UNIT 443

MORRO BAY STATE PARK

GENERAL PLAN

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With thanks to:

The many citizens who have helped shape this plan through participation in planning at workshops and meetings, especially those on the Docent Council of the San Luis Obispo Coast Area State Parks.
MORRO BAY
STATE PARK
Preliminary General Plan


George Deukmejian
Governor

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Secretary for Resources

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Director
Department of Parks and Recreation

Note: The Park and Recreation Commission approved this Preliminary General Plan in JUNE 1988. A Final General Plan was printed dated JUNE 1988.

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SUMMARY
SUMMARY OF GENERAL PLAN PROPOSALS

Long-range planning proposals for Morro Bay State Park are presented in this General Plan, prepared by the California Department of Parks and Recreation.

This summary provides a quick reference to all proposals. The reader should refer to the separate sections of the plan for details of individual proposals.

When fully implemented, the plan's proposals will improve visitor services, further protect resources, and help offset additional expenses.

**Resource Management**

- Preserve and protect Morro Rock and the shorelands and related uplands of Morro Bay.

- Retain the existing golf course in its present size, and attempt to minimize negative effects of this facility on the natural environment.

- Manage the Heron Rookery Natural Preserve primarily as a nesting and roosting area for great blue herons and egrets.

- Protect existing water features and water quality at the state park.

- Protect and preserve the "morros" in the unit as they now exist.

- Provide for geologic investigations and monitoring of geologic hazards for construction of new facilities.

- Reduce invasive exotic plant species in the unit, including eucalyptus, except for trees in the Heron Rookery Natural Preserve and other stands which are providing important wildlife habitat.

- Use indigenous species for landscape plantings where feasible.

- Restore fire to its natural role in the park's ecosystem.

- Protect and restore rare or endangered plant species and native grassland and oaks in the unit.

- Protect, perpetuate, and restore wetland and high marsh habitats in the unit.

- Continue to prohibit livestock grazing in the park.

- Protect and restore native wildlife populations in the unit, especially rare or endangered animal species.

- Provide for monitoring, reporting, and protection of cultural resources.

- Extend the state park boundary to include more marsh and tidelands.
Land Use and Facilities

-- Morro Rock
  o Pave the existing parking/turnaround area, and construct an interpretive shelter.

-- Heron Rookery
  o Pave parking and a walkway to the fence.
  o Develop an interpretive shelter and observation deck.

-- Museum/Windy Cove
  o Develop new interpretive displays in the museum.
  o Provide parking for two buses, and improve trail connections from the museum.
  o Relocate existing parking at Windy Cove 20 feet inland.

-- Marina
  o Retain the existing configuration of the basin; dredge and make repairs.
  o Add 25-50 boat slips and a pump-out.
  o Remove the existing restroom, and develop a permanent food service facility in this area.
  o Renovate existing parking, and add 25-50 spaces on the east end to accommodate the proposed new picnic area.
  o Construct a 25-site picnic area at the east end, with a combination building and interpretive improvements such as a wetland boardwalk.

-- Campground
  o Renovate or replace all existing campground facilities.
  o Realign a portion of the entry road, and convert the existing road to a bicycle and hiking trail.
  o Relocate the entrance station and the campfire center.
  o Remove all ranger residences and maintenance facilities.
  o Install interpretive improvements.
-- Grove
   o Retain as a staff residence area, and install landscape screening.

-- South Bay Day Use Area
   o Develop parking for 10-25 cars, and add an interpretive panel.

-- Cerro Cabrillo Area
   o Develop a new entrance off Turri Road.
   o Develop a new day-use parking area for 25-50 cars.
   o Develop a new 50-100 unit campground and a permanent group camp.
   o Install an interpretive shelter and a system of hiking trails.

-- Park Administrative Area
   o Develop and/or relocate facilities from other areas to serve as a new district headquarters.

-- Chorro Willows
   o Develop parking for 5-10 cars, with an interpretive panel.
   o Remove old group camp facilities, and develop a hiking trail.

-- Golf Course
   o Retain the existing 18 holes of play as is.
   o Enlarge parking by 25-50 cars to reduce parking along Upper State Park Road.
   o Relocate the maintenance area, and develop an over/underpass.

-- Black Hill
   o Retain existing parking, and add interpretive panel.
   o Expand the trail system around the hill.

-- Roads
   o Realign Lower State Park Road between its eastern intersection with Upper State Park Road and the campground.
Interpretation

-- Improve and expand existing interpretive programs offered by docents.
-- Revise and/or develop new literature for interpretation.
-- Fabricate and install interpretive shelters with standardized panels for seasonal rotation throughout the park.
-- Relocate the campfire center, and add an interpretive shelter.
-- Develop a wetland boardwalk.
-- Develop a new interpretive plan for the museum.
-- Construct new interpretive exhibits in the museum.
-- Develop new self-guiding trails with brochures.
-- Develop panoramic view/orientation panels for the Black Hill and Cerro Cabrillo areas.
-- Create audio-visual programs for use in and outside the park.
UNIT DESCRIPTION
as such improvements involve no major modification of land, forests, or waters. Improvements which do not directly enhance the public's enjoyment of the natural, scenic, cultural, or ecological values of the resource, which are attractions in themselves, or which are otherwise available to the public within a reasonable distance outside the park, shall not be undertaken within state parks.

State parks may be established in either the terrestrial or underwater environments of the state.

5019.71. Natural Preserves. Natural preserves consist of distinct 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 biographical 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 which constitute the basis for the establishment of the natural preserve.

Declaration of Purpose

A declaration of purpose (or statement of purpose) describes the purpose of the unit, and identifies the prime resources, long-range management objectives, and the relationship between the unit's resources and recreational uses. A declaration of purpose was written for the state park in 1975, but was never submitted to the State Park and Recreation Commission for approval.

Several changes in the declaration are proposed to clarify the department's management goals and objectives. The original and proposed declarations of purpose for the unit are as follows:

Original (1975):

The purpose of Morro Bay State Park is to provide for the preservation, in an essentially natural condition, of the shorlands and related hinterlands of Morro Bay, including the mouth and lower reaches of Los Osos Creek, the mouth and lower reaches of Chorro Creek, both with related marsh and tide lands, the headland at Whites Point, and extending to the headland at Fairbank Point on the east, and to Morro Rock on the
INTRODUCTION
INTRODUCTION

Purpose of the Plan

This General Plan establishes guidelines for the long-term use, management, and development of Morro Bay State Park. It has been prepared by the California Department of Parks and Recreation in compliance with Public Resources Code Section 5002.2. The law requires approval of the General Plan by the California State Park and Recreation Commission prior to budgeting any development that would constitute a permanent commitment of natural or cultural resources.

The plan summarizes the available information about the unit, documenting the planning process and the relevant data used in making land use decisions and management and development proposals. As conditions change, the plan may be reviewed and updated as necessary to responsibly guide departmental actions at the park. The plan, however, is not meant to provide detailed plans for site development, resource management, or unit operation and maintenance. These details should be provided at the time actual funding and implementation occur.

Objectives of the Plan

The General Plan attempts to meet the following broad objectives:

1. Preserve and perpetuate the natural and cultural resources.

2. Provide, preserve, and protect public opportunities for day use and overnight recreation in a high-quality, safe, enjoyable, and well-managed recreation environment.

3. Restore and protect the natural values of Morro Rock, the Heron Rookery, the Morro Bay wetlands, and the upland areas of the park.

4. Preserve a natural setting for recreational activities, and minimize environmental damage caused by recreation use and development.

5. Provide appropriate interpretive services and facilities for educational and recreational purposes.

6. Develop facilities needed to help meet current and future recreation demands.

7. Monitor recreation use, periodically reassess the ability of the resources to absorb the use they are receiving, and adjust recreation use as necessary to adequately protect resource values.

The Planning Process

The development of this General Plan has been part of a larger planning effort for all state park units in this area. This effort is broadly referred to as the Morro Bay Area State Park Units General Plan, and includes Los Osos Oaks State Reserve, Morro Strand State Beach, Atascadero State Beach, Montana de Oro State Park, and Morro Bay State Park.
The planning process included a comprehensive evaluation of all available resource and recreation information. Based on this evaluation, a number of plan alternatives were prepared. These were analyzed in cooperation with local agencies, interest groups, and the public. A single plan then emerged which we considered to offer the optimum balance between resource preservation and providing public access and educational opportunities.

**General Plan Elements**

This plan is a culmination of this effort with respect to Morro Bay State Park, and is divided into the following elements:

- **Resource Element** - Evaluates the natural and cultural resources of the unit and sets policies for protection, restoration, and use of these resources.

- **Land Use and Facilities Element** - Evaluates existing land use and facilities, and describes proposed land use and facilities that are consistent with the unit’s resources and visitor needs.

- **Interpretive Element** - Establishes interpretive themes, and recommends methods for interpretation of the unit’s natural and cultural values.

- **Operations Element** - Describes specific operational and maintenance requirements of the unit, and establishes operational guidelines for implementation of the plan.

- **Concessions Element** - Evaluates existing and potential concession activities, and establishes guidelines consistent with the classification of the unit.

- **Environmental Impact Element** - In conjunction with the General Plan, serves as the Draft Environmental Impact Report required by the California Environmental Quality Act. It assesses environmental effects, and proposes mitigation measures and alternatives.

**Public Involvement**

The public played a major role in creating this plan. From the outset, the planning team attempted to identify all parties interested in or affected by this plan, and to encourage their participation in the decision-making process. An active mailing list of more than 800 names was developed, and more than 5,000 user surveys were distributed at the state parks in the study area. Public workshops were held at three critical stages in the plan’s evolution, and newsletters were sent to all on the mailing list four times to keep the public informed throughout the process. (See Appendix for sample user survey and newsletters.)

An initial newsletter was sent out after completion of the information-gathering period. It summarized the information we had received through the user surveys, and informed everyone of our planning process and our first public workshop.
The first public workshop was held on November 12, 1986, in Los Osos. The purpose of the workshop was to present the Draft Resource Element, and to allow us to communicate with interested groups, individuals, and agencies to learn more specifically about the issues and concerns they felt should be dealt with. One hundred twelve people were in attendance, actively and openly sharing many concerns.

Issue 2 of the newsletter reported the comments, concerns, and ideas expressed by participants at the first public workshop. It also described the next phase of the process, and informed everyone of the next public meeting.

The planning team then took the wealth of information and ideas that had been generated, and synthesized it into a series of alternative plans. These were presented at a second public workshop on March 18, 1987. This meeting attracted well over 200 participants. A wide range of opinions and suggestions was received. The third issue of the newsletter summarized this input.

