.

Within the Park, elevations range from sea level to approximately 800 feet at the spring site. The 361-foot high rock headland is connected to the mainland by a sandy beach, sand dunes, and marine terrace. Slopes vary from slight to very steep with the steepest areas (greater than 50%) being on Moro Rock and at the spring site. The marine terrace that supports the NAVFAC has slopes that range from 2-15%.

Air Quality

Point Sur SHP is located within the North Central Coast Air Basin (Basin). The Basin is comprised of Monterey, Santa Cruz, and San Benito Counties. The Monterey Bay Unified Air Pollution Control District (MBUAPCD) is the regional agency empowered to regulate air pollution emissions from stationary sources in the Basin. The MBUAPCD regulates air quality through its permit authority over most types of stationary emission sources and through its planning and review activities. The MBUAPCD operates air quality monitoring stations that provide information on ambient concentration of criteria air pollutants.

Air quality is heavily influenced by topography and meteorology. The semi-permanent high pressure cell in the eastern Pacific controls the climate of this air basin. During summer, the high pressure cell is dominant and causes persistent west and northwest winds over the entire California coast. In the fall, the surface winds are weak, and the marine layer grows shallow, dissipating altogether on some days. Occasionally, during the fall, north or east winds develop and transport pollutants into the Basin from either the San Francisco Bay area or the Central Valley.

Northwest winds are dominant in winter. The general absence of deep, persistent inversions and occasional storm systems usually result in good air quality for the Basin as a whole in winter and early spring. The Big Sur Coast, including Point Sur SHP, receives on- and off-shore breezes which result in good air quality throughout the year.

Existing emissions from the Park include those from stationary and mobile sources. Stationary emission sources include existing structures that are believed to contain small amounts of lead from lead based paint on wood surfaces. Mobile emission sources include private vehicles and temporary construction equipment.

Meteorology

The central coast of California experiences a Mediterranean climate, which is characterized by cool, wet winters and warm, dry summers caused by the nearby presence of ocean water. Temperatures are moderated on the coast where the ocean forms a heat sink, which absorbs heat during warm periods and radiates heat during cool periods. However, Big Sur's climate differs from the climates of the Mediterranean as well as the rest of California for several reasons. The central California coast experiences cooler summers than the Mediterranean basin due to consistent summer fog. The recurrent fog that is characteristic of this area during spring and summer moderates the temperatures. The fog is caused when the warm, moist air comes in contact with the cold ocean currents. Big Sur's climate is also distinct from other Mediterranean climates because of the topography of the Santa Lucia range. These mountains lie perpendicular to the prevailing winds and rise directly from the ocean, in some places to elevations greater than one mile. The local climate is strongly shaped by the interaction of this steep topography with the prevailing weather (Henson and Usner 1993).

Annual precipitation in Monterey County is variable with most falling as rain during the winter months. Virtually all of Big Sur's precipitation falls between October and May. The average annual rainfall in Monterey is approximately 17 inches, while the average annual rainfall just down the coast at Pfeiffer Big Sur State Park is approximately 41 inches. Point Sur is the westernmost point along this section of coast, deflecting northwesterly winds and fog. The areas north of the point are usually more foggy and windy than those to the immediate south (Henson and Usner 1993).

A semi-permanent high-pressure area over the north Pacific Ocean is a dominating factor of the regional climate. This system migrates northward and intensifies during the spring and summer months, blocking California from Pacific storms. Strong coastal winds are characteristic of this area, especially in the months from March through October. The direction and intensity of coastal winds are strongly influenced by coastline orientation and topography. Wind speeds are often greater on headlands and other exposed locations like Point Sur. Seasonal data can be obtained from two weather stations in the Park, one at NAVFAC and another at the Light Station.

Geology

The Point Sur SHP area is dominated by an assemblage of rocks known as the Franciscan Formation. The formation is characterized by medium to coarse-grained brown litho-feldspathic sandstone or greywacke, micro-greywacke, chert, metavolcanic rocks, as well as green and blue schist, conglomerates, and silica carbonates. The formation consists of a mélange of rocks deposited in a marine environment and subsequently altered by tectonic activity. During the Jurassic and Cretaceous periods, sediments that were to become the Franciscan Formation were deposited in a marine environment. Later (during the Cretaceous Period), these sediments were carried into a subduction zone between the Pacific and North American plates. Following some metamorphosis, the marine deposits, being less dense than surrounding rocks eventually floated to the surface. Plate movement gradually shifted from subduction to transverse activity (side-by-side) in the late Cretaceous Period. As a result of this transverse activity, the Franciscan Formation rocks at what is now Point Sur, were transported north along the plate boundary to their present location.

Moro Rock itself consists of metavolcanic rocks from this Franciscan assemblage. Greenstone is Point Sur's most prevalent rock, but altered gabbro crops out on the north side of the point and some sandstone is scattered around. The steep relief of Moro Rock is a result of the resistance to erosion of both greenstone and gabbro (Henson and Usner 1993). Elsewhere, the Franciscan formation is overlain by alluvial, colluvial, landslide, and sand dune deposits. Rocks exposed along the beach are predominately medium grained sandstones interbedded with shales.

From Point Sur SHP to the mouth of the Big Sur River, a broad marine terrace forms an extensive flatland. The marine terrace was cut slightly above the present shoreline by wave action during fluctuating sea levels and localized uplift that occurred from the early to late Pleistocene. The beach and dunes adjacent to the point formed from materials made available by streams and rivers eroding their channels. Sand is moved southward along the coastline by ocean currents, and Point Sur SHP intercepts this movement. The dune field was far more extensive in the recent past. The beach to the south of the headland was replenished by sand from the north, which was carried across the point by the prevailing winds out of the northwest. Dune stabilization since the 1960s has changed patterns of sand deposition, and the geomorphic character of the dune field is rapidly changing.

The two principal faults along this section of the coast are the Palo Colorado-San Gregorio fault and the Sur-Nacimiento fault. Faulting and seismic activity occur along the Palo Colorado-San Gregorio immediately north of Point Sur, along the San Andreas fault forty miles to the east, and along the San Gregorio-Hosgri fault five miles offshore. The Big Sur coast is not typically considered a zone of

high seismic activity, but these major faults have been known to be active during recent time.

Three slump and earth flow type landslides have occurred on the headland, possibly in association with the construction of the road and Light Station facilities in the 1890s. These failures occurred in the soil cover on the west, east, and northeast sides of the headland. In the rock above and below the roadway on the southwest side of the headland, several small block fall failures have occurred.

Soils

Point Sur is located in Soil Region II – Central and Northern Coast, which encompasses the coastal border and includes coastal terraces and uplands that are slightly inland. This region is characterized by sedimentary parent material and soils that are mostly shallow and not well developed, with prairie-like characteristics, dark color and a slightly acidic reaction. According to a soil survey of Monterey County by the U.S. Department of Agriculture Soil Conservation Service, nine soil units have been identified within the parcels of Point Sur SHP including Badland, Baywood sand, Coastal beaches, Dune land, Gazos silt loam, Lockwood shaly loam, Rock outcrop – Xerorthents association, Tunitas loam, and Watsonville clay (USDA-SCS 1978). These soils vary widely in depth, permeability, and other characteristics.

Erosion hazard is one important characteristic that may affect potential land uses. The soils at the base of Moro Rock, including the beach and dunes, are highly erodible. Moro Rock and a portion of the spring site have high erosion potential wherever soil is exposed.

Hydrology

Point Sur is located within the Santa Lucia Hydrologic Unit, which is within the Central Coast Hydrologic Basin. This Hydrologic Unit includes the streams on the western side of the Santa Lucia Mountain Range. Although Point Sur SHP does not contain a major drainage system, a few unnamed drainages cross the coastal terrace here.

The Park contains and is bordered by freshwater seeps and coastal wetlands. The NAVFAC is bordered by coastal wetlands to the west. This parcel also contains freshwater seeps, which are areas with seasonal or perennial soil saturation caused by groundwater. A freshwater spring was historically located at the spring site, but its existence has not been recently confirmed because the resources within this parcel of the Park have not been surveyed.

Surface water runoff is very rapid on Moro Rock during periods of rainfall, while runoff on the beach and dune areas is almost nonexistent because permeability

is so rapid. Because the marine terrace is located at the base of a large mountain chain it receives large amounts of runoff. The soils at the NAVFAC characteristically exhibit a slow to medium rate of surface water runoff.

Paleontology

Paleontological resources include organic and mineralized remains of all groups of organisms that have been preserved from a past geologic time by natural processes. Point Sur SHP has not been systematically surveyed for paleontological resources, but it is possible to make some assumptions about these resources by considering the geology of the area. Due to geologic processes including the tectonic activity that characterizes the Franciscan Formation, there is a low potential for fossils on Moro Rock. The marine terrace however, has a much higher potential for fossils.

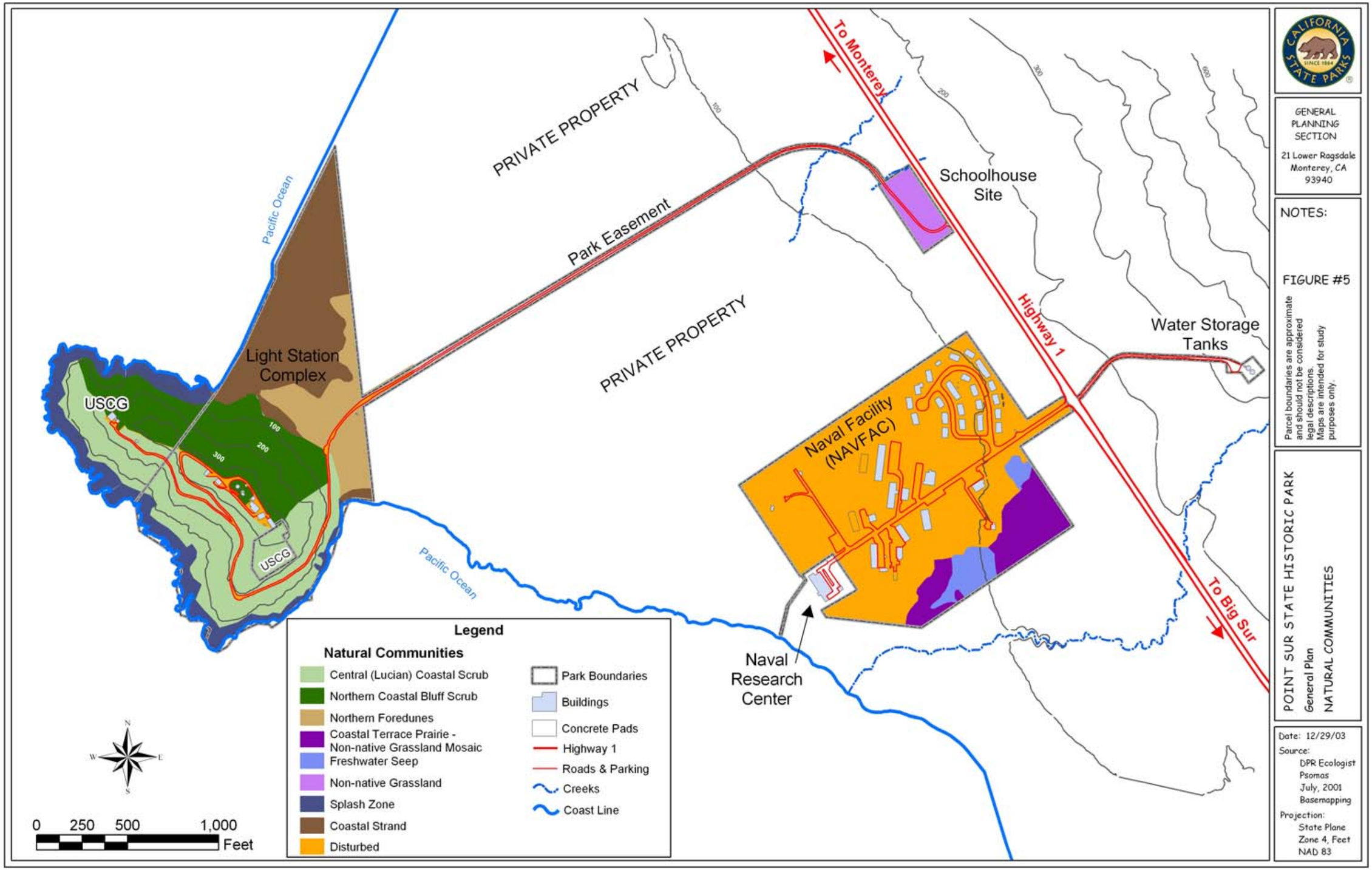
Biotic Resources

Plant Life

Although relatively small in size, Point Sur SHP is comprised of several different plant communities. This is due in part to the distinct land features that occur within the Park's boundaries, including a rocky headland, a sandy beach and dune area, and a broad marine terrace. The Park's vegetation varies from feature to feature. Much of the vegetation at Point Sur exhibits unique low-growing forms caused by a constant exposure to intense winds and salt sprays.

Morning Glory

The major plant communities represented at Point Sur SHP include six that have been defined in *Preliminary Descriptions of the Terrestrial Natural Communities of California* by Robert F. Holland (1986). The California Native Plant Society's vegetation classification, *A Manual of California Vegetation* by John O. Sawyer and Todd Keeler-Wolf (1995) is a more recent system of classification, but this system was not applicable to Point Sur because it has not yet been completed for all of the vegetation types in the State.


PRIVATE PROPERTY
Pacific Ocean
Park Easement
To Monterey
Schoolhouse Site
Highway 1
Water Storage Tanks
Light Station Complex
USCG
PRIVATE PROPERTY
Naval Facility (NAVFAC)
Pacific Ocean
Naval Research Center
To Big Sur
Legend
Natural Communities
Central (Lucian) Coastal Scrub
Northern Coastal Bluff Scrub
Northern Foredunes
Coastal Terrace Prairie - Non-native Grassland Mosaic
Freshwater Seep
Non-native Grassland
Splash Zone
Coastal Strand
Disturbed
Park Boundaries
Buildings
Concrete Pads
Highway 1
Roads & Parking
Creeks
Coast Line
0 250 500 1,000 Feet
GENERAL PLANNING SECTION
21 Lower Ragsdale
Monterey, CA
93940
NOTES:
FIGURE #5
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.
POINT SUR STATE HISTORIC PARK
General Plan
NATURAL COMMUNITIES
Date: 12/29/03
Source:
DPR Ecologist
Psomas
July, 2001
Basemapping
Projection:
State Plane
Zone 4, Feet
NAD 83

The plant communities of Point Sur SHP include Northern Foredunes, Northern Coastal Bluff Scrub, Central Coastal Scrub, Non-native Grassland, Coastal Terrace Prairie, Freshwater Seep, and Maritime Lichen Fields. The Natural Communities Map (Figure 5, Page 2-13) depicts the plant communities along with additional classified areas including Coastal Strand, Splash Zone, and Disturbed. The unvegetated, sandy beach is identified as Coastal Strand. The unvegetated, rocky shore of Moro Rock that is regularly inundated by wave activity is identified as Splash Zone. The landscaped portion of the NAVFAC, which is dominated by introduced kikuyu grass (*Pennisetum clandestinum*) and Monterey cypress (*Cupressus macrocarpa*) is identified as Disturbed.

Northern Foredunes

The Northern Foredunes community at Point Sur is found at the sandy base of Moro Rock and along the foredunes to the north. This community can be separated into two distinct types at Point Sur: steep-sided dunes dominated by European beach grass (*Ammophila arenaria*) and low dunes dominated by a variety of native species. The native species include yellow sand verbena (*Abronia latifolia*), beach sagewort (*Artemisia pycnocephala*), Douglas blue grass (*Poa douglasii*), beach primrose (*Camissonia cheiranthifolia*), and beach morning glory (*Calystegia soldanella*) among others. Two non-native species that are also abundant in the foredune community are sea rocket (*Cakile maritima*) and sea fig (*Carpobrotus chilensis*).

Dune Evening Primrose at Point Sur

Northern Coastal Bluff Scrub

The Northern Coastal Bluff Scrub community at Point Sur occurs on the north and northeast facing slopes of Moro Rock. This community typically consists of low, prostrate or dwarf shrubs that are exposed to nearly constant winds with high salt content. At Point Sur, common community members include lizard tail (*Eriophyllum staechadifolium*), seaside daisy (*Erigeron glaucus*), yellow bush lupine (*Lupinus arboreus*), bluff lettuce (*Dudleya caespitosa*), coast buckwheat (*Eriogonum latifolium*), seacliff buckwheat (*Eriogonum parvifolium*), poison oak (*Toxicodendron diversilobum*), bracken fern (*Pointeridium aquilinum* var. *pubescens*), and beach sagewort.

Central Coastal Scrub

The Central (Lucian) Coastal Scrub community at Point Sur occurs on the south and southwest facing slopes of Moro Rock. Common community members include California sagebrush (*Artemisia californica*), black sage (*Salvia mellifera*), beach sagewort, seacliff buckwheat, and coast buckwheat. This community shares several species in common with the neighboring Northern Coastal Bluff

Scrub Community. The boundary between the two communities is not obvious, with one of the differences being the vegetation height. Vegetation in the Central Coastal Scrub community is taller and less prostrate.

Non-native Grassland

The Non-native Grassland community at Point Sur occurs at the schoolhouse site and in patches on the southern and eastern edges of the NAVFAC. This community is dominated by non-native grasses including wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), ripgut brome (*Bromus diandrus*), and foxtail fescue (*Vulpia myuros*). Non-native forbs like milk thistle (*Silybum marianum*) and bull thistle (*Cirsium vulgare*) are also present in this community. Several native species also occur within this community at Point Sur, including California poppy (*Eschscholzia californica*), golden brodiaea (*Triteleia ixiodes*), soap plant (*Chlorogalum pomeridianum*), checkerbloom (*Sidalcea malvaeflora*), coyote brush (*Baccharis pilularis*), and California coffeeberry (*Rhamnus californica*).

Coastal Terrace Prairie

The Coastal Terrace Prairie community at Point Sur intermingles with the Non-native Grassland Community at the NAVFAC. The two communities form a mosaic on the southern and eastern edges of NAVFAC. The small patches of Coastal Terrace Prairie community are dominated by native grasses including purple needle grass (*Nassella pulchra*) and California oat grass (*Danthonia californica*).

Freshwater Seep

The Freshwater Seep community at Point Sur occurs in two locations on the southern and eastern edges of the NAVFAC. This community is typically composed of herbaceous plants that inhabit areas having seasonal or perennial soil saturation due to groundwater see Figure 5, Page 2-13 and it is often associated with grasslands. At Point Sur, this community is interspersed with the non-native grassland community, and it contains sedges (*Carex* sp.), rushes (*Juncus* sp.), and blue-eyed grass (*Sisyrinchium bellum*). Several circular patches of kikuyu grass also occur within this portion of NAVFAC.

Maritime Lichen Fields

Maritime lichen fields compose a non-vascular plant community that is usually composed of fruticose (shrubby) and crustose (crust-forming) lichen species growing on rock substrates primarily on offshore islands or large sea stacks. At Point Sur, the lichen fields are found scattered on the north and east face of Moro Rock. Dominant fruticose species include *Niebla homolea, Pseudoparmelia caperata,* and *Caloplaca*; crustose species include *Lecanora* spp. and *Lecidea* spp.

Sensitive Plants

Ceanothus at Point Sur

The California Department of Fish and Game Natural Diversity Data Base (NDDB) is an inventory of rare and threatened plants, animals, and natural communities in California. Two of the plant communities that occur at Point Sur SHP are considered by the NDDB to be among those with the highest inventory priorities, the Northern Coastal Bluff Scrub and Coastal Terrace Prairie communities.

Sensitive plants are those that are listed as rare, threatened, or endangered by the California Native Plant Society (CNPS), U.S. Fish and Wildlife Service, and/or California Department of Fish and Game. One federally Threatened plant and two CNPS listed sensitive plants are known to occur at Point Sur, Monterey spineflower, Little Sur manzanita and Monterey Indian paintbrush. Refer to Appendix A-1 (Page 7-2) for a list of the Park's sensitive plants, including those that may occur because suitable habitat exists within the Park.

Monterey Spineflower (*Chorizanthe pungens* var. *pungens*)

Monterey spineflower is listed as a federal Threatened species and is also on CNPS List 1B. List 1B plants are defined as rare, threatened, or endangered in California and elsewhere. Monterey spineflower is a low-growing, annual herb that is endemic to sandy soils in coastal Monterey and Santa Cruz Counties and the Salinas Valley in interior Monterey County. At Point Sur, this plant is found in an isolated patch of sandy soil within the portion of the NAVFAC that is classified as Disturbed. This small patch of sandy soil is sparsely vegetated with several species that are native to coastal dunes.

Little Sur Manzanita (*Arctostaphylos edmundsii*)

Little Sur manzanita is on CNPS List 1B. This evergreen shrub forms low, spreading mats. It is native to the coast of Monterey County, but it is also in cultivation for use in gardens. At Point Sur, Little Sur manzanita occurs within densely vegetated scrub on the slopes of Moro Rock, primarily within the Central Coastal Scrub community.

Monterey Indian Paintbrush (*Castilleja latifolia*)

Monterey Indian Paintbrush

Monterey Indian paintbrush is on CNPS List 4. List 4 plants are of limited distribution and are uncommon enough to have their status monitored, but susceptibility to threat appears low at this time. This perennial herb is only found on the coast of Monterey and Santa Cruz Counties. At Point Sur, it is most numerous on the lower eastern slopes of Moro Rock, but it does occur at scattered locations within the

Park's Northern Coastal Bluff Scrub, Central Coastal Scrub, and Northern Foredune communities.

Exotic Plants

Point Sur has a long history of human use and disturbance, including introductions of exotic plants. Exotic plants are defined as species that have been intentionally or unintentionally introduced into an area outside of the species' natural range. Many of the exotic plant species found at Point Sur represent part of a weedy annual flora introduced from the Mediterranean region of Europe that is now well established in California. Other species, such as calla lily (*Zantedeschia aethiopica*) and periwinkle (*Vinca major*), have been planted as ornamentals. Two species that are native to limited locations in Monterey County, the Monterey cypress (*Cupressus macrocarpa*) and Monterey pine (*Pinus radiata*) were introduced at the NAVFAC to screen the buildings from view.

Appendix A-2 (Page 7-3) contains a list of exotic plant species that can be found at Point Sur SHP. The exotic plants of greatest concern are those that have the potential for spreading and those that degrade native habitat. The species of greatest management concern at Point Sur SHP are European beach grass, kikuyu grass, iceplant, French broom, Harding grass, sweet alyssum, and stock.

European Beach Grass (*Ammophila arenaria*)

European beach grass was introduced from Europe to stabilize sand dunes. It is an aggressive dune colonizer that forms a dense mat of grass and rhizomes that exclude native dune species. Dunes that have been stabilized with European beach grass eventually increase in height, which diminishes the normal ocean breeze behind the dunes and changes the microclimate, making it unsuitable for native dune species. This leads to a succession towards more inland coastal vegetation types. European beach grass infestations threaten the habitat of sensitive dune plants and animals. At Point Sur, European beach grass is well established in the dunes. The infestation extends beyond the Park boundaries into the surrounding private property.

Kikuyu Grass (*Pennisetum clandestinum*)

Kikuyu grass was introduced from Africa to stabilize soil along ditch banks and slopes in southern California. It is a long-lived perennial whose aggressive and weedy character soon became a problem in crop lands. Its use as a turfgrass continued because it can produce quick cover and grow in areas where other grasses would do poorly. At Point Sur, this grass dominates the NAVFAC and can be found at the schoolhouse site as well.

Iceplant – Sea Fig (*Carpobrotus chilensis*) & Hottentot Fig (*C. edulis*)

Sea fig and hottentot fig were introduced from South Africa for erosion control. These succulent perennials quickly became popular landscaping plants and are commonly planted along highways. Iceplant has also been used, like European beach grass, as a sand stabilizer. The two species are known to hybridize where they occur together. At Point Sur, iceplant is most prevalent on the south and southwest slopes as well as the eastern base of Moro Rock.

French Broom (*Genista monspessulana*)

French broom was introduced from the Mediterranean region and the Azores and Canary Islands as an ornamental and for erosion control. This perennial shrub became a popular ornamental which has escaped cultivation. It spreads aggressively into stands of native vegetation. At Point Sur, French broom is currently restricted to a few individual plants at the NAVFAC.

Harding Grass (*Phalaris aquatica*)

Harding grass is thought to be a native of the Mediterranean region, but it was introduced from Australia for use as a forage plant. This perennial grass is often found growing along rivers and creek banks. It has the potential to establish in dense stands and can displace native species. At Point Sur, Harding grass is found in dense clumps at the south and southeastern edges of the NAVFAC.

Sweet Alyssum (*Lobularia maritima*)

Sweet alyssum was introduced from Europe as an ornamental because of its drought tolerance and scented white flowers. This annual forb escaped cultivation and has become established in poorly kept gardens and disturbed areas. At Point Sur, most of the sweet alyssum occurs on the lower southeastern slope and near the eastern base of Moro Rock.

Stock (*Matthiola incana*)

Stock was introduced from Europe as an ornamental for gardens. This perennial herb is a garden escape that has also been a commercial cut flower crop. At Point Sur, stock borders the road primarily on the south and southwestern slope of Moro Rock.

Animal Life

Point Sur SHP consists of several, small, isolated parcels of land. In terms of wildlife, this type of habitat fragmentation is cause for concern. Contiguous habitats are often fragmented by development and other land-use changes. This fragmentation can result in habitat loss. Wildlife that is restricted to small isolated patches may encounter increased predation, increased vulnerability to chance environmental events, and decreased dispersal success. Fragmentation and isolation also leads to local extinctions of species that can only occur in large, contiguous tracts of habitat. Wildlife species that adapt well to

White-crowned Sparrow

disturbance and human habitation benefit from fragmentation and become dominant.

In addition to differences in land-use, Moro Rock is isolated from other wildlife habitats by its geologic features. Each of the parcels of Point Sur SHP is currently surrounded by undeveloped open space (other than State Highway 1). The surrounding property is managed as rangeland for cattle. Grazing pressure alters habitat through vegetative conversion. Additional factors that may affect faunal diversity at the Park include exotic animals and exotic plant infestations.

Wildlife Habitats

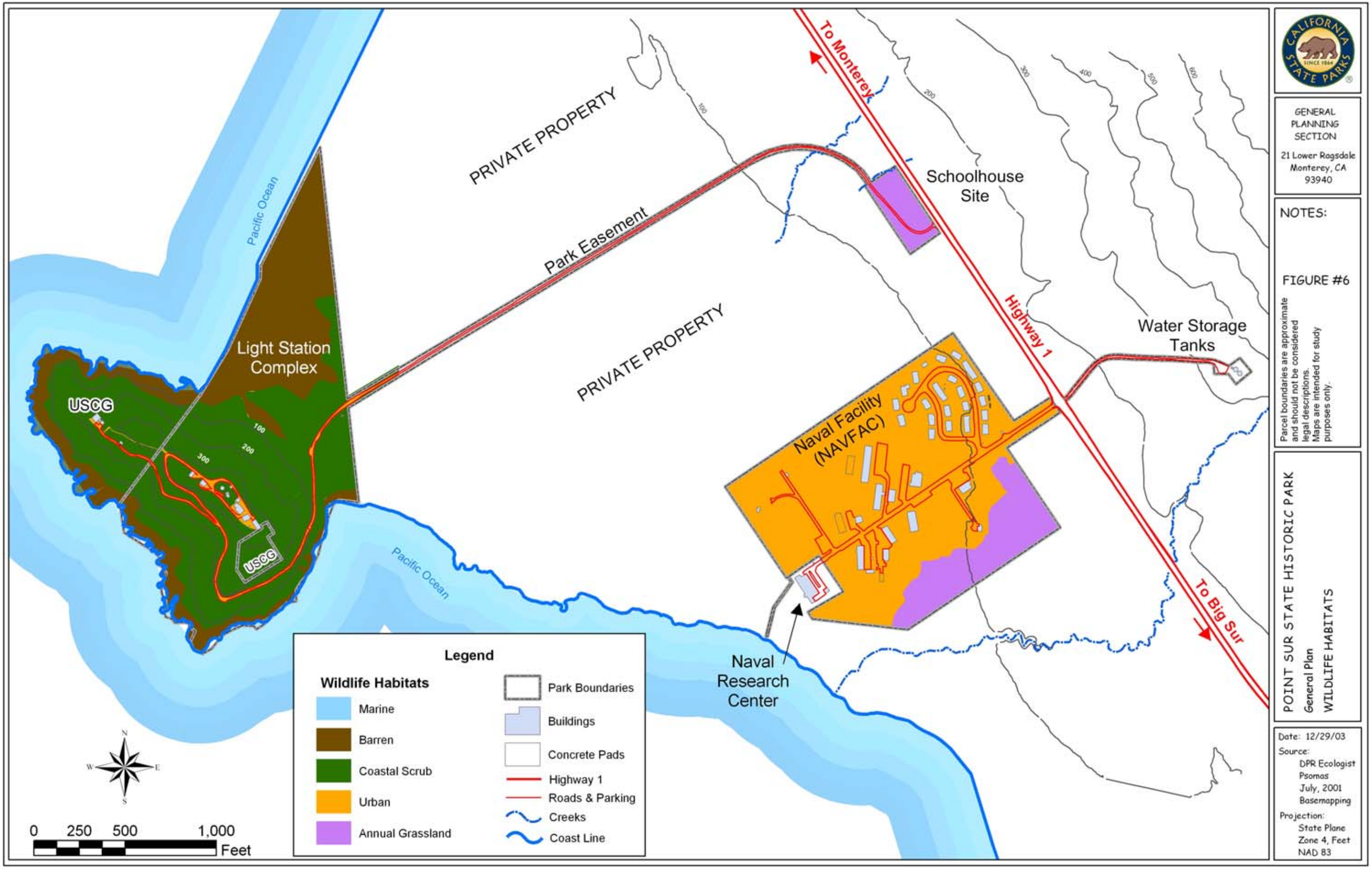
The California Wildlife-Habitat Relationship System is a compilation of information on California's wildlife, habitat classification, and vegetation descriptions. It is used to describe California's wildlife habitats. According to the Wildlife Habitat Relationship classification system, Point Sur SHP contains five different wildlife habitats: Marine, Urban, Barren, Annual Grassland, and Coastal Scrub (Figure 6, Page 2-20). Table 2 illustrates the comparison of these habitats to the Park's associated plant communities.

Table 2. Classification of wildlife habitats and the associated plant communities.

WILDLIFE HABITAT	PLANT COMMUNITY
Marine	no analogue
Barren	no analogue (this area was classified as Coastal Strand and Splash Zone)
Urban	no analogue (this area was classified as Disturbed)
Annual Grassland	Non-native Grassland, Coastal Terrace Prairie*, Freshwater Seep**
Coastal Scrub	Central Coastal Scrub, Northern Foredunes, & Northern Coastal Bluff Scrub

*Coastal Terrace Prairie communities can be classified as Perennial Grassland Habitat, but at Point Sur this community occurs only in small patches and is surrounded by Non-native Grassland.

**Freshwater Seep communities are often classified as Fresh Emergent Wetland Habitat; however this classification does not fit the habitat at Point Sur State Historic Park.


PRIVATE PROPERTY
Park Easement
PRIVATE PROPERTY
Pacific Ocean
Light Station Complex
USCG
USCG
Pacific Ocean
To Monterey
Highway 1
Schoolhouse Site
Water Storage Tanks
Naval Facility (NAVFAC)
Naval Research Center
To Big Sur
100
200
300
400
500
600
Legend
Wildlife Habitats
Marine
Barren
Coastal Scrub
Urban
Annual Grassland
Park Boundaries
Buildings
Concrete Pads
Highway 1
Roads & Parking
Creeks
Coast Line
N
S
E
W
0 250 500 1,000
Feet
CALIFORNIA STATE PARKS
SINCE 1864
GENERAL PLANNING SECTION
21 Lower Ragsdale
Monterey, CA
93940
NOTES:
FIGURE #6
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.
POINT SUR STATE HISTORIC PARK
General Plan
WILDLIFE HABITATS
Date: 12/29/03
Source:
DPR Ecologist
Psomas
July, 2001
Basemapping
Projection:
State Plane
Zone 4, Feet
NAD 83

Marine Habitat

Marine habitats extend from the contiguous zone of the ocean to the upper limit of the unvegetated shoreline (this definition creates some overlap with the barren habitat type). Marine habitat is divided into four zones, the pelagic zone (deep water that does not support canopy forming kelps), the subtidal zone (from the low-tide line to and including depths that support canopy forming kelps), the intertidal zone (from the spray zone to the low-tide line), and the shore zone (any barren land between the spray zone and terrestrial vegetation). At Point Sur SHP, the majority of the shore zone has been identified as barren habitat.

The greater part of the marine habitat at Point Sur occurs in the water offshore from the Park itself. Waters off the coast of Point Sur SHP are part of the Monterey Bay National Marine Sanctuary. This federally protected marine area that stretches from Marin to Cambria was established for resource protection, research, education, and public use. One of the ten major upwelling centers along the California-Oregon coast occurs offshore of Point Sur. Upwelling is the rising of deeper, colder, and often nutrient rich water to shallower depths. When upwelled water has high nutrient concentrations, phytoplankton production and subsequent biological activity is often promoted. For this reason, regions of upwelling are among the richest biological areas of the world.

The shallow waters off the coast of Point Sur, which comprise the subtidal zone of the marine habitat, contain five major habitat features including sandy plain, kelp oases, kelp forest, vertical rock walls, and tube worm beds. Sandy plains cover large areas off of the point, and especially north of the headland. Species that are common to the surface of the sandy plains include sand dollars (*Dendraster excentricus*), olive snails (*Olivella biplicata*), sand dabs (*Citharicthys stigmaeus*), and sunflower stars (*Pycnopodia helianthoides*). Patches of kelp oases are located to the north, west and south of the point. Species that can be found in this habitat include giant kelp (*Macrocystis pyrifera*), winged kelp (*Pointerygophora californica*), kelp perch (*Brachyistius frenatus*), senorita (*Oxyjulis californica*), and black surfperch (*Embiotoca jacksoni*). A vast kelp forest dominated by giant kelp spreads south of the point. Other species found in this habitat include winged kelp, bladder-chain kelp (*Cystoseira osmundacea*), orange cup corals (*Balanophyllia elegans*), gumboot chiton (*Crypointochiton stelleri*), and bat stars (*Asterina miniata*). Vertical or nearly vertical rock surfaces are associated with the sea cliffs, surge channels, and faces of large boulders offshore of the point. Some of the species found in this habitat are the black-and-yellow rockfish (*Sebastes chrysomelas*), feather-duster worms (*Sabellid* spp.), and the social cup coral (*Astrangia lajollaensis*). Along the western face of the kelp forest, ornate tube worm (*Diopatra ornata*) beds form dense mats that bind sediment and rise above the sandy bottom. An offshore reef is an

additional habitat feature that occurs in the deeper waters off of Point Sur in the pelagic zone.

Additional wildlife of the marine habitat at Point Sur potentially includes a wide variety of sea birds and marine mammals. Gray whales (*Eschrichtius robustus*) are often seen offshore of the point as they migrate up and down the coast. Point Sur is also within the range of the southern sea otter (*Enhydra lutris nereis*), and the Park is located within the California Sea Otter Game Refuge.

Barren Habitat

Hatching Western Snowy Plover Chicks

Barren habitats are defined by the absence of vegetation. At Point Sur, this habitat type overlaps with the marine habitat to include the sandy beach (or coastal strand) and the rocky outcroppings of the lower portion of Moro Rock (or splash zone). Although devoid of vegetation, barren areas do provide essential habitat features for some species of wildlife. Rocky ledges and open sand provide nesting habitat for several different bird species.

A seabird colony has been documented nesting on the rocky cliffs on the western flank of Moro Rock. The colony has included pelagic cormorants (*Phalacrocorax pelagicus*), black oystercatchers (*Haematopus bachmani*), western gulls (*Larus occidentalis*), and pigeon guillemots (*Cepphus columba*) (Sowls et al 1980). These rocky cliffs provide potential nesting habitat for the black swift (*Cypseloides niger*) as well. The western snowy plover (*Charadrius alexandrinus nivosus*) nests within the barren habitat on the beach.

Urban Habitat

The structure of urban habitats varies from tree groves to shrub cover to lawns. At Point Sur, this habitat includes the developed and landscaped portion of the NAVFAC. Although the majority of this habitat is overgrown with kikuyu grass, it does contain a few valuable habitat features, including a grove of trees, several old buildings, and a concrete-lined drainage ditch.

The Monterey cypress and pine trees provide a roosting and potential nesting site for birds like the American kestrel (*Falco sparverius*), white-tailed kite (*Elanus leucurus*), and red-tailed hawk (*Buteo jamaicensis*) that forage nearby. Northern flickers (*Colapointes auratus*) can also be found in this grove of trees. Located within the Pacific Flyway, these trees provide a resting and feeding site for migrating land birds.

The buildings of the NAVFAC provide nest sites for birds like cliff swallows (*Petrochelidon pyrrhonota*) and barn swallows (*Hirundo rustica*), and they provide roosting and potential nest sites for Say's phoebes (*Sayornis saya*). These buildings are also used as roosting and potentially breeding sites for bats. Potential bat species include the western long-eared bat (*Myotis evotis*), Yuma bat (*Myotis yumanensis*), and Townsend's big-eared bat (*Corynorhinus townsendii*).

Cliff Swallows at NavFAC

An approximately 850-foot long concrete-lined drainage ditch runs diagonally from the main NAVFAC road to the fence line at the southern edge of the property. This ditch holds water during the wet winter and spring months and provides marginal habitat for breeding amphibians. Numerous Pacific chorus frog (*Hyla regilla*) tadpoles have been documented on site. Wilson's snipe (*Gallinago delicate*), which is a bird common to marshy fields and grassy margins of freshwater, is also found along this drainage and throughout the NAVFAC.

Additional birds that are common in this habitat include the house finch (*Carpodacus mexicanus*) and Anna's hummingbird (*Calypointe anna*). Some mammals that are common to urban areas include the raccoon (*Procyon lotor*) and striped skunk (*Mephitis mephitis*). Non-native wildlife common to urban habitats include the Virginia opossum (*Didelphis virginiana*) and European starling (*Sturnus vulgaris*).

Annual Grassland Habitat

Annual grassland habitats are open grasslands that are dominated by annual grasses. Forbs and perennial grasses are found in these habitats as well. At Point Sur, this habitat type is found at the schoolhouse site and along the edge of the southeastern corner of the NAVFAC. It includes the Non-native Grassland, Coastal Terrace Prairie, and Freshwater Seep plant communities. The Coastal Terrace Prairie and Freshwater Seep communities are not typical annual grassland habitat, but they are classified this way at Point Sur due to their small size and patchy configuration amid non-native, annual grassland.

A variety of wildlife species use annual grassland habitats for foraging, but many require additional habitat features, such as trees, shrubs, or water for breeding and cover. Numerous songbirds have been noted using the annual grassland habitat at Point Sur, including yellow-rumped warblers (*Dendroica coronata*), palm warblers (*Dendroica palmarum*), American goldfinches (*Carduelis tristis*), lesser goldfinches (*Carduelis psaltria*), and western bluebirds (*Sialia mexicana*).

Monarch butterflies (*Danaus plexippus*) are among the invertebrates that are also found in this habitat.

Reptiles such as the coast garter snake (*Thamnophis atratus*) and western fence lizard (*Sceloporus occidentalis*) are found in the annual grassland habitat at Point Sur. The coyote (*Canis latrans*) is one species of mammal known to use this habitat. Several additional mammal species that potentially occupy this habitat as well include the western harvest mouse (*Reithrodontomys megalotis*), deer mouse (*Peromyscus maniculatus*), California vole (*Microtus californicus*), and black-tailed jackrabbit (*Lepus californicus*). Due to the annual grassland habitat's close proximity to the urban habitat, as well as the isolated nature of the urban habitat here, these two habitat types share several species in common at Point Sur SHP.

Coastal Scrub Habitat

White-crowned Sparrow at Moro Rock

Coastal scrub habitat is characterized by low to moderate sized shrubs. At Point Sur, this habitat type is located on Moro Rock and at its base. It includes the Northern Coastal Bluff Scrub, Central Coastal Scrub, and Northern Foredunes plant communities.

Many of the wildlife species that are found in the other habitats at Point Sur SHP may use the coastal scrub habitat as well. The coast garter snake and western fence lizard may be found in this habitat. Birds that are common in this habitat include the white-crowned sparrow (*Zonotrichia leucophrys*), golden-crowned sparrow (*Z. atricapilla*), and song sparrow (*Melospiza melodia*).

A few additional species would be restricted to the coastal scrub habitat and not found in the other habitat types at Point Sur. The Park is within the range of the black legless lizard (*Anniella pulchra nigra*) which has the potential to occur in this habitat. This habitat also has the potential to harbor the Smith's blue butterfly (*Euphilotes enopointes smithi*) and the globose dune beetle (*Coelus globosus*).

Sensitive Animals

Sensitive animals are those species that are listed as threatened, endangered, sensitive, or of special concern by the U.S. Fish and Wildlife Service, the Department of Fish and Game, and/or other agencies or organizations. Several sensitive animals occur at Point Sur SHP, and federally designated critical habitat is present as well. The Endangered Species Act defines critical habitat as areas which are essential to the conservation of listed species. Appendix A-3 (Page 7-4) contains a list of the sensitive animals that either occur at the Park, or have the potential to occur because suitable habitat exists within the Park. The eight

sensitive animals that are discussed below are either federal or State Threatened or Endangered species that have been documented at Point Sur or species that necessitate a comparable level of management consideration due to their sensitivity and the likelihood of their occurrence.

Southern Sea Otter (*Enhydra lutris nereis*)

The southern sea otter is listed as a federal Threatened species and a State Fully Protected animal. This marine mammal once ranged from Prince William Sound to central Baja California, but is now restricted to central California (translocated colonies also exist off the coast of Alaska, British Columbia, and Washington). The sea otter has been hunted for fur, but current threats to the species decline include oil spills, pollution, disease, and mortality incidental to commercial fishing. Southern sea otters occur within Point Sur's marine habitat, which is within the California Sea Otter Game Refuge.

Black Swift (*Cypseloides niger*)

The black swift is a California Special Concern species. This bird is a local summer resident along the Big Sur coast that nests in moist locations on cliffs located above the ocean surf or adjacent to waterfalls. Black swift nesting has been strongly suspected on Moro Rock at Point Sur (Desante and Remsen 1972). They are known to breed at several other cliff locations in the Big Sur area and forage widely over the Big Sur coast (Roberson 2002).

California Brown Pelican (*Pelecanus occidentalis californicus*)

The California brown pelican is listed as a federal and State Endangered species as well as a State Fully Protected animal. The use of chlorinated hydrocarbons like DDT attributed to the species decline in the 1960s and 1970s. Since the banning of pesticides like DDT, the population has rebounded. The Little Sur River mouth, approximately 2 miles north of Point Sur, is a major brown pelican roosting site in summer and fall (Roberson 2002). At Point Sur, brown pelicans are often seen flying along the coastline.

California Condor (*Gymnogyps californianus*)

The California condor is listed as a federal and State Endangered species that was once a regular along the Big Sur coast. Lead poisoning, caused by the ingestion of flesh contaminated with lead bullets, was a factor in the species decline. The last 27 wild condors were captured by 1987, and a successful captive breeding program was undertaken. In 1992 U.S. Fish & Wildlife Service began to release young condors back into the wild in southern California. In 1996, the non-profit Ventana Wilderness Society (VWS) began releasing condors into Big Sur's Ventana Wilderness, Los Padres National Forest. VWS currently monitors a healthy condor population in Big Sur, with plans to release a total of 50 condors over a ten year period.

Western Snowy Plover (*Charadrius alexandrinus nivosus*)

Western Snowy Plover Chick

The Pacific coast population of the western snowy plover is listed as a federal Threatened species. Habitat loss and degradation is a major factor, as well as a continuing threat, in the decline of the plover. Human disturbance, urban development, introduced plants, and expanding predator populations all contribute to habitat loss and degradation. Although the plover breeds on coastal beaches from southern Washington to southern Baja California, populations are concentrated in areas of suitable habitat. Nests are formed of scrapes or depressions in the sand, leaving plover eggs as well as the precocial chicks vulnerable to trampling.

At Point Sur, the beach and dune area to the north of the point is federally designated critical habitat for the western snowy plover. The plover breeds and winters here, and this is the only beach between the Monterey Bay and San Luis Obispo County on which the plover is known to nest. This is also one of the few beaches with nesting western snowy plovers that is not open to the public.

California Red-legged Frog (*Rana aurora draytonii*)

The California red-legged frog is listed as a federal Threatened and a California Special Concern species. These frogs spend most of their lives in or near ponds, marshes, springs, streams, and reservoirs. The decline of the species is attributed to over-harvesting, habitat loss, non-native species introduction, and urban encroachment. Current threats include habitat loss due to stream alteration and disturbance to wetland areas, competition and predation from non-native species, and expanding urbanization. The California red-legged frog does occur in the Big Sur River which flows through Andrew Molera and Pfeiffer Big Sur State Parks. Optimal habitat for this species may be found at the Park's freshwater spring (further study of this site is needed). In addition, nearby wetlands and ephemeral drainages within the Park provide the potential for occurrence.

Globose Dune Beetle (*Coelus globosus*)

Yellow Sand Verbena at Point Sur

The globose dune beetle is a federal Species of Concern. This species ranges from Sonoma County to Baja California. It inhabits coastal dunes and is primarily restricted to the foredunes. The beetle burrows into the sand underneath dune vegetation. It is often associated with yellow sand verbena and beach saltbush (*Atriplex leucophylla*). Threats to this species include the loss of

habitat caused by development and the invasion of exotic plant species like European beach grass. The globose dune beetle has been documented from the Little Sur River south to Point Sur (U.S. Fish and Wildlife Service, no date).

Smith's Blue Butterfly (*Euphilotes enopointes smithi*)

The Smith's blue butterfly is listed as a federal Endangered species. The butterfly's current range is known from the mouth of the Salinas River in Monterey County to the San Carpoforo Creek area in San Luis Obispo County (Arnold 2002). The primary threat to this species is urbanization, but other land uses, including cattle grazing, also threaten the butterfly. Its larval and adult food plants are limited to certain species of buckwheat (*Eriogonum*). The adult butterflies spend the majority of their time on the buckwheat flowerheads, which is where they lay their eggs. The larvae feed on the flowerheads as well, and they pupate either in the flowerheads or in the leaf litter on the ground. Because of this close association with buckwheat, disturbance to occupied plants is equivalent to disturbance of the butterfly.

Coast Buckwheat on Moro Rock

Two species of buckwheat, which provide potential habitat to the Smith's blue butterfly, occur in the coastal scrub habitat at Point Sur SHP, seacliff buckwheat (*E. parvifolium*) and coast buckwheat (*E. latifolium*). To date, surveys at the Park have not documented the butterfly in any of its life stages. However, the butterfly has been documented, under weather conditions similar to those at Point Sur, at Cooper Point (approximately 5.5 miles south of Point Sur) and Pfeiffer Beach (approximately 6.5 miles south of Point Sur) (Arnold 2002). Potential for the Smith's blue butterfly to occur at Point Sur SHP is high because good quality suitable habitat is present.

Exotic Animals

Exotic animals are non-natives that have been introduced to an area outside of their natural range. Species that have expanded their range as a result of human urbanization and cultivation are often considered exotic species as well. Many exotic animals are well adapted to human disturbance, and they only flourish in disturbed areas. Others have managed to prosper in wildlands where they compete for resources with native species.

Wild Pig (*Sus scrofa*)

Wild pigs include wild boar that are native to Europe and feral pigs. The wild boar was introduced into Monterey County in 1925 for sport hunting. Wild pigs can flourish in a variety of habitats and on a variety of food types. They compete with native wildlife by eating anything from grain to carrion, and their foraging patterns are destructive to vegetation and the landscape. Wild pigs are

found in the Point Sur area, and they pose management concerns in nearby Andrew Molera State Park.

European Starling (*Sturnus vulgaris*)

The European starling was introduced to New York City from Europe in 1890. It proliferated in North America and had reached Monterey County by 1953. Today starlings are abundant in all urban and cultivated areas where they out-compete native cavity-nesters for nest sites. In this way, the European starling has altered the status and distribution of native species like the purple martin (*Progne subis*). European starlings are abundant in the Point Sur area, and they are often seen at the NAVFAC.

CULTURAL RESOURCES

Native American Ethnographic Overview

Human occupation along the Big Sur coast is known to have occurred as long ago as 4400 B.C. (Jones 2003:117). Even earlier dates are well established both in the Monterey Bay area to the north and in San Luis Obispo County to the south, but it is unclear exactly when the first people settled along this most rugged section of the coastline.

The Esselen, or their ancestors, may have been the first people to live along this section of the coast, as well as far to the north. The Esselen likely were concentrated in this area when the Rumsen Ohlone (or Costanoan) expanded southward, culminating 2500 years ago. At the time of European contact, the Esselen lived in the Upper Carmel River Valley, the drainages of the Big and Little Sur Rivers and throughout the Santa Lucia Mountains. Their neighbors to the south of Lucia were the Salinan people.

Point Sur SHP is in either Esselen territory (Breschini and Haversat 1994) or the Costanoan area known as Sargenteruc (Millikin 1990). Very little ethnographic data was recorded for this area, and what was recorded presents conflicting views. Mission records show that people from both the Rumsen and the Esselen were absorbed into the mission sphere. Although some thought at one time that the Esselen were extinct (Kroeber 1925:544), the descendants of these early people thrive and continue to have an active interest in their ancestral homelands. The self-identified Ohlone/Costanoan-Esselen Nation is an organized tribal council seeking to gain federal recognition. More than half of its enrolled members reside in Monterey and San Benito Counties.

The material culture of the Esselen is not well known. Indications from nearby areas such as Garrapata State Park (Davis et al 1990a) and Andrew Molera State Park (Davis et al 1990b) suggest that prehistoric archaeological sites are regularly found scattered along the coastline, especially near the outfall of creeks. The archaeological record reveals many facets of the aboriginal culture and shows how these evolved through time. Typically, food remains include fish, shellfish, birds, marine and terrestrial mammals and plants. The processing tools for food preparation include grinding equipment such as portable and bedrock mortars and pestles. Hunting tools, including spear and arrow tips, were made from local materials (primarily chert), but a small percentage were also made from obsidian that had to be traded from sources as remote as the eastern Sierra Nevada.

Along the entire California coast, ornaments were made from shell and bone. The sites that were utilized after the establishment of the missions also contained tools and ornaments in traditional forms made out of newly available materials. One example of this is projectile points made of bottle glass.

Imported goods were rare except for glass trade beads – the most commonly found indicator of European contact at Native American sites.

Native American Cultural Resources within the Park

Native American sites are found within close proximity to Point Sur SHP. These are located at Andrew Molera State Park directly south of the Park and on private lands adjacent to the Park. Within the Park, all the known cultural resources are components of the built environment. No archaeological resources have been identified. The Park areas known as the Schoolhouse Site, the road right of way, the beach and foredunes, and the Moro Rock itself were all thoroughly surveyed by DPR. The report states that "No prehistoric archaeological sites, features, or artifacts were discovered." (Woodward 1987:5)

A preliminary archaeological reconnaissance by the private firm Archaeological Consulting (Breschini and Haversat 1981) was conducted at the NAVFAC. They carried out background research and conducted a field survey of the approximately fifty acre parcel. The records search found no previously recorded sites, and during the survey the authors noted that "most of the property consists of dense grasses or buildings and roads," (op. cit.: M-15), and that they "...located no evidence of archaeological resources on the property."

Historic Overview

Spanish Period (1542-1793):

The first historic period sightings of Moro Rock along the Alta California coast were recorded by Spanish explorers during the 16th century. The expeditions of Cabrillo in 1542, Salcedo in 1565, Gali in 1585 and Cermeño in 1594 were an indication of Spain's imperial intentions on her northern frontier. British interest in territorial expansion was also signaled by George Vancouver's expedition to the Big Sur coast in 1793. (Roland, 1991; Hornbeck, 1983).

Mexican-Early American Period (1834-1866)

It was not until the 1830s during the Mexican period that the 8,949 acre parcel, Rancho El Sur was deeded to Juan Bautista Alvarado, the future governor of California. In 1840 Alvarado transferred title to his uncle by marriage, the Yankee emigrant John Rogers Cooper. He and his family were a part of a growing number of pioneer homesteaders who began to settle in the Big Sur region beginning in this period, using the ranch land primarily for cattle grazing. In 1866 when Cooper was officially deeded the acreage, he granted a right of way to the federal government for the construction of a lighthouse. The family subdivided the property and continued their ranching activities, as have subsequent owners—up to the present day. (Davis, 1989; Henson & Usner, 1993).

Late 19th to Mid 20th Century Development Period (1886-1939)

By the 1860s the need to locate a lighthouse at Point Sur had been identified because of the risks to the increasing sea commerce between Monterey and San Luis Obispo. Several shipwrecks which occurred just off Moro Rock- most notably the *S.S.Ventura* in 1875- were a further spur for the establishment of the Lighthouse. After almost twenty years of delay, funding for the Light Station was appropriated in 1886 and construction finally began.

The top of the Rock was dynamited and leveled and an incline railway was constructed on the east side of the rock, as well as a landing on the rock's south side. Local sandstone was quarried for the most important and architecturally distinctive of the Light Station buildings – the Lighthouse Tower/Fog Signal Building, Assistant Keepers Quarters and Engine hoist house which would shortly be remodeled into the Head Keepers Quarters. The style of these buildings, called Richardson Romanesque, was used primarily for commercial and civic buildings and found predominantly in the mid-west and east coast. Point Sur Light Station certainly contains the only lighthouse on the west coast built in this architectural style. The three most prominent buildings, the Lighthouse, Head Keepers and Assistant Keepers Quarters with their steep vertical rooflines and facades were constructed out of sandstone; this durable material was insurance against harsh weather conditions atop the rock. Later, wood-frame support buildings were added, such as the combination Carpenter/ Blacksmith shop and Barn. Still later, a concrete Oil House was added. Figure 3 (Page 2-3) depicts the locations and construction dates of these buildings.

View of Light Station Complex, c.1930s

Despite these advances at the rock, living conditions remained primitive for the four keepers and their families. When William Mollering Jr. came to Point Sur in 1926 to assume the position of 3rd Assistant Keeper and later Head Keeper, there was no electricity, refrigeration or indoor plumbing for his family of four. The following year a school teacher was hired to instruct the six children then living atop the rock. The teacher typically boarded with the head keeper's family and

taught in one of the small outbuildings nearby. By the early 1930s there were enough children to justify construction of a one-room schoolhouse on a small parcel of land near Highway 1.

Children at One-Room Schoolhouse c.1930

This school served the nine children then living on the rock as well as others who lived in the surrounding area. During the 1930s when the population living on the rock reached its height, the ample quarters at Point Sur easily accommodated the growing families of the keepers and their assistants. Bill Owens, 3rd Assistant Keeper (1935-1937), lived on the rock with his family of seven. According to Owens, each family had their own fenced kitchen gardens, a cow and several chickens. Still, day-to-day challenges at Point Sur were always formidable, and over the years the lack of good access roads, difficult weather conditions, and a problematic water system would continually engage the ingenuity of the Light Service engineers, the Keepers and their families. (Roland, 1991; DPR, 1990; CCLK, files, Monterey District Office, n.d.)

Historic Structures at Point Sur Light Station

The 1990 and 1991 National Register of Historic Places nomination statement and index identified the period of significance for the Light Station complex as 1889-1940. The following structures are from this time frame.

<u>Cistern, 1888-contributing structure</u>
This whitewashed igloo-shaped cistern, the oldest structure of the Light Station complex, has an approximate holding capacity of 53,000 gallons of water. It is located on the highest point of Moro Rock, directly north of the water tower replica. (National Register, 1990)

Lighthouse, 1889-contributing structure

This 60 foot tall tower with its rectangular, attached fog signal and oil lamp rooms is located on the northwest slope of Moro Rock, placed at a low elevation to avoid the coastal fog. It was constructed of locally quarried sandstone in the Richardson Romanesque style which is characterized by massive stone walls and semi-circular arches and principally used for civic and commercial buildings. The tower is topped by a cylindrical iron lantern room with an outside parapet gallery. Attached to the west side of the lantern room tower is the fog signal room with its arched doorway. A single story room which housed the lamp oil room is attached to the east side of the lantern tower. In the 1930s this room was outfitted as a radio room. (Natl. Reg, 1990, CCLK files, n.d.)

Head Keepers Quarters, 1889-contributing building

This two-story building was initially constructed as the engine hoist house for a single-track rail system, that ran up the east facing side of Moro Rock. Remodeled for living quarters in 1902, the building's first floor exterior is masonry designed in the Richardson Romanesque style, with arched and semi-circular recessed doorways and windows. The second floor exterior was also modified in the late 1930s, its original tudor-revival or half-timbered façade was replaced with shiplap or channel siding. (Natl. Reg, 1990)

Head Keeper's Quarters in 1914

Assistant Keepers Quarters (Triplex), 1889-contributing building
This massive two-and-a-half story residential building is the most dramatic and visible building on Moro Rock and, with a few exceptions, matches the construction and architectural design of both the Lighthouse and the adjacent Keeper's Quarters. Suggesting the influence of gothic design, the residences' cross-gabled, steep vertical rooflines and multiple chimneys, is the visual focal point of the entire historic Light Station complex. The exterior masonry façade, with its decorative stone keystones and lintels remains much as it was originally constructed, with the exception of several wooden room additions and gable windows added in the late 1930s. (Natl. Reg, 1990)

Assistant Keepers Quarters (Triplex) in 1893

Carpenter/Blacksmith Shop, c. 1907-contributing building
This one-story wood frame building with a sloping hipped roofline is located just northwest of the Assistant Keeper's Quarters. It was constructed as one of the vital technical supports to the Light Station complex, with its own forge, anvil, drill press and other period tools. In the late 1990s without the benefit of an Historical Structures Report (HSR), DPR staff used available information and an earlier Existing Conditions Analysis report (1991) to conduct stabilization and reconstruction of portions of the building. (Natl. Reg, 1990, CCLK files, n.d.)

Barn c. 1900-contributing building
This wooden one-story building with its jerkinhead roof and hayloft is due northwest of the Assistant Keeper's Quarters. The Barn housed the horses, mules, and cows for the Light Station. During the 1940s the Coast Guard

modified the structure and used it as a working garage and storage room. In the late 1990s without the benefit of an Historical Structures Report (HSR), DPR staff used available information and an earlier Existing Conditions Analysis Report (1991) to conduct stabilization and reconstruction of portions of the building. (Natl. Reg, 1990, CCLK files, n.d.)

Oil House, c. 1907-contributing building

The Oil House is a one-story flat-roofed rectangular building, slightly south of the Lighthouse complex. It replaced the Oil Lamp room and stored flammable liquids such as paint and kerosene. (Natl. Reg, 1990, CCLK files, n.d.)

Garage, c. 1925

Although the National Register Nomination form (1990) defines this building as non-contributing, it falls within the period of significance for the Light Station, which is 1889-1940. The garage has interpretive value in the secondary interpretive period (1939-1974) and follows Departmental standards regarding the "flow of history." The garage is a one story wood frame shed structure located just east of the Assistant Keeper's Quarters.

Pumphouse, c. 1939

Although the National Register Nomination form (1990) defines this building as non-contributing, it falls within the stated period of significance for the Light Station, which is 1889-1940. The pumphouse has interpretive value in the secondary interpretive period (1939-1974) and follows Departmental standards regarding the "flow of history." This one room wood frame structure was constructed just prior or during World War II.

c.1960s aerial photo showing mess hall at lower left and barracks building at upper left with the Antennae tower located between the two buildings.

Mess Hall, c. 1945

Although the National Register Nomination form (1990) defines this building as non-contributing, it falls within the secondary interpretive period which calls for the interpretation of the WWII era (1939-1974). This rectangular concrete block building with its moderately pitched gable roof was the dining facility for approximately forty men stationed on the rock during World War II. The men were housed in the nearby Barracks building. The Mess Hall has recently been converted into a visitor center and small gift shop.

World War II to Initial State Park Ownership

In 1939 in response to the outbreak of war in Europe, the Lighthouse Service was abolished and re-incorporated under the Coast Guard. As part of the efforts towards military preparedness, a major renovation of buildings and systems was undertaken. The tramway and landings were removed and radio towers and electricity were installed. Road access was improved from the newly built Cabrillo Highway (Highway 1) up to the rock. Keeper Thomas Henderson was assigned to Point Sur during the war years and performed his regular duties and additional watch detail as needed to support the Coast Guard. In the mid-1940s a Barracks and Mess Hall were constructed for the Coast Guard, large enough to accommodate forty men. The modernization atop the rock signaled a new era for Point Sur. Experiments in sonar and radar, the RACON (RAdar BeaCON) Transponder Tower shown in the photograph above, were begun in the late 1930s. This developing technology at the Light Station was the new focus of operations well into the 1950s, (O'Neil, 2003; Sheehy, 2003). During the post-war years the numbers of Keepers and their families declined. In 1972 the Lighthouse was completely automated and the majority of the buildings that had supported the Keepers were boarded up and abandoned. The Coast Guard retained ownership and continued to maintain the light and radio beacon.

RAdar BeaCON (RACON) Tower on Moro Rock.

The Point Sur Light Station continued to evolve with the times. With the devastation wrought by submarines during World War II, the U.S. Navy sought a more effective means of detecting undersea threats. In the Cold War era, economic and ideological tensions grew between the Soviet Union and the United States leading to a nuclear arms build-up. The precarious nuclear standoff between the two superpowers resulted in the doctrine of MAD or Mutual Assured

Destruction. Decades of covert activities led to the development and use of technologies like SOSUS, a passive acoustical SOund SUrveillance System, which enabled the US to track Soviet submarines. Beginning in the late 1930s, experiments by the US Navy, primarily on the east coast, led to the development of the precursor technology to SOSUS, the Sound Fixing And Ranging (SOFAR) system. At Point Sur, SOFAR had been housed in a small concrete building near the Barracks. The subsequent discovery of a deep underwater sound channel on the beach just below the Light Station, led to the establishment of Point Sur NAVFAC in the mid 1950s. NAVFAC was similar in layout and function to a network of SOSUS facilities worldwide.

Moro Rock with NAVFAC *in the background c.1960s*

Built in 1957, the Point Sur Naval Facility (NAVFAC) was a large self-sufficient facility with a full complement of support and recreational facilities for its isolated personnel. Similar in mission and facility-size to hundreds of SOSUS bases worldwide, its official mission was to conduct oceanographic research. Located on the marine terrace to the landward side of the rock, adjacent to Highway 1, the base was constructed with an eye towards high security; its architectural design was indebted to a post-war industrial and military aesthetic. Buildings at the base were designed in a low profile, flat-roofed style, which were particularly suited to blend into the surrounding landscape, with minimal design details (see Figure 4, Page 2-4). The ranch-style Capehart design, a standard plan military employee housing type was used at NAVFAC near the main entrance gate.