The planning team then embarked on the tasks of taking the many proposals received from the second public workshop and developing them into a single plan for the unit.

The single plan was then announced in the fourth issue of the newsletter, and was presented for evaluation at a third series of public meetings held on September 1 and 2, 1987. Approximately 50 people were in attendance at each of these meetings. The plan was reevaluated after the meetings, appropriate changes were made, and the Preliminary General Plan was issued in compliance with the California Environmental Quality Act for review and comment.

In addition to the newsletters sent out by the planning team, news releases were distributed before each public meeting, resulting in numerous newspaper articles and radio and television announcements. The meetings were attended by a broad representation of user groups whose enthusiastic and insightful participation has strongly influenced this plan.

The planning team also received a tremendous amount of assistance in preparing this plan from the Natural History Association and another affiliated group, the Docent Council. These groups displayed a keen awareness of the planning issues at the park. Their comments were extremely valuable in analyzing the various alternatives and developing a single plan.

Other groups which should be recognized for their important assistance include the Golf Course Advisory Committee, the Sierra Club, and the San Luis Obispo Soaring Association.

Agency Coordination

Valuable input was also solicited and received through coordination with the following agencies:
County of San Luis Obispo
  Board of Supervisors
  Department of Planning and Building
  Park Facilities Division
  Engineering Department
  Department of General Services

City of Morro Bay
  City Administrator
  City Council
  Planning/Community Development
  Public Works
  Recreation and Parks

California Department of Transportation

California Department of Fish and Game

California Coastal Commission

State Water Quality Control Board

Pacific Gas and Electric

Pacific Bell
RESOURCE ELEMENT
Wetlands habitat at the mouth of Los Osos Creek
RESOURCES ELEMENT

This Resource Element was prepared to meet requirements set forth in Section 5002.2, Subsection (b) of Division 5, Chapter 1 of the Public Resources Code, and Chapter 1, Section 4332 of Title 14 of the California Administrative Code. In compliance with this section of the Public Resources Code, the Resource Element sets forth long-range management objectives for the natural and cultural resources of the unit. Specific actions or limitations required to achieve these objectives are also set forth in this element; maintenance operations and details of resource management are left for inclusion in specific resource management programs that will be prepared at a later date.

This element also identifies specific resource sensitivities and physical constraints, and establishes the department's guidelines for acceptable levels of development and use with respect to these concerns.

The Resource Element has two main parts. The first is a brief summary of the unit's resources. More detailed information on these subjects is on file with the Department of Parks and Recreation. The second part deals with policy formulation, which begins with unit classification and declaration of purpose and concludes with specific resource management policies.

RESOURCE SUMMARY

Natural Resources

Topography

Morro Bay State Park is located on the central California coast, in the southern end of the Coast Ranges Geomorphic Province. In the area of the park, the principal ranges are the northernmost Santa Lucia Range, trending northwest to southeast, and the Irish Hills of the San Luis Range, paralleling the Santa Lucia Range to the south. Between these two ranges lies the Los Osos Valley, bordered on the west by Estero Bay and the Pacific Ocean, and on the southeast by the San Luis Valley.

Located mostly within the city limits of Morro Bay, the state park includes 2,749.05 acres of varied topography. Situated along the southern edge of the hills of the Santa Lucia Range, the unit includes the westernmost end of a series of nine volcanic plugs. These form a ridge running from Morro Rock (included in the park) on Estero Bay southeast inland toward the town of San Luis Obispo. The prominent domes included within the park boundaries are Morro Rock, Black Hill (661 feet), and Cerro Cabrillo in Park Ridge, which crosses the northeastern corner of the unit. At 911 feet, Cerro Cabrillo is the highest point in the park. Smaller morros (volcanic rock outcroppings) are scattered south of Park Ridge, surrounded by grassland sloping down to sea level.

The principal drainages are Chorro Creek, entering the unit from the north between Black Hill and Cerro Cabrillo, and Los Osos Creek, entering the southeast corner of the unit from the Los Osos Valley. Springs and seeps
located high in the morros are the origin of numerous small, unnamed, intermittent creeks. These creeks flow with the larger creeks into the fresh and brackish water marshes, and eventually into the extensive coastal salt marsh found at the southwestern boundary of the state park. The level, western portion of the unit has been developed, and contains a marina, golf course, and campground.

Meteorology

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

Morro Bay State Park is located in the Non-Salinas Valley sub-area of the South Central Coast Air Basin. The major pollutants monitored in this basin are ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, hydrocarbons, and total suspended particulate matter (TSP). The Non-Salinas Valley sub-area meets state and federal standards for ozone, carbon monoxide, and nitrogen dioxide; the sub-area is unclassified for TSP and sulfur dioxide. The air quality is generally excellent due to the prevailing onshore winds that keep pollutants to the east.

Hydrology

Morro Bay State Park is situated in the San Luis Obispo Hydrologic Unit of the Central Coastal Drainage Province. The San Luis Obispo Hydrologic Unit covers 780 square miles on the western slopes of the Santa Lucia Range, extending from the Monterey-San Luis Obispo County line to the western drainage divide of the Santa Maria River. It is characterized by mountainous and hilly terrain, with many small stream valleys. Morro Bay State Park is in the Chorro and Los Osos Hydrologic Subareas of the San Luis Obispo Subunit. Surface hydrological features include the lower extremities of Chorro Creek, Warden Lake Creek, and Los Osos Creek, and springs and seeps high in the morros, all of which drain into the salt marsh and eventually into Morro Bay. Land use in the watersheds includes agriculture and pasture land as well as significant urban and suburban development.

Water quality problems along the creeks are many and diverse. Dairy operations upstream on Chorro Creek and its tributaries discharge polluted water which affects the creek and Morro Bay during periods of high runoff. Upstream agriculture also uses herbicides and pesticides, more sources of pollution. The sewage treatment plant of the California Men's Colony discharges upstream, but the level of treatment and compliance with requirements has generally been good. Chorro Creek and its tributaries are included in a study of the effects of mining activities on water quality and aquatic habitat. Leachate from a refuse dump upstream of Los Osos Creek is yet another source of degradation. Shellfish in Morro Bay have recently been quarantined by the State Department of Health Services due to excessive
bacterial counts in oysters grown there. Possible sources of the problem are under investigation, and include live-aboard boat discharges in the Midway Marina in Morro Bay State Park, dairy discharges in Chorro Creek, and storm drains, septic systems, and the sewage collection and disposal system for the City of Morro Bay. In accordance with the direction of the Environmental Protection Agency, the City of Morro Bay is now chlorinating the effluent from its treatment plant, and, therefore, should have removed this as a potential source of bacterial pollution in the bay.

The Chorro and Los Osos Valley groundwater basins underlie Morro Bay State Park. The primary source of recharge waters is the infiltration of rainfall and stream flow into recent alluvium in the high, narrow tributary canyons that are thinly covered with soil, and along the flat lowlands of Los Osos Creek and its tributaries. Another source could be springs that emanate from exposed Franciscan bedrock, possibly recycled magmatic water rising through fractures along the volcanic plug alignment. Subsurface flow is seaward, with localized depressions in the level of the ground water table resulting from continual extractions from wells. The ground water has a high calcium and magnesium bicarbonate hardness, as well as a high total dissolved solids content and high chloride ion concentration, probably reflecting effects of irrigation return waters that have percolated into the ground water. Salt water intrusion has resulted from excessive ground water extractions during dry periods, but the problem is transitory, diminishing with the return of wet weather.

Geology

Despite its proximity to Montana de Oro State Park, Morro Bay State Park is dominated by a different suite of rocks than its neighbor to the south. Underlain by Franciscan "basement," the park's surface exposures include Franciscan melange, greywacke, chert, serpentinite, weathered diabase, and basalt associated with red chert. In addition to the basement and associated rocks, young volcanic plugs protrude through the older, less resistant rocks, forming the spectacular morros from which the park obtained its name (morro is Spanish for "terrain" or "dome-shaped rock"). A blanket of Recent sand and Quaternary alluvium (stream deposits) covers most of the lowlands of Morro Bay State Park. The golf course and campground are on top of the extensive sand deposits. The undeveloped area east and south of Chorro Creek is underlain by Franciscan melange, intruded by volcanic plugs composed of dacite, rhyodacite, and rhyolite (light-colored extrusive volcanic rocks, composed of varying ratios of quartz, plagioclase feldspar, biotite, and amphibole).

The disjunct highlands of Morro Bay State Park (Morro Rock, Black Hill, Cerro Cabrillo, and the other unnamed volcanic plugs elevated throughout the otherwise subdued terrain) are part of a chain of volcanic rocks known as the Morro Rock - Islay Hill complex.

The Morro Rock - Islay Hill complex is about 28 kilometers in length, and trends about N 40° W, with Morro Rock defining the west end and Islay Hill defining the southeastern extent of the chain. The age of the volcanic plugs is between 26.4 ±0.8 and 22.1 ±0.9 million years. The origins of these volcanic rocks -- the mechanism for their intrusion, the reason for their linearity, and their connection with the "big picture" of plate tectonics, hot
spots, and plate-plate interactions -- have sparked numerous theories by geological researchers. One of the most intriguing aspects about the Morro Rock - Islay Hill intrusive complex is that when the volcanic intrusions took place (22 to 26 million years ago), the land was perhaps 260 to 300 kilometers to the southeast of its present location. Except for the Quaternary alluvium, landslide deposits, and Recent sand, all of the geological material originated far to the southeast, and has since migrated along strike-slip (transform) faults northwestward to its current location.

Morro Rock was an offshore island until Work Project Administration laborers joined it to the mainland between 1933 and 1935. The U.S. Army Corps of Engineers began dredging for the Morro Bay harbor in 1942, and deposited about two million cubic yards of material on the sand spit, and about one million cubic yards of material around and to the north of Morro Rock. Breakwaters were constructed to protect and define the harbor entrance. These breakwaters interrupted the natural migration of sandy deposits, and resulted in shoaling of the channel and building up of a tombolo (sand bar) almost 2,000 feet long, connecting Morro Rock to the mainland. Dredging continues to be an ongoing maintenance activity in order to keep the channel navigable. Historical records indicate that Morro Rock was again isolated from the mainland as a result of the intense storms in 1941, and that the low-elevation tip of the barrier spit north of the south breakwater washed out at least once prior to 1896, with breakers entering the bay. Between 1896 and 1917, the spit tip reached all the way to Morro Rock for a time, and in 1941, the northernmost end of the spit was awash with surf.