Beyond the employee housing area, the base buildings were organized into sectors or areas by function within the facility's larger rectangular boundary

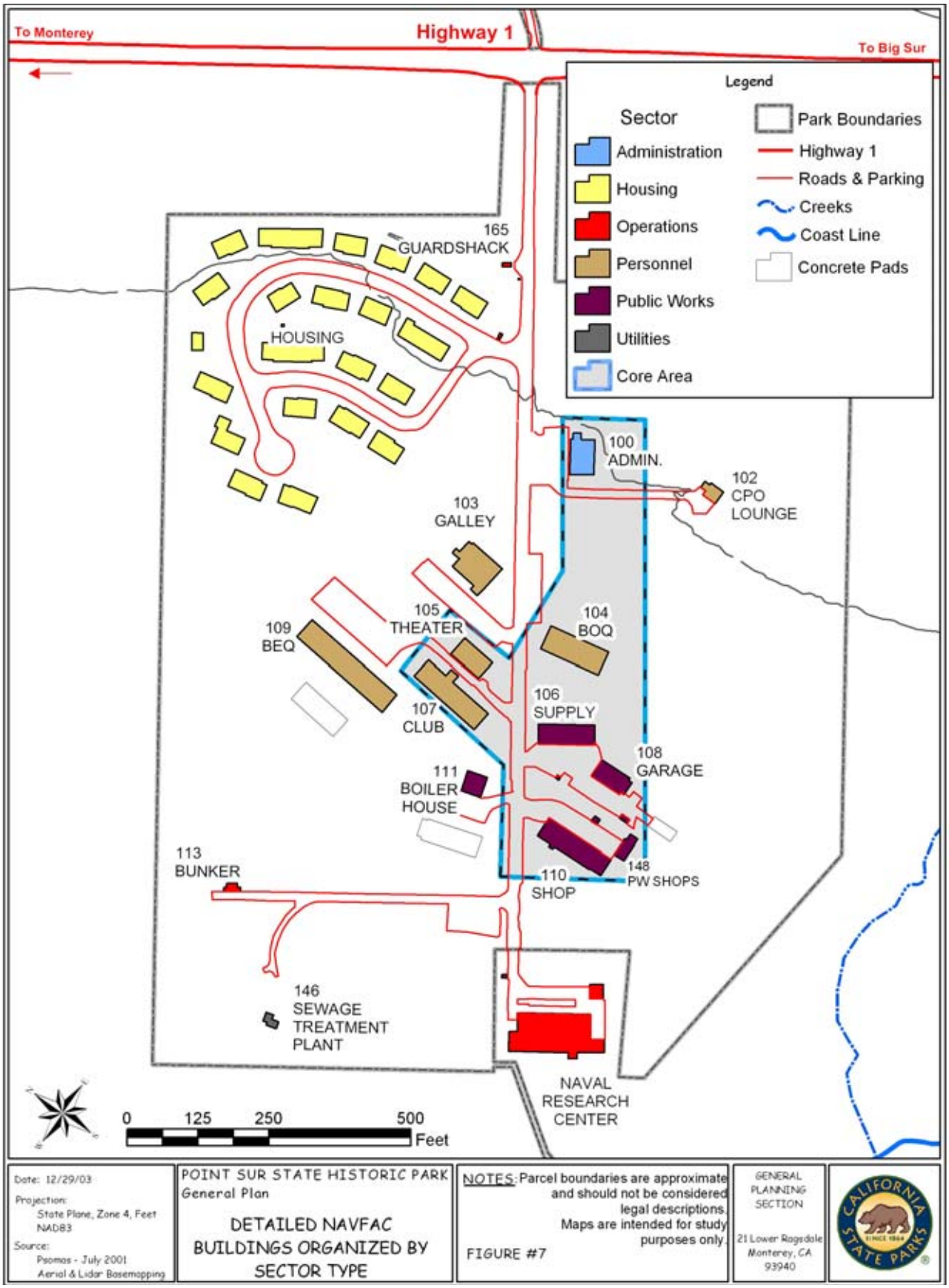
(Figure 7, Page 2-39). All of the high security, sensitive data collecting took place in the Terminal Equipment Building (OPS) located near the shoreline facing Moro Rock. It is a rectangular concrete fortress-like structure with a flat-roof and no windows. Inside, sonarmen would man banks of consoles on a 24-hour basis, as a stylus recorded sound patterns directly from undersea hydrophone cables. These "gram recorders" were able to identify submarines by shaft, firing and cylinder rates. Navy personnel stationed at Point Sur talked about their experience on base as "life-changing," as they performed their daily duties and spent time in the local community:

> "Several of us were active in the Big Sur area at that time, including the Redwood Lodge, Post's Rancho Sierra Mar and the Big Sur Inn. We also participated in the Big Sur Grange programs. Those were the days when Henry Miller lived in the area and participated in the Big Sur activities." (Turk, 2001)

Point Sur NAVFAC also gave new opportunities to young women just entering American military service in the late 1970s:

> "Women's opportunities were just being realized the year I was commissioned…I'm told we were the first group of females (non hospital types) to do this. Anyway, without flight and ships to choose from and the pickings slim, I chose the SOSUS route. No regrets." (Jenkins, 2003)

Point Sur NAVFAC was de-commissioned in 1984 and its base abandoned. The Naval Post-Graduate School continues to operate out of the Terminal Equipment Building (currently called the Naval Research Center) and, with partners from several universities, collects data from hydrophones with a new focus on natural resource conservation.


To Monterey
Highway 1
To Big Sur
Legend
Sector
Administration
Housing
Operations
Personnel
Public Works
Utilities
Core Area
Park Boundaries
Highway 1
Roads & Parking
Creeks
Coast Line
Concrete Pads
165
GUARDSHACK
HOUSING
100
ADMIN.
102
CPO
LOUNGE
103
GALLEY
105
THEATER
104
BOQ
109
BEQ
107
CLUB
106
SUPPLY
108
GARAGE
111
BOILER
HOUSE
113
BUNKER
110
SHOP
148
PW SHOPS
146
SEWAGE
TREATMENT
PLANT
NAVAL
RESEARCH
CENTER
0
125
250
500
Feet
Date: 12/29/03
Projection:
State Plane, Zone 4, Feet
NAD83
Source:
Psomas - July 2001
Aerial & Lidar Basemapping
POINT SUR STATE HISTORIC PARK
General Plan
DETAILED NAVFAC
BUILDINGS ORGANIZED BY
SECTOR TYPE
NOTES: Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.
FIGURE #7
GENERAL
PLANNING
SECTION
21 Lower Ragsdale
Monterey, CA
93940
CALIFORNIA
STATE PARKS

Structures at the NAVFAC

The NAVFAC buildings were judged not eligible for listing on the National Register of Historic Places in 1984 by the State of California's Office of Historic Preservation. Examining the base again in 2001, and as the facility approached fifty years of age, this judgment was again upheld by staff historians, consultants and the State Historic Preservation Office (SHPO). Nomination to the California Register of Historic Places is currently under evaluation by the DPR. Although NAVFAC was deemed historically non-significant, the base played a role in the overall growth and development of the military presence at Point Sur reinforcing technological change at the Lighthouse complex. This was the case particularly during the first 20 years of operation, when SOSUS was at the forefront of Cold War defensive technology. The facility's origins and its connections to the World War II era and the beginnings of the Cold War era make it a bridge between the 19th century development of the Light Station on through to the complex world of post-Cold war politics in the 21st century.

As with most military facilities, evolving technology and changing personnel needs impacted the design and operations on base. The most dramatic changes occurred as intelligence gathering equipment was removed when it became outmoded. During the late 1970s, the Terminal Equipment Building was used to collect data but no longer had to rely on a large number of sonar men to collect it. Automation in the form of computer tracking made this unnecessary, and most of the data that was collected was remoted to a more active and centralized SOSUS site in Mendocino, California (Centerville Beach). By the late 1970s at least six antennae towers and their cable houses were removed from the facility. Other buildings and structures related to security, recreation and general operations were also listed as removed in the Navy's 1981 Master Plan, including several sentry gates, a fallout shelter, a vehicular bridge, flag poles, and indoor swimming pool and playing court (tennis). This led to the conclusion that the integrity of NAVFAC - an important criteria of the National Register of Historic Places, had been largely lost. (U.S. Navy, 1981; Aerial map, c.1975)

The Department of Parks and Recreation identified buildings by historic uses that were grouped in areas or clusters at the base, a representative sampling of which can be seen in a historic core area (excluding the employee housing segment). These were: administration, operations, personnel, public works and utilities. All of the NAVFAC buildings share the same materials and design characteristics though they vary a great deal in size. The buildings are designed as simple rectangular shapes that have flat, overhanging and or slightly angled roof lines, sash windows and doors symmetrically placed.

Administration

This area included the buildings associated with running the day-to-day operations of the facility, including security:

Administration Building #100 is a 2,628 square foot building. It is a one-story concrete masonry building.

Chief Petty Officer (CPO) Lounge Building #102 is a concrete masonry one-story 580 square foot building. It is situated near the main entrance gate and functioned as both a watch post and an officer's lounge.

Guard Shack Building #165. Near the main gate may be a replacement of an earlier sentry structure. This small rectangular building may have been built in the 1970s.

Operations

This area has very few remaining structures that pertain to NAVFAC military intelligence gathering and Cold War era history.

Small arms magazine (bunker) Building #113. This igloo-style structure housed arms.

Terminal Equipment Building (TEC) Building, historically called (OPS) #114, (currently called the Naval Research Center) is a concrete masonry one-story 10,000 square foot building. It was, and continues to be, the centerpiece for data and intelligence gathering and is owned and operated by the U.S. Navy.

Personnel

This sector served the enlisted and officer's personal and recreational needs:

Galley Building #103 is a concrete masonry one-story 3,675 square foot building built as the mess hall for NAVFAC personnel.

Bachelor Officer's Quarters (BOQ) Building #104 is a concrete one-story 4,144 square foot concrete masonry building.

Theater Building #105 is a concrete masonry one-story 1,940 square foot building that was used for lectures and showing movies.

Navy Enlisted Club Building #107 is a concrete masonry one-story 1,994 square foot building used as a PX, medical facility and meeting area.

Bachelor Enlisted Quarters (BEQ) Building #109 is a large two-story 11,595 square foot building which housed enlisted personnel.

Bowling Alley #144 (Quonset) 4,320 square feet, was deemed structurally unsound and demolished in 2003.

Gymnasium #145 (Quonset) 4,000 square feet, was deemed structurally unsound and demolished in 2003.

Public Works

This section was the maintenance area for the base:

Supply Warehouse Building #106 is a concrete masonry one-story 2,758 square foot building now used by DPR staff.

Vehicle Garage Building #108 is a concrete masonry one-story structure with three bays, now used by DPR staff.

Shop Building #110 is a concrete masonry one-story 4,439 square foot building and now used by DPR staff.

Boiler House Building #111 is a steel frame one-story 1,188 square foot building.

Public Works Storage Building #148 is a concrete masonry one-story 456 square foot building, now used by DPR staff.

Hazardous/Flammable Material Storage (Fuel Storage Shed) # 169 is a concrete masonry one-story 180 square foot structure, now used by DPR staff.

Paint Storage Shed is a concrete masonry one-story 150 square foot structure.

Firehouse structure #166 metal frame, 960 square feet, was deemed structurally unsound and demolished in 2003.

Utilities:

Waste Treatment Plant Building #146 is a concrete masonry one-story 275 square foot building.

Initial State Park Ownership to Present

In 1980 the Lighthouse Tower and the six other buildings that make up the Light Station complex were nominated to the National Register of Historic Places. Four years later in 1984, California State Parks acquired the majority of the Light Station buildings and property to create Point Sur SHP. Tour operations began the next year. In 1990-91 the National Register nomination was updated and revised, acknowledging the Point Sur Light Station complex as an historic district. The Light Station was also recognized as a State Historic Landmark number 951, in 1994. It was placed on the California Register of Historic Places in 1999. (Natl. Register, 1980, 1990, California Register, 1999)

In 2000, California State Parks acquired most of the former Point Sur Naval facility, (NAVFAC) a 38.54 acre parcel with some 45 buildings and structures on the landward side of Moro Rock. The purpose of this acquisition was primarily for the use of the existing employee housing units and to explore the reuse potential of selected buildings. An investigation of the potential historic significance of the buildings and structures at Point Sur NAVFAC showed that their Cold War era association could make a unique contribution to the interpretive story of Point Sur SHP, while assisting in Park operations. In combination, the 19th – early 20th century Point Sur Light Station, the World War II era RACON Tower and SOFAR site and the Cold War era NAVFAC base demonstrate the continuity of over 100 years of maritime and military history at Point Sur SHP.

Historic Resources Recordation Summary

The Park's historic and cultural resources consist of two distinct elements, the 19th – early 20th century Light Station complex and the mid-20th century Cold War era NAVFAC. Most of the resources on Moro Rock and the Schoolhouse site have been identified and recorded on standard (523 series) State recordation forms. The Light Station complex was nominated to the National Register of Historic Places in 1980 and updated in 1990-91, as an historic district, associated with the categories of architecture, commerce, communications and transportation.

In 1987, an Historic Structure and Archaeological Survey of the Light Station buildings and features in the Park was undertaken by DPR staff. It recorded the 5 contributing historic buildings and the 3 non-contributors in the Historic District, as well as landscape features and structural elements including retaining walls, bridges and viaducts, the RACON Tower site and the Point Sur Schoolhouse site. Two of the most important structures, the Assistant Keepers and Head Keepers Quarters had Historic Structure Reports produced by DPR in 1991. The previous year Interactive Resources was hired by DPR and produced a report entitled*: "Existing Conditions Analysis and Proposed Restoration Plan: Point Sur Light Station, Carpenter and Blacksmith Shop, Barn, Garage, and*

Pumphouse." Restoration projects undertaken include a 1999 rehabilitation project on the 1908 Carpenter- Blacksmith Shop and the c.1900 Barn.

In addition to the National Register Nominations, a full DPR Primary Recordation (523 series) should be completed for each historic building and structure of the Light Station complex. This will complement the previous Historic Structures Report and Conditions Assessment completed in the late 1980s and early 1990s. Recent information collected on the World War II era resources and post-war period structures on the rock will require additional study and recordation.

Park Interpretation & Collections

There are several means by which the public can learn about the Light Station at Point Sur SHP. These include:

- Public Tours. The primary public access to the Light Station is docent-led tours.

- Interpretive Exhibits. Temporary and permanent interpretive displays have been designed and installed throughout the Light Station.

- Publications, Community Outreach. In addition to on-site interpretation and education, information about the Light Station is provided in other formats as well: informational brochures, web sites, video tape, program presentations, news media, etc.

There is no structured interpretation at this time of the Cold War era NAVFAC.

In addition to public tours, school tours are given by request throughout the year. Special interest tours, such as Elderhostel, and moonlight walks are scheduled when the weather and volunteer staffing permits.

The greatest interpretive challenge for Point Sur SHP is that there is no public access on a casual, drop-in basis. Point Sur may be one of the few State Parks in California where this is the case. Because of the Park's remote location and the rock's steep topography, currently only those visitors who are able to learn about the advertised tour schedule in advance, or happen to drive by and see the line of cars waiting for the tour to start are able to visit the Park and take the guided tour. The tour takes up to three hours and the maximum limit is 40 people. Currently, the tour focuses on the history of the Light Station buildings as they evolved during the late 19th-to-mid 20th century.

<u>A Typical Light Station Tour</u>

At the scheduled time a State Park volunteer unlocks the Highway 1 access gate to let in the public, who wait in their cars along Highway 1. This is a dangerous

location as there is no turn lane and the Park's entrance is close to traffic. Once inside the gate visitors drive to and park at the base of the Moro.

Visitors taking the walking tour must be able-bodied enough to walk up the ½ mile, 14% grade to the Light Station and then back down to the parking area (chemical toilets are located nearby). Limited provision for disabled visitors has been established, and shuttle in a Park vehicle can be requested by prior arrangement with Park staff. None of the Park vehicles are ADA equipped. As an ADA alternative, or for those who cannot spend the required touring time at Point Sur, a video can be viewed upon request at the Big Sur Station visitor information center located seven miles south of Point Sur. Additionally, a sign language or oral interpreter can be provided if given two weeks advance notice.

Visitors on Guided Tour of Light Station Complex

Once near the rock's top, the visitor branches off the main road onto a spur that goes to the Lighthouse complex. At the Lighthouse, the visitor can climb a 37-step circular staircase to get a view from the top of the lantern room and step outside onto its gallery walkway. The public may also view exhibits in the adjoining Fog Signal room.

Visitors proceed back up the hilltop steps and pathway and back onto level ground, briefly entering the Carpenter-Blacksmith Shop and the Barn. The public then walks beyond the Assistant Keepers Quarters, past the whale bone display and into the ground floor of the Head Keepers Quarters which has a small exhibit area. The last stop on the tour is the Visitor Center building which provides small gift items, books and additional interpretive exhibits and lighthouse related information.

Collections

The majority of collections consist of 3-dimensional objects that have been acquired or donated by families of the former Keepers. These include 19th-20th century carpenter and blacksmith tools, small items of furniture, china and some textiles. There are also Coast Guard related objects that are primarily aids-to-navigation equipment and Lighthouse Service memorabilia. Artifacts related to the Light Station are also stored in curatorial spaces at Monterey SHP and at Fort Ord Dunes SP.

Tools on display inside the Carpenter-Blacksmith shop

Aesthetic Resources

Aesthetics is traditionally defined as the philosophy of appreciation of art and beauty. It is a concept that readily calls to mind the rugged and spectacular environment of the Big Sur coast. Most particularly, this region's famous scenic resources are the driving force behind the planning and preservation efforts of local and federal agencies, as well those of California State Parks. Scenes of the unspoiled landscape and the grandeur of the natural environment contribute to an especially high quality of aesthetic resources to be found along the Big Sur coast.

Aesthetic resources at Point Sur SHP are characterized by scenic vistas that contain many of the same elements that characterize the Big Sur experience. However, there are unique and specific cultural and natural elements only found at the Park itself. These resources can be viewed at vista points from several miles away as well as from within the Park's boundaries.

Traveling southbound, towards the northern boundary of Point Sur SHP, the topography changes dramatically from steep and mountainous terrain to the rolling flatlands of the coastal marine terrace. Open agricultural lands and pasturage for cattle and horses are part of the privately owned El Sur Ranch operations and have been part of the landscape since its development in the early-to-mid 19th century. On the ocean side, by far the most distinctive of all scenic resources at the Park is the imposing and impressive Moro Rock, rising 361 feet above sea level. From atop the rock, the views are equally dramatic looking eastward back toward the Santa Lucia Mountain ridges and its most prominent peak, Pico Blanco, as well as north towards the Monterey Peninsula. Southward, the view stretches out toward the isolated beaches that make up the coastline towards Andrew Molera State Park. Climatically, the vivid contrasts of bright sun, fog, high winds and storm conditions make the experience at Point

Sur SHP that much more memorable. The rock, and the infinite variety of scenic viewing experiences it creates for the visitor, is perhaps the definitive aesthetic experience at Point Sur SHP.

Natural Features

The unique landforms and biota at Point Sur SHP contribute to its aesthetic value. The Park's prominent and contrasting geologic features create a striking landscape. The proximity to the ocean offers dynamic colors, sounds and weather patterns. Wildflowers and other vegetation within the Park exhibit a wide array of colors which vary throughout the year. Distinctive, low-growth forms of the plant life caused by constant exposure to intense winds and salt spray add to the Park's distinguishing appearance. The small size of the Park goes unnoticed as it is offset by vast surrounding open space. Point Sur SHP's natural resources are varied and present many opportunities for an aesthetic experience.

Cultural Features

The experience common to Point Sur SHP's two main cultural resources is that of isolation. Both the 19th century Light Station complex atop Moro Rock and the landlocked Cold War era submarine listening station were solitary outposts, designed to be self-sufficient along the remote Big Sur coast.

The historic Light Station was initially developed in 1887 to protect commercial shipping interests. It was one in a chain of lighthouses along the 1200 mile California coast. The massive buildings with their gothic-inspired, steeply vertical facades are an imposing presence atop the rock, and visible for miles along the Big Sur coast. The Light Station complex is quite large in its massing and scale, as well as its number of support buildings.

At the mid-point in the 20th century, the mission of the Light Station was almost completely superceded by changing national policies and politics. By the late 1950s architecture had changed radically, and Point Sur NAVFAC situated directly east of the rock was designed in the utilitarian and post-war industrial style of the day. Security, not visibility, was the goal. The low profile concrete masonry buildings were placed in orderly grid-like zones amidst shifting sand dunes. The large number of buildings related to recreation attest to the accommodation made by the Navy to satisfy the needs of its isolated personnel.

Seen together, the two complexes play off one another in stark contrast -- offering an unusual aesthetic experience. NAVFAC, with its practical and unadorned industrial design provides a dramatic counterpoint to the historic period revival-style of the Light Station. Together, these cultural elements within view of the dramatic mountain scenery provide a sense of the remote grandeur of the Big Sur environment.

Recreational Resources

Currently the primary recreation at the Park is the trek up the road to the Light Station complex during a guided tour. Other recreational activities enjoyed by visitors on the tour are photography, bird watching, and nature study. For the safety of the visitors, due to Moro Rock's steep and rocky terrain, and its irreplaceable historic buildings, Park staff is cautious about allowing visitors to stray from the tour. At this time public access is not allowed on the beach at the base of the rock. The NAVFAC currently does not offer public recreation.

System-wide Planning Influences

Planning for State Parks must be wide-ranging to consider issues that cross regional, local community, and Park boundaries. Federal, state, county, and community agencies are responsible for providing oversight and review of various planning-related laws and policies, such as the California Environmental Quality Act (CEQA), and the Americans with Disabilities Act (ADA), as well as Regional Water Quality Control Board and Air Quality Management District regulations.

Resource Management Directives

The California Department of Parks and Recreation's Resource Management Directives guide the planning process. A list of planning influences that may affect planning decisions at Point Sur SHP can be found in the Bibliography section, page 6-1.

Unit Classification

The Public Resources Code contains statutes for the classification of Units of the State Parks System. Historical Units, which include Point Sur SHP, are defined below.

> **Public Resources Code Section 5019.59** Historical Units, to be named appropriately and individually, consist of non-marine areas established primarily to preserve objects of historical, archaeological, and scientific interest, and archaeological sites and places commemorating important persons or historic events. The areas should be of sufficient size, where possible, to encompass a significant proportion of the landscape associated with the historical objects. The only facilities that may be provided are those required for the safety, comfort, and enjoyment of the visitors, such as access, parking, water, sanitation, interpretation, and picnicking. Upon approval by the commission, lands outside the primary historic zone may be selected or acquired, developed, or operated to provide camping facilities within appropriate historical Units. Upon approval by the State Park and Recreation Commission, an area outside the primary historic zone may be designated as a recreation zone to provide limited recreational opportunities that will supplement the

public's enjoyment of the Unit. Certain agricultural, mercantile, or other commercial activities may be permitted if those activities are a part of the history of the individual Unit and any developments retain or restore historical authenticity. Historical Units shall be named to perpetuate the primary historical theme of the individual Unit.

Regional Planning Influences

Consideration of regional influences is important in the discussion regarding the land use and facilities at Point Sur SHP. When planning for the future of Point Sur SHP, it is important to understand the relationship with the Park's features and its impact with the surrounding community, agencies, and stakeholders. It is critical that planning efforts are consistent with the existing Big Sur Coast Land Use Plan and the Monterey County General Plan, when it is adopted.

Monterey County

The 1984 Big Sur Coast Land Use Plan and 1988 Monterey County Coastal Implementation Plan (Part 3, Regulation for Development in the Big Sur Coast Land Use Plan) contain management policies which pertain to Point Sur SHP. The General Plan sets out to comply with these management policies by restoring and enhancing the natural character of Point Sur SHP and its coastline by protecting the critical viewshed and its high quality scenic value.

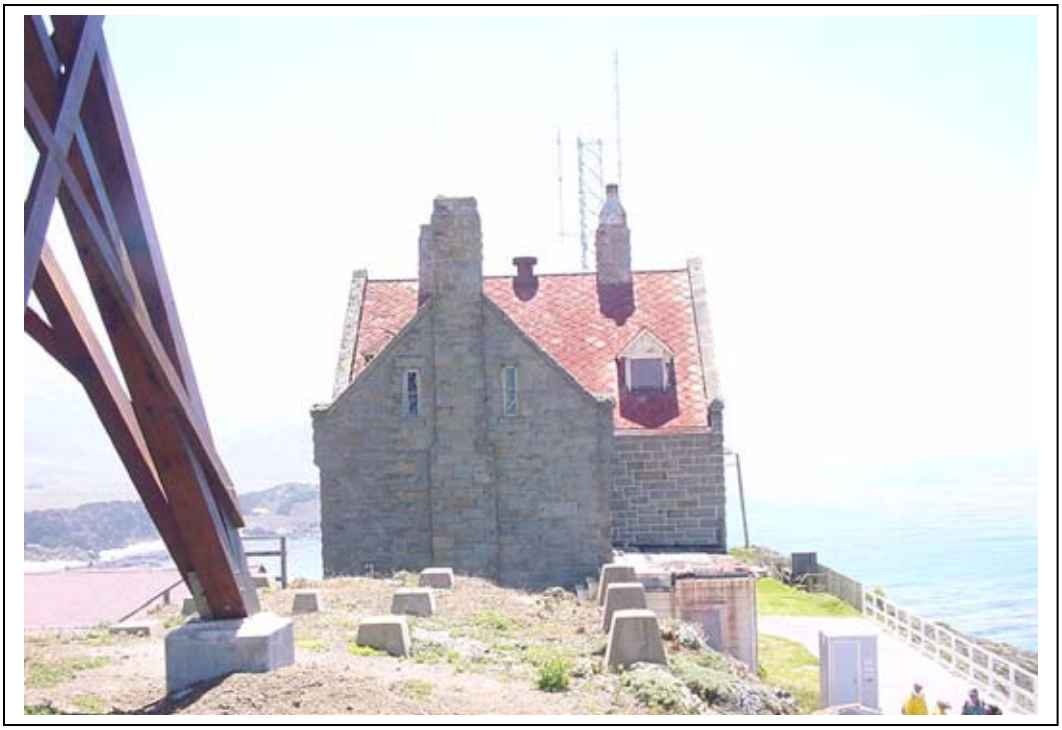
Local Coastal Plan

The California Coastal Commission is responsible for administering the State's coastal management program. The California Coastal Act of 1976 requires all local governments in the Coastal Zone to prepare Local Coastal Plans (LCP) that are then certified by the Coastal Commission as consistent with the Coastal Act. When this step was completed by Monterey County, the County then became the primary decision-making authority for coastal development permits (CDP). The County makes decisions using the certified LCP (along with certain public access policies of the Coastal Act) as the standard of review. The County decision-making body takes on a trustee role for their part of the Coastal Zone. Appeals of the County's findings can be made to the Coastal Commission. Point Sur SHP is located within the Coastal Zone. As such, the Park will be subject to Monterey County's Local Coastal Plan requirements.

Other Agencies

Additional agencies that will have an influence on the Parks development and future planning efforts can be found in the Bibliography beginning at page 6-1.

ISSUES AND ANALYSIS



ISSUES AND ANALYSIS

The following is a summary of the major issues derived from the General Plan process. The plan attempts to resolve these issues with goals and guidelines and guidance for future planning efforts. The issues identified here are not intended to be comprehensive of all the issues that are dealt with by Park staff.

Physical Resource Issues

Geology

The geologic formations of the Big Sur coast contribute to the outstanding scenic value of the area. Sand dunes are an ephemeral geomorphic feature susceptible to human influences. They are extremely fragile and sensitive to disturbance and rapid instability. The once vast dune field at Point Sur has been subjected to extensive human disturbance, including the construction of various different incarnations of a road, which led to the placement of fencing and the introduction of exotic plants to stabilize the dunes. The beach area to the south of Moro Rock has been eroding faster than it can be replenished by sand from the north. The erosion of this beach can be expected to continue and accelerate, especially as dune stabilization persists with the spread of exotic vegetation. To create a balance between the increasing demands of coastal development and recreation and the conservation of dune form and biotic diversity, an understanding of the eolian processes and dune response to human influences will be necessary.

Soils

An important component of terrestrial ecosystems, soil provides a base for many of the processes that support life. The soil food-web is the set of organisms within the soil, including bacteria, fungi, protozoa, nematodes, arthropods and earthworms that perform critical processes that allow plants to grow normally and keep the soil healthy for all living things. The vital functions provided by healthy soil include the ability to store water and nutrients and neutralize pollutants. Human activity can cause soil disturbance, compaction, and degradation and reduce its ability to provide these functions. Soil structure declines and the biological activity decreases when native soils are removed or eroded, which results in poor water filtration and water holding capacity. Soil erosion in storm water runoff will contribute to poor water quality and compromised habitat in nearby streams.

Hydrology

Natural hydrological patterns are an important part of a healthy ecosystem. Availability of water is often a limiting factor for plants and animals as well as human use and development. Poor planning can result in water quality and quantity issues. The entire need for proper protection of the Park's hydrologic resources will not be clear until the resources of the spring site have been surveyed and/or evaluated.

Paleontology

Point Sur SHP has never been surveyed for paleontological resources. Fossils are nonrenewable natural resources which are subject to degradation from weathering, erosion, and human actions. Potentially, the lack of information about these resources could lead to the failure to protect them, increasing their risk of degradation.

Biotic Resource Issues

Plant and Animal Life

The significant and sensitive biotic resources of Point Sur SHP are vulnerable to environmental changes and human actions. The small size and isolated nature of the Park's parcels make it particularly susceptible to the effects of surrounding land uses, with the persistent danger of habitat fragmentation. Point Sur has endured many years of human use and development which have resulted in lasting impacts. Competition and sometimes predation from exotic species may threaten the survival of native species. The increase or concentration of Park visitation and recreation may have detrimental environmental consequences. Additional threats to biotic resources include damage caused by livestock trespass, competition for water resources, recreational activities, development, and pollution.

Cultural Resource Issues

Archaeological

There are no known archaeological resources within Point Sur SHP, but some areas have not been surveyed or were covered with dense vegetation, pavement, and structures when the survey was carried out. Due to the known existence of archaeological sites nearby, there is a potential for cultural deposits that have not yet been identified. The absence of reliable survey data puts subsurface cultural resources at risk.

In addition, DPR recognizes that an area's cultural significance to Native Americans is not solely dependent upon the presence/absence of archaeological artifacts. There is a need to understand and document the cultural significance of the Park and surrounding area to indigenous people.

Historical

<u>Light Station</u>

Further study and recordation and the level and type of treatment of the significant 19th to early 20th century historic buildings and structures atop the rock is central to the management of these sensitive resources. Appropriate preservation strategies for these increasingly fragile buildings must deal with issues such as security, public access, circulation and provisions required by the Americans with Disabilities Act.

NAVFAC

Decisions regarding the continued and future use of the NAVFAC buildings must, among other factors, consider their cultural significance, their condition and appropriate re-use, as well as issues of security, hazardous materials, visual impacts, circulation, ADA provisions, and public access.

Point Sur NAVFAC is a historic link to the Light Station's mid-20th century technological growth and development. The base was established as submarine listening station in the mid-1950s with a mission to detect armed Soviet submarines then patrolling the west coast. SOSUS, the acoustical system that allowed the US and its allies to eavesdrop on undersea traffic was an important advance in the development of sonar and had been a product of experiments taking place at the Light Station as early as the late 1930s - in preparation for World War II. During the post war years Point Sur NAVFAC was established as one of three bases operating in California, located in Big Sur because of the discovery of a deep marine sound channel, which enabled acoustical tracking across the Pacific during the height of the Cold War.

NAVFAC is currently the only defensive Cold War era submarine listening station now within State holdings and a significant component of Point Sur SHP's history. The rehabilitation and potential adaptive re-use of selected NAVFAC buildings provides State Parks with an unprecedented opportunity to give the public access and to interpret this important facet of Cold War history within the context of the changing operations of the Light Station.

The importance of retaining and interpreting World War II and Cold War era cultural resources has recently gained greater national attention as the passage of time makes these resources eligible for historic nomination. Despite the non-eligibility of NAVFAC for the National Register of Historic Places, each individual resource should be evaluated carefully on a case-by-case basis.

Aesthetic Resource Issues

Preservation of the scenic and natural qualities of the Big Sur coast has been a consistent theme of local, county and state planning for well over 50 years. The significance of this concern is reflected in the Big Sur Coast Land Use Plan (LUP) adopted as part of Monterey County's Certified Local Coastal Program. This plan was adopted in 1986 and amended in 1996 and sets out the following goal:

> *"To preserve for posterity the incomparable beauty of the Big Sur county, its special cultural and natural resources, its landforms and seascapes and inspirational vistas. To this end, all development must harmonize with and be subordinate to the wild and natural character of the land."*

The concept of viewshed protection is central to the LUP. Not only is Point Sur SHP within the critical coastal viewshed, but Moro Rock and the Light Station is one of the most visually significant components of the viewshed. All future development, modifications or demolition at the Park have the potential for greatly impacting the special scenic qualities that typify Big Sur.

Light Station

It is vital that the Light Station's historic integrity and appearance is preserved. Decisions regarding building treatments must consider the effect on the historic look and feel of the Light Station complex. Projects that might lessen the character-defining features of these resources need to be carefully evaluated. Another threat to the integrity and appearance of the Light Station is vandalism. Over the years, the Light Station buildings have occasionally been subjected to destruction by people illegally entering the buildings, starting fires, and destroying Park property.

NAVFAC

Due to its highly visible location on the coastal marine terrace any future development, reuse or demolition along the coastline will have significant visual impact. Assessing the effect of demolition and re-use of selected Naval buildings to the surrounding environment and protecting the viewshed from Highway 1 is critical, whether establishing long term planning goals and objectives or considering specific projects.

Interpretive Resource Issues

The primary interpretive policy of State Parks is to heighten and increase public understanding, appreciation and enjoyment of the natural, cultural, historic and recreational values of California as represented in the State Park system; to increase public understanding and concern for the environment, and thereby provide an increased desire to protect and enjoy the natural and cultural heritage of California. In the planning, development and implementation of interpretive programs, all of the Unit's cultural and natural features should be included.

To date, the focus of interpretive efforts at Point Sur SHP has been the Light Station's history. To a lesser degree, interpretation of the natural resources of Moro Rock and the surrounding region has been included in Park tours. With the acquisition of NAVFAC in 2000 and its incorporation into the Historic Park, there is a need not only to expand interpretation of that facility and the Cold War era, but offer information about NAVFAC's connection to the Light Station. Together, these two resources represent over 100 years of maritime and military development at Point Sur. There is also a need to expand interpretation of the Unit's natural resources and the indigenous people who were the first stewards of these resources. Meeting these needs will require a comprehensive Unit-wide

Interpretive Plan, training for Park staff and volunteers, and development of a variety of appropriate interpretive media.