Soils

Morro Bay State Park is located in the southernmost tip of the Northwestern Coastal Ranges Soil Region (Soil Region I), which is characterized by steep mountain ranges and small valleys. Eleven soil mapping units are found within the boundaries of the state park.

Saline Aquolls are silty clay loam, clay loam, or clay soils that formed in alluvium deposited primarily by the overflow of Chorro and Los Osos Creeks into Morro Bay. Aquolls, saline, are found on the shore of Morro Bay in the estuary of Chorro and Los Osos Creeks, and they support the salt-tolerant plants of the salt and brackish water marsh. Their constraints include periodic inundation with salt or brackish water and a water table at or very near the surface, lack of soil oxygen, and slow permeability and surface runoff.

Baywood fine sand and dune land are found along the western side of the park, underlying the campground and golf course, and along the southern edge of the unit. Baywood fine sand is a gently rolling soil formed in deposits of wind-blown sand, and dune land consists of sand dunes stabilized by vegetation. These soils support coastal sage scrub and dune oak scrub, with scattered patches of coast live oak forest. The excessively sandy nature of these soils causes cut banks to cave in.

Along the corridor of Chorro Creek are nearly level, occasionally flooded pseamments and fluvents. These soils are excessively drained, stratified deposits of sand and loamy sand that may contain thin layers of sandy loam, silt, or gravel. Permeability is rapid, available water capacity is low, surface runoff is slow, and the hazard of water erosion is moderate.
Along the Los Osos Creek corridor is Baywood fine sand, Marimek sandy clay loam, and Los Osos loam. Marimek sandy clay loam is nearly level, and is formed in alluvium weathered from sedimentary rocks. It is characterized by slow percolation and occasional flooding, resulting in a problem of wetness. Los Osos loam is formed in residual material weathered from sandstone or shale. Constraints associated with this soil include a high shrink-swell potential, low strength, shallow depth to rock, and slow percolation. These waterway corridor soils support coastal freshwater marsh vegetation, willow thickets, and southern riparian forest.

The soils high on the morros are Briones-Pismo loamy sand and the Briones-Terra complex. These are deep and excessively drained soils that formed in residual material weathered from soft sandstone. They have similar constraints, including their steep slope, shallow depth to rock, and slow percolation, resulting in poor filter activity, seepage, and piping characteristics. The vegetation growing on these soils at higher elevations consists primarily of coastal sage scrub, with some chamise chaparral appearing on the northern aspect of the hills, and scattered patches of coast live oak forest.

The slopes below and between the morros consist of Los Osos loam, Diablo clay, and Ciba clay. The clays are formed in residual material weathered from sandstone, shale, or mudstone. Some of the constraints they pose include shallow depth to rock, high shrink-swell potential, low strength, slow percolation, too much clay, and excessive steepness in some areas. Grassland vegetation grows on these sloping, lower-elevation soils.

Plant Life

Morro Bay State Park is situated in the coastal zone of San Luis Obispo County. This unit is located in the Central Coast Region of the California Floristic Province. The relative stability of the climate, as well as its habitat diversity, makes the Central Coast Region one of the richer areas of endemic taxa in California.

There is a wide diversity of vegetation in Morro Bay State Park. Eight vegetation types and fifteen corresponding plant communities occur in the unit:

<table>
<thead>
<tr>
<th>Vegetation Type</th>
<th>Plant Community</th>
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<tbody>
<tr>
<td>Valley and Foothill Grasslands</td>
<td>Annual Introduced Grassland</td>
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<tr>
<td></td>
<td>Stipa Grassland (Native Grassland)</td>
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<tr>
<td>Marshes and Swamps</td>
<td>Coastal Salt Marsh</td>
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<tr>
<td></td>
<td>Coastal Freshwater Marsh</td>
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<td></td>
<td>Coastal Brackish Marsh</td>
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<td>Coastal Scrub</td>
<td>Coastal Sage Scrub</td>
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<td></td>
<td>Central Coastal Scrub</td>
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<td></td>
<td>Dune Oak Scrub</td>
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<tr>
<td>Broadleaf Evergreen Forest</td>
<td>Live Oak Forest</td>
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<td>Blue Gum Forest (Exotic)</td>
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<td>Vegetation Type</td>
<td>Plant Community</td>
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<tr>
<td>Streambank Woodland and Forest</td>
<td>Willow/Cottonwood Riparian Forest</td>
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<td></td>
<td>Willow Thicket</td>
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<tr>
<td>Closed-cone Coniferous Forest</td>
<td>Monterey Pine Forest</td>
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<tr>
<td>Exotic Mixed Species Forest</td>
<td>Mixed Species Forest</td>
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<tr>
<td>Lichen Fields</td>
<td>Maritime Lichen Fields</td>
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</table>

Annual introduced grassland is found in the vicinity of Cerro Cabrillo and on the slopes of Park Ridge. Dominant species include slender wild oat (Avena barbata), soft chess (Bromus mollis), and foxtail (Hordeum leporinum). A large area of native perennial grassland occurs in the Cerro Cabrillo/Park Ridge area of the unit, and intergrades with annual grassland in the vicinity of the old dairy farm. Purple needlegrass (Stipa pulchra) is the dominant species. Pine blue grass (Poa scabrella) is also found in this location, where it is interspersed with shrubs on north-facing slopes.

The Morro Bay wetland is composed of three major plant communities: coastal salt marsh, coastal brackish marsh, and coastal freshwater marsh. Sedimentation, local topography, levels of soil salinity, and nutrient availability affect the distribution of marsh species. Occurring in areas of periodic tidal inundation and relatively high levels of soil salinity, coastal salt marsh is the principal plant community. Dominant species are pickelweed (Salicornia spp.), jaumea (Jaumea carnosa), arrow grass (Triglochin concinna), and sea lavender (Limonium californicum).

Coastal brackish marsh is characterized by variable salinity levels that can increase at high tide and during periods of low freshwater input. Dominant species include jaumea, pickelweed, saltgrass (Distichlis spicata), three-square (Scirpus americanicus), bog rush (Juncus effusus var. brunnneus), and bulrush (Scirpus spp.). Ditch grass (Ruppia maritima) is common in the stream channels.

Freshwater marsh occurs on the south shore of Los Osos Creek in areas not subject to tidal flows. Wild rye (Elymus triticoides) forms a dense stand in this area. Other freshwater marsh species include beach silverweed (Potentilla egedei var. grandis), cattail (Typha latifolia), bulrush (Scirpus spp.), and Douglas' coyotebrush (Baccharis douglasii).

Coastal sage scrub occurs on steep south-facing rocky slopes, in areas having thin soil and good drainage, and in areas of recent disturbance or fire. Coastal sage scrub, often called "soft chaparral," is composed of dense, drought-deciduous species which have affinities to interior and semi-desert regions. Representative species include California sagebrush (Artemisia californica), black sage (Salvia mellifera), and sticky bush monkey-flower (Mimulus aurantiacus). In Morro Bay State Park, coastal sage scrub occurs on Black Hill and on Cerro Cabrillo.
Central coastal scrub vegetation is composed of dense shrubs that are not drought-deciduous. It occurs in areas having greater available moisture than in sites dominated by coastal sage scrub. Typical coastal scrub species are coyote brush (Baccharis pilularis ssp. consanguinea) and poison-oak (Toxicodendron diversilobum). In the unit, central coastal scrub occurs on the upland periphery of the wetland, and in moist drainages along Park Ridge.

Dune oak scrub is characterized by shrubs interspersed with shrub-like coast live oak (Quercus agrifolia). Associated species include holly-leaf cherry (Prunus ilicifolia), sand almond (Prunus fasciculata var. punctata), and Morro Bay manzanita (Arctostaphylos morroensis). Vegetation is dense and impenetrable; shrubs are approximately 6' to 8' high. In the unit, dune oak scrub occurs on upland terraces along the south shore of Los Osos Creek.

Coast live oak forms small forests on the north-facing bank of Los Osos Creek, in seasonal drainages near Cerro Cabrillo, and on old stabilized sand dunes adjacent to the golf course. Trees are 20' to 25' high, and multitrunked. Understory species include bracken fern (Pteridium aquilinum var. pubescens), poison oak, and annual and perennial grasses.

A stratified riparian forest dominated by black cottonwood (Populus trichocarpa), red willow (Salix lasiandra), and arroyo willow (S. lasioleana) occurs along Los Osos Creek at the southeastern boundary of the unit. Canopy trees are about 30' high. Mid-canopy species include blue elderberry (Sambucus mexicana), California wax myrtle (Myrica californica), and western dogwood (Cornus occidentalis); twinberry (Lonicera involucrata) occurs as a twining shrub. Representative low canopy species are poison-oak, gooseberry (Ribes sp.), and blackberry (Rubus sp.).

Well-developed willow thickets occur on the periphery of the riparian forest along Los Osos and Chorro Creeks, and are composed of dense, even-aged stands of arroyo willow. The willows are approximately 15' to 20' high. Understory species include poison oak, bracken fern, blackberry, and, in several areas, German ivy (Senecio mikaniiodes).

A dense forest of non-native blue gum (Eucalyptus globulus) has become established in the vicinity of the Grove Office in the park. Scattered stands of blue gum are also established on Black Hill, White Point, at the Heron Rookery Natural Preserve, and adjacent to the wetland. The understory is typically sparse; tree litter is deep.

Monterey pine (Pinus radiata) has been introduced into the unit as a landscaping plant. Although native to California, this species is not native in Morro Bay State Park. It has become naturalized, and is reproducing as a small forest on the north side of Black Hill.

The campground has been planted with several species of exotic trees, including Monterey pine, eucalyptus, sycamore (Platanus sp.), and plum (Prunus sp.). These trees are of varying height, and form a closed canopy.

Maritime lichen fields are found primarily on offshore islands and large sea stacks. They are composed primarily of fruticose (shruby) and crustose (crust-forming) species, and occur on rock substrates. The height of the
fruticose lichens varies with exposure to wind and available moisture (rain and fog). Average heights range from less than 1" to 2". Where they occur, maritime lichen fields are often dominated by two or three species; plant cover can be 100%. This plant community is found on the north faces of Morro Rock. Dominant species include Niebla homoea and Pseudoparmelia caperata.

Two rare species of manzanita occur in Morro Bay State Park: Morro Bay manzanita (Arctostaphylos morroensis) and Arroyo de la Cruz manzanita (A. cruzensis). Habitat which could support salt marsh birdsbeak (Cordylanthus maritimus ssp. maritimus) occurs in the coastal brackish marsh associated with Los Osos Creek. All three of these species are listed by the California Native Plant Society as rare and endangered (CNPS-1B). The salt marsh birdsbeak is state and federally listed as endangered, and currently occurs in the southern end of Morro Bay, outside State Park System property, and along the Morro Bay sand spit.