State Park's policy requires that programs be developed for each Unit and should be easily available to Park users. Public access issues will be of concern at Point Sur SHP. There are currently many barriers to public access at this Unit and the only public access is by guided tour to the Light Station. The number and frequency of the tours is limited by staffing and operational concerns. Unless prior arrangements have been made with Park staff, those who do go on the 3 hour tour must be physically able to walk to the top of Moro Rock and back.

Key considerations for interpretive planning include:

- Safe ingress/egress to and from the Park;
- A safe tour-staging area that also enables development of different types of tours and means of public access;
- Meeting the requirements for visitors with special needs (physical, language, etc.) the casual traveler, and school groups;
- Utilization of technology to enhance off-site interpretation;
- Opportunities to explore other portions of the Park, including NAVFAC and the beach;
- Interpretive linkages between the Light Station, NAVFAC, the Schoolhouse site, and Spring site;
- Continue to support the existing volunteer and association programs.

<u>Light Station</u>
Interpretive opportunities at the Light Station are closely related to preservation efforts. Protection of these irreplaceable resources is paramount and must take priority when considering public activities and access. Interpretive and public access guidelines in existing and future Historic Structure Reports must be followed. Other issues that will affect interpretation at the Light Station complex include the development of a tour-staging area at NAVFAC, as well as the addition of new information on the role of Point Sur in World War II and Cold War era history.

<u>NAVFAC</u>
Public safety, traffic and circulation patterns, resource impacts, resident/public impacts, and aesthetic concerns are all issues that will need careful consideration

during interpretive planning. The re-use of buildings at NAVFAC will change and broaden the interpretive focus at the Park. Another key consideration is the development of plans for visitors with special needs, the casual traveler and school groups. NAVFAC does not currently have any facilities to serve visitors. Re-use of some of the buildings could provide interpretive opportunities in addition to meeting operational needs.

Beach Access

The interpretive opportunities and the visitor experience would vary according to the method of beach access permitted and the type of activities allowed. Limited access opportunities might include a short, guided walk on the beach as part of the Light Station tour. The beach could be included in guided tours that focus on the area's natural, historic, and scenic resources. Interpretation could include the history of Light Station operations and transport methods to the top of Moro Rock. While touring the beach, visitors could get an up-close look at the dune vegetation while they learn about the plants and animals that live there along with the area's geologic features.

Collections

Point Sur SHP's growing collections are stored and displayed in numerous locations. There is a need for a secure archival area and library space at the Unit where collection management and research can be done by Park staff and volunteers. Currently there is no such location. This need should be a top priority when considering future uses for buildings at Point Sur SHP. As artifacts are acquired, the Park's scope of collections statement and related departmental policies will guide future acquisition of appropriate period World War II and Cold War era artifacts, as well as collections relating to the 19th century Light Station.

Visitor Use and Development

Beach Access Issues

A number of public access issues relate to the beach at Point Sur SHP. Due to the small size of the parcel and its proximity to restricted private property, public access to the beach would make it difficult to prevent Park visitor trespass onto private property. This problem would likely intensify with increased visitor numbers, and people on the beach would inevitably attract more visitors from the highway. Because all land below the mean high tide line is held in Public Trust by the State Land Commission, public access is allowed below this unmarked line, even where it is bordered by private land. This means that given access to the parcel of beach within the Park, the public would be free to access the entire length of the beach below the mean high tide line. However, it may be difficult for the average Park visitor to determine the exact location of the mean high tide line without fencing or boundary signs.

Cattle currently rotationally graze the private property that borders the Park. There are no fences in place to prevent the cattle from trespassing onto the Park's portion of the beach, or to prevent the public from entering private property. Public safety would also become a management issue if the public were given access to this parcel along with the free-ranging cattle. Grazing cattle also pose a concern for protection of sensitive plant and wildlife species.

Another concern is the potential for increased vandalism to the structures at Point Sur SHP caused by the influx of visitors nearby. Beach visitors would be in close proximity to Moro Rock, where several historic structures can be found. The rock is currently only open to the public for guided tours a few times a week and is often not staffed by Park staff. Several of the historic buildings are visible from the base of the rock. These buildings are an interesting sight, and may be inviting to potential vandals.

The beach at Point Sur is designated as critical habitat for the federally threatened western snowy plover (*Charadrius alexandrinus nivosus).* The plover both nests and winters on this beach. Providing public access to this beach would introduce a new, human disturbance, previously absent from Point Sur.

Western Snowy Plover

According to the Draft Recovery Plan for the western snowy plover that was prepared by the U.S. Fish and Wildlife Service, expanding public access to the coast for recreation may adversely affect snowy plovers and their breeding or wintering habitat.

Expanded coastal access brings significantly greater numbers of people to the beach, exacerbating potential conflicts between human recreational activities and plover habitat needs. This expanded access may exceed the threshold of beach visitors that public resource agencies, like DPR, can effectively manage while also meeting their responsibilities to protect natural resources.

The draft recovery plan also details specifically the human caused disturbances that threaten the continued existence of the species. The increasing level of human recreation was cited as a major threat to the breeding success of the Pacific coast population of the western snowy plover (only the Pacific coast population is federally listed as threatened). Beach walkers and joggers may

crush eggs or chicks and unintentionally chase adults away from their nests or broods. Separating adults from their nests or broods can cause mortality by exposing the eggs or chicks to heat, cold, blowing sand, and/or predators. Beach pedestrians have been known to inadvertently step on eggs and chicks, deliberately take eggs from nests, and remove chicks from the beach (often thinking that the chicks have been abandoned).

Recreational activities that are concentrated in one location, such as sunbathing, picnicking, photography, or birding, can impact incubating or brooding adults when the activities occur in close proximity to the nests or broods. Activities that occur in the wet sand, like fishing or jogging, can disturb plover adults or broods, which feed at the edge of the surf. Activities that occur in the water, like surfing, swimming, or kayaking, can impact plovers when the beach is used to take a break from the activities or as access to and from the water. Kite flying also has the potential to negatively impact plovers. They perceive kites as potential avian predators, and they may be caused to flush and move away from the disturbance.

Trash left on the beach by visitors feeds predators and encourages their habitation at higher levels than would otherwise occur, making predators a greater threat to plovers. Surf fishing and shellfish harvesting can result in the improper disposal of offal and bait, which attracts crows, ravens, and gulls (all predators of plover eggs and chicks). Other attractions for predators include signs and fences, which provide perches for avian predators like loggerhead shrikes and red-shouldered hawks.

Concentrations of people can deter plovers from using otherwise suitable habitats. Repeated intrusions by people into nesting areas may cause the birds to move into marginal habitats where their chances of reproductive success are reduced. Activities and disturbances occurring on State Park property will affect plovers using the adjacent habitat as well.

The management actions that would be necessary in order to protect western snowy plovers and their habitat include resource management, interpretation, law enforcement, and operational management. According to the Draft Recovery Plan, resource management actions include monitoring, predator trapping, and the use of enclosures, symbolic fencing, and signage. Interpretive actions include informational signage, brochures, handout cards with photographs and information, and several annual public outreach programs (like slide programs). Enforcement actions include verbal warnings, citations, and arrests, with key concerns including dogs and trespass into closed areas. Operational management includes scheduling special events to avoid the breeding season, and regulation of recreational use to avoid sensitive areas.

Extending visitor use to the beach would increase maintenance and law enforcement functions at Point Sur SHP. Increased ranger patrol of the beach would be necessary for public safety and to ensure compliance with the rules and regulations. Increased maintenance would be necessary to remove trash and clean restrooms.

It will be necessary to determine the visitor carrying capacity of the beach in order to manage visitor use and monitor for potential impacts. Seasonal and daytime closures may be necessary to effectively manage and monitor potential environmental impacts and ensure compatibility with surrounding land uses.

Enabling visitors to access the beach below the mean high tide line to the north of State Park property may require additional visitor management or enforcement. Fencing or signage of the mean high tide line may not be feasible. Fences and signs will require regular maintenance, because they will be located on an extremely windy beach and constantly buried and/or unburied due to changing beach conditions.

Access and Circulation

Safe public ingress/egress to Point Sur SHP from Highway 1 is of principal concern. This need exists whether visitors arrive by private vehicle, public transportation or shuttle from another location. Currently, public access is by vehicle though a gate at the schoolhouse site. There are no turn, acceleration, or deceleration lanes at this location. This section of highway is relatively open and straight, and motorists are inclined to accelerate and take opportunities to pass other vehicles. This creates potential conflicts for the Park staff and visitors attempting to get to the access gate. Exacerbating the problem is the grade and surface between the highway and gate.

The General Plan team met with Caltrans to review ingress/egress alternatives to the Park. The safest alternative, as identified by Caltrans, was through the existing NAVFAC entrance, which would necessitate:

- Appropriate signage at the main entrance so visitors can identify the main Park entrance leading into the Park;
- Provision of day use parking, visitor serving facilities, and information;
- A safe road from Highway 1 to a parking area;
- A road easement and with access between NAVFAC and Moro Rock;
- Roadways, parking areas, and turnarounds that accommodate vehicles and buses of varying sizes.

The above actions would have, to varying degrees, resource and aesthetic impacts. They would also enable expanded interpretive opportunities for visitor orientation, tours, day use and access to portions of the Park now closed to the public. Pedestrian access between NAVFAC and Moro Rock could be considered in conjunction with the California Coastal Trail.

While access and circulation improvement at Point Sur SHP is needed, consideration must also be given to resulting traffic impacts on Highway 1. As a highway intended to never carry more than two lanes, the sense of Big Sur as a quiet remote place can be threatened as travel demand increases. The needs and considerations of visitors and residents must be balanced.

Facilities and Employee Housing

As previously noted, the identified acquisition purposes when State Parks acquired NAVFAC were to:

- Provide a safe staging area for the Point Sur Light Station;
- Provide housing for full-time and seasonal State Park employees and allow removal of current housing inappropriately located in critical resource areas within other Big Sur State Parks;
- Improve the critical viewshed by removing unneeded structures from the Highway 1 viewshed.

Considering these objectives and the increased public awareness of the cultural significance of the site itself, it is necessary to determine which buildings will remain at NAVFAC and which will be removed. This general plan will provide the initial basis and long-term needs for determining the disposition and appropriate future uses of remaining structures.

Issues regarding a safe staging area and public serving needs have been addressed in the previous Interpretive Resource Issues section. There is also a need to provide on-site maintenance and grounds support for both the Light Station and NAVFAC. Although the Sector's primary maintenance facility is at Pfeiffer Big Sur SP, a second maintenance shop and employee reporting location has been established at NAVFAC. This facility is overseen by the Sector's Park Maintenance Supervisor responsible for Point Sur SHP and the Sector's trail programs. Having this second reporting location for staff, tools, materials and equipment has been beneficial in meeting the specialized maintenance needs of both the Light Station and NAVFAC.

The provision of housing for employees in Big Sur is a critical issue. The current Big Sur Coast Land Use Plan in Section 5.1.2 notes that "A serious housing

shortage exists for employees in Big Sur, particularly in the visitor industry. Employee housing provided by an employer must be a primary source of affordable housing in the area." Due to the high costs and low vacancy rates in Big Sur, it is critical that State Parks continues to provide housing for its permanent and seasonal employees, not only to ensure the recruitment and hiring of skilled personnel but also to ensure that Parks does not further exacerbate the community's housing problems.

Using all of its available resources within existing Parks in the Big Sur Sector, the Department has provided sufficient housing for permanent employees. This included eight residences at NAVFAC (an additional three residences are used by CHP). However, this will no longer be the case once the Department implements current plans for facility improvements and changes at other State Parks in the Big Sur Sector. Table 3, Page 3-15, includes a housing matrix, which details the occupancy of available housing units within the Big Sur Sector. The following describes the recent actions and anticipated changes in these units:

- One permanent employee housing unit, a mobile home at Pfeiffer Big Sur SP, was removed from the Sector's housing inventory in 2003 due to its poor condition. The replacement housing unit needs to be located within the Sector.

- An additional permanent employee housing unit is needed within the Sector due to a new position assignment to the Big Sur Sector in 2003. Rehabilitating NAVAC housing units at Point Sur SHP currently offers the only possibility for accommodating new Sector employees.

- Implementation of the Pfeiffer Big Sur SP General Plan (approved October, 1999) will necessitate relocating 6 permanent employees and 8 seasonal employees from the Lower Residence Area. The cornerstone of the Pfeiffer Big Sur GP is the removal of camping from the prime redwood resources in Main Camp and relocating that overnight lodging/camping to the Park's South Day Use and Lower Residence area.

- Implementation of the Unit Management Plan for Andrew Molera SP will necessitate relocating 1 permanent employee from that Unit. The former ranch complex is the cultural heart of Andrew Molera SP. The November, 1996 Unit Management Plan recommended removal/relocation of non-historic development from this area. In the 1990's two mobile homes were moved out of this cultural area. One mobile home still remains and needs to either be moved elsewhere in the Sector or replaced by another employee housing unit. The Sector's Concession partners (Big Sur Lodge and the Ventana Wilderness Society) as well as allied agencies (USFS and

Caltrans) also identified additional housing needs for their employees in Big Sur. Alternatives for meeting these housing needs include:

- Continued and expanded use of the NAVFAC housing units, including rehabilitation of the remaining 13 NAVFAC housing units.

- Construction of new housing and relocation of existing mobile homes on State Park property, in the Big Sur area. In addition to the location where the existing mobile home was, two potential new locations for housing units have been identified in the Upper Residence area at Pfeiffer Big Sur SP. Although other potential locations have been cursorily considered over the years, no satisfactory sites have yet been identified.

The Sector has frequently been unable to meet its seasonal employee housing needs during peak hiring periods. In summer, when funding permits, 35+ seasonal employees may be hired. There currently is housing available in the Sector for 24 seasonal employees at the MAF seasonal dormitory and Pfeiffer Big Sur SP triplex and cabin. In the past a NAVFAC residence identified for permanent employee housing was temporarily used to house seasonal employees. That residence is no longer available for seasonal use. Whenever feasible, the Sector tries to offset this seasonal housing shortage by hiring local residents, who do not require housing. Because housing is limited for seasonal employees, they often commute from the Monterey Peninsula. The rehabilitation of the existing BOQ facility to serve as a dormitory at NAVFAC or construction of new housing and infrastructure elsewhere on State Park property in Big Sur is needed. In addition to the valuable use of seasonal employees, the use of temporary housing by contractors working on State Parks property has also proved to be cost-effective, when available.

Identifying additional new housing locations in existing State Parks within Big Sur has been problematic. The Departments ability to provide adequate funding for new development is problematic. Feasible sites for construction of employee housing often competes with the sites potential for increased public use or new visitor facilities. Undeveloped portions of the Park can also include sensitive natural and cultural resources that may be affected by new housing developments. Funding for employee housing, as well as for other Park operations and maintenance facilities, has not kept pace with the growing needs of these Units related to the increases in Park visitation, needs for building rehabilitation, infrastructure, and public safety issues. In the short-term, there is greater likelihood for the Department to get budgetary support for the rehabilitation and upgrades for existing facilities rather than development of new facilities.

When considering the current and potential uses of NAVFAC facilities, infrastructure improvements will be required in addition to building rehabilitation. This includes sewer, potable and non-potable water, electrical and gas systems, waste disposal, and drainage. Infrastructure investment is needed whether or not facility and housing use is expanded beyond current levels.

Buildings must also be made safe for staff and/or visitor occupancy and use. Existing structures will require repairs, renovation and seismic retrofitting before they can be used. The potential for hazardous materials such as lead-based paint and asbestos exists on the site, and must be identified and appropriately handled.

With increased public use and access, the Park's facilities and historical structures become more vulnerable. Consideration must be given to appropriate fire prevention/suppression and intrusion systems. Increased public education and enforcement presence may be necessary.

Table 3 - Existing Housing Facilities in Use Big Sur Sector – 12/03

Unit	Housing Facilities (Occupant)	Comments
Point Sur State Historic Park	8 – SFR (DPR) 1 – SFR (CHP) 1 – Duplex (CHP / CHP Office)	There are an additional 9 SFR and 2 duplexes that are vacant and not connected to infrastructure.
Andrew Molera State Park	1 - SFR (DPR) 1 - Mobile home (DPR)	Unit Management Plan recommends relocation of mobile home.
Pfeiffer Big Sur State Park	***Lower Residence Area*** 4 - Mobile homes (DPR) 1 – Duplex (DPR) 1 – Triplex (DPR, 6 seasonals) 1 – Cabin (DPR, 2 seasonals) ***Upper Residence Area*** 1 - Mobile home (DPR) 6 - SFR (DPR) 1 – Cabin (DPR)	Implementation of the Pfeiffer Big Sur General Plan requires relocation of all employees in the Lower Residence Area. The 3 historical structures will be used for public service purposes.
MAF (Multi-Agency Facility)	***Dorm*** 8 rooms for DPR (16 seasonals) 5 rooms for USFS (10 seasonals) 1 - SFR (Caltrans employee) 2 – Duplex (Caltrans employees) 2 - Duplex (USFS employees)	
Julia Pfeiffer Burns State Park	SFR (DPR.)	
John Little State Reserve	SFR (DPR)	
TOTALS	17 SFR 4 Duplexes 6 Mobile homes 1 Triplex 1 Dorm	

SFR = Single Family Residence

Adjacent Land Use

Currently the Navy owns the Terminal Equipment Building at the southern corner of the NAVFAC, which is still being used as a research facility in conjunction with several universities. This building is being considered for cooperative use with State Parks. The U.S. Coast Guard has two parcels on Moro Rock which are currently being transferred to State Parks. The addition of the two parcels from the U.S. Coast Guard and the potential shared use of the U.S. Navy Research Facility will require additional management and the development of public programming.

Because Point Sur SHP consists of non-contiguous parcels and easements traversing private property, it is essential that good working relationships and communications are maintained with adjacent public and private neighbors. Currently these include the El Sur Ranch, U.S. Navy, U.S. Coast Guard, CALTRANS, and the National Marine Sanctuary.

The land practices and uses by one party inevitably affect the others. Consideration must be given to natural, cultural, and aesthetic resources; as well as operational and safety impacts. There is a need to protect the natural resources in the Park Unit from adjacent land uses, such as overgrazing of the native landscape or other uses which lead to the spread of exotic plants.

The existing access road to the Light Station is across a right-of-way easement and is surrounded on both sides by privately owned land. Currently, visitors are not allowed off the easement road and its use is controlled by State Parks.

There are also opportunities for shared benefit. The continued operation of the Terminal Equipment Building by the Naval Postgraduate School for research purposes provides a collaborative opportunity for public education and interpretation.

At a broader level, it is incumbent upon DPR to manage not only Point Sur SHP in an integrated manner but also all of the State Park Units that comprise the Big Sur Sector of the Monterey District. Likewise, the planning efforts by all public agencies in Big Sur must involve all stakeholders including other agencies, community businesses, organizations, and residents. Through coordinated planning and action, regional issues can be addressed most effectively and comprehensively.

THE PLAN

THE PLAN OVERVIEW

The Plan section establishes the overall long-range purpose and vision for the future of Point Sur State Historic Park. Specific goals and supporting guidelines further clarify the vision for the future of the Park. The goals and guidelines are designed to rectify the currently identified critical issues described in the last section, while providing a solid foundation for continued resource protection, preservation, and rehabilitation, as well as facility development and resource interpretation at the Park. The goals and guidelines serve as design and implementation guides for subsequent management and development plans within the three planning areas of the Park Unit: Light Station, NAVFAC, and the Beaches.

This General Plan is, by necessity, visionary in nature, although much of its content is driven by currently identified issues. The General Plan is designed as a dynamic document that allows managers the opportunity to incorporate newly emerging technologies and improved management concepts for resolving current issues, along with the ability to provide adequate direction for resolving issues that may arise in the future.

Declaration Of Purpose

In the year 2000, the Department of Parks and Recreation acquired the former Naval Facility (NAVFAC) which added a parcel to Point Sur SHP. This new acquisition brought new opportunities and resources to the Park. The current Declaration of Purpose is as follows:

> *The purpose of Point Sur State Historic Park, in Monterey County is to preserve and protect one of the few self-sufficient late nineteenth century light stations in California, complete with the full range of its associated facilities. This complex is listed on the National Register of Historic Places. Situated on a prominent coastal moro, the site of this historic complex offers the visitor dramatic Pacific Ocean coastal vistas and good opportunities to view both resident and migratory marine mammals. The Unit contains the rare Little Sur manzanita and provides nesting habitat on the cliffs for peregrine falcon and on the sandy beach for the threatened western snowy plover.*
>
> *California State Parks will preserve, protect, restore, interpret and manage the Unit's cultural, natural, aesthetic and scenic resources, features and values, making them available to the public for their educational, inspirational and recreational benefits.*

This General Plan proposes a new Declaration of Purpose for this Unit that emphasizes the newly acquired resource values:

> *The purpose of Point Sur State Historic Park is to preserve a rare example of an intact and self-sufficient late nineteenth century light station and to utilize and tell the story of one of the few remaining self-sufficient submarine listening stations on the west coast. These facilities present a continuum of maritime and military history at Point Sur. The significant aspects of this history and the Park's unique natural, cultural, and scenic resources will be preserved, protected, and interpreted for visitor enjoyment and education.*

PLAN SUMMARY – The Preferred Alternative

This alternative will preserve and interpret the historic Light Station complex and NAVFAC site and provide public access to both properties. The main visitor access and parking for this Unit will be provided at the NAVFAC site, where some remaining buildings will be adapted for interpretation, staff employee housing and administrative purposes. The Park's sensitive natural resources will be preserved and interpreted along with its significant aesthetic resources.

Objectives:

- Preserve and interpret significant historic, cultural, and natural features;
- Establish a main Park entrance at the NAVFAC to accommodate visitors and enhance interpretive opportunities;
- Enhance the Highway 1 viewshed and open space corridor, while keeping existing landscape screen features of the NAVFAC;
- Provide safe ingress and egress to and from Highway 1 as well as parking and a tour staging area at the NAVFAC to accommodate Light Station tours as well as self-guided tours of the NAVFAC;
- Provide limited beach access, while preserving and interpreting significant plant and animal life and habitats.

PARK FEATURES

Light Station Complex

The predominant feature of Point Sur SHP is the Light Station complex atop Moro Rock, a late 19th –mid 20th century collection of historic buildings and structures (see Figure 3, Page 2-3). A concerted effort to preserve and interpret this site for future generations is consistent with the stewardship responsibilities and the mission of the California Department of Parks and Recreation. The three

principal sandstone buildings, the Lighthouse and Assistant and Head Keeper's Quarters, were constructed of locally quarried stone, and their design, Richardson Romanesque, is architecturally distinctive, not typically used for lighthouses nor often found on the west coast. As these buildings continue to be preserved, the public may have increased opportunities for touring. Other 19th century structures, such as the cistern could be rehabilitated to serve as a source of non-potable water for fire suppression and maintenance. Historic support buildings such as the Barn and Carpenter/Blacksmith Shop should continue to be toured and additional period objects installed and exhibited. Other buildings such as the Pumphouse, Garage and Mess hall (the present day Visitor Center) once thought non-contributors, will be re-evaluated as to their historic significance and potential for preservation and interpretation of the Light Station from its earliest years through the post World War II period. Historically and culturally significant buildings and structures will be treated according to guidelines set forth in a future Cultural Resources Management Plan.

Former Point Sur Naval Facility (NAVFAC)

The Park's primary visitor entrance from Highway 1 will be the gate into the NAVFAC, where appropriate signage and visitor contact facilities are planned (see Figure 4, Page 2-4). Existing buildings will be rehabilitated for use as a Park office, visitor information, and tour staging area. From this location, visitors can join docent and Park staff led tours (Light Station, beach, NAVFAC), enjoy interior and exterior interpretive and informational exhibits regarding the Park, or take a self-guided walking tour of the NAVFAC. New easements will be sought to connect NAVFAC and Moro Rock.

In 2001, State Parks obtained Coastal Commission authorization for the demolition of several NAVFAC structures at Point Sur State Historic Park. At the same time, development of this General Plan had begun. Monterey District did not want to proceed with any demolition until further research had been completed and considered regarding the buildings' historic significance; they were judged ineligible. The NAVFAC buildings were also rated on their visual impact, particularly from scenic Highway 1. Buildings were ranked from 1 to 4, 1 denoting lowest impact on the viewshed to 4, rated as the highest impact on scenic Highway 1. Recommendations were made by DPR, in recognition of the special scenic qualities of the Big Sur coast, to remove buildings that were most visually intrusive and in the worst condition. These recommendations were very important to this planning effort. Some of the remaining buildings will be part of a program of rehabilitation and re-use, others, as discussed below, may be demolished. Every effort was taken to maintain continuity of historic or past usage with future re-use, as some of the NAVFAC rehabilitated buildings will be part of the interpretive program at the Park. (See Table 4, Page 4-36)

After consultation with the State of California's Historic Preservation Office (SHPO) and further evaluation it was concluded that a total of eight structures could be removed. In April, 2003, three buildings (#166 Firehouse, #144 Bowling Alley, and #145 Gym) were completely removed down to the concrete pads. In addition, asbestos-containing materials were removed from 5 additional buildings to facilitate their future demolition.

The following recommendations for the future disposition of the remaining buildings at the NAVFAC are based on current knowledge. This plan's recommendations are not meant to preclude other uses based on future information and/or needs. Partnerships with other agencies and entities may lead to additional uses not yet being considered. It is recommended, however, that to the degree possible, adaptive re-use correspond to the structure's historic function: Administration, Personnel, Public Works, Operations, Utilities.

To aid in the interpretation of the NAVFAC's cultural significance, it is recommended that remaining structures should, to the degree possible, retain the architecture and landscaping features of the NAVFAC era. There may be times when this is not feasible or desirable. For example, it is desirable to remove the high-security chain-link fence surrounding the site with less visually obtrusive fence that would maintain separation between the site and adjacent cattle grazing while allowing greater movement of other wildlife.

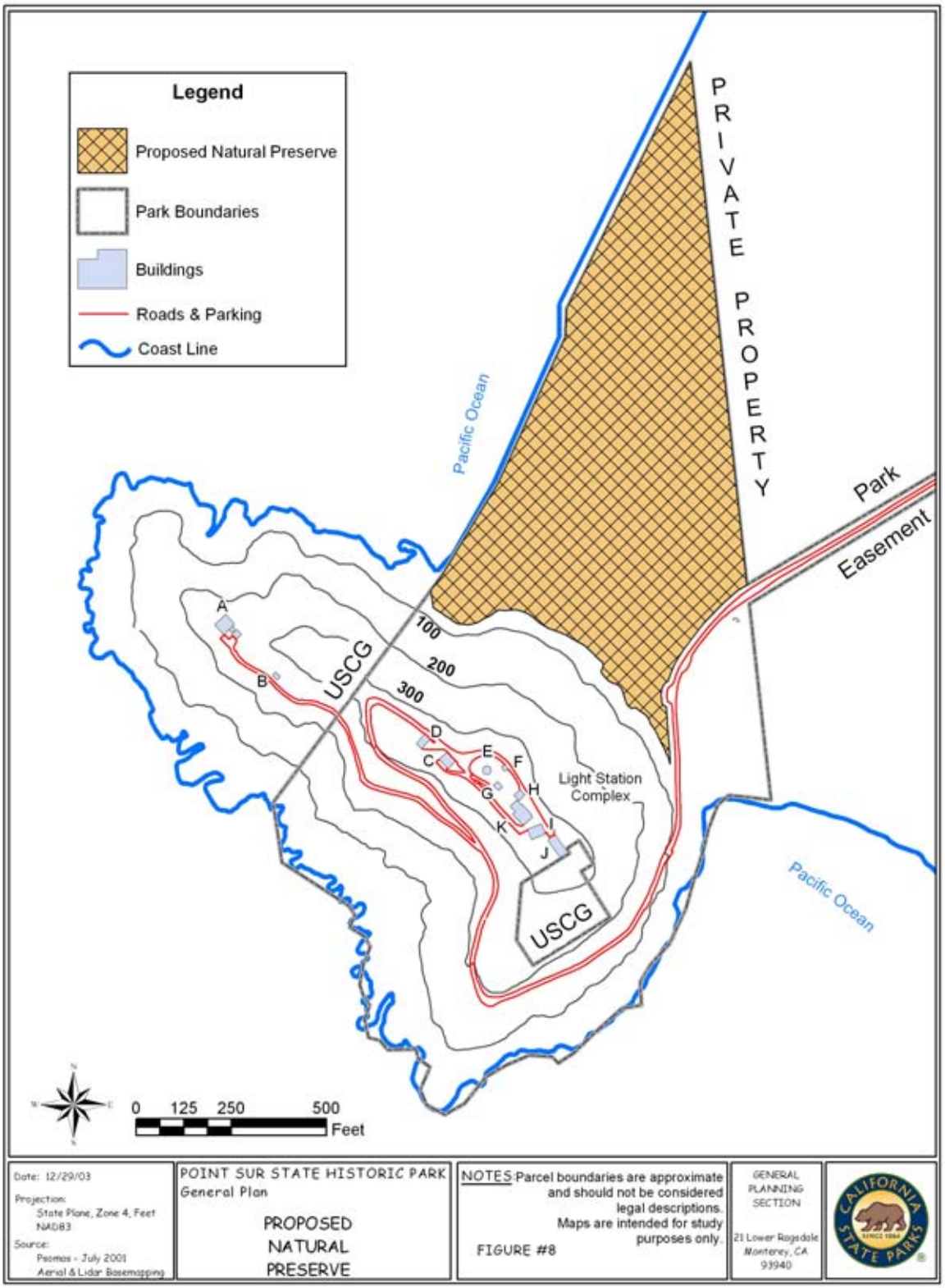
The 24 existing employee housing units on site will be considered for continued rehabilitation to house State Park and other agency staff until such time that alternative employee housing can be provided off-site. At that time, the buildings can be removed and open space values further enhanced. The employee housing area will remain closed to public use. The rows of existing mature cypress and pine trees that provide a vegetative screen of many of the remaining structures from Highway 1 will be maintained through replacement plantings.

The Beaches

The need to protect the beaches at Point Sur SHP has helped to shape the plans for guided tours and limited beach access. The coastal dunes and beaches at Point Sur are home to the protected western snowy plover. The beach area to the south of Moro Rock is sheltered from the northern winds and is a good place to view the rock from the water's edge. Beach tours could educate the public about the protection of the rare and protected plant and animal life around the rock, the native dune landscape, and the western snowy plover. With the tours beginning at Moro Rock near the bottom of the rock, the public will be able to tour the beach and the Lighthouse all from the same point. The need for tour off-loading and turn-around area with restrooms at the base of Moro Rock should be considered. California State Parks is currently proposing the northern beach

area to be designated as a Natural Preserve as illustrated in Figure 8 (Page 4-6). The General Plan supports the preserve designation as a means to preserve and protect the beach area while still providing controlled access for interpretation.

FUTURE CONSIDERATIONS



Acquisitions

Effective management of the natural and cultural resources and accommodations for visitor tours within the Park are limited by the State's non-contiguous land ownership and important considerations to surrounding private properties. The Department will continue its negotiations and cooperation with adjacent land owners and managers. The focus will continue to be improving access, circulation, and the management and interpretation of resources on lands between Highway 1, NAVFAC, the Schoolhouse site, and Moro Rock. These General Plan goals would be achieved through easements, partnerships, and/or future land acquisition from willing sellers. The General Plan also supports acquisition of the two parcels on the Light Station complex, currently owned by the U.S. Coast Guard and authorized for transfer through the National Historic Lighthouse Preservation Act of 2000.

Naval Research Center

The existing Naval Research Center, located in the Terminal Equipment Building at the NAVFAC is owned and operated by the U.S. Navy. The Navy plans to replace this existing structure with a smaller more efficient building. California State Parks will explore the possibility of forming partnerships with the Navy and research agencies to further the goal of public education at Point Sur SHP. The data collection and information gathered from the Research Center could form the basis for cooperative development of interpretive exhibits and other programs. Topics might include current research on the coastal marine habitat, acoustical research, and Cold War era history.

Infrastructure

Water Supply – The Park Unit currently has no permanent source for water. The future of the Park's health, safety and welfare depends on a reliable source of water (both for fire protection and drinking water). During the General Plan process, many water source concepts were studied to serve future Park needs, such as drilling new wells on and off site, rebuilding the spring inlet supply in the eastern portion of the Park, and a desalinization system for NAVFAC. Currently, plans are being made to upgrade the existing well and distribution system at Andrew Molera State Park to serve Point Sur SHP. However, a combination of reasonable alternate approaches may be necessary as additional buildings are rehabilitated and adapted for future uses. Water distribution lines should be replaced with new facilities and individual water shut off provided at each building.

Sanitation – The NAVFAC has a functioning septic system that serves the employee housing area. The septic system is in need of maintenance and possible upgrades to provide reliable waste water disposal. Prior to occupying additional buildings at the NAVFAC septic system upgrades and expansion will be needed. The Light Station has pump out toilets to serve visitors and staff.

There is no easily developable area at the Light Station for a septic leach field. The most likely waste water disposal scheme for the Light Station, other than pump out toilets, is to convey waste water from Moro Rock to the NAVFAC via a small diameter force main. The development of a sewage disposal system at the Light Station would require concurrent development of a water supply.

Heat – Per the Historical Structures Report (HSR) for the Head and Assistant Keeper's Dwellings, permanent heating systems should be installed in both structures. Additional heating system installations may be necessary in other Light Station structures as well, based on future HSR recommendations. The employee housing at the NAVFAC are heated with propane gas. The propane gas is distributed to the residences from a central propane tank. The propane system should be replaced with individual propane tanks suitable for residential use so that tenants can be responsible for their propane consumption and the network of propane lines around the residential area can be abandoned.

Electrical – The NAVFAC has overhead electric service with pad mounted transformers. The equipment is in poor condition and requires upgrading. The site is subject to pervasive high winds and salt spray. These conditions indicate that future upgrades to the electrical system should include replacement of overhead lines with underground facilities. The Light Station is served by an overhead electrical line from Highway 1 to the base of Moro Rock. The electrical line is underground from the base of Moro Rock to the Light Station complex. Future electrical upgrades should include undergrounding the electrical line from Highway 1 to the base of Moro Rock. Undergrounding the electrical lines will increase viewshed quality and prevent exposure of equipment to salt spray and high winds.

PARK-WIDE MANAGEMENT GOALS AND GUIDELINES

Natural Resource Management and Protection

The mission of the California Department of Parks and Recreation includes "helping to preserve the State's extraordinary biological diversity, protecting its most valued natural… resources…." The biotic communities at Point Sur State Historic Park have undergone changes influenced by past land use activities including grazing, fire suppression, introduction of exotic plant species, and the development of the Light Station and NAVFAC. The following goals and guidelines create a context to protect existing natural resources while establishing a program for enhancing the Park's natural resource values.

Goal: Preserve, interpret and where necessary, manage and rehabilitate Point Sur SHP's ecosystems in order to perpetuate the natural and sustainable functions of plant and animal life.

> **Guideline:** Provide special protection for sensitive species as well as for other exceptional natural resources.
>
> **Guideline:** Inventory and monitor the Park's natural resources to document their distribution and health.
>
> **Guideline:** Manage toward a natural condition where appropriate, with a minimum disruption to natural processes.
>
> **Guideline:** Develop a Natural Resources Management Plan for Point Sur SHP. This plan would identify and prioritize key actions required to achieve natural resources sustainability within the Park. The plan would identify, evaluate, and provide recommendations for the protection of the Park's significant natural resources and will be a tool for Park managers.

Goal: Management actions will be guided by an understanding of the ecosystems operating in the Park.

> **Guideline:** California State Parks will actively incorporate inventory and monitoring efforts into land management actions. A major focus of these efforts will be to quantify trends in species abundance and distribution, document correlations between land management actions and biotic health, and identify sensitive species and habitats.
>
> **Guideline:** Ensure that native species, community, and habitat conservation is incorporated into all future developments, management plans, and visitor use patterns of the Park, and that the protection of sensitive species and habitats receives priority.

Physical Resources

Geology

The spectacular scenery along the Big Sur coast is a direct result of its geologic history. The geologic formations along this section of coast are a major contributor to the unique landscape of Point Sur State Historic Park. Documentation and preservation of fragile geological formations is important.

Goal: Protect and preserve the unique geologic features and resources of Point Sur State Historic Park.

> **Guideline:** Identify and monitor significant geologic features and take protective measures where necessary.
>
> **Guideline:** Preserve fragile geologic features. Management decisions with respect to facilities development and visitor use must recognize and mitigate negative impacts to these features.

Soils

Soil provides a foundation for many biological processes and is an important part of terrestrial ecosystems. Human activities can cause soil disturbances, including compaction, degradation, and erosion. Integrating an understanding of soil constraints and soil dynamics into management decisions is necessary.

Goal: Protect the soils of Point Sur State Historic Park.

> **Guideline:** Incorporate an evaluation of the effects of human activities on soils in future management plans and actions.
>
> **Guideline:** Identify and minimize Park operations and visitor activities that have negative impacts on soils.

Hydrology

Point Sur State Historic Park does not contain any major waterways or groundwater basins, but the Park and its surroundings do contain other hydrologic features including drainages, wetlands, and freshwater seeps and springs. In the past several decades, water needs within the Park have been met with water pumped from wells along the Big Sur River at Andrew Molera State Park. Land use and development must be sustainable without adversely affecting water resources or the plant and animal life dependent upon these resources.

Goal: Protect the surface and groundwater resources of Point Sur State Historic Park.

Guideline: Evaluate the water resources of the Park and their need for protection.

Guideline: Cooperate with adjacent land managers to identify the sources that degrade water quality and quantity within the watersheds associated with Point Sur State Historic Park, and ensure that current and future Park developments and visitor use patterns do not degrade water quality and quantity.

Paleontology

Although much of the geologic composition of Point Sur State Historic Park is not conducive to preserving the record of prehistoric life forms, Pleistocene fossils may exist within Park boundaries. Fossils are nonrenewable natural resources which are subject to degradation from weathering, erosion, and human actions.

Goal: Document, protect, and preserve paleontological resources that are found within Point Sur State Historic Park.

Guideline: Encourage the study of paleontological resources within the Park.

Guideline: Ascertain and evaluate the significance of fossil remains if they are discovered.

Guideline: Adequately protect significant paleontological resources in place whenever possible. Conserve these resources through recovery when they cannot be protected in place.

Biotic Resources

Plant Life

Native plant communities are a vital component of California's ecosystems, and they are protected in the State Park System. Departmental policy mandates the preservation and perpetuation of representative samples of natural plant communities. In managing for the perpetuation of native plant species and native plant communities, natural processes must be allowed and unnatural disturbances must be recognized and curtailed.

Goal: Protect, perpetuate, and where possible, rehabilitate the native vegetation of the Park.

Guideline: Vegetation will be managed toward a natural condition where appropriate, with a minimum disruption to natural processes.

Guideline: Evaluate the Park's disturbed natural areas to determine where rehabilitation will be appropriate and successful. Identify the desired outcome for areas that necessitate restoration, including species of plants to be used in revegetation; methods of site preparation; timing methods; and location of seed collection, propagation, and planting.

Sensitive Plants and Plant Communities

Two natural plant communities at Point Sur State Historic Park are considered of high inventory priority by the California Department of Fish and Game Natural Diversity Data Base, the Northern Coastal Bluff Scrub and Coastal Terrace Prairie communities. In addition, two plants that occur within the Park are identified by the California Native Plant Society as either meeting the criteria for State listing as threatened or endangered, or as being potentially threatened, Little Sur manzanita and Monterey Indian paintbrush. The Park also contains one Federally Threatened plant, Monterey spineflower. Sensitive plants and communities can be inadvertently destroyed or damaged by facility development, maintenance, visitor use, or other activities.

Goal: Protect sensitive plants and plant communities within the Park and manage for their perpetuation.

Guideline: The Coastal Bluff Scrub and Coastal Terrace Prairie communities will be managed to perpetuate and enhance their natural values. Activities which degrade these communities will be avoided.

Guideline: Sensitive plants (including the Monterey spineflower, Monterey Indian paintbrush, and Little Sur manzanita) will be protected and managed for their perpetuation.

Guideline: Systematic surveys for sensitive plants will be made during the appropriate season for plant identification when facility development, resource management, or increased visitor use is proposed. All sensitive plant populations will be mapped.

Exotic Plants

Many exotic plant species occur at Point Sur State Historic Park. Some of these have become naturalized in California, and a few may be determined to have some historic value. Others are invasive and threaten native plants and wildlife habitat by out-competing native vegetation.

Goal: Reduce the presence of and further invasion of exotic plant species in the Park.

Guideline: Non-invasive exotics that have been identified as having historical significance will be preserved only at known historic locations.

Guideline: Support projects that quantify and map the abundance and distribution of exotic species within the Park and the extent to which they negatively affect native species.

Guideline: Exotic species removal and control efforts will give priority to the eradication of species that threaten rare or sensitive communities, habitats, and/or species followed by the most invasive and conspicuous exotic species.

Guideline: Identify and implement effective methods of control and eradication. Exotic plant removal methods will be consistent with protection of natural and cultural resources.

Guideline: Consider partnerships with neighbors, public agencies, and private businesses to plant native or non-invasive plant species in the vicinity of the Park. Educate the Park residents on the importance of planting native or non-invasive plant species in their yards.

Animal Life

Successful perpetuation and protection of native wildlife populations is closely connected to the continuance of natural plant communities and habitats, and it is an important part of the Department's resource management program. Wildlife populations at Point Sur are subject to a variety of land uses and habitat types. This area has a long history of human presence which has altered the land and the habitat.

Goal: Protect and perpetuate natural wildlife populations, and preserve and enhance wildlife habitat in the Park.

Guideline: Avoid or minimize human activities that degrade habitat or alter natural ecological processes.

Guideline: Restore altered natural wildlife habitats where appropriate and re-establish natural ecological processes where possible.

Guideline: In future building treatments, protect native wildlife species that are using the buildings for breeding or roosting.

Guideline: Appropriate measures will be taken to prevent livestock trespass and their impacts to plant and animal habitats.

Guideline: All fencing will be of a type that meets the fencing purpose without unnecessarily blocking wildlife movement.

Guideline: Avoid activities that encourage proliferation of current or future exotic animal species.

Sensitive Animals and Habitats

In spite of its small size, Point Sur SHP provides valuable habitat for and potentially supports several sensitive wildlife species. Sensitive wildlife includes those species that are identified as threatened, endangered, or of special concern by the U.S. Fish and Wildlife Service, the California Department of Fish and Game, and/or other agencies and organizations. Park operations such as facility development, maintenance activities, and visitor uses have the potential to negatively affect sensitive wildlife and habitats.

The Park contains federally designated critical habitat for the western snowy plover. The beach and dune area on the north side of Moro Rock is Monterey County's southern-most known breeding site for the species. This beach and dune area also provides habitat for the globose dune beetle. The Smith's blue butterfly has not been documented within the Park, but suitable habitat exists in the stands of coast and seacliff buckwheats on Moro Rock. Moro Rock also provides nesting habitat for seabirds and potentially the black swift. Additionally, potential habitat exists within the Park for the California red-legged frog. These species and their habitats are susceptible to human disturbance.

Goal: Protect sensitive animals and habitats within the Park and manage for their perpetuation.

Guideline: All programs or projects at Point Sur SHP will be designed to avoid impacts to sensitive species and habitats.

Guideline: Sensitive species and habitats will be protected from all current and future visitor uses in the Park.

Guideline: Sensitive habitats will be maintained, restored, enhanced, and protected.

Guideline: Focus sensitive species management on the identification and preservation of sensitive habitat.

Guideline: Assess all sensitive habitats in the Park for site-specific threats.

Guideline: Monitor populations of sensitive species on a regular basis in cooperation with the appropriate regulatory agencies.

Guideline: The U.S. Fish and Wildlife Service shall be consulted prior to any activities which may negatively impact Smith's blue butterfly habitat (coast and seacliff buckwheat) or western snowy plover habitat (the beach and dunes on the north side of Moro Rock).

Guideline: Follow the California State Park's Western Snowy Plover Systemwide Management Guidelines (2002), including the preparation of a western snowy plover management plan for the Park, or the inclusion of Point Sur SHP in a district-wide western snowy plover management plan.

Landscape Linkages

The protection of landscape linkages is a key component in facilitating the movement and dispersal of native plants and animals within Park boundaries and between the Park and other natural areas, which is important to maintaining ecosystem health. Corridors of suitable habitat are critical to support viable populations of animals that require large areas of land. Without these corridors the Park may lose wildlife species and the ecological values associated with them. Maintenance of a full array of wildlife species depends on coordinated ecosystem management across ownership boundaries.

Goal: Enhance and maintain the movement and dispersal of native animals and plants through the Park and the region.

Guideline: Identify critical habitat corridors and support and work towards their preservation, protection, and enhancement.

Guideline: California State Parks will work with other major landowners and managers along the Big Sur coast to ensure that migration and dispersal corridors are established or maintained uninterrupted in a natural condition.

Guideline: California State Parks will actively coordinate with other agencies and property owners to acquire land or conservation easements from willing parties, to ensure key landscape linkages are preserved or enhanced.

Cultural Resources Management and Protection

An important directive in the mission of California State Parks is to protect the State's irreplaceable cultural and historic resources. The Park Unit at Point Sur was established as a State Historic Park to preserve and manage the significant historic resources for the enjoyment and education of future generations. The following goals and guidelines will help direct those efforts.

Archaeological Resources

Point Sur SHP has undergone partial archaeological survey. In 1985, all accessible areas of the Light Station and associated areas, including Moro Rock, the beach and dunes, the road right of way, and the Schoolhouse site were surveyed and no prehistoric sites or artifacts were discovered. The Spring site was not surveyed. The NAVFAC was surveyed for archaeological resources in 1981, however, no prehistoric sites or artifacts were discovered. In addition to tangible artifacts, there is a need to identify and understand the cultural significance the Park may have to indigenous people.

Goal: Identify, document, and evaluate any additional archaeological cultural resources within the Park.

> **Guideline:** California State Parks will conduct archaeological surveys in areas that were not previously surveyed.
>
> **Guideline:** California State Parks will collaborate with local Native American groups and individuals to document the cultural significance of the Park and surrounding area to indigenous people.

Goal: Protect undocumented archaeological resources at Point Sur SHP.

> **Guideline:** California State Parks will provide archaeological monitoring in areas judged potentially sensitive for archaeological resources.

Historic Resources

Point Sur SHP contains a number of locally, regionally and nationally significant resources that include the mid-19th to early 20th century Light Station, the World War II era Mess Hall and RACON Tower site, as well as the mid-20th century NAVFAC base. Although the two main resources, the Light Station and the submarine listening station are distinctly different in significance and historic character and located some distance from each other within the Park, they have a distinct interrelationship. Treatments therefore, will be chosen with respect to the unique needs and requirements of each site, while managing these resources as a whole.

Goal: Ensure a high level of appropriate preservation, stabilization, and restoration of the Park's cultural and historic resources.

> **Guideline:** Any repair, stabilization, restoration, or rehabilitation will follow policies and protocols as established by the Public Resources Code 5024 and the *Secretary of the Interior's Standards for the Treatment of Historic Properties,* as well as the California Historic Building Code.

Goal: Develop appropriate preservation treatments, rehabilitation and re-use standards, accessibility standards, and on-going maintenance plans for all historic and culturally significant buildings and structures.

> **Guideline:** Inventory and document all buildings and structures in the Park Unit.
>
> **Guideline:** Prepare Cultural Resource Management Plan (CRMP) for the Park Unit.
>
> **Guideline:** Develop maintenance plans that are sensitive to different treatments prescribed for the wide range of historic and cultural resources at the Park.

Goal: Ensure an adequate level of protection from natural disasters and human intrusion.

> **Guideline:** Develop and maintain protective measures and systems to ensure preservation of all historic and culturally significant resources at the Park Unit.

Collections

Like other historic units, Point Sur SHP has a collection of objects, documents, and other items associated with the Light Station, the NAVFAC, and other cultural aspects of the site. It is a growing collection that requires appropriate curatorial management such as identification, preservation, storage, display, and protection. Guiding these efforts is the Unit's recently developed Scope of Collections statement. This document will be the basis for evaluating future acquisitions for the Unit's collection.

Goal: Future artifact acquisitions will focus on those representing the core themes and periods of significance in the Park including appropriate period World War II and Cold War era artifacts, as well as collections relating to the Light Station.

Guideline: Develop strategies to acquire artifacts to meet identified interpretive themes and goals.

Goal: Develop a curatorial and research center for collections storage and study space, and ensure the Unit's collection is properly inventoried, accessioned, preserved, properly stored, and displayed.

Guideline: Identify and develop secure, environmentally controlled location within the Park for a curatorial and research center.

Guideline: All objects will be accessioned and cataloged in accordance with Departmental standards and procedures.

Guideline: All objects at the Park Unit belonging to other individuals, agencies, or associations will be clearly identified and departmental acquisitions policies strictly adhered to.

Guideline: Objects will be stored and/or displayed in appropriate conditions and protected with a sufficient level of security. When feasible, it is desirable to maintain the collection at the Unit itself.

Aesthetic Resources

Preservation and enhancement of the special aesthetic quality of the Big Sur coastline is important to State Parks. Situated in the Coastal Zone, Point Sur SHP is a dominant feature of that coastline, and actions taken at the Park will influence the overall aesthetic and visual character of the Highway 1 corridor along the Big Sur Coast. The plan for the future of the Point Sur SHP seeks to ensure that there is a balance in efforts to enhance the viewshed, while preserving the Park's distinctive natural and cultural resources. Cultural resources considered significant may include a number of NAVFAC buildings that are proposed for rehabilitation. Consideration of aesthetic values played an important role in the ranking of individual buildings at NAVFAC.

In recognition of the importance of Big Sur's Highway 1 corridor, and particularly the scenic qualities of that corridor, State Parks has been an active participant in the collaborative creation of the Coast Highway Management Plan (CHMP) which will be finalized in 2004. The CHMP characterized the corridor's intrinsic qualities that are important for long-term preservation, summarizes the major issues identified by stakeholders, presents strategies and actions to address the issues, and proposes a structure for implementation. State Parks supports the principles, goals, and objectives outlined in the CHMP. While such support does not suggest unanimous agreement on all specific management strategies and practices, it does indicate a willingness to work toward collaborative solutions.

Goal: Preserve and enhance the unique scenic environment at Point Sur SHP.

Guideline: Assess impacts of future projects on their level of visual intrusion in the immediate area, the overall Park setting, and the viewshed as seen from scenic corridor, Highway 1.

Guideline: DPR's rehabilitation program for selected buildings at the NAVFAC, may require additional vegetative screening to enhance the viewshed as seen from scenic corridor, Highway 1.

Guideline: Be an active participant in the Coast Highway Management Plan (CHMP) implementation plan.

Interpretation and Education

Interpretation is a powerful stewardship tool. Point Sur State Historic Park holds national and statewide significance for the rich maritime and military history of both the Light Station and the former Point Sur Naval Facility (NAVFAC). In addition to these cultural resources, the Park also contains diverse natural resources of significance that require care and protection. Interpretation and education provide the cornerstone for continued stewardship of these precious cultural and natural resources. Interpretation heightens and increases public understanding, appreciation, and enjoyment of the Park's natural, cultural, historic and recreational values. People who know something of the Park's natural and cultural history will take a greater interest in its protection and preservation and become better Park supporters and stewards.

The goal of the interpretive program for Point Sur SHP is to communicate the value of all the Park's resources and values. To achieve this goal, the following are the Park's unifying theme, primary, and secondary themes. These themes are explored in greater detail in the Park's *Interpretive Prospectus*. The themes incorporate the interpretive and educational recommendations made throughout this General Plan.

Unifying Theme:

A dramatic coastal landmark that is home for a diverse number of plants and animals, Point Sur has always drawn people - from the area's earliest inhabitants and early settlers, through the Light Station and NAVFAC personnel and families, to the present visitors to Point Sur State Historic Park.

Primary Themes:

- Safeguarding California: The Light Station has safeguarded sailors and provided support facilities for both civilian and military uses while, during

the Cold War era, NAVFAC protected America from enemy submarines and provided marine scientific information.

- Shaping Culture and Politics: Both sites developed within the cultural context of their time. The gold rush and California's statehood were factors that contributed to more ships plying the West Coast, and more shipwrecks. With increased shipping, a lighthouse was needed at Point Sur. NAVFAC is significant in telling the story of how the Cold War era shaped the culture and politics of the second half of the 20th century.

- Location is Everything: The settings for both the Light Station and NAVFAC were determined by the sites' purposes and the unique natural characteristics of Point Sur. The Light Station was designed to be visually noticeable while NAVFAC was designed to be low profile. The settings also contributed to construction and operational challenges.

- Impacts of Technology: Changes in technology linked the Light Station and NAVFAC and influenced the development and resulted in the closure of both sites.

- Life at Point Sur: Both the Light Station and NAVFAC represented isolated outposts that presented special challenges for the people who lived and worked there.

- Protecting the Environment: The natural resources at Point Sur SHP are vulnerable to environmental changes and human actions and require our efforts to protect them.

Secondary Themes:

- The First People: The indigenous people of Point Sur were the land's first stewards, and today their descendants continue this connection.

- Early Times: Point Sur's early history, from the first Spanish explorers to its ranching roots, is a rich story.

- Creation of a State Park: Point Sur State Historic Park reflects Californians' increasing interest in their cultural treasures.

- Preservation for the Future: Preserving our history for future generations is an on-going effort.

In addition to the interpretive themes, the following specific interpretive and educational goals and guidelines are provided.

Goal: Provide a safe tour-staging and visitor drop-off orientation area.

> **Guideline:** Select and develop a site within the Park with the appropriate facilities for public use.

Goal: Expand interpretive and educational opportunities for both on- and off-site visitors of all abilities.

> **Guideline:** Identify interpretive opportunities for self-guided tours, lectures, signage, brochures, and other media for NAVFAC.
>
> **Guideline:** Ensure all brochures, printed material, web sites, etc. reflect all of the Park's resources and values.
>
> **Guideline:** Develop accessible facilities to serve the disabled visitor throughout the Park, including traffic circulation, exhibits, signs and publications, and tour accommodations.
>
> **Guideline:** Consider innovative technology to reach visitors, especially those off-site.
>
> **Guideline:** Ensure that programs and publications for school children are congruent with the California State Standards.

Goal: Develop exhibits and displays that inspire the sharing of thoughts, ideas and memories, especially by those who lived and worked at the Light Station and NAVFAC.

> **Guideline:** Include opportunities for visitors to enhance their experience by engaging in conversation about the exhibits, thereby expanding the collective knowledge about the sites and the eras in which they operated.
>
> **Guideline:** Enhance the visitors' experiences by forging a connection between visitor interest and displayed artifacts.

Goal: Establish appropriate house museum, period displays, and formal exhibits in selected Light Station and NAVFAC buildings.

> **Guideline:** Develop Furnishing Plans for selected buildings that emphasize their specific historic period, while taking into account the larger context of the 100+ year flow of history between the Light Station and NAVFAC.

Goal: Continue to ensure successful interpretive and educational efforts through the active support of volunteers and cooperating associations.

> **Guideline:** Maintain and provide support for the active State Park volunteers at Point Sur SHP. Provide volunteer program management, training, evaluation, and support. Provide meeting space.
>
> **Guideline:** Expand training for current and future volunteers to include the entire Park Unit, based on the Unit's *Interpretive Prospectus*.
>
> **Guideline:** Design volunteer recruitment material that reflects the interpretive vision for the Park as a whole.
>
> **Guideline:** Maintain a positive and supportive partnership with a cooperating association that supports the Unit's volunteer program and restoration activities.

Goal: Look for opportunities to develop interpretive and educational partnerships with institutions such as the Monterey Bay National Marine Sanctuary (MBNMS), the Naval Post Graduate School (NPGS), and other interested partners.

> **Guideline:** Develop collaborative exhibits and displays with the MBNMS and NPGS.
>
> **Guideline:** Expand training for staff and volunteers to include information about the MBNMS and NPGS and their programs.
>
> **Guideline:** Explore other partnership opportunities that present themselves.

Visitor Use and Development

Before new development of the Park can proceed, sustainability and the impact to water quality must be evaluated. Natural hazards are a consideration when planning new development within the Park. Infrastructure and utility improvements will be necessary as the Park's facilities expand to accommodate the visitor use in both the Light Station complex and at NAVFAC.

Water Quality

Surface water, groundwater and the ocean are all important resources that must be protected. The primary responsibility for protection of water quality lies with the State Water Resources Control Board and nine regional boards. In the Big Sur area, the Central Coast Regional Water Quality Control Board is responsible for adopting and implementing the Water Quality Control Plan (Basin Plan) that

sets forth the water quality standards and control measures. New projects or new/increased visitor use within the Park must be evaluated to insure that they do not contribute to degradation of surface and groundwater quality.

Goal: Identify the beneficial uses and the surface water quality objectives, within the Park.

> **Guideline:** Identify any potential naturally-occurring impacts to water quality, such as landslides.
>
> **Guideline:** Determine if natural processes have been aggravated or accelerated by human activities and develop mitigation measures. Identify management actions to prevent any negative impacts to water quality from planned construction or other activities in the Park.

Goal: Upgrade existing storm water facilities to comply with current non-point source pollution guidelines.

> **Guideline:** Identify, design and construct needed storm water pollution improvements.

Potable and Non-Potable Water

During the planning process, the General Plan Team determined early on that the need for a potable water source was paramount to the Park's future development. A study was made by the team to evaluate possible fresh water sources. In addition the team also studied the availability of non-potable water sources for use in fire suppression and maintenance. The goals and guidelines reflect the best alternative for these water sources.

Goal: Establish a reliable potable water source for the Park.

> **Guideline:** Establish a new water well and water line with adequate water storage to replace existing aged water facilities in the Park.
>
> **Guideline:** Establish sufficient infrastructure for utilities to serve current/future use and development. Consider other potential water sources and supply (wells, desalinization, springs, etc.).

Goal: Establish a reliable non-potable water source for the Park's fire suppression and maintenance requirements at the Lighthouse complex.

> **Guideline:** Consider reestablishing the historic water collection system, to collect roof water off the Light Station buildings and store in the

existing cistern. Development of an adequate fire suppression system will require equipment placement in the maintenance garage.

Sustainability

The use of sustainable design and construction materials is an appropriate concept for the Department to consider in development of new facilities. Sustainable design contributes to a healthier environment, which in turn would benefit the Park's visitors and natural and cultural resources.

Goal: Use sustainable design in the siting and construction of any future facilities and, as much as possible, in the maintenance of facilities in the Park, including buildings, parking lots, day use areas, and trails.

Guideline: Where possible, use natural, renewable, indigenous, and recyclable materials, and simple-to-maintain and energy-efficient design.

Guideline: Use cost/benefit analysis over time to help justify the use of more costly, sustainable construction materials.

Guideline: A primary objective of using sustainable design would be to enhance opportunities to teach and "lead through example" of the importance of respect toward our living Earth and the natural resources that sustain life both inside and outside the Park.

Guideline: Consider the building or structure/land interface to minimize disturbance to site character, skyline, vegetation, hydrology, and soils.

Guideline: Consider using natural or non-toxic means of pest and vegetation control.

Guideline: Use sustainable design to minimize impacts to cultural and natural resources by choosing appropriate building sites and creating low-impact structures that avoid the use of environmentally-damaging, waste-producing, or hazardous materials.

Natural Hazards

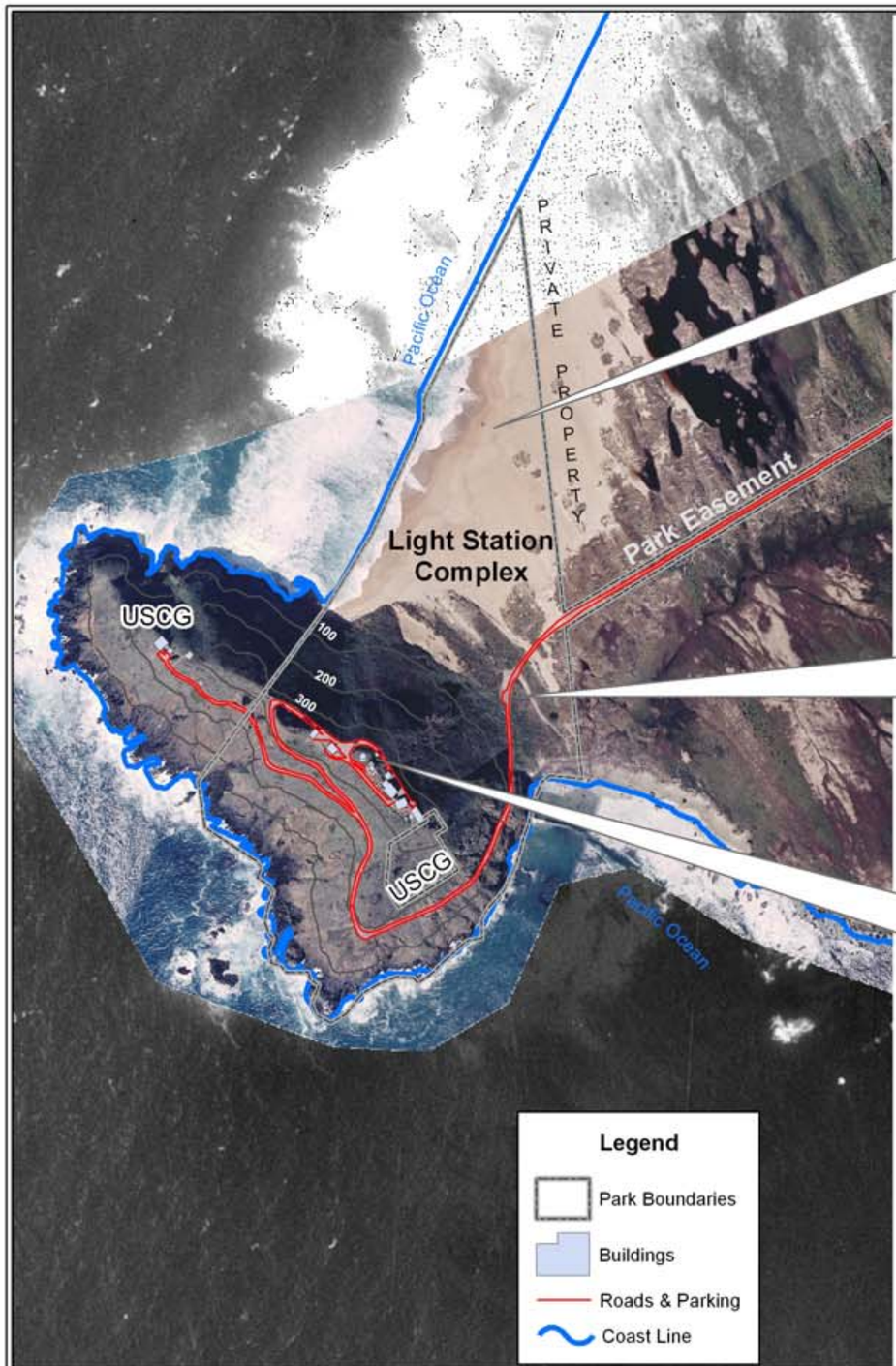
Several potential geologic and natural hazards must be considered when planning new buildings, roads, or trails within the Park. Site-specific investigations should be conducted in any areas where new development is planned. The investigations may consist of reconnaissance geologic mapping, aerial photo surveys, and geotechnical investigations. These investigations are important to protect manmade structures, public safety, and to reduce impacts to the natural environment.

Goal: Minimize any negative impacts resulting from the Park's natural processes with regard to planned structures or other public projects (trails, roads, etc.).

> **Guideline:** Monitor and document the geologic and other natural processes affecting the Park and its resources.
>
> **Guideline:** Include professional (biological, geological, engineering) evaluations for siting and design of permanent structures, roads, and trails to mitigate potential damage from unstable soil, landslides, flooding, earthquake-induced damage, and potential soil or groundwater contamination. These evaluations are also to protect the environment from adverse effects due to construction projects. Detailed site investigations and soil testing will be conducted during the planning and design of specific construction projects.
>
> **Guideline:** Perform slope stability and soils studies in public use areas, including monitoring geomorphic change where appropriate and feasible. The intent is to understand the geologic processes affecting sites receiving public use and where resources might be at risk. Employ management actions that minimize erosion and prevent the creation or reactivation of landslides to reduce the risk of erosion hazards to people and resources.
>
> **Guideline:** Identify areas of geological or other natural sensitivities to insure that any planned projects will not negatively impact the Park's natural environment. Monitor and document the geologic and other natural processes affecting the Park and its resources.

AREA-SPECIFIC GOALS AND GUIDELINES

This section defines the management goals and guidelines that are specific to individual areas in Point Sur SHP. Management of specific areas will follow the appropriate Park-wide goals and guidelines in addition to the subsequent, more specific goals and guidelines (see Figures 9 & 10, Page 4-26 & 4-27).



BEACH & DUNE AREA

Proposed Natural Preserve, see Figure #8, Page 4-6

Protect and interpret snowy plover and other sensitive dune, wetland, and marine species and habitats.

Guided tours of proposed Natural Preserve & Beach Areas.

MORO ROCK PARKING

Provide short-term parking for Light Station tours and limited beach use.

Provide interpretation of significant natural and cultural resources.

Preserve and protect native plant and wildlife species habitats.

LIGHT STATION COMPLEX

Restore and interpret buildings and features associated with the historic Light Station.

Utilize remaining structures for appropriate interpretive purposes.

Seek to acquire Coast Guard surplus properties on the rock.