Several species of exotic plants are established in Morro Bay State Park. An asterisk (*) indicates that a species is highly invasive and capable of naturalizing.

| Blue gum               | Eucalyptus globulus* |
| Monterey pine         | Pinus radiata*       |
| Monterey cypress      | Cupressus macrocarpa |
| Castor bean           | Ricinus communis*    |
| Bailey's acacia       | Acacia baileyana*    |
| Hoary cress           | Cardaria draba*      |
| German ivy            | Senecio mikanioides* |
| Kikuyu grass          | Pennisetum clandestinum |
| Spearmint             | Mentha spicata       |
| Prickly-pear          | Opuntia ficus-indica |
| Giant reed            | Arundo donax         |
| Ice plant             | Carpobrotus edulis*  |

Other exotic species that are naturalized and widespread include annual introduced grasses (Avena, Bromus, Hordeum), mustard (Brassica sp.), and filaree (Erodium sp.). Hoary cress dominates significant portions of the marshland, displacing important native plants and wildlife habitat.

Animal Life

Within the boundaries of Morro Bay State Park are many very different biotic communities, each offering different habitat opportunities for wildlife. The nine biotic communities of the park include the salt marsh, coastal wetland (freshwater and brackish marsh), coastal scrub, coastal dune chaparral, grassland, riparian woodland, coast live oak woodland, introduced eucalyptus forest, and human development. The Morro Rock and Heron Rookery Natural Preserves, both established to protect wildlife habitat, are within Morro Bay State Park.

The salt marsh is nutrient-rich and highly productive, and provides forage for many wildlife species. It is an important nursery ground for several species of fish, and soil organisms, such as worms, mollusks, and crustaceans, provide food for a great diversity of shorebirds, such as greater yellow legs, least
sandpipers, willets, and killdeer. The availability of forage makes this area an important stopover point for migrating waterfowl, including pintail, ruddy duck, American widgeon, and cinnamon teal. The many birds using the salt marsh, in turn, provide prey for the endangered American peregrine falcon.

The coastal wetland biotic community includes both brackish water and freshwater marsh areas fed by streams and seeps. The dense vegetation makes this a productive biome for all classes of wildlife. An abundance of aquatic and terrestrial insects provides food for amphibians, reptiles, birds, and mammals, such as the Pacific tree frog, the western pond turtle, the long-billed marsh wren, and the ornate shrew. These insectivores, and herbivorous animals as well, feed the larger carnivores, including the garter snake, the great blue heron, the marsh hawk or northern harrier, and the coyote. The vegetation also provides food for higher vertebrates, such as red-winged blackbirds and harvest mice.

Morro Rock is classified as a natural preserve, primarily due to its value as a nesting habitat for a pair of endangered peregrine falcons. It also provides habitat for many other species of birds, each aspect of the rock providing somewhat different habitat resources. The moist, cool northeastern face attracts the belted kingfisher and the black oystercatcher, while the warmer, drier south face is habitat for the fox sparrow, dark-eyed junco, and western flycatcher. The western aspect, facing the ocean and riddled by a network of alcoves, crevices, and ledges, makes ideal roosting and nesting habitat for seabirds, such as the Brandt's cormorant, pelagic cormorant, and western gull. The western rattlesnake is a predator on the rock, as is the introduced domestic cat.

The coastal scrub biotic community provides a home for many species of birds, including the bushtit, rufous-sided towhee, scrubjay, sage sparrow, and Cooper's hawk. The resources of the coastal scrub are also used after dark by birds, such as the insectivorous poorwill and the predaceous barn owl, and particularly by mammals, such as the big brown bat, brush rabbit, black-tailed deer, bobcat, and coyote.

Coastal dune chaparral provides good cover and nesting opportunities. The Anna's, Allen's, and rufous hummingbirds make use of the flower nectar, while the California thrasher, California quail, wrentit, and brown towhee look for insects, fruits, and seeds in the bushes. Reptiles of the chaparral include the western fence lizard, gopher snake, and western rattlesnake. The brush mouse, California mouse, mule deer, gray fox, and mountain lion are some of the mammals inhabiting this biotic community.

The grassland community provides abundant food, including seeds and insects, but little cover. Birds that make use of these resources include the western meadowlark, lark sparrow, California quail, and white-crowned sparrow. Mammals include the deer mouse, western harvest mouse, vagrant shrew, and California ground squirrel. Reptile, bird, and mammal predators frequent this community, and include the western rattlesnake, marsh hawk or northern harrier, white-tailed kite, burrowing owl, short-eared owl, bobcat, coyote, and the very rarely seen badger.
The riparian woodland, with its constantly available water and dense, diverse vegetation of trees, shrubs, and herbs, provides abundant food and cover to many wildlife species. The moist riparian area produces abundant insect life which feeds many insectivorous amphibians, birds, and mammals, such as the Pacific tree frog, western skink, Wilson's warbler, black phoebe, western flycatcher, rough-winged swallow, and ornate shrew. Omnivorous inhabitants include the dusky-footed woodrat, opossum, and raccoon. Predators of this community include the garter snake, black-crowned night heron, red-shouldered hawk, and gray fox.

The coast live oak woodland offers the food and cover resources supplied by the oak trees as well as the resources available from the understory vegetation, which can range from grassland to shrubland. The varied insects provide food for the western fence lizards and other reptiles often found in this dry environment. Nuttall's and acorn woodpeckers, band-tailed pigeons, and scrubjays take advantage of the acorns produced by the oaks. The pocket gopher, California pocket mouse, California ground squirrel, black-tailed deer, and spotted skunk are some of the mammals in this community. Many raptorial birds hunt in the oak woodland, including the marsh hawk or northern harrier, redtail hawk, and kestrel, while the mammalian predators include the gray fox, coyote, and bobcat.

Introduced from Australia, the forests of blue gum eucalyptus produce little that can be used as forage by native species of wildlife. There are a few species that use the trees for cover. Monarch butterflies migrate to the Morro Bay area to overwinter, and large groups of butterflies tend to congregate in the dense stands of eucalyptus which provide a site near water, a ready supply of nectar, and protection from winter storms. Great blue herons, black-crowned night herons, and great egrets make use of the trees for their rookeries. Turkey vultures use the trees as night roosts.

Human development in the park provides habitat for species which are adapted to disturbed environments and are not disturbed by human activities. Native species include most insect species, the fence lizard, Brewer's blackbird, white-crowned sparrow, mourning dove, mockingbird, robin, Stellar's jay, common crow, deer mouse, pocket gopher, raccoon, striped skunk, and mule deer. Introduced animals compete for resources with native species, and include the garden snail, house sparrow, starling, rock dove, and domestic cat.

Several state (S) or federally (F) listed rare (R), threatened (T), or endangered (E) species occur in, or may be seen from, the park. The American peregrine falcon (FE, SE) nests on Morro Rock, and may be seen foraging in the park. Habitat for the endangered Morro Bay kangaroo rat (FE, SE) may exist within unit boundaries. The California brown pelican (FE, SE) may be seen from the park. Other listed species that have been sighted or may be seen in or from Morro Bay State Park include the California black rail (SR), the California clapper rail (FE, CE), and the bald eagle (FE, CE), and federal candidate species -- the California marsh snail, the Morro shoulder band snail, and the tidewater goby. Many other species, either resident and breeding or seasonal and migrant, are considered by wildlife agencies to be "of special concern." A few of these are the Morro Bay blue butterfly, willow flycatcher, Cooper's hawk, common loon, double-breasted cormorant, burrowing owl, California gull, and elegant tern.
Marine Life

The marine areas in and adjacent to Morro Bay State Park are estuarine environments. The bay is protected from ocean waves by the Morro Bay sand spit. Tides range from the minus 2-foot level to the plus 7-foot level. The cycle is a mixed semi-diurnal type characterized by two high tides and two low tides per day. During high tide, the bay has approximately 2,100 acres of surface water. At low tide, about 650 acres of surface water are in the bay, and approximately 1,450 acres of tidal mud flats are exposed. Surface water temperatures in the ocean water vary by about 15°F. during the year, ranging from 51°F. in the winter to 64°F. in the late summer or fall. Temperatures in the bay can be far warmer (in the 70s F.) due to the sun's warming effect on shallow water. Salinities in the ocean waters in the area average 34 parts per thousand. During the rainy season, salinities in the bay are greatly reduced. Because salt water is heavier than fresh water, there is a tendency for the salt and fresh water to remain stratified, resulting in surface water being essentially fresh for several days following a heavy rain.

Morro Bay State Park contains the Chorro Delta portion of Morro Bay. At the mouth of the Los Osos and Chorro creeks, the Chorro Delta is a well-developed, 470-acre, tidal salt marsh which is submerged only at high tides. Further into the bay is the 1,450-acre mud flat area, which contains less silt and more clay than the higher tidal flat. These mud flats also include 480 acres of eelgrass. Most of the plants and animals root or burrow into the muddy bottom, and are protected in these sediments. The bay serves as a nutrient trap which is important for the existence of these plants and animals. Morro Bay State Park also includes Morro Rock, with typical rock intertidal flora and fauna.

The most conspicuous marine vascular plant species in Morro Bay is eelgrass (Zostera marina). Eelgrass forms thick beds in the sublittoral zone. Scattered clumps of Gracilaria, a species of algae harvested in other areas as a source of agar, grows in the sand and mud of the midlittoral zone. Another species of algae, sea lettuce (Ulva lactuca), forms large beds in the low midlittoral and sublittoral fringe from near White Point to the docks in the boat basin.

Morro Bay supports a diverse and abundant invertebrate fauna. Forty-three species of Polychaete have been reported. Ghost shrimp and fat inkeeper worms are widely distributed throughout the bay. Twenty-nine species of bivalves have been identified in the bay, including 15 species taken by sport clammers. The most popular with sport clammers are the littleneck, geoduck, Washington, and gaper clams. The bay supports commercial production of planted Pacific oysters, but, as a result of fecal contamination, the future of this operation is uncertain. Most of the hard substrates have an abundant barnacle population, a maintenance problem for boat owners. Of the 97 species of crab found in the bay, the lined shore crab, mud crab, and porcelain crab are the most often encountered. Twenty-five species of gastropods and 32 species of nudibranches have been collected from the bay. Most of the 14 species of Echinoderms are encountered infrequently, but populations of the sand dollar are very large at times.
Many juvenile fish species more commonly associated with other areas occur in Morro Bay. Fishermen commonly catch jacksmelt and a variety of surfperches (walleye surfperch, shiner surfperch, etc.). Occasionally, shallow water rockfishes, as well as juvenile lingcod and boccacio, are caught by recreational fishermen. Leopard sharks, bat rays, skates, shovel-nose guitarfish, and flatfishes, such as the starry flounder and Pacific sand dab, also occur. Pacific mackerel and jack mackerel may occur during the warmer periods of the year. Target Rock, at the mouth of Morro harbor, has a particularly diverse mix of estuarine and rocky subtidal fish. These include sculpins, surfperches, and a normally uncommon species, California sheephead. Coastal creeks and tidal channels contain sticklebacks, sculpins, killifishes, mosquito fishes, gobies, juvenile flatfishes, juvenile jack, and topsmelt. The freshwater portions of Chorro Creek may contain steelhead, arroyo chubs, and Sacramento squawfish.