N W E S

0 250 500 1,000 Feet

GENERAL PLANNING SECTION

21 Lower Ragsdale
Monterey, CA
93940

NOTES:

FIGURE # 9

Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

POINT SUR STATE HISTORIC PARK
General Plan
PROPOSED LANDUSE & FACILITIES - A

Date: 12/29/03
Source:
Psomas
July, 2001
Aerial & Lidar
Basemapping
Projection:
State Plane
Zone 4, Feet
NAD 83

POTENTIAL ROAD CONNECTION
Manage visitor activities to prevent trespass onto adjacent private lands.

Investigate potential for public access road connection across private property.

MAIN PARK ENTRANCE
Provide signage and road improvements for establishing the main park entrance and visitor contact.

VISITOR PARKING & TOUR STAGING AREA
Rehabilitate buildings and parking areas as needed.

Develop exhibits and staging area for site tours and interpretive programs.

Provide for self-guided interpretation of the NAVFAC.

FORMER NAVAL FACILITY (NAVFAC)
Remove dilapidated and/or high visual impact structures.

Retain other buildings for appropriate adaptive use.

Reduce visual impacts and enhance open space views.

Interpret NAVFAC history (site, operations, and features).

Control and manage exotic plants and preserve native species.

EMPLOYEE HOUSING (24 units)
No Public Access. Housing managed by DPR.

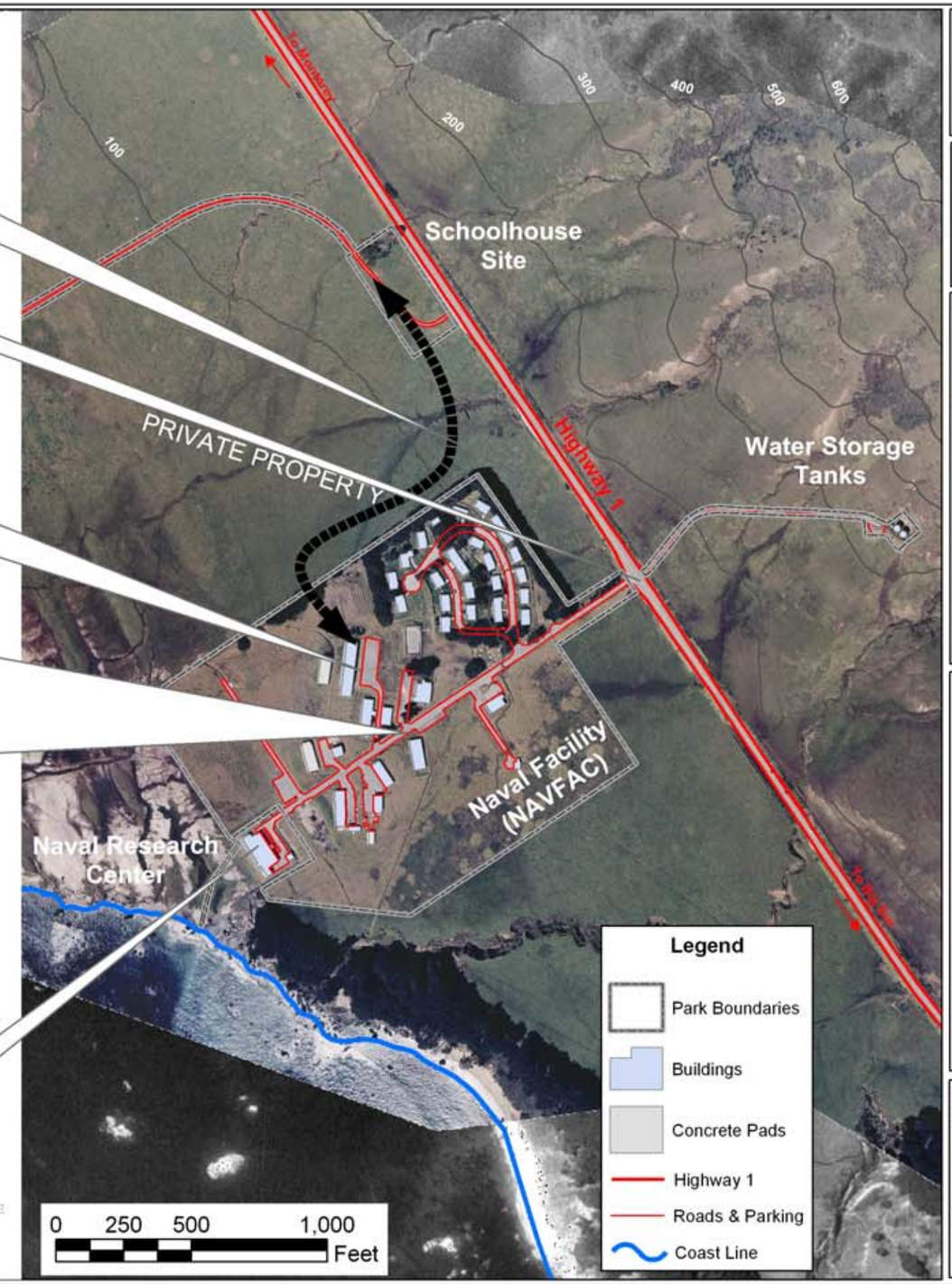
Houses to be used until more suitable housing locations are identified and funding allows relocation.

Maintain vegetative screening for housing area.

Provide adequate utility infrastructure to support intended use. Continue to utilize existing housing for interm.

INTERPRETIVE OPPORTUNITIES
Coordinate with the Naval Postgraduate School on potential joint-agency interpretive efforts.

Emphasis on marine research efforts, and NAVFAC history.



CALIFORNIA STATE PARKS SINCE 1864

GENERAL PLANNING SECTION
21 Lower Ragsdale
Monterey, CA
93940

NOTES:

FIGURE #10

Parcel boundaries are approximate and should not be considered legal descriptions.
Maps are intended for study purposes only.

POINT SUR STATE HISTORIC PARK
General Plan
PROPOSED LANDUSE & FACILITIES - B

Date: 12/29/03
Source:
Psomas
July, 2001
Aerial & Lidar
Basemapping
Projection:
State Plane
Zone 4, Feet
NAD 83

The Beach and Dune Area

The beach and dune area is located at the base of Moro Rock, primarily to the north of the access road. Historically Point Sur's dune complex was larger with actively migrating dunes that swept across the entire landward side of Moro Rock. Today, much of this area is stabilized predominantly by exotic vegetation. Point Sur SHP includes a small parcel of this dune system. Sand dunes compose a fragile environment that is often home to several sensitive species, and this dune area is part of the federally designated critical habitat for the western snowy plover.

Goal: Manage the dunes at Point Sur SHP for the perpetuation and enhancement of their native biota.

> **Guideline:** Dune management will be based on a multidisciplinary evaluation of the geology, hydrology, biology, and morphology of the dunes. Recommended actions may include controlling exotic vegetation, revegetation with native species, limiting recreational access to the dune complex, and/or modifying activities on adjacent State Park land which have an impact on the dunes.
>
> **Guideline:** Manage visitor access to protect native plant and animal habitat and to prevent or reduce dune erosion. Educational features such as view points or nature trails will be considered as an alternative to uncontrolled use of the dune area.
>
> **Guideline:** Consult with the U.S. Fish and Wildlife Service before implementation of management actions that pertain to the dune area, including changes in visitor use.
>
> **Guideline:** The *Western Snowy Plover Systemwide Management Guidelines* (published by DPR in March of 2002) should be followed for managing beach use.
>
> **Guideline:** Determine an appropriate level of beach access and use through consultation with the U.S. Fish and Wildlife Service (FWS) as necessary. If the FWS determines that the proposed use may result in take of the plover, a Habitat Conservation Plan will be required before implementing any proposed actions to open the beach for public use.
>
> **Guideline:** Consider allowing beach access only from October through February to avoid the breeding season. Any amount of beach access will require a long-term, multi-faceted management approach.

Guideline: Consider a study to establish the appropriate level of use on and around the beach.

Guideline: Designate the northern beach area as a Natural Preserve for protection of western snowy plover habitat and other significant natural resources.

Proposed Natural Preserve Area

Section 5019.50 through 5019.80 of the Public Resources Code contains statutes for classification of Units of the State Park System. Based on these statutes and an evaluation of the resources of Point Sur SHP, the Department proposes that a portion of the Park be sub-classified as a natural preserve. This natural preserve will incorporate the beach and dune area at the base of Moro Rock. The boundary of the proposed natural preserve would be delineated by the Park boundary, the 70 foot contour line at the base of Moro Rock, and 15 feet from the edge of the north side of the entrance road. The entrance road is defined to include the 20' x 110' existing parking area at the base of Moro Rock (see Figure 8, Page 4-6).

Hatching Western Snowy Plover Nest

The northern beach at Point Sur has been included in western snowy plover critical habitat designations by the U.S. Fish and Wildlife Service. This beach is valuable to the threatened plover as both a nesting and a wintering area. These birds are sensitive to disturbances caused by human activities. Increasing levels of human recreation is a major threat to the breeding success of the plover. In addition to direct mortality that can be caused by humans, concentrations of people can deter plovers from using otherwise suitable habitats.

Point Sur's northern beach also provides habitat for the globose dune beetle, which makes its home in the sand under native foredune vegetation. Another potential resident of the sandy soil is the black legless lizard (*Anniella pulchra nigra*). This area also provides potential foraging habitat for the northern harrier (*Circus cyaneus*) and other raptors. In addition to the biotic resources, this area contains coastal sand dunes, a geologic feature which is among the most dynamic and fragile natural formations.

The creation of a natural preserve within Point Sur SHP is an effort to recognize and protect the sensitive biotic and physical features of the Park. It will provide the highest level of protection for the western snowy plover and other sensitive resources found in the Point Sur beach and dune habitat. This sub-classification

is necessary to ensure that future Park development, public access and use, operations, and management decisions recognize the significance and sensitivities of the beach and dune habitat, and do not adversely affect the resources contained within the natural preserve boundary.

Currently, this area is governed by the State Historic Park classification as defined in Public Resources Code Section 5019.59. The sub-classification to a natural preserve will modify the primary goal for the beach and dune area to natural resource preservation. Public Resources Code Section 5019.71 governs the purpose, management, and use of natural preserves:

> ***Public Resources Code Section 5019.71 –*** *Natural preserves consist of distinct nonmarine areas of outstanding natural or scientific significance established within the boundaries of other State Park System Units. The purpose of natural preserves shall be to preserve such features as rare or endangered plant and animal species and their supporting ecosystems, representative examples of plant or animal communities existing in California prior to the impact of civilization, geological features illustrative of geological processes, significant fossil occurrences or geological features of cultural or economic interest, or topographic features illustrative of representative or unique biogeographical patterns. Areas set aside as natural preserves shall be of sufficient size to allow, where possible, the natural dynamics of ecological interaction to continue without interference, and to provide, in all cases, a practicable management unit. Habitat manipulation shall be permitted only in those areas found by scientific analysis to require manipulation to preserve the species or associations that constitute the basis for the establishment of the natural preserve.*

The proposed natural preserve will be managed according to this section of the Public Resources Code in addition to these General Plan guidelines and the Resource Management Directives for the California Department of Parks and Recreation Section 1812.2, which states:

> *Boundaries of wildernesses and natural preserves will be established to give full protection to environmental and ecological integrity, from the standpoints of watershed influences, scenic and visual unity, cultural values, and other appropriate environmental factors.*

Developments in Natural preserves are limited to trails and interpretive facilities required to make possible the visual and sensory enjoyment of the resource by visitors. Vehicle access and parking are not appropriate; visitor centers, restrooms, structures, and facilities other than signs shall be placed outside Natural preserves.

Goal: Establish special protection and designation for sensitive wildlife habitats and geologic features at the northern beach and dune area at Point Sur SHP with a primary management philosophy to protect, preserve, and interpret significant resources, and promote natural processes.

Guideline: Manage visitor access to protect native plant and animal habitat and to prevent or reduce dune erosion. Educational and interpretational features such as view points or nature trails will be considered as an alternative to uncontrolled use of the proposed natural preserve.

Guideline: Trails may be considered in the natural preserve for interpretive opportunities. These limited trails should be designed in areas where they would have the least impact on wildlife habitat and ecological systems, allowing visitors an opportunity to experience the Park, without disturbing critical habitats. Active forms of recreation that may occur off of trails shall be prohibited in the proposed natural preserve.

Guideline: Various structures associated with the functions of the Light Station were historically located at or near to the base of Moro Rock. Representations of these cultural features shall not be recreated or constructed within the natural preserve.

Visitor Use and Development

The provision for additional visitor use and access to the Park's features is a cornerstone of this plan. Such access affects how the visitor enters the Park, staff and vehicle parking, what facilities are used and the connections between the Park's various parcels. The addition of a 'Main Gate Entrance' at the existing NAVFAC will allow for safe ingress and egress to the Park Unit. Parking will be provided along with administrative and public facilities for visitor orientation, tours, day use and Park staff. The main gate could be opened to the public daily from sunrise to sunset to allow for day use of the visitor facilities. However, the access road to the schoolhouse site, beach, and Light Station would be controlled by Park staff.

Main Gate Entrance Development

Goal: Establish a main gate entrance with the appropriate signage at the existing NAVFAC intersection on Highway 1 that will allow safe ingress and egress to the Park.

> **Guideline:** Expand current intersection to provide a safe entrance area and allow for easy exiting on to Highway 1. Provide for bus use both entering and exiting.
>
> **Guideline:** Provide Point Sur SHP signage at the main gate entrance that is visible from both directions off Highway 1.
>
> **Guideline:** Continue to provide school bus access for NAVFAC residents.

Visitor Parking

Goal: Provide an adequate parking area (30 – 50 cars) for day use, tours, buses and Park staff at NAVFAC.

> **Guideline:** Provide ADA compliant parking facilities and adequate bus parking. Consolidate day use visitor parking to enhance circulation.
>
> **Guideline**: When consolidating parking, implement appropriate mitigating measures to lessen the visual impact of the parking area.

Visitor and Staff Facilities at the NAVFAC

Goal: Allow visitors to experience the NAVFAC through discovery and interpretation. Establish day use areas and staff administrative facilities.

> **Guideline:** Provide visitor orientation facilities adjacent to the parking area.
>
> **Guideline:** Rehabilitate area to insure safe day use by visitors, including self-guided walking tour. Although rest stop seating may be provided, full picnic facilities will not be developed.

Moro Rock Staging Area

Goal: Enhance existing vehicle parking and staging area at base of Moro Rock to best serve current and future tour operations.

> **Guideline:** Expand and/or modify existing parking and staging area at the base of Moro Rock to ensure it adequately meets tour operation needs including parking and turn-around for vehicles, busses, and/or shuttles.

Guideline: Continue to provide restroom facilities, including an ADA accessible restroom and public seating.

Guideline: Allow guided beach access and interpretation along the approved trails to the north and south beaches from Moro Rock staging area.

The Light Station Complex

This collection of late 19th century to mid 20th century buildings and structures that are located atop Moro Rock need to be carefully considered and prioritized for specific treatments. The rarity and fragility of these 19th and early-to-mid 20th century historic resources require protection at the highest level. California's Public Resources Code 5024.5 dictates that, "no State agency shall alter the original or significant historical features or fabric, or transfer, relocate, or demolish historical resources." The four distinct but interrelated treatments are: preservation, rehabilitation, restoration and reconstruction. They are federally and state mandated standards found in *The Secretary of the Interior's Standards for the Treatment of Historic Properties.*

The 1990 and 1991 National Register of Historic Places nomination statement and index identified the period of significance for the Light Station complex as 1889-1940. The 1989 *Historic Structure Report: Assistant Keeper's Dwelling and Head Keeper's Dwelling* concludes that the period between 1908 and circa 1925 is the period of greatest historic integrity, and offers the greatest potential for restoration of surviving historic fabric.

On the issue of future reconstructions, the HSR notes that to return the Light Station complex to a pre-1900 period (for example) would require demolition of some existing historic buildings and reconstruction of buildings and transportation systems no longer in existence. Neither demolition, nor reconstruction is consistent with the Secretary of the Interior's Standards. Similarly, although the World War II era buildings, structures and sites, including the Mess Hall, RACON piers and antennae sites were built and used after the Light Station's period of significance, they are in themselves culturally significant and represent the flow of history at the Light Station—and will therefore not be demolished. To summarize, the Standards do not approve of the recreation of buildings and structures that *did not exist together in time*, thus presenting a false portrait of the history of the Light Station.

Goal: Follow Departmental standards and practices, including previous Historic Structure Reports (HSR) in selecting the appropriate treatment for all buildings and structures on the rock.

Guideline: Although preservation may not be the sole treatment applied to the Light Station complex, this treatment will have precedence over the three other standards. The *Secretary of the Interior's Standards* defines preservation as, "the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Preliminary measures to protect and stabilize the property generally focuses upon the repair of historic materials and features rather than extensive replacement and new construction."

Guideline: The period of significance for the Light Station complex should follow the dates designated by the National Register of Historic Places nomination statement in 1990 and indexed in 1991 which is: 1889 - 1940.

Guideline: Follow the assumptions set out in the Department's 1989 Historic Structures Report: *Assistant Keeper's Dwelling and Head Keeper's Dwelling, Point Sur State Historic Park*. This report concluded that reconstruction of historic buildings and transportation systems that pre-date or post-date the Light Station's greatest period of surviving and intact buildings which fall between 1908 and 1925, is not consistent with the Secretary of the Interior's Standards.

Guideline: Complete the historical investigation and documentation for the Carpenter/Blacksmith shop, Barn, Garage, and Pumphouse in the Historical Structure Reports (HSR).

Goal: Due to the historical significance, vulnerability and irreplaceable nature of the Light Station's historic fabric, appropriate actions will be taken to ensure their security and appropriate forms of public access.

Guideline: Identify and implement appropriate security measures for the Light Station complex. These include fire prevention, suppression, and Intrusion systems.

Guideline: Identify options for public access, including ADA provisions for all buildings and structures at the Light Station. Use California's Historical Building Code to develop appropriate alternatives.

Goal: The same level of investigation, documentation, and treatment consideration should be given to those buildings and structures that post-date the period of significance for interpretive reasons. These include pre-and post-World War II era structures and features.

Guideline: Complete primary records (DPR 523 series) on all non-contributing buildings (Mess Hall, Pumphouse, Garage) and all other surviving World War II buildings, structures, and sites including the RACON Tower piers and Antennae sites.

The NAVFAC

NAVFAC is a 38.54 acre parcel located on the coastal terrace stretching beyond Moro Rock. This area has a long history of human use, including cattle grazing before its development by the Navy. The development by the Navy of the NAVFAC including: building and infrastructure construction as well as landscaping with exotic vegetation.

At the time this General Plan was being written, it was determined that eight (8) buildings were eligible for immediate removal. They were in very poor condition and not considered to be historically significant. Three (3) buildings have been removed and five (5) more will be removed as funding permits. Other buildings will be considered for removal if they are determined not to be needed for Park purposes (see Figure 11, Page 4-38).

Goal: Enhance open space vistas and ensure public safety by removing selected buildings within the Highway 1 viewshed that are not required for State Park purposes.

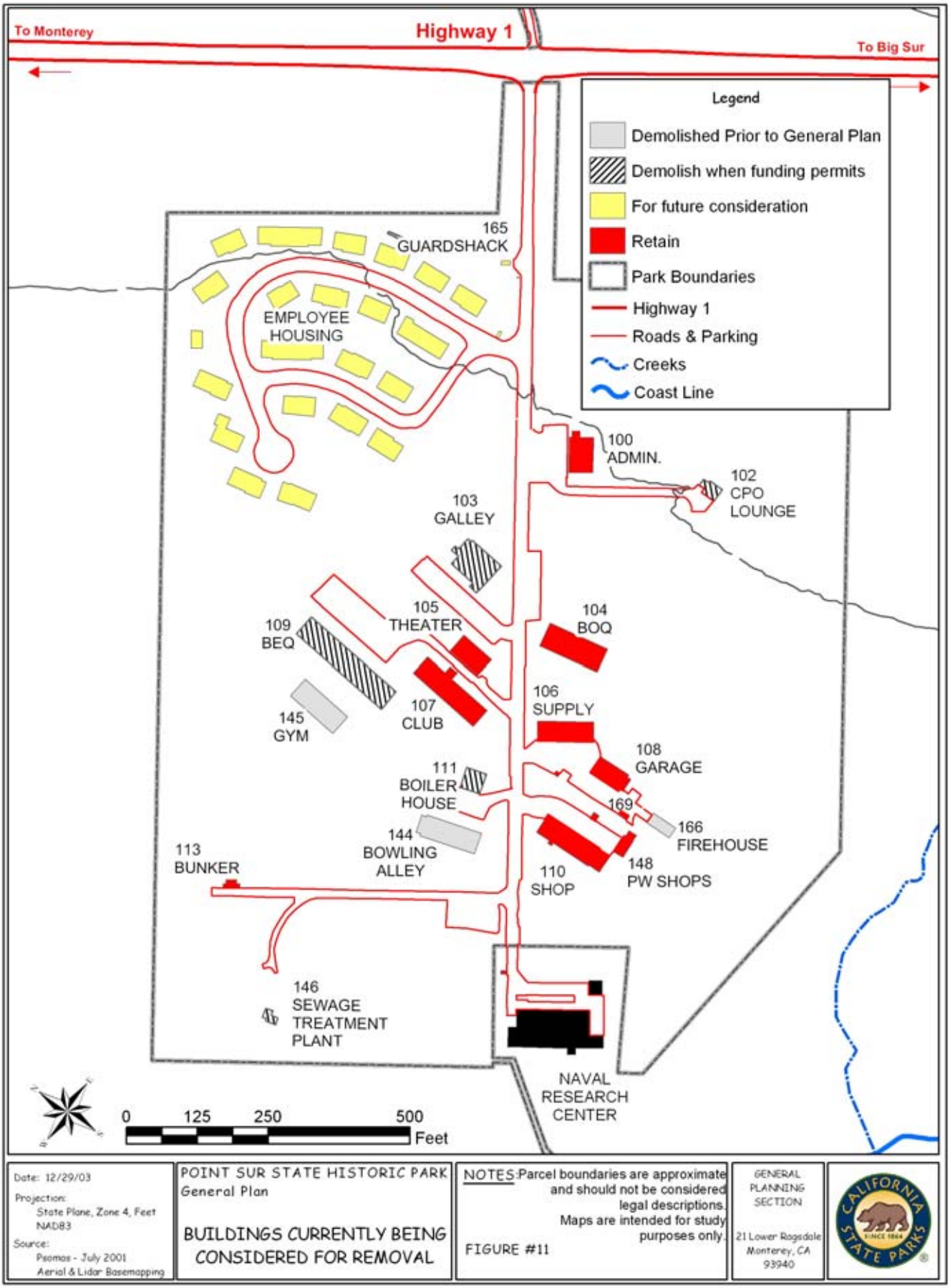
Guideline: Implement the NAVFAC Adaptive Re-use Program (see Table 4, Page 4-36). Those buildings recommended for demolition should be demolished as soon as funding permits. Buildings identified for retention should be retrained until the administrative, interpretive and maintenance requirements for adaptive use are determined. Buildings subsequently determined to be unnecessary for these uses should also be removed when funding permits.

Table 4 - NAVFAC Adaptive Re-use Program

Building # Name	Year Built Prior Use	Recommendation	Interpretive Opportunity
100 Administration	1957 Office	Retain. Potential uses: administration, curatorial	Exemplifies Personnel Area of NAVFAC.
102 Chief Petty Officer's Lounge (CPO)	1957 Officer's lounge, watch post	Demolish.	
103 Galley	1957 Mess hall	Demolish.	
104 Bachelor's Officer Quarters (BOQ)	1957 Housing	Retain. Potential uses: temporary employee housing, administration	Exemplifies Personnel Area of NAVFAC.
105 Theater	1957 Movies, lectures	Retain. Potential uses: visitor serving functions in conjunction with #107	Exemplifies Personnel Area of NAVFAC.
106 Supply	1957 Utility	Retain. Potential uses: maintenance support facility	Exemplifies Public Works Area of NAVFAC.
107 Navy Enlisted Club	1957 PX, medical facility, meeting area	Retain. Potential uses: visitor serving functions; location is particularly desirable for tour staging and interpretive focus.	Exemplifies Personnel Area of NAVFAC.
108 Garage	1957 Utility	Retain. Potential uses: maintenance support facility	Exemplifies Public Works Area of NAVFAC.
109 Bachelor's Enlisted Quarters (BEQ)	1957 Housing	Demolish	

Table 4 (cont.) - NAVFAC Adaptive Re-use Program

Building # Name	Year Built Prior Use	Recommendation	Interpretive Opportunity
110 Shop	1957 Utility	Retain. Potential uses: maintenance support facility.	Exemplifies Public Works Area of NAVFAC.
111 Boiler House	1957 Utility	Demolish.	
113 Bunker	1957 Housed arms	Retain.	Exemplifies Operations Area of NAVFAC.
138 Filling Station	1957 Security	Retain	Exemplifies Public Works Area of NAVFAC.
146 Waste Treatment Plant	1962 Utility	Demolish.	
148 Shop Storage	1962 Utility	Retain. Potential uses: maintenance support facility.	Exemplifies Public Works Area of NAVFAC.
169 Fuel Storage Shed	1977 Utility	Retain. Potential uses: maintenance support facility.	Exemplifies Public Works Area of NAVFAC.
Paint Storage	n.d. Utility	Retain. Potential uses: maintenance support facility.	Exemplifies Public Works Area of NAVFAC.
Guardshack	c.1970 Security	Retain. Potential uses: bus shelter for school children.	Exemplifies Administration Area of NAVFAC.
Employee Housing Units 1-24, Building 168		Retain. Potential uses: employee housing	Exemplifies Personnel Area of NAVFAC.


To Monterey
Highway 1
To Big Sur
Legend
Demolished Prior to General Plan
Demolish when funding permits
For future consideration
Retain
Park Boundaries
Highway 1
Roads & Parking
Creeks
Coast Line
165
GUARDSHACK
EMPLOYEE
HOUSING
100
ADMIN.
102
CPO
LOUNGE
103
GALLEY
105
THEATER
104
BOQ
109
BEQ
107
CLUB
145
GYM
106
SUPPLY
108
GARAGE
111
BOILER
HOUSE
169
166
FIREHOUSE
144
BOWLING
ALLEY
113
BUNKER
110
SHOP
148
PW SHOPS
146
SEWAGE
TREATMENT
PLANT
NAVAL
RESEARCH
CENTER
0
125
250
500
Feet
Date: 12/29/03
Projection:
State Plane, Zone 4, Feet
NAD83
Source:
Psomas - July 2001
Aerial & Lidar Basemapping
POINT SUR STATE HISTORIC PARK
General Plan
BUILDINGS CURRENTLY BEING
CONSIDERED FOR REMOVAL
NOTES: Parcel boundaries are approximate and should not be considered legal descriptions.
Maps are intended for study purposes only.
FIGURE #11
GENERAL
PLANNING
SECTION
21 Lower Ragsdale
Monterey, CA
93940
CALIFORNIA
STATE PARKS

Goal: Buildings that are determined to be rehabilitated for adaptive re-use, should wherever feasible, maintain the look and feel of the NAVFAC during its period of significance (1957-1977).

> **Guideline:** Follow the *Secretary of the Interior's Standards for the Treatment of Historic Properties and the California State Historic Building Code* in considering the appropriate treatment on a building-by-building basis.
>
> **Guideline:** The rehabilitation standard, which may become the dominant treatment for the remaining buildings at NAVFAC, will respect their historic (past) use when feasible. The rehabilitation standard though the most flexible in terms of alteration to a building, "acknowledges the need to alter and add to a historic property to meet continuing or changing uses while retaining the property's historic character."
>
> **Guideline:** Factor in the historic (previous) use when developing treatments for specific buildings at the NAVFAC.

Goal: Integrate Cold War era history into the overall history at Point Sur SHP at the NAVFAC.

> **Guideline:** Identify interpretive opportunities for self-guided tours, lectures, exhibits, signage, and other innovative media as part of the interpretation of the Cold War era.

Goal: Manage the undeveloped portions of NAVFAC parcel, including areas where buildings or other structures have been demolished, towards a natural condition for the perpetuation and enhancement of native biota.

> **Guideline:** Establish a vegetation management program, with emphasis on revegetation and enhancement of native plant communities and species.
>
> **Guideline:** Identify, prioritize, and implement effective methods of invasive exotic plant control and eradication. Priority should be given to the protection and restoration of the Freshwater Seep and Coastal Terrace Prairie communities and remnant areas of native vegetation.
>
> **Guideline:** Replace the existing chain-link perimeter fence with ranch fencing.

Existing Employee Housing Units at NAVFAC

There are 24 existing employee housing units at NAVFAC that are currently screened by the existing cypress trees from Highway 1. These employee housing units are available for use by Park and other agency staff. Eleven units are currently in use and the other 13 could be rehabilitated for future use until alternative employee housing can be provided off-site. At that time, the buildings can be removed and open space values further enhanced. The employee housing area will remain closed to public use.

Goal: Make available all 24 employee housing units to Park and other agency staff, while investigating off-site alternatives for employee housing.

> **Guideline:** Study the overall condition of the existing employee housing units for residential use and upgrade to current building codes with adequate infrastructure (utilities, water, sewage).
>
> **Guideline**: Maintain the historic look of the residential area so long as it is in use. Develop guidelines for fencing and other features in the residential area.

Goal: Screen employee housing area from the viewshed corridor of Highway 1.

> **Guideline:** Maintain the existing cypress trees that screen the employee housing from Highway 1. Establish a maintenance program for the stand's continued health and rejuvenation. Evaluate the appropriateness of their continued presence should the employee housing units be removed.

Schoolhouse Site

Goal: Allow access from the NAVFAC parking area to the schoolhouse site.

> **Guideline:** DPR should initiate efforts to provide a road easement through a negotiated agreement with adjacent property owners that connects the NAVFAC parking lot to the schoolhouse site.

Spring Parcel

Goal: Interpret the spring site, including the natural features and the uses made of the area during all periods of human occupation in conjunction with other Park facility improvements.

> **Guideline:** Conduct natural and cultural surveys to document the spring site and its features.

Guideline: Research and describe the historic uses, especially as they relate to the Light Station.

Adjacent Land Use

Goal: Allow for growth and potential development at Point Sur SHP in coordination with other Big Sur Sector State Parks.

Guideline: Employ regional planning strategies to identify and address the current and future development goals and potential use increases at all Big Sur Sector State Parks.

Goal: Identify and address Big Sur planning needs in the most effective and comprehensive manner.

Guideline: Work collaboratively on planning efforts with all stakeholders including other agencies, community businesses, organizations and residents.

Guideline: Look for opportunities with adjacent land owners to realize shared benefits.

FUTURE PLANNING EFFORTS

Unit Management Plans

There are numerous planning efforts that require attention beyond the scope of a general plan. The development of this plan identifies future planning needs and defines the vision and direction for Point Sur SHP. The following management plans are needed in order to fully implement this General Plan. Plans are not listed in order of priority and they are not intended to exclude other planning needs that may arise in the future. Management plans may need to be revised or updated in connection with future acquisitions.

Natural Resources Management Plan

A Natural Resources Management Plan (NRMP) should be developed for Point Sur SHP. This plan would identify and prioritize key actions required to achieve natural resources sustainability within the Park. The plan would identify, evaluate, and provide recommendations for the protection of the Park's significant natural resources and will function as a tool for Park management.

The Natural Resources Management Plan may endeavor to add to and improve upon the natural resources inventory. This plan would assess the integrity of sensitive habitats, communities, species, and populations. Recommendations may include focused studies or inventories, specific monitoring and assessment,

habitat restoration, long-term maintenance, and/or potential sub-classifications or special designations for significant resource areas. In addition, the plan should prioritize natural resource projects and maintenance activities based upon a thorough evaluation of the Park's natural resources and threats to these resources.

A component of this NRMP should include management of the western snowy plover habitat, which would also be included in a district-wide Western Snowy Plover Management Plan. This management plan would address all management actions deemed necessary to meet California State Park's obligation to protect the western snowy plover.

Cultural Resources Management Plan

Due to the complexity and wide range of historic and cultural resources at the Park, a Cultural Resources Management Plan (CRMP) should be developed. This plan would identify and prioritize key actions required to protect significant cultural resources, and function to guide Park management and programs for preservation treatment of historic structures. Recommendations may include focused studies or inventories, specific monitoring and assessment, long-term maintenance, and a program for defining appropriate treatment for the structures including, preservation, restoration, rehabilitation or removal, and adaptive reuse. The CRMP would provide a prioritized master plan for projects affecting the Light Station complex, the schoolhouse site and the NAVFAC site, with a larger and more comprehensive Park-wide plan to support a broad range of interpretive and administrative goals.

Allowable Use Intensity

Public Resources Code Sections 5001.96 and 5019.5 require a State Park to evaluate the land carrying capacity limit as to its recreation potential for future use.

> *Attendance at State Park System Units shall be held within limits established by carrying capacity determined in accordance with Section 5019.5*.
>
> *Before any Park or recreational area developmental plan is made, the department shall cause to be made a land carrying capacity survey of the proposed Park or recreational area, including in such survey such factors as soil, moisture, and natural cover*.

The carrying capacity of land or allowable use intensity, is developed by evaluating the interaction between land uses and natural systems and determining how these interactions will affect, over time, the land's integrity and sustainability. Maximum capacity is the point where land regeneration is

exceeded by demands made on natural systems and there is resulting degradation or destruction of the systems. Carrying capacity not only relates to the area's environmental resources but also the quality of the visitor experience.

In terms of park and recreation planning, carrying capacity may be extended in meaning to suggest that no cumulative net losses will be permitted to occur in any of the Unit's resource values (natural, cultural, aesthetic, or recreational) due to human use (activities or facility development). However, seemingly insignificant effects can have a permanent impact on resource values. Therefore the intent of the Public Resource Code is to avoid degradation of resource-based Park systems. The great variety of factors involved in damage to natural, cultural and aesthetic resources and the complexity of the interactions among the factors makes establishing a carrying capacity number difficult. Visitation, individual or group usage, time, and types and patterns of recreational use all contribute to the impact on resource systems. To aid in impact minimization, management can regulate capacity limits and land use, enact mitigation measures, educate and interpret for the public, and ensure proper design. Determination of resource location and significance allows management to create future guidelines for public use of a Park and access to it.

Adaptive management is a tool to address the carrying capacity (or allowable use intensity) and its primary goal is to protect the Unit's resources in a desired condition from continual recreational use. Adaptive management then, is an ongoing, iterative process of determining desired conditions, selecting and monitoring indicators and standards that reflect these desired conditions, and taking management action when the desired conditions are not being realized.

The desired conditions for the Park Unit are reflected in this Plan's goals for protecting the Unit's resources while allowing for high-quality visitor use experience. These uses may be defined by visitor use activities and/or development of facilities. Allowable use intensity by visitor use must consider past, present, and future uses, and may be used as planning tools in assessing the appropriateness of future proposals. If the Department determines that the entire Park or a specific area of the Park is not meeting the desired visitor experience or resource protection goals set forth in an adaptive management program, then desired conditions would not have been realized and management action would be initiated. Management action could determine that the violation was caused by natural variation (e.g., by a natural storm event). Actions to manage or limit visitor use would be implemented when the desired condition was not met due to impacts associated with visitor use.

Management actions include, but are not limited to, the following:

- Site management (e.g., facility design, barriers, site hardening, area/facility closure, redirection of visitors to suitable sites);
- Regulation (e.g., the number of people, the location or time of visits, permitted activities, or allowable equipment);
- Enforcement of regulations (e.g., patrols, notification, citations);
- Education (e.g., information signs and exhibits, interpretive programs, visitor center exhibits, brochures and fliers, public meetings, meetings with user groups); and
- Altering access (e.g., parking in proximity to sensitive resources, bike access, etc.).

Management actions must comply with the requirements of the California Environmental Quality Act (CEQA) and other applicable regulations.

ENVIORNMENTAL ANALYSIS

ENVIRONMENTAL ANALYSIS

Summary

The objectives of the Environmental Analysis section are to identify the significant impacts of implementing the General Plan and to provide general mitigation measures for a first tier of environmental review. The General Plan does not provide a detailed program of specific development or management, but sets the broader goals for the Park's management, resource protection, and provisions for public use. Future planning steps may include layout and design of facilities or specific resource management plans and processes. A more detailed level of environmental analysis is applied at that time.

The proposals contained in this document were developed during the general planning process for Point Sur SHP. The General Plan proposals, also referred to as the Plan, respond to critical issues in Park facilities and management and provide guidelines for future Park land use decisions. The Plan outlines specific goals and guidelines, recommends facility development, and identifies the need for specific resource management plans. This analysis focuses on the environmental effects of the preferred alternative as discussed in the Plan section of this document.

The Plan proposes to preserve and interpret the historic Light Station complex and historic NAVFAC site, and provide public access to both properties. The main visitor access and parking will be provided at the NAVFAC site, with some of the remaining buildings adapted for interpretation, employee housing, and administrative purposes. Other structures on the NAVFAC will be removed to enhance the viewshed. Limited beach access would be provided, as well as preservation and interpretation of significant plant and animal habitats.

Comprehensive management plans for natural and cultural resources are proposed. Planning areas have been identified which will guide Park-wide land use decisions and visitor use areas.

Potential significant environmental impacts are those commonly associated with facility development and visitor use. Potential adverse impacts identified in this plan include disturbance to or loss of natural and cultural resources and impacts to aesthetic resources and water quality. Potential mitigation measures for each type of impact have been discussed. These mitigation measures reflect the specificity of the General Plan and are therefore in the form of guidelines. The most appropriate mitigation measures will be developed as specific projects are proposed and implemented.

Description

This General Plan for Point Sur SHP, with all its sections, constitutes an environmental impact report (EIR), as required by Public Resources Code Sections 5002.2 and 21000 et seq. It will be submitted to the California Park and Recreation Commission (Commission) for approval. The Commission has sole authority for the plan's approval and adoption. Following approval by the Commission, the Department will prepare management plans and area development plans as staff and funding become available. Future projects, based on the proposals in this General Plan, will be subject to standard permitting requirements and approvals by regulatory agencies.

The Notice of Preparation for this General Plan was circulated to the appropriate federal, state, and local planning agencies on January 14, 2003 for a 30-day review period. Written comments were received from the following government agencies: U.S. Fish and Wildlife Service, California Department of Transportation, California Department of Toxic Substances Control, and the National Marine Fisheries Service.

The tiering process of environmental review is incorporated into this EIR. Tiering in an EIR prepared as part of a general plan allows agencies to consider broad environmental issues at the general planning stage, followed by more detailed examination of actual development projects in subsequent environmental documents. These later documents incorporate, by reference, the general discussions from the broader EIR in the General Plan and concentrate solely on the issues specific to the later projects [Public Resources Code Section 21093; California Environmental Quality Act (CEQA) Guidelines Section 15152]. This document represents the first tier of environmental review.

As a first tier of planning, this Plan provides Park-wide goals and guidelines for interpretation, cultural and natural resource management, aesthetics, and visitor use. Future second tier review will provide more detailed information and environmental analysis. At each planning level the project will be subject to further environmental review to determine if it is consistent with the General Plan and to identify any significant environmental impacts and mitigation measures that may be specific to the project.

Mitigation generally requires resource specialists to evaluate the scope of work, identify the cause of the impacts, and specify measures to avoid or reduce the impacts to a less than significant level. More comprehensive environmental review will be possible at those levels of planning, where facility size, location, and capacity can be explicitly delineated, rather than at the general plan level. Additional potentially significant environmental impacts and mitigation measures specific to the project will be identified at that time.

The Plan section of this General Plan represents the project description and establishes the overall long-range purpose and vision for Point Sur SHP. Specific goals and supporting guidelines are designed to address the currently identified critical issues, while developing strategies for resource protection, preservation, rehabilitation, resource interpretation, and facility development at the Park.

The Plan identifies three primary planning areas to guide land use decisions, facility development, and visitor use. The Plan also outlines a number of Park-wide proposals, including the development of a natural resources management plan and cultural resources management plan. The following is a summary of some of the planning proposals contained in the project, or Preferred Alternative. The complete list of proposals can be found in The Plan section of this document. If the General Plan were fully implemented as written, the following proposals would be carried out:

Preferred Alternative: Park-Wide Proposals

- Provide special protection for sensitive species as well as for other exceptional natural resources.

- Develop a Natural Resources Management Plan to identify and prioritize key actions to achieve natural resources sustainability.

- Develop a Cultural Resource Management Plan to identify and prioritize key actions to achieve cultural resources preservation.

- Protect and preserve unique geologic features and resources.

- Identify and minimize Park operations and visitor activities that have negative impacts on soils.

- Develop appropriate preservation treatments, accessibility standards, interpretative media and on-going maintenance plans for all buildings and structures.

- Cooperate with adjacent land managers to identify the sources that degrade water quality and quantity within the watersheds associated with the Park.

- Reduce the presence of and further invasion of exotic plant species in the Park.

- Ensure a high level of appropriate preservation, stabilization, restoration and renovation of the Park's cultural and historic resources.

- Preserve and enhance the unique scenic qualities in the Park environment.

- Establish a reliable potable water source for the Park.

- Identify, document, and evaluate any additional cultural resources within the Park; protect undocumented archaeological resources.

- Minimize activities and new facility development in sensitive habitats.

- Inspect all structures for sensitive wildlife species; identify and comply with all species protection measures prior to maintenance, construction and/or structure demolition.

- Develop management actions to prevent and minimize impacts to water quality from naturally-occurring processes, visitor use, maintenance, and development activities (to include best management practices for erosion control and surface runoff for all projects within the Park).

- Identify and evaluate areas of potential resource hazards; develop management actions to minimize potentially hazardous resource impacts to recreation, facilities, and visitor use; prohibit the development of permanent structures and major day use facilities in areas subject to significant hazards.

- Identify, preserve, and perpetuate the distinctive landscape qualities of Point Sur SHP by enhancing and protecting existing views, viewsheds, and other aesthetic resources.

The proposed General Plan attempts to address the challenges, constraints, and opportunities created by the existing uses, facilities, visitor demands, and recent acquisitions. The plan provides direction, criteria, goals, and objectives for future development, operation and management.

Preferred Alternative: Area-Specific Proposals
The Beach and Dune Area

- Manage visitor access to protect native plant and animal habitat and prevent or reduce dune erosion.

- Consult with appropriate resource agencies prior to implementing management actions within the dune area.

- Follow the *Western Snowy Plover System-wide Management Guidelines* (published by the Department of Parks and Recreation, March 2002) for managing beach use.

- Consider only seasonal access to the beach to avoid the western snowy plover breeding season.

- Designate the northern beach area as a Natural Preserve for protection of western snowy plover habitat and other significant natural resources.

- Manage the dunes for the perpetuation and enhancement of the native plants and wildlife.

The NAVFAC

- Establish the main Park entrance and public access at the existing NAVFAC entrance road.

- Provide day use facilities for visitor orientation and interpretation. Provide adequate visitor and staff parking, including ADA compliant parking.

- Renovate existing residential structures to provide additional employee housing opportunities.

- Rehabilitate or restore some existing NAVFAC structures for staff administrative and maintenance use.

- Manage the undeveloped portions of the NAVFAC parcel towards a natural condition for the perpetuation and enhancement of native ecosystems.

- Upgrade existing storm water facilities and comply with current non-point source pollution guidelines.

- Initiate efforts to provide a road easement (through an agreement with adjacent property owners) to connect a visitor parking lot at NAVFAC with the schoolhouse site.

- Enhance the Highway 1 viewshed and ensure public safety through the removal of some existing structures.

Moro Rock and Light Station Complex

- Provide an expanded tour staging area at the existing Moro Rock location.

- Allow guided beach access and interpretation on approved trails.

- Establish a reliable non-potable water source at the Light Station complex for fire suppression and maintenance requirements.

- Establish appropriate exhibits in selected Light Station buildings.

- Follow Department standards in selecting the appropriate treatment for all buildings and structures on the rock.

Environmental Setting

Refer to the Existing Conditions section of the General Plan for a description of the existing Park environment, significant resource values within the Park, and the local and regional environment in the vicinity.

This General Plan is consistent with other applicable regional plans, such as the Monterey County Local Coastal Program, Big Sur Coast Land Use Plan.

Potentially Significant Environmental Effects And Proposed Mitigation

The purpose of this section is to identify impacts of the project that have the potential for significance and will require more detailed analysis when management plans and area development plans are prepared.

According to the CEQA Guidelines Section 15382, a significant effect on the environment refers to a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." Significant environmental effects are those commonly associated with visitor use, facility rehabilitation, and development projects. These adverse effects can include negative visual impacts, degradation of water quality, and disturbance to or loss of cultural resources, sensitive species, and wildlife habitats.

The term threshold is used to describe levels of impact. Thresholds are standards used to determine if an activity or project will cause, or potentially cause, a substantial adverse physical change. If the project or activity could exceed a threshold, the impact is considered potentially significant. If appropriate mitigation can reduce the impact below the threshold, the impact is considered less than significant. Mitigation is defined as actions that will:

- avoid the impact altogether by not taking a certain action;
- minimize the impact by limiting the degree or magnitude of the action and its implementation;
- rectify the impact by repairing, rehabilitating, or restoring the impacted environment;
- reduce or eliminate the impact over time by preservation and maintenance operations during the life of the action; and

- compensate for the impact by replacing or providing substitute resources or environments (CEQA Guidelines Section 15370).

This General Plan is the first phase of a tiered EIR and, as such, proposed development, potential impacts, and associated mitigation are general in nature. Many of the proposed mitigation measures are contained in the plan goals and guidelines. As management plans, area development plans, or other projects are proposed, they will be subject to further environmental review. Project specific mitigation measures will be developed and implemented at that time.

The following potential impacts and associated mitigation measures refer to proposals planned within the existing Park boundaries.

Aesthetic Resources

Threshold

The threshold level for an aesthetic impact consists of a management or development activity that will substantially degrade the existing aesthetic character or quality of a site and/or its surroundings, or is incompatible with the character of the Park. This includes, but is not limited to, activities that are visually offensive to both visitors and Park neighbors.

Impact

Potentially significant, unless mitigated

Discussion

The Big Sur coast is noted for its dramatic scenic vistas and clean ocean air which contribute to the high quality of aesthetic resources in the area. In addition to these spectacular features, Point Sur SHP contains some unique natural and cultural elements. These include Moro Rock, the distinctive low growing vegetation, the small sandy beach and dune complex, as well as the sense of isolation felt while viewing the historic Light Station and associated buildings standing atop Moro Rock and the Cold War era structures of the NAVFAC remaining on the coastal terrace. Views from Highway 1 allow the visitor expansive and spectacular views of the Park features and the scenic coastline.

Any changes that substantially degrade the visual experience for Park visitors and others viewing the Park from adjacent property have the potential to cause significant impacts. The significance of visual impacts is dependent on the expectations and perceptions of the viewers. Visitors expecting a wilderness experience may perceive the presence of facilities or numerous visitors to generally be more offensive than visitors expecting higher levels of service or social interaction.

The following are identified in the plan as facilities that, if developed, could create significant adverse visual impacts within the Park:

- Renovation/adaptive reuse of other existing structures for park administrative and visitor serving functions;
- Parking for visitor orientation, Light Station and NAVFAC tours;
- New access road to the Light Station complex and beach area;
- Interpretive exhibits/facilities;
- Trails;
- Informational signage.

The development of new facilities and retention of existing facilities could create adverse visual impacts if proper design for color, scale, location, style, materials, and architectural mass are not carefully considered. In the natural landscape or historic setting, the use of inappropriate colors, design, and materials for new facilities or renovated structures may be visually offensive.

A parking area with reflective parked vehicles and inappropriate lighting could be a very obvious human-made intrusion to a relatively open natural landscape. Development of outdoor interpretive structures could create adverse visual impacts for Park visitors and people viewing the Park from adjacent properties, including the Highway 1 corridor. High-profile directional, informational, and interpretive signs along trails, roads, and highways could also contribute to visual clutter. Inappropriate lighting throughout the Park, including the employee housing area, may create negative visual impacts and obscure the dark night sky in this generally remote location along the Big Sur coast. Obstructing an existing viewshed may be considered an adverse impact.

The impacts to visual resources are considered potential because the actual size, location and design of the facilities or structures has not been determined.

Mitigation

Visual impacts can be avoided or reduced by appropriate site design, and selection of materials. Specific project designs will define aesthetically appropriate design features, identify visual resources, and identify optimum methods for protecting existing resources.

Appropriate native plant species and/or site grading should be used to screen or soften the visual effect of parking areas, appropriate visitor facilities, roads, and

trails; buffer any intrusive or distracting views and activities outside Park boundaries; and enhance scenic views. Inappropriate materials and colors for site facilities should be replaced with the appropriate materials and colors to enhance the historic resources and the existing environment. Construction and maintenance activities should be scheduled to decrease the impacts to visitors and adjacent property owners. Roads and trails should be sited to minimize visual impacts. As appropriate, utilities should be placed underground.

The Department of Parks and Recreation has begun the removal of several buildings at NAVFAC, as approved by the Coastal Commission in 2001, in order to enhance the scenic viewshed along the Big Sur Coast. The General Plan proposes to evaluate additional removal of structures as it becomes necessary. Structure removal may open viewsheds and enhance the scenic resources of the area. The reconstruction of any buildings and features would be considered as potential viewshed impacts. The original look of the existing employee housing area would be maintained. In addition, guidelines for fencing and other features would be developed to maintain appropriate aesthetic standards.

All plans and projects will be in compliance with local, state, and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project specific mitigation. Mitigation will be implemented in later planning and development stages.

Conclusion

Impacts to aesthetic resources can be reduced to a less than significant level by implementing the General Plan guidelines and project specific mitigation measures.

Responsibility:	Department of Parks and Recreation Staff/Landscape Architect, and other mandated contracting authorities
Monitoring/Reporting:	Completion of required resource evaluations and development plans prior to implementation of specific projects, as part of the subsequent tier CEQA review

Biological Resources

Threshold

Direct take or removal of a sensitive species; substantial reduction, disturbance, or alteration of sensitive habitat or native plant community; actions that reduce, disturb or alter critical habitat, cause a fish or wildlife habitat to drop below self-sustaining levels, reduce the number or restrict the range of a rare, threatened, or endangered species, or threaten to eliminate an animal community; introduction of non-native, invasive species.

Impact

Potentially significant, unless mitigated

Discussion

Human activities and associated impacts (including building construction and ranching) have altered native plant and animal communities throughout the region, including lands in what is now Point Sur SHP. The remaining habitats that have survived provide food, shelter, and nesting sites for sensitive species and are highly valued Park resources. Consequently, protection and restoration of these habitats, especially the sensitive vegetation communities and sensitive wildlife habitat, is essential and will help ensure the stability of plant and wildlife populations.

Sensitive wildlife, habitats, plants, and plant communities are known to occur at Point Sur SHP. A complete survey of the Park's biological resources has not been completed; therefore there is the potential for additional sensitive resources at the Park. Potential significant impacts to these biological resources may occur during facility development, construction, renovation, rehabilitation, or resource management as proposed in the General Plan.

Development of the following facilities and activities could create significant adverse impacts on biological resources within the Park, especially the introduction of new facilities and structures into previously undisturbed areas.

- Visitor orientation and day use area
- Parking for the orientation center and Light Station tours
- Entrance, visitor, and maintenance roads
- New access road to the Light Station complex
- Trails
- Beach access
- Interpretive exhibits/facilities
- Adaptive reuse of the NAVFAC structures
- Structure demolition
- Rehabilitation of areas where the landscape has been disturbed
- Vegetation management projects and programs

There are habitat types and plant communities within the Park's current boundaries that are considered sensitive. Two of the most sensitive habitat types within the Park are marine (including the Monterey Bay National Marine Sanctuary and the California Sea Otter Game Refuge), and the beach and dune area to the north of the point (which is also Federally designated critical habitat for the western snowy plover). Two sensitive plant communities found in the Park are Coastal Terrace Prairie, found at the southern and eastern edges of the NAVFAC, and Northern Coastal Bluff Scrub, occurring on the north and northeast facing slopes of Moro Rock. Facility renovation and development, and resource management have the potential to disturb, degrade, or remove habitat.

Three sensitive plants known to occur at the Park are Little Sur manzanita, located on the slopes of Moro Rock primarily in the central coastal scrub community, Monterey Indian paintbrush, most numerous on the lower eastern slopes of Moro Rock, and Monterey spineflower, on a small patch of sandy soil at the NAVFAC site. Potential habitat exists at the Park for eight other sensitive plants (see Appendix A-1, Page 7-2).

Sensitive wildlife species are known to occur at Point Sur SHP including the California brown pelican, loggerhead shrike, western snowy plover, white-tailed kite, and globose dune beetle. Some wildlife species not known to occur at the Park require a comparable level of protection and management due to their sensitivity and the likelihood of their appearance. Some of these species are the southern sea otter, black swift, California condor, California red-legged frog, and Smith's blue butterfly. In addition, potential habitat exists at the Park for numerous other sensitive wildlife species (see Appendix A-3, Page 7-4).

The beach and dune habitat to the north of Moro Rock is federally designated critical habitat for the western snowy plover. The plover breeds and winters here, and it is the only beach between Monterey Bay and San Luis Obispo County on which the plover is known to nest.

The plan identifies the majority of potential facility development and renovation in areas that have been previously disturbed. There would be minimal adverse impacts to vegetation and wildlife in these portions of the Park. The introduction of new facilities into previously undisturbed areas of the Park, as well as the renovation of some currently vacant structures for adaptive uses could create adverse impacts on wildlife and sensitive plants.

Ground disturbance, including grading, soil compaction, or vegetation removal, has the potential to provide habitat for non-native invasive species. Ground disturbance could include new facility construction (interpretive structures, parking lots) as well as road and trail development or rehabilitation. Trails and roads can also become dispersal corridors for invasive plants. The spread of

invasive species, especially into previously undisturbed native habitats or sensitive habitats, may have adverse impacts by promoting the loss of native habitat and reducing species diversity.

Vegetation management in the Park can result in significant impacts as well as pose potential risks to humans and property. Among management activities that will require further impact assessment prior to implementation are habitat restoration projects (including soil grading, and other activities), and vegetation removal, whether exotic or native.

Mitigation

The General Plan proposes a number of guidelines to preserve, enhance, and minimize disturbance to vegetation and wildlife. A Natural Resource Management Plan would be developed to provide guidance for identification, protection, habitat restoration, and adaptive management of the Park's resources, especially sensitive vegetation, wildlife, and habitats.

Site-specific surveys for sensitive species and habitats will be completed as part of the planning process for resource management projects, facility renovation, construction, and maintenance. If necessary, state and federal resource agencies may be consulted to assist with appropriate resource protection, habitat enhancement, and management techniques.

If there is any potential for significant adverse effects, proposed facilities will be redesigned to avoid impacts, or appropriate mitigation measures will be developed to reduce the impacts to a less than significant level. All activities and new facility development in areas of known sensitivity would be minimized. This may include limiting access to some areas of the Park, or temporarily closing or relocating facilities to promote restoration. Construction and restoration will be scheduled whenever possible to avoid disturbance to sensitive wildlife, especially during the breeding season. In addition, sensitive habitat will be preserved and protected from construction impacts.

The three planning areas outlined in the General Plan will also provide additional resource management guidance by designating appropriate land use, facility development, and visitor use areas, resulting in a significant reduction in opportunities for facility development and adverse visitor use impacts in sensitive areas.

Visitor use impacts to wildlife can be significantly reduced or eliminated by placing facilities away from known nesting sites and sensitive habitat, and controlling visitor use during the breeding period. However, all impacts cannot be avoided because the range of some animals may include the entire Park. As

much as possible, efforts will be made to reduce or eliminate human influences to wildlife (including access to food and garbage). An interpretive program for natural resources is proposed that may promote public understanding, education, and stewardship.

The plan proposes guidelines for invasive species management and reduction, including guidelines to prioritize exotic species removal and control efforts (giving the highest priority for removal to those species that threaten sensitive communities, habitats, and/or species), identifying and implementing appropriate control methods, and creating partnerships with neighboring property owners and public agencies to encourage the establishment of non-invasive native plants. A program of revegetation of disturbed areas with appropriate native species should also be implemented.

For continued resource protection and enhancement, on-going communication and cooperation with regulatory agencies, local jurisdictions, and adjacent landowners will be pursued to encourage conservation easements and acquisition of property from willing sellers for buffers and habitat linkages.

Foremost among the necessary precautions observed during the planning and implementation of vegetation management is adherence to existing laws, regulations, and protocols. Mitigation strategies will include avoidance and minimization of impacts, or compensation for unavoidable impacts. The environmental disclosure process requires that all such planning be developed with the participation of the local public and all appropriate agencies. Activities with the potential for impacts will include disclosure of potential impacts specific to each activity. Mitigation for significant impacts shall be developed as part of the planning and environmental disclosure process.

All plans and projects will be in compliance with local, state, and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project specific mitigation.

<u>Conclusion</u>
Impacts to biological resources can be mitigated to a less than significant level by implementing the General Plan guidelines and project specific mitigation measures.

Responsibility: The Department of Parks and Recreation Staff/Resource Ecologist, and other mandated contracting authorities

Monitoring/Reporting: Completion of required resource evaluations and development plans prior to implementation of specific projects, as part of subsequent tier CEQA review.

Cultural Resources

Threshold

Substantial loss or destruction of the historic fabric or structure(s) that eliminate important examples of major periods of California history or prehistory; addition or alterations, including non-historic additions and repairs, that adversely impact or substantially alter the visual continuity of a cultural resource or landscape.

Impact

Potentially significant, unless mitigated

Discussion

Point Sur SHP contains significant and potentially significant cultural resources that could be destroyed or degraded by new development and facility improvements proposed in the General Plan. These resources, consisting of historic buildings and structures, are very important features. There are no known archaeological resources within the Park.

The Light Station and NAVFAC buildings (excluding the employee housing) are in the process of being inventoried and recorded, although there has not been a complete inventory of the Park's archaeological resources; therefore, there is potential for the discovery of previously unknown cultural features during facility construction, rehabilitation, resource management projects, restoration, or maintenance operations.

Areas at the Light Station are of greatest concern. This is where the majority of known important cultural resources are located, and where the highest visitor use currently occurs. The NAVFAC site is proposed as the main Park access, as well as the visitor orientation and tour staging area. Self-guided tours of this area may also be considered.

The following are identified in the plan as potential facilities and activities that could create significant adverse impacts on cultural resources within the Park:

- Renovation of an existing structure for use as a visitor orientation and contact center
- Parking for the visitor orientation and day use area

- New main access utilizing the existing entrance road into the NAVFAC property
- Trails and viewpoints
- Interpretive exhibits/facilities
- Adaptive reuse or removal of historic structures
- Informational signage
- Rehabilitation of areas where the landscape has been disturbed
- Resource management projects

Historic structures will be considered for adaptive reuse. This adaptive reuse of historic and or culturally significant structures could involve the modification, replacement, or removal of historic fabric such as walls, doors, windows, hardware, and utilities or introduce non-historic elements to a structure, including access ramps, furniture, and heaters. Some structures will also be considered for removal. This could disturb potential underground cultural resources as well as involve the destruction of historic resources.

Interpretive facilities, trails, and their associated amenities, placed in or near historic landscapes can potentially decrease historic ambiance and increase the threat of vandalism or damage due to additional public use.

All areas proposed for development will require complete inventories on a project-by-project basis if they have not been previously inventoried.

Mitigation

Prior to construction, significant repairs, implementation of interpretive programs, adaptive reuse or removal of historic structures or sites, or other site-specific development, areas of potential impact should be inventoried and reviewed to determine the presence and significance of cultural resources, the potential impact, and recommended mitigation, if appropriate. Impacts may be reduced by project avoidance, site capping, structural stabilization/renovation, project redesign, and data recovery.

The alteration or removal of any historic or archaeological features will be subject to Public Resources Code 5024.5 review requirements. All construction, maintenance, or improvements of historic structures will be in conformance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties*

with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings and the California Historical Building Code.

The General Plan proposes development of a Cultural Resources Management Plan which would contain guidelines to assure cultural resource identification and appropriate mitigation of potential impacts to resources within the Park, including any future acquisitions. The plan would identify and prioritize key actions required to protect significant cultural resources. Recommendations could include focused studies, specific assessment, long-term maintenance, and a program for defining appropriate treatment for the structures including preservation, restoration, rehabilitation or removal, and adaptive reuse. General Plan designated planning areas may provide additional resource protections by authorizing specific Park areas for development and appropriate recreational activities.

The General Plan proposes a number of guidelines to ensure protection of the currently known and documented resources, as well as those yet to be discovered. Surveys should be conducted in areas not previously surveyed, monitoring during construction of new facilities or renovation or removal of historic or non-historic facilities should be provided in areas determined as potentially sensitive for archaeological resources, and the Department should cooperate with local Native American groups and individuals to document the cultural significance of the Park to indigenous people. Appropriate security measures, including fire prevention, fire suppression, and intrusion systems should be identified and implemented to ensure the security of the cultural resources in the Park.

All plans and projects will be in compliance with local, state, and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project specific mitigation.

<u>Conclusion</u>
Impacts to cultural resources can be mitigated to a less than significant level by implementing the General Plan guidelines and project specific mitigation measures.

Responsibility:	Department of Parks and Recreation Staff/Cultural Resource Specialist, and other mandated contracting authorities
Monitoring/Reporting:	Completion of required resource evaluations and development plans prior to implementation of specific projects, as part of the subsequent tier CEQA review

Hazards and Hazardous Materials

Threshold

A significant impact would be expected to occur if the project would: create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; release hazardous materials, substances, or waste into the environment creating a significant hazard to the public; emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school; be located on a site which is included on a list of hazardous materials sites and, as a result, creates a significant hazard to the public or environment; be located in the vicinity of a private airstrip or within two miles of a public airport resulting in a safety hazard for people residing, working, or visiting the project; or expose people or structures to a significant risk of loss, injury, or death from wildland fires.

Impact

Potential significant, unless mitigated

Discussion

Some of the existing structures at Point Sur SHP may contain hazardous materials, most notably asbestos and lead. During structure renovation and demolition these hazardous materials have the potential to be released, especially through collection, transport, and disposal of these materials. Pesticides may be used at the Park as one of the many management tools to control and prevent invasive exotic species and to enhance native habitats.

The Park property is not included on a list of hazardous materials sites and is not near a school site or an airport.

Mitigation

Studies and investigations should be conducted to determine any potential contamination or hazardous materials prior to future projects. During structure renovation and/or demolition, containment and removal of any asbestos containing material and lead based paint shall be accomplished in compliance with state, federal and local regulations. In addition, air quality will be monitored and legally mandated standards maintained during structure demolition. All regulations for hazardous material transport, use, and disposal will be adhered to.

The project proposes identification and implementation of appropriate fire prevention and fire suppression methods to ensure public safety.

If necessary, a Pesticide Management Plan shall be developed and implemented to regulate the storage and application of pesticides to protect public safety and water quality.

Future projects will be subject to further, more detailed review. Should hazardous substances or other health hazards be identified, appropriate warning and protective methods would be developed and implemented.

Conclusion

Impacts resulting from hazardous and hazardous materials can be mitigated to a less than significant level by implementing the General Plan guidelines and project specific mitigation measures.

Responsibility:	The Department of Parks and Recreation Staff and other mandated contracting authorities.
Monitoring/Reporting:	Completion of required resource evaluations and development plans prior to implementation of specific projects, as part of subsequent tier CEQA review.

Water Quality Resources

Threshold

A substantial violation in a water quality standard or waste discharge requirement; alteration of the existing drainage pattern of an area in a manner that would result in substantial erosion or siltation; substantial degradation of water quality, especially related to non-point sources.

Impact

Potentially significant, unless mitigated

Discussion

The protection of water quality is extremely important in the Central Coast Hydrologic Basin. Many water quality problems are related to non-point sources, such as soil erosion (from construction), storm water runoff (sediment and chemicals), and individual wastewater disposal systems. Non-point sources have been identified as the major cause of water pollution in California.

The General Plan proposes facilities that may have an impact on water quality. Development, removal, and maintenance of the following facilities could create significant adverse impacts.

- New visitor orientation and contact facility
- Day use facilities
- Parking for the orientation facility and day use
- Entrance and maintenance roads
- Park maintenance and storage facility
- Trails
- Interpretive exhibits/facilities
- Removal of existing buildings
- Rehabilitation of areas where the landscape has been disturbed

Surface waters within the Park include several unnamed drainages which cross the coastal terrace, as well as freshwater wetlands and coastal seeps. These surface waters, adjacent to existing recreation facilities and future proposed development, are highly susceptible to water quality impacts. Sedimentation of these waters may increase turbidity and physically alter the habitat. An increase in sediment loading may be considered a significant impact.

Soils in some areas of the Park are classified as highly erodible, especially those soils at the base of Moro Rock, including the beach and dunes. The headland and a portion of the parcel east of Highway 1, referred to as the Spring parcel, also have high erosion potential when the soil is exposed. Any proposed soil disturbing activities or increases in impervious surfaces may contribute to potentially significant adverse impacts to water quality.

Human activities in the watershed can greatly accelerate the rate and amount of erosion and sedimentation. Activities at the Park that could increase sedimentation may include construction of new facilities, rehabilitation or removal of existing facilities, operations and maintenance practices, and outdoor recreation.