The only state or federally listed rare, threatened, or endangered aquatic marine organism seen in the bay is the southern sea otter. It is federally listed as threatened. Although much discussion has taken place regarding the effects of the otter, it does not appear to be eliminating any species completely from the bay or other areas of the coast. Outside the bay, the federally listed endangered Pacific gray whale may be seen offshore from Morro Rock.

Cultural Resources

Archeological Sites

There are 16 recorded Native American archeological sites in Morro Bay State Park, based on a recent, thorough survey. Most of these sites are located along the shores of Morro Bay, and consist of sandy deposits with moderate quantities of shell fragments. Four sites have bedrock mortars, used for pounding and grinding food. Three sites consist of chipped stone debris, including one that appears to be a small chert quarry. Several of these sites may have been occupied by Northern Chumash Indians into historic times, but the ethno graphic names for these places have not survived. Only one of these prehistoric archeological sites has been heavily affected; it is located along State Park Road next to the marina. One historic archeological site has been located in the park, an early 20th century occupation area at Fairbank's Point.

Standing Structures and Historic Sites

There are a number of historic Euroamerican sites within the boundaries of Morro Bay State Park. The most highly visible historic site is "El Moro," the great bare rock that marks Morro Bay. Master Mariner Juan Rodriguez Cabrillo charted "El Moro" on November 11, 1542. The rock has always been a great landmark; early tourists to the coast loved to climb it. Beginning in 1890, it became a source of rock to build breakwaters and causeways at Port San Luis and Morro Bay. More than a million tons were blasted from its sides. Quarrying stopped in 1963 due to public pressure. While the State of California acquired Morro Rock in 1935, real protection of the rock did not develop until 1968, when Morro Rock became a registered California Historical Landmark.
The portal gate, maintenance shop, and comfort station, built by the Civilian Conservation Corps, were recorded as significant historic structures. One standing Aeromotor windmill was documented on the recently acquired Baptista Ranch property. The barn, garage, and milking shed on the Pedro Ranch were recorded prior to demolition, and were judged to be insignificant. All standing structures, regardless of age, were photographed during a complete survey of the unit.

Ethnographic Background

The Native American people who inhabited the central California coast prior to the Euroamerican period were known as the Chumash. The accounts of the early Spanish explorers depict sharp contrasts between the Chumash groups along the Santa Barbara Channel and those inhabiting the territory north of Point Conception. Cabrillo commented on the number and size of the villages found along the channel and the lack of villages on the coast north of the point. Fages, a member of Portola's 1769 expedition, described the large villages found along the channel, all having populations in excess of 400, as pueblos. North of Point Conception, Fages depicted habitation sites as small or insignificant villages. The inhabitants were characterized as "very poor ill-conditioned Indians;" there is mention of a village without houses at Morro Bay.

Fages noted that the large villages along the Santa Barbara Channel had chiefs or captains (wot). The chief's primary role was that of military commander. The position was for life, and the individual had absolute, total independence. There is reference in the early Spanish accounts to only one captain or wot among all of the Northern Chumash; his name was Buchon. The Spaniards were told that Buchon, whose village was near Pismo Beach, took tribute for 20 leagues in all directions.

Based on archeological evidence and early ethnographic accounts, the Northern and Southern Chumash apparently shared similar food procurement and processing strategies. An extensive array of traps, nets, disguises, blinds, missiles and projectiles, fishing gear, and vegetable-gathering equipment was used. The wide variety of animals eaten included deer, sea mammals, bear, dog, wolf, fox, puma, skunk, raccoon, rodents, rabbit, moles, eagles, buzzard, snake, fish, and shellfish. Grinding implements, earth ovens, stone boiling in baskets, and sun and smoke drying, as well as other implements and techniques, were used in food preparation.

Structures used by the Northern and Southern Chumash included ceremonial sweathouses, domed and conical buildings, and communal houses. The remains of a dwelling on property owned by P.G. and E. in the City of Morro Bay were excavated here in 1961. The structure was circular, 25 to 30 ft in diameter; archeological evidence indicates that it was dome-shaped.

All of the coastal Chumash groups fished. Ethnographic accounts and faunal remains from excavated sites indicate that both the Northern and Channel Chumash used weir traps; dip, drag, gill, and seine nets; and hooks and lines. Hooks were made from cactus spines, shell, and bone. Spears and harpoons were also used. Both groups probably used the kelp fishery
year-round. The Channel Chumash, the only group to build and use the tomol (plank canoe), had access to the more seasonally available larger pelagic species, such as tuna and swordfish. Both the Channel and Northern Chumash used tule and dugout canoes.

Historic Background

James H. White homesteaded the present golf course-campground area of Morro Bay State Park in the late 1860s. He received his patent in 1870. The same year, David H. Harvey patented the land east of Chorro Creek. Both White and Harvey were farmers. Ultimately, the land passed into the hands of R. E. Jacks, a substantial San Luis Obispo County landholder; he leased the land for agriculture. A number of owners also held smaller parcels around White Point, Fairbank Point, and north and west of Black Hill.

In 1928, C. E. Miller and E. W. Murphy acquired the present golf course/campground area property, developing a nine-hole golf course and other related features. By mid-1929, these facilities, known as the Cabrillo Country Club, were open to the public. In 1934, Morro Bay State Park was established. During the next several years, the area of the golf course, White Point, and Black Hill were extensively refurbished by the Depression-era Civilian Conservation Corps (CCC) and Works Progress Administration (WPA). A CCC camp was established in what is now the campground. The CCC rebuilt the golf course and constructed a new campground with picnic tables, fireplaces, water lines, restrooms, masonry drainage ditches, and ornamental stonework, including the portals at the north entrance. Most of the Cabrillo Country Club facilities were repaired or replaced.

The CCC camp was used by a number of military organizations during World War II. The coastal artillery of the army moved there from Atascadero Beach in 1943. The army departed in 1944 and was replaced by the navy and the coast guard. The navy and coast guard added more buildings and dock facilities north of White Point.

In 1949, the marina was excavated, and the golf course was reworked and expanded to 18 holes. During this period, most of the CCC camp and the navy and coast guard buildings were torn down, piers and docks removed, and the area landscaped. In the late 1950s, plans were developed for the Museum of Natural History, which was dedicated in 1962. The Cabrillo Clubhouse, which had been the first "park warden's" residence, was moved and adapted for use as staff residences, and the clubhouse site became the parking lot for the new museum.

Several acquisitions have enlarged Morro Bay State Park over the years, including the Heron Rookery National Preserve in 1973, which was known until recently as the "Fairbanks-Ranney property" or the "Schneider Farm." The "Baptista Ranch" was acquired in 1975, and the "Pedro Ranch" in 1982; the latter two properties were former cattle ranches located immediately south of Chorro Creek and east of Morro Bay, and are referred to in this General Plan as the Cerro Cabrillo property.
Esthetic Resources

Morro Bay State Park is an area of scenic terrain with varying distance zones, complex topographic forms, and diverse vegetation. The proximity of Morro Bay State Park to the Pacific Ocean and the presence of water in the landscape contribute to the scenic resources of this unit.

Morro Rock stands like a sentinel on the shore of the ocean, and contrasts dramatically with the adjacent sandspit and inland sweep of salt marsh. The upland ridges and slopes provide a palette for spring flowers and the shadows of clouds. Small oak forests, with lichen-dappled trees, are sanctuaries of stillness, of quiet sounds and filtered green light. The rush and flow of Chorro and Los Osos Creeks draw visitors into the complex beauty of the salt marsh. Small runnels from Cerro Cabrillo fall gently over rocks and down slopes colored by poppies and mallow.

Sweeping panoramas can be seen from knolls on Park Ridge and from Black Hill. Black Hill provides extensive views of the salt marsh, bay, and sandspit. Views from Cerro Cabrillo provide a contrast between small volcanic outcrops in the foreground and the expanse of marsh beyond.

There are several prominent negative features in the viewsheds of Morro Bay State Park. South Bay Boulevard and Turri Road create sharp lines of demarcation between the upland and marsh areas. The marina, campground, and golf course superimpose unnatural features on the natural landscape. The road and parking areas around Morro Rock, as well as the fenced PG&E outfall, detract from the sharp rise of this promontory, and isolate it from the ocean and adjacent landforms. The water tanks and the eucalyptus planted to conceal them impinge seriously on the panoramas from the summit of Black Hill. Eucalyptus trees also block near-distance views of the marsh and from White Rock. Houses in the far distance and the PG&E cooling towers also detract from the viewshed in this unit.

Recreation Resources

Morro Bay State Park receives an average annual visitation of almost 1.4 people. The complex natural resources of the wetland and upland areas provide excellent opportunities for the study of natural history and related sciences, and for contemplative activities. Camping, boating, and golfing are additional recreational activities associated with this unit. There are 135 family campsites at Morro Bay State Park. Each site has a table, stove, and food locker; each can accommodate recreational vehicles to 31' long. Water and hook-ups are located in 20 sites, and a sanitation station is provided. Restrooms with hot showers and laundry tubs are also located in the campground. There are also two group camps and a day-use area with 12 picnic tables.
RESOURCE POLICY FORMULATION

Classification

The classification of a State Park System unit forms the foundation on which all management and development policies are based. Classification statutes contained in Article 1.7 of the Public Resources Code specify broad management objectives and improvements appropriate in a state park and a natural preserve.

The first acquisition of land for Morro Bay State Park by the State of California was on January 8, 1934. Morro Rock was acquired by the state on March 28, 1935. Over the years, additional lands have been acquired, bringing the total size of the unit to 2,749 acres.