Potential impacts associated with construction practices include soil and vegetation disturbance from grading, filling, and construction equipment use and storage. Surface and groundwater contamination may occur from construction materials, such as concrete, paint, and other chemical products. Ground disturbance, especially in floodplains and wetlands, may reduce the natural processes for sediment and nutrient absorption. There may be ground

disturbance during removal of existing structures, causing soil erosion into nearby drainages.

Storm drains and ditches currently collect water from the paved areas throughout the Park and convey water to an outfall near the ocean. Impervious surfaces may contribute to water pollution as a source of vehicle contaminants, such as oils, grease and other petroleum and chemical products. These substances become suspended or dissolved in storm water runoff and may enter surface or groundwater.

Normal Park operations may include vegetation removal by mechanical or chemical methods. This practice can disturb the ground surface, contributing to increased erosion and sedimentation, and excess pesticides may enter groundwater or surface waters.

Recreation impacts can include soil compaction in day use areas and along unpaved trails. Intense visitor use may also cause increased erosion on unpaved trails (including dune erosion), disturbance to or destruction of sensitive wetland vegetation due to trampling, and watershed damage by human-caused wildfires.

Mitigation

The Department will comply with all applicable water quality control standards as contained in the Water Quality Control Plan for the Central Coast Basin (Basin Plan). Compliance will be achieved through the implementation of Park guidelines, appropriate best management practices, and site-specific mitigation measures. The use of best management practices for erosion control and surface runoff should be developed for all projects in the Park, as appropriate. Certified best management practices will be considered.

Site-specific studies of soil conditions and facility siting will be conducted as part of the planning process for any proposed development, site-specific plans, resource management plans, or facility construction or removal. All new projects, rehabilitated facilities, and increased visitor use in the Park will be evaluated to ensure that they do not contribute to the degradation of water quality. Any accelerated erosion, sedimentation, and habitat degradation will be reduced or eliminated where feasible.

Natural vegetation and soils will be protected and restored to preserve natural infiltration. Erosion control practices should be used near surface waters for all activities that disturb the ground surface, and existing natural drainage patterns should not be significantly modified.

Potential mitigation measures for construction impacts may include the use of erosion control best management practices to stabilize soils during construction

and for any activities that involve soil disturbance; protecting all non-construction areas to prevent unnecessary disturbance; restabilizing and revegetating areas at the completion of construction or structure removal; and avoiding storage of surplus or waste materials near surface waters or in drainages.

Recreational facilities will be designed to minimize water quality impacts by avoiding disturbance to steep slopes, highly erodible soils, and wetland areas. Recreation impacts may be avoided or reduced by utilizing erosion control measures near surface waters for all human activities which disturb the ground surface, and developing ongoing restoration programs for areas disturbed by recreational use. Best management practices will be applied to day use areas to reduce erosion and provide appropriate treatments for storm water runoff. Temporary closure, remodeling, or relocation of facilities will be considered to allow the recovery of compacted soils and natural vegetation. To avoid potential impacts to water quality, efforts will be made to discourage Park visitors from entering sensitive habitat areas, including wetlands.

Future implementation of specific projects will be subject to a more extensive analysis of potential impacts and mitigation during subsequent environmental review.

Impacts to water quality can be mitigated to a less than significant level through the implementation of General Plan guidelines and project specific mitigation measures.

<u>Conclusion</u>
Impacts to water quality resources can be mitigated to a less than significant level by implementing the General Plan guidelines and project specific mitigation measures.

Responsibility:	The Department of Parks and Recreation Staff/Resource Ecologist/Geologist, and other mandated contracting authorities
Monitoring/Reporting:	Completion of required resource evaluations and development plans prior to implementation of specific projects, as part of subsequent tier CEQA review.

Unavoidable Significant Environmental Effects
Evaluation at the specificity of this first tier review indicates that the potential effects from projects proposed in this General Plan can be reduced to a less than significant level with appropriate facility siting, the implementation the plan goals and guidelines, of resource management programs, and the development of other specific mitigation measures.

Until the uses, locations, and scope of facilities or management plans are specified the actual level of impact, whether individual or cumulative, cannot be determined. However, all plans and projects are required to be in compliance with local, state, and federal permitting and regulatory requirements and subject to subsequent tier CEQA review and project specific mitigation.

Unavoidable significant environmental effects are not anticipated as a result of the proposals in this General Plan/Environmental Impact Report.

Significant Irreversible Environmental Changes

No significant irreversible changes to the physical environment are anticipated from the adoption and implementation of this General Plan.

Facility development, including structures, roads, and trails, may be considered a long-term commitment of resources; however, the impacts can be reversed through facility removal and discontinued access and use. The Department does remove, replace, or realign facilities, such as trails, where impacts have become unacceptable either from excessive use or from a change in environmental conditions.

The construction and operation of facilities may require the use of non-renewable resources. This impact is projected to be minor due to the limited amount of facilities planned for development and to the consideration of sustainable practices in site design, construction, maintenance, and operations. Sustainable principals used in design and management emphasize environmental sensitivity in construction, the use of non-toxic materials and renewable resources, resource conservation, recycling, and energy efficiency.

Many cultural resources are considered unique and nonrenewable. Destruction of any significant cultural resource may be considered a significant irreversible effect. To avoid this impact, proposed development sites will be surveyed for cultural resources, all site and facility designs shall incorporate methods for protecting and preserving significant cultural resources, and human activities will be monitored to ensure protection of cultural resources.

Growth-Inducing Impacts

If implemented completely, the General Plan would not foster significant economic and population growth in the region. Additional directional and informational signage outside the Park boundaries (on the highway and in the community) should increase the Park's profile. With complete development of all proposals, there is likely to be a minimal increase in Park visitation. Although there may be increased Park visitation, it would be primarily from visitors who have already traveled to the Big Sur Region, hence, minimal increase to

Highway 1 traffic except as related to general population growth. Facilities would be improved (including a more efficient entrance and tour staging area), but the number of public tours to the Light Station complex is not expected to substantially increase.

Any improvement or increase in capacity can encourage increased use, which may create additional tourism and the need for tourist services in the adjacent communities and surrounding region. The proposals in the General Plan may potentially foster a limited amount of economic growth in the region by encouraging an increase in supporting recreation and tourist services. The Big Sur area is a popular visitor destination and currently has a recreation and tourism-based economy. A slight increase in visitor use may be considered an economic benefit to the surrounding region.

Population growth in the State and region will continue to create an increased use and demand for recreational opportunities at State Parks, including Point Sur SHP. These proposals are not expected to result in a substantial growth impact.

Alternatives

This section identifies alternatives to the proposed project (described in The Plan section of the General Plan) and discusses environmental impacts associated with each alternative. This discussion is consistent with CEQA Guidelines Section 15126.6(a) that require EIRs to describe a range of reasonable alternatives to a project or its location that would attain the basic objectives of the project, but would avoid or reduce significant effects of the project, and to evaluate the comparative merits of the alternatives. The Guidelines set forth the following criteria for selecting alternatives:

- "…the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." [CEQA Guidelines Section 15126.6(b)].

- "The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects of the project,…" [CEQA Guidelines Section 15126.6(c)].

- "The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project." [CEQA Guidelines Section 15126.6(f)].

Three alternatives to the project were considered:

- Alternative A – No Project.
- Alternative B – Improvements To On-Going Uses.
- Alternative C – Removal of All Structures from the NAVFAC Site.

Alternative A – No Project

Description

The California Environmental Quality Act requires an evaluation of the specific "no project" alternative and its impact [CEQA Guidelines Section 15126.6(e)(1)]. The no project alternative describes the existing conditions, as well as the physical conditions that are likely to occur in the future if the project (the proposed plan) is not approved. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the expected impacts of not approving the project.

If a General Plan is not implemented for Point Sur SHP the existing situation will continue for Park development, operation, and management. Development within the Park would be restricted to projects that:

- repair, replace, or rehabilitate an existing facility;
- provide a temporary facility, so long as the construction does not result in the permanent commitment of resources;
- are necessary for the protection of public health and safety; or
- provide emergency measures necessary for the immediate protection of a natural or cultural resource [Public Resources Code 50022(c)]

Evaluation

The existing conditions, including the parking, tour staging, and visitor orientation limitations, would continue if the General Plan were not adopted.

Under the no project alternative the Park's natural and cultural resources may not receive an increased level of protection. Comprehensive Park-wide resource management plans and policies for natural and cultural resources may not be developed. Under the no project alternative cultural resource protection would be limited. Development of a systematic assessment process to determine the future treatment of cultural resources within the Park would be unlikely because implementation of new programs would require adoption of a general plan.

Under the no project alternative the sub-classification of Natural Preserve for further protection of the northern beach and dune area with its associated sensitive species may not occur.

Public access to Point Sur SHP is currently limited to guided tours of the Light Station. Open access to the Park for travelers on Highway 1 would not occur with the no project alternative. Without a General Plan, the Department would not have the authority to develop or enhance facilities to respond to visitor needs, other than for the protection of the public health and safety. Potential public use, recreation, and interpretation opportunities would be unrealized.

Visitor orientation, self-guided tours, and tour staging improvements may not be accomplished with the no project alternative. Existing circulation and parking limitations would continue and visitor use would be limited to tours on a first-come, first-served basis. Improvements to informational and directional signage may not occur. Recreational and interpretive improvements that could enhance the visitor experience at the Park's current level of use or anticipated future needs may not be developed. Funding for recreation and interpretation improvements to enhance the visitor experience may be difficult to obtain.

Under the no project alternative, land use management may not be evaluated on a Park-wide basis, and planning areas to guide land use, visitor use intensity, recreational facility development, and possible future acquisitions may not be developed. Without an organized land use plan, natural and cultural resource management plans, and development guidelines, incremental cumulative impacts may adversely impact the Park in the future.

Alternative B – Improvements to On-Going Uses

Description

This alternative would preserve and interpret the historic Light Station and NAVFAC. NAVFAC would continue to serve Park employee housing and administrative needs; however, it would remain closed to public use. The interpretive importance of the facility would be presented to Park visitors by means of interpretive panels at the Schoolhouse site and/or the Light Station complex. Some dilapidated structures on NAVFAC site would be removed to enhance views towards the ocean, while the cultural significance of the overall NAVFAC would be preserved. Public parking for Light Station tours would be provided at the existing staging area located at the Schoolhouse site (adjacent to Highway 1). Public access to the Light Station would continue to be by guided tours only.

Employee housing would be provided at the NAVFAC site in the existing employee housing area. Residential structures not currently in use would be renovated/upgraded for continuing employee housing needs.

The scenic viewshed would be enhanced wherever possible (for example, by demolishing buildings at NAVFAC that are structurally unsound). The cultural value of the remaining structures at NAVFAC would be protected with appropriate stabilization or adaptive reuse for Park administrative or maintenance facilities.

Wildlife habitat would be enhanced with appropriate native plant restoration and invasive exotic plant control. Sensitive species and habitats would be protected by restricting access to certain areas.

Evaluation

This alternative would continue limited public access and interpretation to the Park. With guided tours only and no public access to the NAVFAC site, visitor access would be minimal and some potential adverse effects may be reduced.

Impacts to aesthetic resources may be reduced with less visitor facilities proposed, such as parking, signage, visitor orientation, and a new connector road from the NAVFAC site to the Schoolhouse site. Less visitor facilities may result in less construction/renovation, thus reducing potential impacts to water quality, sensitive species, and sensitive habitats.

Although this alternative may reduce the potential for some adverse impacts, it will also reduce opportunities for safe and efficient visitor circulation, public access, recreation, and important cultural interpretation to this coastal site.

Alternative C – Removal of All Structures from the NAVFAC Site

Description

Alternative C would require that all structures at the NAVFAC site be removed – including the twenty four employee housing units and any renovated structures currently used for Park administration and maintenance. After structure removal, the NAVFAC site could be restored with native vegetation appropriate to the region and coastal terrace habitat. The area could be managed towards a natural condition for the perpetuation and enhancement of native biota.

The existing entrance and gate to the NAVFAC would remain, to be used as access to the Naval Research Facility, an existing research facility owned and operated by the US Navy (not currently open to the public).

Renovation and guided tours of the Light Station complex would continue. Tour staging would remain at the Schoolhouse site and at the base of Moro Rock. There may be expanded interpretive exhibits at the Light Station documenting NAVFAC and the interpretive importance of these Cold War era structures.

Evaluation

Alternative C would provide enhancement of the scenic viewshed with the removal of all structures on the NAVFAC. The only structure remaining in this area would be the Terminal Equipment Building (currently referred to as the Naval Research Center), a research facility currently owned and operated by the US Navy. The area has the potential to be restored to coastal prairie habitat using species native to the region.

Without the additional visitor facilities, staff employee housing, or Park administrative and maintenance areas there is the potential for reduced impacts to sensitive species and habitats (including wetlands), water quality, and aesthetics. However, the removal of existing and potential employee housing would be a substantial impact in this area due to the current critical demand for affordable employee housing along the Big Sur coast. Facilities for Park administration and Park maintenance would need to be constructed at another Park facility in the region. Potential additional impacts to that Park Unit may occur, as well as increased vehicle trips between Park locations.

Inadequate tour staging and visitor orientation facilities would continue with this alternative. Interpretation of a significant era in our history would also be diminished by removal of the structures.

Cumulative Impacts

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines Section 15355).

The facility development proposed in the General Plan may result in impacts to cultural resources, sensitive species, wildlife habitat, water quality, and visual resources. To the extent that the loss and degradation of biological, cultural, and visual resources is occurring in the region, any loss, disturbance, or degradation of these resources would contribute to cumulative impacts. The plan proposes a number of mitigation measures to avoid or minimize impacts to these resources. In addition, any possible future acquisitions and conservation easements may act to protect existing Park resources, preserve viewsheds, and enhance plant and wildlife habitat by providing habitat linkages and buffers. The implementation of the General Plan goals and guidelines with additional mitigation, as appropriate, will reduce the impacts to a less than significant level.

Effects Found Not To Be Significant

As a first tier of planning and environmental analysis, the potential impacts to the following items were found not to be significant, based on an evaluation of the thresholds found in CEQA Guidelines, Appendix G, Environmental Checklist Form. Future implementation of plan proposals will be subject to a more detailed analysis of potential impacts resulting from the specific project during a second-level environmental review.

Agricultural Resources

Much of the property adjacent to Point Sur SHP is in private ownership by the El Sur Ranch, and is used for cattle grazing. An easement across the El Sur Ranch allows limited guided public access from Highway 1 to Point Sur SHP.

The General Plan proposals would not substantially impact the land use on adjacent parcels. The plan proposals would not convert farmland, conflict with existing zoning for agricultural use, or involve changes that would result in farmland conversion to non-agricultural use.

Future implementation of General Plan proposals will be subject to additional tiered environmental review. No significant agricultural use impacts are projected.

Air Quality

Point Sur SHP, located along the Big Sur coast and within the North Central Coast Air Basin (Basin), receives on and off shore breezes which result in good air quality throughout the year.

The criteria pollutants of concern in the Basin are ozone, PM10, and carbon monoxide. The Monterey Bay Unified Air Pollution Control District's (MBUAPCD) air quality monitoring stations provide information on ambient concentrations of the criteria air pollutants. The nearest monitoring station to the Park is the Carmel Valley-Ford Road monitoring station. Toxic air pollutants, such as asbestos, are regulated and controlled through a permit process directed by the MBUAPCD.

The Basin is currently designated a maintenance area for the federal one-hour ozone ambient air quality standard (AAQS) and is designated as an attainment area for the federal eight-hour ozone AAQS. Under the California Clean Air Act, the Basin is a moderate nonattainment area for the State ozone AAQS and is designated nonattainment for the State PM10 AAQS. The overall exceedances of PM10 were due in large part to natural causes such as sea salt or emissions from wild fires (Monterey Bay Unified Air Pollution Control District, CEQA Air Quality Guidelines, September 2002). There have been no recorded violations of the federal or State carbon monoxide AAQS at MBUAPCD monitoring stations. The

Basin is designated as attainment or unclassified with respect to the other state and national ambient air quality standards.

Some existing structures may contain lead from the previous use of lead based paint. There is the possibility that these toxins could become airborne during structure renovation or removal. Further discussion of this issue can be found under Potentially Significant Environmental Effects, Proposed Mitigation, and Hazards and Hazardous Materials.

Temporary construction equipment and vehicles are considered mobile emissions sources. Dust from site preparation and facility construction/renovation proposed in the General Plan may create temporary air quality impacts. The impact can be substantially reduced by the use of dust control measures and other construction best management practices, as appropriate. Dust control measures should be developed during site-specific planning as an element of sustainable design for site development and in future project development review and implementation. There may be a minimal increase in Park visitation as a result of additional informational and /or directional signage as well as expanded facilities and interpretive opportunities, including self-guided tours. An increase in visitor use may cause a minor increase in total vehicle emissions at this location. Alternative modes of transportation to the Park should be encouraged. Should a more efficient visitor/staff entrance be developed as proposed, the Department should coordinate with the local transit authority to locate a transit stop at the new entrance, if appropriate, and publicize the location and benefits of public transit to the community and Park visitors.

The Department will continue to comply with all local, state, and federal regulations regarding air quality. Air quality impacts resulting from this project will not be significant.

Geology and Soils

There are specific areas within the Park, especially on Moro Rock, that have experienced slump and earth flow type landslides. Several small block failures have also occurred on the southwest side of the headland, in the rock above and below the roadway. These landslides and block failures may be associated with the construction of the road and Light Station facilities during the 1890s. The Big Sur coast is not considered a zone of high seismic activity, although there are active faults in the area.

Site specific surveys to identify potential hazardous areas should be conducted prior to any permanent facility development, and construction of facilities in these areas avoided if appropriate. Signs have been and will continue to be posted warning visitors of any currently known or potential hazards. All new

development will comply with current building code standards for construction in seismic areas.

Future projects will be subject to further, more detailed review. The project will not result in or expose people to substantial geologic hazards.

Hydrology

Implementation of the General Plan proposals would not substantially deplete groundwater supplies or interfere with groundwater recharge, and would not substantially alter the existing drainage pattern. The proposals would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems. The plan proposals focus on renovation and rehabilitation of existing facilities. Any new visitor facilities proposed would not substantially impact hydrology.

Future implementation of General Plan proposals will be subject to additional tiered environmental review. No significant hydrology impacts are projected.

Land Use and Planning

The General Plan for Point Sur SHP provides guidelines for future land use and development and is consistent with local and regional general plans. The General Plan proposals are consistent with the existing land use in the area, which is primarily open space, recreation, and ranching.

Implementation of plan proposals will enhance the existing viewshed through selective screening of facilities and removal of specific structures. The property also provides employee housing, with additional employee housing to be available as structures are renovated and utilities upgraded. As more suitable employee housing becomes available at other off-site locations these structures would be removed, further enhancing the viewshed.

Future implementation of General Plan proposals will be subject to additional tiered environmental review. No significant land use and planning impacts are projected.

Mineral Resources

The Park property is not known to contain any significant mineral resources. The plan will not result in significant impacts to mineral resources.

Future implementation of General Plan proposals will be subject to additional tiered environmental review. If implemented, this plan would not substantially impact mineral resources.

Noise

The General Plan proposes new visitor facility development and existing structure renovations that could potentially increase noise levels during normal operation. Development and renovation of these facilities will involve construction equipment and may cause temporary increased noise levels. Noise impacts should be subject to timing constraints to avoid negative impacts to Park visitors and any sensitive wildlife identified as occurring in the vicinity. The addition of a visitor orientation facility and tour staging area may add increased noise levels through normal visitor use and traffic.

Any future projects will be subject to additional environmental review. There will not be significant adverse noise impacts resulting from the implementation of this plan.

Public Services

The proposal would not require additional government services for fire protection, police protection, schools, or public facility maintenance.

The plan proposes that a new main entrance road to the Park be located at the existing entrance to the NAVFAC. Access to this entrance would be from Highway 1, an existing public road. Significant increased maintenance of existing public roads is not anticipated with the addition of the new access point.

Future implementation of General Plan proposals will be subject to additional tiered environmental review. If implemented, this plan would not have an adverse effect on public services.

Recreation

The proposals in this General Plan would not cause a substantial increased use of any regional parks or recreation facilities. The plan may restrict some types of recreation in order to minimize resource impacts; however, the plan also proposes providing increased opportunities for interpretation and education. The plan proposes increasing recreational resources with development of a visitor orientation facility, self guided tours of NAVFAC, enhanced interpretation of the Light Station complex and NAVFAC, and enhanced interpretation of the natural resources.

Any future projects will be subject to additional environmental review. There will not be significant adverse impacts to recreational resources resulting from the implementation of this plan.

Transportation/Traffic

There will not be significant adverse impacts to transportation or traffic by implementing the proposals presented in this General Plan.

The plan proposes access and parking improvements that will enhance safety and circulation into and within the Park. These improvements include providing staff and visitor access through an existing entrance road into the NAVFAC property. Most of the visitors will arrive by private vehicle or bus. Adequate visitor and staff parking, as well as a tour staging area for Park visitors, will be provided through the renovation of existing parking facilities. A potential new road, connecting the NAVFAC site to the existing road at the Schoolhouse site, would provide visitor access to the Light Station complex and beach area for additional tours and interpretive opportunities.

Improvements in directional and informational signage should make travelers more aware of the Park and its location and may result in minimal increased visitation. The General Plan proposals intend to maintain a level of visitor use that is consistent with the local/regional land use plans. The plan proposals do not include facilities that would generate additional traffic.

Future implementation of General Plan proposals will be subject to additional tiered environmental review. If implemented, this plan would not substantially impact traffic and circulation resources.

Utilities and Services Systems

The project proposes the renovation of existing structures and some new facility development including additional use of existing structures for a visitor orientation facility and improvements to parking and circulation. Utility rehabilitation and upgrades are an element in this renovation. Additional utilities and service systems may be required; however, they would be minimal.

The renovation or construction of utilities and service systems should not cause significant environmental effects.

Future implementation of General Plan proposals will be subject to additional tiered environmental review. If implemented, the project will not result in a need for substantial increases or alterations in utilities and service systems.

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#1	State Park System resources definition
#2	State Park Resource Manager description
#3	State Park inventory
#4	State Park acquisition objectives
#5	State Park development
#7	Natural and scenic resource analysis for State Parks and Reserves
#24	Primary objective of the Department of Parks and Recreation
#25	Program establishment for identification, description, and evaluation of all resources
#26	Identification and management of environmental and human-related factors influencing State Park lands
#28	Visitor use impacts
#29	Vegetation management
#31	Environmental resource management
#32	Resource management programs
#33	Exotic plant management
#34	Invasive vegetation control
#35	Natural wildlife habitat preservation
#36	Wildlife population balance
#37	Soil conservation and erosion control
#42	Allowable uses to protect water features
#43	Water quality control
#44	Water diversion
#45	Water pollution control
#46	Environmental quality
#54	Identification, evaluation, and description of historic resources
#55	Criteria for determination of significant historic resources
#57	Inventory of significant cultural resources
#58	Cultural resource protection
#59	Approval for underground work
#60	Management and interpretation of human history
#61	Adaptive use of historic structures
#63	Cultural resource management programs
#64a	Priorities for preservation, rehabilitation, and reconstruction
#64b	Guidelines for preservation and/or restoration of existing historic features

#64c Preservation, restoration, and reconstruction of historic features within the primary period of a unit
#64d Restoration and preservation of historic features outside the primary period for a unit
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California Recreational Trails Plan.
California State Park and Recreation Commission Statements of Policy.

California State Parks System Plan.
California State Parks Access to Parks Guidelines.
California State Parks Mission Statement.
Policies, Rules, Regulations, and Orders of the California State Park and Recreation Commission and the California Department of Parks and Recreation.
California Native Plant Society.
California Natural Diversity Database.

Regional Planning Influences

The policies, plans and programs of agencies and organizations in the region affect the Park in various ways. These influences represent government on many levels and address regional issues that may affect planning decisions at Point Sur SHP.

Federal

US Fish and Wildlife Service
US Army Corps of Engineers

State

California Coastal Commission
California Department of Fish and Game
California Department of Forestry and Fire Protection
California Department of Transportation
California Regional Water Quality Control Board, Central Coast Region

County and Local

Monterey County General Plan
Monterey County Local Coastal Program
Big Sur Coast Land Use Plan
Coast Highway Management Plan
Monterey Bay Unified Air Pollution Control District CEQA Air Quality Guidelines, 2002.
Monterey Bay Unified Air Pollution Control District Air Quality Management Plan for the Monterey Bay Region, 2001.

APPENDICES

Appendices

Point Sur State Historic Park
General Plan 2003

Appendix A-1

Sensitive Plant Species Occurring, or for which Potential Habitat Exists, within Point Sur State Historic Park

Family	Scientific Name	Common Name	Status
Asteraceae	*Layia carnosa*	Beach layia	FE, SE, CNPS List 1B
Brassicaceae	*Erysimum menziesii* ssp *Menziesii*	Menzie's wallflower	FE, SE, CNPS List 1B
Brassicaceae	*Erysimum menziesii* ssp *Yadonii*	Yadon's wallflower	FE, SE, CNPS List 1B
Ericaceae	*Arctostaphylos edmundsii*	Little Sur manzanita*	CNPS List 1B
Fabaceae	*Astragalus tener* var *titi*	Coastal dunes milk-vetch	FE, SE, CNPS List 1B
Fabaceae	*Lupinus tidestromii*	Tidestrom's lupine	FE, SE, CNPS List 1B
Liliaceae	*Fritillaria liliacea*	Fragrant fritillary	CNPS List 1B
Onagraceae	*Clarkia lewisii*	Lewis's clarkia	CNPS List 4
Polemoniaceae	*Gilia tenuiflora* ssp *Arenaria*	Sand gilia	FE, ST, CNPS List 1B
Polygonaceae	*Chorizanthe pungens* var *pungens*	Monterey spineflower*	FT, CNPS List 1B
Scrophulariaceae	*Castilleja latifolia*	Monterey Indian paintbrush*	CNPS List 4

* Species that have been documented at Point Sur State Historic Park

STATUS CODES:
FE = Federal Endangered, FT = Federal Threatened, SE = State Endangered, ST = State Threatened
CNPS = California Native Plant Society
List 1B = plants that are rare, threatened, or endangered in California and elsewhere
List 4 = a watch list of plants that are of limited distribution, but their vulnerability to threat appears low at this time

Appendix A-2

Exotic Plants at Point Sur State Historic Park

Family	Scientific Name	Common Name
Aizoaceae	*Carpobrotus chilensis*	Sea fig
Aizoaceae	*Carpobrotus edulis*	Hottentot fig
Aizoaceae	*Tetragonia tetragoniodes*	New Zealand spinach
Apiaceae	*Conium maculatum*	Poison hemlock
Apiaceae	*Foeniculum vulgare*	Fennel
Apocynaceae	*Vinca major*	Periwinkle
Araceae	*Zantedeschia aethiopica*	Calla lily
Araliaceae	*Hedera helix*	English ivy
Asteraceae	*Cirsium vulgare*	Bull thistle
Asteraceae	*Cotula australis*	Australian cotula
Asteraceae	*Cotula coronopifolia*	Brass buttons
Asteraceae	*Gnaphalium luteo-album*	Cudweed
Asteraceae	*Senecio vulgaris*	Common groundsel
Asteraceae	*Silybum marianum*	Milk thistle
Asteraceae	*Sonchus oleraceus*	Sow thistle
Brassicaceae	*Brassica* sp	Mustard
Brassicaceae	*Cakile maritima*	Sea rocket
Brassicaceae	*Lobularia maritima*	Sweet alyssum
Brassicaceae	*Matthiola incana*	Stock
Caryophyllaceae	*Cerastium glomeratum*	Mouse-ear chickweed
Caryophyllaceae	*Silene gallica*	Common catchfly
Caryophyllaceae	*Stellaria media*	Chickweed
Cistaceae	*Cistus villosus*	Rock rose
Cupressaceae	*Cupressus macrocarpa*	Monterey cypress
Fabaceae	*Genista monspessulana*	French broom
Fabaceae	*Medicago polymorpha*	Bur clover
Fabaceae	*Melilotus indica*	Sweet clover
Geraniaceae	*Erodium cicutarium*	Red-stemmed filaree
Geraniaceae	*Erodium moschatum*	White-stemmed filaree
Malvaceae	*Malva parviflora*	Cheeseweed
Oxalidaceae	*Oxalis pes-caprae*	Bermuda buttercup
Plantaginaceae	*Plantago coronopus*	Cut-leaved plantain
Plantaginaceae	*Plantago lanceolata*	English plantain
Poaceae	*Ammophila arenaria*	European beach grass
Poaceae	*Avena* sp	Wild oats
Poaceae	*Bromus diandrus*	Ripgut brome
Poaceae	*Lolium* sp	Ryegrass
Poaceae	*Pennisetum clandestinum*	Kikuyu grass
Poaceae	*Vulpia myuros*	Foxtail fescue
Polygonaceae	*Rumex acetosella*	Sheep sorrel
Polygonaceae	*Rumex crispus*	Curly dock
Pinaceae	*Pinus radiata*	Monerey pine

Appendix A-3
Sensitive Wildlife Species Occurring, or for which Potential Habitat Exists, within Point Sur State Historic Park

Type	Common Name	Species	Status
Mammals	Fringed bat	*Myotis thysanodes*	FSC, BLMS, WBWGHP
	Townsend's big-eared bat	*Corynorhinus townsendii*	CSC, FSC, FSS, BLMS, WBWGHP
	Western long-eared bat	*Myotis evotis*	FSC, BLMS
	Yuma bat	*Myotis yumanensis*	FSC, BLMS
	Blue whale	*Balaenoptera musculus*	FE
	Finback whale	*Balaenoptera physalus*	FE
	Humpback whale	*Megaptera navaeangliae*	FE
	Right whale	*Balaena glacialis*	FE, CFP
	Sei whale	*Balaenoptera borealis*	FE
	Sperm whale	*Physeter cotodon*	FE
	Southern sea otter	*Enhydra lutris nereis*	FT, CFP
Birds	American peregrine falcon*	*Falco peregrinus anatum*	SE, CFP
	Ashy storm-petrel	*Oceanodroma homochroa*	FSC, CSC
	Black swift	*Cypseloides niger*	FSC, CSC
	California brown pelican*	*Pelecanus occidentalis californicus*	FE, SE, CFP
	California condor	*Gymnogyps californianus*	FE, SE
	California gull	*Larus californicus*	CSC
	California spotted owl	*Strix occidentalis occidentalis*	FSC, CSC
	Common loon	*Gavia immer*	FSC, CSC
	Double-crested cormorant	*Phalacrocorax auritus*	CSC
	Elegant tern	*Sterna elegans*	FSC, CSC
	Harlequin duck	*Histrionicus histrionicus*	FSC, CSC
	Loggerhead shrike*	*Lanius ludovicianus*	CSC
	Marbled murrelet	*Brachyrampus marmoratus*	FT, SE
	Merlin	*Falco columbarius*	CSC
	Northern harrier	*Circus cyaneus*	CSC
	Osprey	*Pandion haliaetus*	CSC
	Rhinocerous auklet	*Cerorhinca monocerata*	CSC
	Tufted puffin	*Fratercula cirrhata*	CSC
	Western snowy plover*	*Charadrius alexandrinus nivosus*	FT, CSC
	White-tailed kite*	*Elaneus caeruleus*	FSC, CFP
Reptiles	Black legless lizard	*Anniella pulchra nigra*	CSC, FSS
Amphibians	California red-legged frog	*Rana aurora draytonii*	FT, CSC
Invertebrates	Globose dune beetle*	*Coelus globosus*	FSC
	Smith's blue butterfly	*Euphilotes enoptes smithi*	FE

*Species that have been documented at Point Sur State Historic Park

STATUS CODES:

BLMS = Bureau of Land Management Sensitive, CFP = California Fully Protected, CSC = California Species of Concern, FE = Federally Endangered, FT = Federally Threatened, FSC = Federal Species of Special Concern, FSS = US Forest Service Sensitive, SE = State Endangered, ST = State Threatened, WBWGHP = Western Bat Working Group High Priority

APPENDIX B
POINT SUR STATE HISTORIC PARK
GENERAL PLAN
TEAM MEMBERS

CENTRAL SERVICE CENTER

Matt Bischoff – Historian II
Joan Carpenter – Senior Civil Engineer
Susan Doniger – Historian II
Karen Hildebrand – Associate State Archaeologist
Terry Lee – Associate Landscape Architect/ Project Manager
Amy Palkovic – Associate Resource Ecologist/ Central Service Center Lead
Joe Ramos – Research Analyst II - GIS Specialist
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Ken Gray – Associate Parks and Recreation Specialist
Lois Harter – Big Sur Sector Superintendent

Special thanks to:

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Gary Nelson – Park Maintenance Supervisor
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Elizabeth Hubert – Associate Resource Ecologist Central Service Center
Jeff Frey – Assistant Resource Ecologist – Big Sur Sector
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