In the early 1960s, the present State Park System classification system was established, and in May 1963, the State Park and Recreation Commission classified the unit as Morro Bay State Park. This action did not change the name; the unit had been known by this name since its creation. Classification by the commission did, however, bring management of the unit under the provisions of Public Resources Code Section 5019.53. Subsequent classifications of two subunits, Morro Rock Natural Preserve in September 1969 and Heron Rookery Natural Preserve in April 1975, brought management of these two parcels under the provisions of PRC 5019.71. Public Resources Code Sections 5019.53 and 5019.71 provide the fundamental direction for management of Morro Bay State Park and the two natural preserves. The two sections are quoted below:

5019.53. State Parks. State parks consist of relatively spacious areas of outstanding scenic or natural character, oftentimes also containing significant historical, archaeological, ecological, geological, or other such values. The purpose of state parks shall be to preserve outstanding natural, scenic, and cultural values, indigenous aquatic and terrestrial fauna and flora, and the most significant examples of such ecological regions of California as the Sierra Nevada, northeast volcanic, great valley, coastal strip, Klamath-Siskiyou Mountains, southwest mountains and valleys, redwoods, foothills and low coastal mountains, and desert and desert mountains.

Each state park shall be managed as a composite whole in order to restore, protect, and maintain its native environmental complexes to the extent compatible with the primary purpose for which the park was established.

Improvements undertaken within state parks shall be for the purpose of making the areas available for public enjoyment and education in a manner consistent with the preservation of natural, scenic, cultural, and ecological values for present and future generations. Improvements may be undertaken to provide for recreational activities including, but not limited to, camping, picnicking, sightseeing, nature study, hiking, and horseback riding, so long
as such improvements involve no major modification of land, forests, or waters. Improvements which do not directly enhance the public's enjoyment of the natural, scenic, cultural, or ecological values of the resource, which are attractions in themselves, or which are otherwise available to the public within a reasonable distance outside the park, shall not be undertaken within state parks.

State parks may be established in either the terrestrial or underwater environments of the state.

5019.71. Natural Preserves. Natural preserves consist of distinct 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 biographical 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 which constitute the basis for the establishment of the natural preserve.

Declaration of Purpose

A declaration of purpose (or statement of purpose) describes the purpose of the unit, and identifies the prime resources, long-range management objectives, and the relationship between the unit's resources and recreational uses. A declaration of purpose was written for the state park in 1975, but was never submitted to the State Park and Recreation Commission for approval.

Several changes in the declaration are proposed to clarify the department's management goals and objectives. The original and proposed declarations of purpose for the unit are as follows:

Original (1975):

The purpose of Morro Bay State Park is to provide for the preservation, in an essentially natural condition, of the shorelands and related hinterlands of Morro Bay, including the mouth and lower reaches of Los Osos Creek, the mouth and lower reaches of Chorro Creek, both with related marsh and tide lands, the headland at Whites Point, and extending to the headland at Fairbank Point on the east, and to Morro Rock on the
west, including all intervening coastal lands extending inland to include Black Hill and Hollister Peak. The natural and scenic attributes of the bay, together with its ecological and cultural features, will be protected and interpreted for the edification and enjoyment of the public. Recreational day and overnight uses may be established and operated to enhance visitor enjoyment of the natural features of the park. The Morro Bay Sand Spit will be protected within the park for all of its natural, scenic, and ecological values, as will Morro Rock at the entrance to Morro Bay.

(Note: Since this was written, the Morro Bay Sand Spit has been transferred to Montana de Oro State Park.)

Proposed:

The purpose of Morro Bay State Park is to make available to the people the shorelands and related uplands of Morro Bay, including the wetlands and lower reaches of Los Osos and Chorro Creeks, the bay's marsh and tidelands, and the native grasslands, woodlands, shrublands, and scenic rocky outcrops. All significant scenic, natural, cultural, and recreational resources shall be protected and perpetuated.

The existing marina and golf course in the park were constructed prior to establishment of the current State Park System classification system. These uses are inconsistent with the unit's classification as a state park due to the significant loss of native habitat that construction and maintenance of such facilities entails. Since these facilities now exist and are recognized as important recreational resources, they may remain, but must not be expanded beyond their current physical size. Every effort shall be undertaken to minimize the negative effects of these facilities on the natural environment.

Morro Rock Natural Preserve, at the entrance to Morro Bay, will be protected as part of Morro Bay State Park, and will be managed primarily for perpetuation of the rock as an American peregrine falcon nest site, but also for perpetuation of its other natural and scenic values.

The Heron Rockery Natural Preserve shall be managed primarily for its value as a nesting area for great blue herons.

The function of the California Department of Parks and Recreation at Morro Bay State Park is to manage the unit's varied natural, cultural, esthetic, and recreational resources in order to ensure the perpetuation of the diverse environmental complexes; to interpret them effectively; and to provide such facilities and services as are necessary for the public's full enjoyment of the unit consistent with its perpetuation.

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1/ Public Resources Code Section 5001.9 prohibits expansion of facilities which are not in compliance with Article 1.7 of the code.
Zone of Primary Interest

The zone of primary interest is that area outside the unit in which land use changes could adversely affect the resources of Morro Bay State Park. This area includes the adjacent city of Morro Bay, the communities of Baywood Park and Cuesta-by-the-Sea, the watersheds of Los Osos and Chorro Creeks, and the tidal and submerged lands of Morro Bay.

In addition, the department is concerned about activities on all lands, no matter how far from the unit, that can, through their development and use, adversely affect the resources and features in the unit. Air pollution generated by the Morro Bay and Diablo Canyon power plants, oil spills, either in the bay or offshore, discharge of sewage effluent in the bay, and pollution from other sources all potentially could affect Morro Bay State Park. Inland developments which affect surface water flow, like reservoirs and the construction of roads and buildings, also can have negative effects on the unit’s resources. Loss of the natural erosion products which form the beaches can result in narrowed beaches and accelerated beach erosion. Erosion of upland areas and subsequent deposition of sediment in the lowlands could affect the tidal exchange of seawater in the bay. Additional development within the "viewshed" could significantly affect the unit's scenic resources. Department officials should be aware of these potential threats, and take action whenever possible to minimize them.

Resource Management Policies

Resource management in the State Park System is governed by laws contained in the Public Resources Code, by regulations in the California Administrative Code, by directives approved by the department's director, and by policies approved by the State Park and Recreation Commission. General policies related to the unit classification and the Declaration of Purpose have been addressed in previous sections.

Specific departmental Resource Management Directives amplify the legal codes, and provide clear management guidelines. Directives that are pertinent to existing or potential problems related to management of resources in Morro Bay State Park are:

#4 Acquisition Objectives
#5 Development in State Parks
#9 Development in Natural Preserves
#33 Exotic Plants - Landscaping
#34 Exotic Plants - Elimination
#35 Wildlife Protection
#46 Environmental Quality
#58 Cultural Resource Protection
#59 Underground Work
#70 Archeological Sites

Directives #4, #5, #58, and #59 are particularly relevant to planning issues for Morro Bay State Park:
(4) IN STATE PARKS, THE PRINCIPAL ACQUISITION OBJECTIVE IS TO ACQUIRE THE ECOLOGICAL, CULTURAL, AND SCENIC ENTITIES THAT EMBRACE THE RESOURCES TO BE PRESERVED OR PERPETUATED, AND TO ACQUIRE LANDS OUTSIDE BUT RELATED TO THE PRIME RESOURCE AREAS THAT ARE NECESSARY TO PROVIDE THE RELATED PROTECTION, RECREATION, INTERPRETATION, AND SERVICES.

IN RESERVES, THE ACQUISITION OBJECTIVE IS TO ACQUIRE AS ECOLOGICAL ENTITIES THE NATURAL VALUES TO BE PRESERVED OR PERPETUATED, AND THE INCLUDED CULTURAL VALUES, AND ALSO TO ACQUIRE LANDS NEEDED FOR ACCESS TO, ENJOYMENT OF, PROTECTION OF, AND INTERPRETATION OF THE PRIME RESOURCES.

(5) DEVELOPMENT IN STATE PARKS IS TO BE LOCATED AND DESIGNED TO PROTECT AND ENHANCE ENJOYMENT OF THE PRIMARY RESOURCES. IN STATE PARKS, THE PRIMARY PURPOSE FOR DEVELOPMENT IS TO PLACE VISITORS IN AN OPTIMAL RELATIONSHIP WITH THE RESOURCES, FOR RECREATIONAL ENJOYMENT AND UNDERSTANDING OF THOSE RESOURCES. IN STATE PARKS, RESOURCES MAY NOT BE MANAGED OR MANIPULATED TO ENHANCE RECREATIONAL EXPERIENCES.

(58) CULTURAL RESOURCES IN THE STATE PARK SYSTEM SHALL BE PROTECTED AGAINST DAMAGING OR DEGRADING INFLUENCES, INCLUDING DETERIORATION OR ADVERSE MODIFICATION OF THEIR ENVIRONMENTS. ALL EVIDENCE OF SUCH RESOURCES SHALL BE INVESTIGATED BY QUALIFIED PERSONNEL, AS DESIGNATED BY THE DIRECTOR, BEFORE ANY RESTORATION, RECONSTRUCTION, OR DEVELOPMENT IS BEGUN. IF STABILIZATION OF CULTURAL REMAINS IS REQUIRED TO PREVENT LOSS OR DETERIORATION, IT SHALL BE UNDERTAKEN IN WAYS THAT SHALL NOT THREATEN ARCHEOLOGICAL, HISTORICAL, OR RELATED ENVIRONMENTAL VALUES.

(59) NO UNDERGROUND WORK, WHETHER ORIGINAL OR MAINTENANCE, MAY BE UNDERTAKEN IN THE STATE PARK SYSTEM UNTIL CLEARANCE IS GIVEN BY A DEPARTMENT ARCHEOLOGIST. EMERGENCY WORK REQUIRED TO PROTECT THE PUBLIC HEALTH AND SAFETY MAY BE UNDERTAKEN WITHOUT PRIOR CLEARANCE, PROVIDED CONCURRENT NOTICE OF THE CRISIS IS MADE TO A DEPARTMENT ARCHEOLOGIST.

In addition to policies, directives, and laws that apply statewide, the following specific resource policies have been developed for Morro Bay State Park:

Natural Resources

Hydrologic Resources

The water features are important to perpetuation of the natural and esthetic values at Morro Bay State Park. Any significant alteration of the hydrologic systems supporting these water features, either in or outside the unit, may affect them significantly. These impacts need to be identified, monitored, and prevented or corrected before major park system values of the unit are lost.
Policy: The department shall be actively involved in local activities and land use decisions that may result in such adverse impacts on the unit's water features as stream channelization, diversion, or pollution. Measures to maintain water quality, channel flow, and sediment rates shall be recommended and supported. No water shall be diverted within the unit's boundaries that will significantly affect the water features and the ecosystems they support.

Water Quality

The quality of the water resources of Morro Bay State Park has been affected by several different factors. Chorro Creek and its tributaries are affected by discharges of manure from upstream dairy operations which pollute the creek and Morro Bay during wet weather. Upstream agriculture also makes use of herbicides and pesticides. In addition, Chorro Creek can be affected by the California Men's Colony sewage-treatment plant discharge. Leachate from the garbage dump upstream of the unit on Los Osos Creek is another possible contaminant. Commercial oyster fisheries in Morro Bay have recently been quarantined by the State Department of Health Services due to excessive coliform bacterial counts in oysters grown there. Live-aboard boat discharges in the marina in Morro Bay State Park have been cited as a possible source of fecal coliform contamination, in addition to storm drains, septic systems, and the sewage collection and disposal system of the City of Morro Bay.

Policy: All major water features in the park, particularly the marina, Chorro Creek, and Los Osos Creek, shall be tested for water quality. Monitoring shall be continued on a regular basis to assess levels of bacteria, pesticides, and herbicides in the water. Should levels above safe health standards be indicated, the department shall work with the California Regional Water Quality Control Board, appropriate agencies in the County of San Luis Obispo, and upstream landowners (including the State Department of Corrections, local dairies, and other agricultural interests) to develop water management plans to bring the water quality to within state-accepted guidelines.

Geologic Hazards

Geologic hazards at Morro Bay State Park include landslides, block falls, liquefaction, tsunamis, and seismic shaking. Site-specific investigations prior to new developments can help to avoid building in areas subject to these hazards.

Policy: New developments shall avoid geologic hazards. Site-specific geologic investigations shall be conducted prior to final siting of new buildings or roads, to assure that geological hazards have been avoided or mitigated. The reports shall identify potential geologic hazards of the site, and provide for mitigating measures to ensure structural stability and integrity of the development.

Paleontological Resources

No fossil resources are known to exist at Morro Bay State Park. It is possible that the sand deposits or alluvial deposits could yield fragmentary fossil material, although none have been reported to date.
Policy: In the event that a fossil discovery is made at Morro Bay State Park, the department shall determine the validity and significance of the discovery, and take appropriate protective or stabilization action.

Soil Constraints

Some of the soils of Morro Bay State Park are poorly suited to development of recreation facilities, buildings, and roads. Soil constraints cited in the Soil Conservation Service Soil Survey of the coastal part of San Luis Obispo County for the soils present in the unit include the slope, shallow depth to rock, easily erodible soil, soils that are too sandy, and soils that have a high shrink/swell potential or low strength, all adversely affecting plans for development of recreational facilities. Some soils have slow permeability and are poor filters. Other soils exhibit seepage and piping (the formation of subsurface cavities by water moving through the soil) which undermine their strength. Problems with reclamation and difficulties in revegetation and erosion control have been identified for areas in the unit.

Policy: Soil characteristics shall be considered in the design and location of facilities. Soil loss due to erosion caused by facility development, visitor use, and unit operation and maintenance shall be monitored, and projects implemented when necessary to prevent soil losses and restore soil integrity where possible.

Soil Erosion

Trails, roads, streambanks, and hillsides in Morro Bay State Park are all experiencing erosion. As modifications to the natural system are introduced or as visitor use increases, erosion could accelerate and cause undue damage. Trails and roads now in the park were constructed without adequately considering or implementing methods to prevent erosion. It may be necessary to actively manage those areas most severely eroded, and to include soil erosion considerations in future plans for development and use.

Policy: The department shall minimize human-caused erosion in Morro Bay State Park. Unnatural or destructive erosion shall be controlled and prevented by means that are consistent with the goals of the park, department policies, and resource management directives. Steps shall be taken to correct existing erosion problems and restore eroded areas in the unit. These areas shall be identified, restored to natural contours if possible, and revegetated with appropriate native plant species when necessary. Where correction is necessary, all measures used shall be as unobtrusive as possible, fitting naturally into the environment, with the objective of restoring the natural condition.

Vegetation Management

It is the policy of the department to preserve and perpetuate representative examples of natural plant communities common to a unit and the region (Policy No. 7; Res. Mgt. Directives, 1831.1). The natural plant communities at Morro Bay State Park have been affected by urbanization, road construction, golf course and marina development, and displacement by exotic species. The net results of such impacts include reduced numbers and restricted distribution of native species.
Policy: The department shall work toward restoration and perpetuation of native vegetation at Morro Bay State Park. The primary objective of this program shall be to manage toward a natural condition with a minimum of disruption to natural processes.

Exotic Plant Species

Many exotic plant species have become naturalized in Morro Bay State Park, where they are successfully competing with native species. Exotic species have also been planted in the campground area, on Black Hill, in the golf course, and on White Point. Perpetuation of native plant communities is dependent on the control and removal of exotic species.

Policy: The department shall pursue a long-range objective of controlling or eliminating exotic plants, including hoary cress, Monterey pine, Monterey cypress, eucalyptus, and ice plant, that have become established in undeveloped areas of the park. The highest priority for control efforts shall be given to those species most invasive and conspicuous in the landscape. An exception shall be made for the trees in the Heron Rookery Natural Preserve, which are providing important wildlife habitat.

Landscaping

Exotic species detract from the natural appearance of Morro Bay State Park, escape and displace native species, have lower habitat value for native wildlife, are prone to insect attack and disease, and can require permanent irrigation and greater maintenance costs. Disposal of trimmings and clippings from existing landscaped areas in natural areas can spread exotic species seeds and prevent germination of native seed.

Policy: In order to maintain the diversity of native species, landscaping in developed areas should consist of species indigenous to the unit. If exotic species are used, these shall be species which are incapable of naturalizing in the wild, and which will not require a permanent irrigation system. Trimings and clippings from existing landscaped areas shall be disposed of in a manner that minimizes negative effects on natural processes.

Hoary Cress

Hoary cress (Cardaria draba), an invasive weed, has become established in several sites in Morro Bay State Park: in the upper Chorro Creek wetland, in areas in the vicinity of Park Ridge, and in the Los Osos Creek drainage. The total acreage involved is estimated at approximately 20 acres; the involved acreage has doubled for the years 1984, 1985, and 1986 in the Chorro Creek drainage.

Control and eradication will restore native wetland species and improve conditions in the high marsh and riparian areas of the Chorro Creek and Los Osos Creek wetlands, as well as in the native grasslands of Park Ridge.

Policy: The department shall pursue a long-range objective of controlling and eradicating hoary cress in Morro Bay State Park. Control measures to be used shall be chosen to minimize disruption to wetland species, as well as to preclude the introduction of residual toxic chemicals into the ecosystem.
Eucalyptus

Eucalyptus globulus, or blue gum, was first introduced to California by 1853; by 1870, it was being planted for commercial purposes. Although the tree is no longer used for timber production, it is still grown for fuel, windbreaks, pulp, and ornamental landscaping. Eucalyptus globulus is adapted to a wide range of substrates, and reaches its best development on moderately fertile loams or heavy but well-drained soils. It is well adapted to areas with an annual rainfall of 24-44 inches. In areas with summer drought, the extensive root system of a eucalyptus tree is able to extract water from the soil even though other plants may not be able to do so. Toxins are present in the leaves of eucalyptus trees. These phytotoxins are leached from leaves by fog and rain, and are capable of inhibiting annual herbaceous species.

A eucalyptus forest is established in Morro Bay State Park, on the lower slopes of Black Hill. Smaller stands and hedgerows occur on White Rock, along State Park Road adjacent to the marsh, and in the vicinity of the marina. Eucalyptus is reproducing in these areas, and is displacing native coast live oak woodland and coastal sage scrub vegetation. The eucalyptus understory is relatively sterile, since the deep litter layer and toxins associated with it preclude native seedling establishment.

Policy: In accordance with Resource Management Directive 34 (Section 1831.1), the department shall develop a long-term plan to remove eucalyptus trees and seedlings from the Black Hill and White Rock areas of Morro Bay State Park. Trees occurring along State Park Road adjacent to the marsh and marina shall also be controlled, and some removed. Revegetation and landscaping with native species shall be coordinated with the tree removal. Tree removal will be phased to minimize disruption of natural, cultural, scenic, and recreational values.

Eucalyptus trees in the Heron Rookery Natural Preserve and trees used as roost sites for the monarch butterfly shall not be removed.

Prescribed Fire Management

Prior to the 1920s, fires burned regularly throughout Morro Bay State Park and vicinity. The fires were most often ignited by lightning in the late summer and early fall, and by the intentional or accidental activities of Native Americans and ranchers. Wildfires began to be effectively suppressed in the late 1920s, and since that time, fire has only infrequently burned through the unit. Disruption of natural fire processes has resulted in ecological imbalances and the increased likelihood of destructive wildfires due to fuel accumulation. The reintroduction of fire through a carefully controlled prescribed fire program is needed to maintain native plant species and plant communities which developed under a regime of frequent fires, to restore the ecological processes occurring in the park to a more natural status, and to reduce the potential for catastrophic wildfires.

Policy: Fire shall be restored to its natural role in Morro Bay State Park ecosystems in accordance with department-prescribed fire management policies. An ongoing Prescribed Fire Management Program shall be established and maintained.
Fire Prevention and Suppression

Wildfire can be a threat to natural resources, facilities, and human life and property. A prescribed Fire Management Program which simulates the historic natural fires of this region will reduce the damage from future wildfires, but cannot eliminate the threat of destructive wildfires during periods of fire weather conditions and from human-caused ignitions. For these reasons, the department requires that a Wildfire Management Plan be developed for every State Park System unit that experiences wildland fires.

Because conventional fire control facilities and procedures can result in more serious and long-lasting impacts on park resources than the wildfire itself, the development of special standards and procedures applicable to the park environment is important.

Undesirable effects of suppression activities can be avoided by using a planned program of modified fire suppression. This program divides the park into compartments bordered by existing natural and artificial firebreaks. In the event of a wildfire, suppression activities are concentrated along the borders of a compartment, thereby minimizing resource damage. The program would also identify resource sensitivities which should be considered if additional suppression activities are required. Wildfire contingency planning in this manner will greatly reduce the likelihood of damage from suppression activities, while providing for the necessary protection of park resources and public safety.

Policy: The department shall work with the California Department of Forestry, the Morro Bay Fire Department, the South Bay Fire District, and other appropriate agencies to implement a Wildfire Management Plan at Morro Bay State Park. This plan shall address all aspects of wildfire planning, including prevention, presuppression, and suppression. The plan shall identify modified fire suppression methods designed to preserve sensitive park resources while protecting human lives and facilities.

Rare and Endangered Plants

Several species of rare and endangered plants are known in Morro Bay State Park and vicinity. Rare and endangered plants can be inadvertently destroyed by development of facilities, maintenance programs, visitor use, or other activities, especially when the exact population locations, habitat requirements, and tolerances are not known.

Policy: Rare and endangered plants found in Morro Bay State Park shall be protected and managed for their perpetuation, in accordance with state law (PRC, Division 2, Chapter 10, Section 1900).

Systematic surveys for rare and endangered plants shall be made throughout the unit. If any rare or endangered species is found, all populations shall be mapped, and management plans developed for their protection and perpetuation.

Prior to any site-specific development, heavy use activities, or prescribed burns, additional surveys will be made during the flowering season for rare and endangered plants in the areas that will be affected.
Salt Marsh Birdsbeak

Salt Marsh birdsbeak (Cordylanthus maritimus ssp. maritimus) is a wetland plant species which is state and federally listed as endangered. It is listed as an endangered species primarily because of extensive habitat loss. It occurs in the vicinity of Cuesta-by-the-Sea, and on the shore of Morro Bay along the sand spit. Habitat that could support salt marsh birdsbeak exists in the brackish marsh associated with Los Osos Creek in Morro Bay State Park.

Policy: The department shall work with appropriate state and federal agencies to introduce salt marsh birdsbeak into the Los Osos Creek watershed of Morro Bay State Park. Seed shall be collected under the direction of a knowledgeable botanist, and used to seed areas deemed suitable to support the species.

Native Grassland

Native grassland (Stipa grassland) is found in Morro Bay State Park, in the upland areas of Park Ridge. In this area, the grassland is dominated by purple needlegrass. Small-flowered melic and pine bluegrass also occur here, but are not extensive.

Policy: The department shall undertake appropriate efforts to maintain the diversity and integrity of native grassland in Morro Bay State Park. Efforts shall include field surveys to identify and assess populations of native grasses. The control and/or eradication of exotic species and restoration of fire to its natural role shall be undertaken to restore and maintain the diversity of native grasslands.

Oak Management

Because of grazing pressures, habitat modification, and fire suppression, oaks in California have experienced a very low rate of regeneration. Most oak woodland/forest areas display a loss of natural age structure which typically is represented by a variety of different age classes. A plant community composed of even-aged individuals is considered to be an unstable community, especially when limited to the older age classes as found among the oaks.

Small, closed canopy stands of coast live oak occur in Morro Bay State Park on the lower slopes of Black Hill adjacent to the golf course, in the Park Ridge area, and in the Los Osos Creek drainage. With the exception of trees along Los Osos Creek, little or no oak regeneration from seed has been noted. Stands near the golf course have been affected by encroaching exotic vegetation, including eucalyptus, Monterey pine, and Bailey's acacia.

Policy: In order to ensure the protection and perpetuation of the native oaks of Morro Bay State Park, the oak communities shall be managed to promote an increased representation of the younger age classes of the oaks. Removal of exotic species from oak stands shall also be undertaken.

An oak monitoring program shall be established to determine annual recruitment and mortality of oaks, and present age class representation.
Morro Bay Wetland

The term "wetland" refers to any watercourse or body of water, the lands underlying or adjacent to these waters, and the wildlife and natural communities dependent on the wetland habitat (Public Resources Code, Section 5812). Coastal wetlands are essential to fish as spawning and nursery areas, and to migratory waterfowl and shorebirds as resting, feeding, and nesting sites. From a human standpoint, wetlands may help to minimize the effects of flooding and erosion, and buffer the effects of pollution. With their diversity of animal and plant life, wetlands are also important esthetic and recreational resources.

In California, approximately 70 percent of coastal wetland acreage has been destroyed since 1900. Of the remaining wetlands, seven percent occurs on the coast between San Francisco and the Mexican border; 80 to 89 percent is in the San Francisco Bay complex. Because such a large proportion of wetland habitat has been lost, the California Coastal Act requires that the "biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes...be maintained and, where feasible, restored..." (Article 4, Section 30231).

In the Morro Bay area, many historic marshes have been drained and converted to residential, industrial, or agricultural use. The existing wetland in Morro Bay includes coastal saltmarsh, coastal freshwater marsh, brackish marsh, willow forest and thicket, and eel grass beds. The two major tributaries into the marsh, Chorro Creek and Los Osos Creek, provide habitat for the tidewater goby, a federal candidate species. The California marsh snail, another federal candidate species, is known in Los Osos Creek. The California black rail (State listed as Threatened) is also reported in the wetland.

Policy: The wetland ecosystem in Morro Bay State Park shall be preserved. This system shall be considered for designation as a natural preserve. In order to preserve the integrity of the area, a wetland management plan shall be developed and implemented. The plan shall address sensitive species management, sediment and flood control, restoration of degraded areas, and pollution abatement.

Chorro Creek Wetland

Aerial photographs and published information document changes that have occurred in the Morro Bay wetlands. Substantial changes in the tidal regime in the area south and east of White Point were caused by construction of the marina in 1949. The dredged material filled about 15 acres, and closed off tidal influence to another 30 acres. Restoration of the spoils area could increase the extent of the marsh by about 10 acres, and restore tidal influence to approximately 30 acres, without interfering with operation of the marina. Continued operation of the marina will require periodic maintenance dredging. Dredge spoil disposal can result in loss of wetland habitat.

Policy: The department shall work with appropriate state and local agencies to improve tidal action to the lower Chorro Creek wetland adjacent to the marina. To prevent additional loss of wetland habitat, dredge spoils shall not be placed in wetland areas subject to tidal inundation.
High Marsh

High marsh areas represent an extremely restricted wetland zone found only in a narrow band around the Morro Bay marsh. High marsh forms a boundary (ecotone) between the tidal wetlands and the uplands. Because high marsh areas are rarely inundated, they are subject to development pressures. High marsh in Morro Bay State Park has been altered significantly by road construction, encroachment of exotic vegetation, dredge spoil disposal, and human foot traffic.

Policy: In order to protect high marsh resources and to preserve the transition from wetland to upland in Morro Bay State Park, foot traffic shall be directed onto elevated walkways and onto trails placed in adjacent uplands. Trails and walkways shall be designed and placed to minimize the impacts on the high marsh.

Exotic plant species that are displacing native marsh vegetation, including those used for landscaping or bank stabilization, shall be controlled and eradicated.

Livestock Grazing

Livestock grazing is inconsistent with State Park System management objectives of promoting natural processes and restoring natural ecosystems. Livestock grazing affects native grasslands, contributes to soil disturbance and erosion, pollutes surface waters, and detracts from esthetic features with the necessary installation of cross-fencing and watering troughs and tanks. Recreational experiences are restricted in areas where cattle congregate. The Department of Parks and Recreation terminated grazing in Morro Bay State Park in 1985.

Policy: Livestock grazing in Morro Bay State Park shall continue to be prohibited.

Wildlife Management

Animal life is an important part of natural ecosystems, and adds interest and variety to the park experience. Protection and perpetuation of natural wildlife populations are major management objectives at Morro Bay State Park.

Policy: Altered wetlands and other important wildlife habitat areas shall be restored as nearly as possible to conditions that would exist had natural ecological processes not been disrupted. Whether or not restoration of natural conditions is possible, it shall be the policy of the department to avoid significant imbalances caused by human influences on the natural wildlife populations. If it is necessary to regulate animal populations, the methods used shall be based on sound principles of ecosystem management, shall be consistent with the general policies of the department, and shall avoid disturbance to other natural values of the park.
Wildlife Requiring Special Management Consideration

Five federally or state-listed rare or endangered animal species may occur in Morro Bay State Park, or may frequent the vicinity. These species include the American peregrine falcon, the bald eagle, the California clapper rail, the California black rail, and the Morro Bay kangaroo rat, as well as federal candidate species - the California marsh snail, Morro shoulder band snail, and the tidewater goby. Two additional listed species, the brown pelican and the southern sea otter, may be observed from the unit.

Many animal species of special concern occur in Morro Bay State Park. These species are of concern specifically to the State Department of Fish and Game due to a statewide reduction in breeding status, suitable habitat, or other threats to the population. Other species are of special scientific, interpretive, or educational interest. Some of these species are the Morro blue butterfly, monarch butterfly, northern harrier or marsh hawk, osprey, prairie falcon, Cooper's hawk, burrowing owl, and yellow warbler. More species of special concern may be observed from the unit, including the common loon, American white pelican, double-crested cormorant, and California gull.

Policy: Specific management programs shall be developed when appropriate for animal species that are threatened, endangered, or of special concern. Necessary and suitable habitat, where it exists, shall be perpetuated. Programs or projects undertaken at Morro Bay State Park shall be planned and designed so animal life requiring special management consideration will not be adversely affected. Resource management actions will focus on natural processes, in recognition that natural processes are mutually beneficial to all important resources.

Morro Bay Kangaroo Rat

The Morro Bay kangaroo rat (Dipodomys heermanni morroensis) is listed as an endangered mammal by the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG), and is also listed in the International Red Data Book for mammals. This unique subspecies occurs in a restricted range on the south side of Morro Bay, and the survival of the species is endangered by continuing modification and destruction of its habitat. The population has been reduced to fewer than 350 individuals occupying several small isolated areas of suitable habitat. The original range has decreased due to urban development or natural plant succession resulting in mature coastal scrub vegetation too dense and closed for suitable Morro Bay kangaroo rat habitat. Because the Morro Bay kangaroo rat requires open, sandy areas beneath low coastal scrub vegetation, the mature scrub provides fewer den sites and fewer food plant species, and impedes its leaping mode of escape from predators. Feral house cats from nearby urban developments exert undue predation pressure on the remnant Morro Bay kangaroo rat populations, and human disturbance, such as burrow destruction through foot, equestrian, off-road vehicle, and road traffic, is yet another threat to its survival.

Recovery efforts for the Morro Bay kangaroo rat have been conducted by the USFWS, CDFG, and DPR. These efforts include development of the Morro Bay Kangaroo Rat Recovery Plan, establishment of the Morro Dunes Ecological Reserve, habitat rehabilitation activities, such as hand-clearing and
controlled burning of the mature coastal scrub, and initiation of a captive breeding program to produce animals for reintroduction into areas of rehabilitated habitat in their former range.

Morro Bay kangaroo rats were trapped near the east end of Santa Ysabel Avenue, on land adjacent to the southwestern boundary of Morro Bay State Park, as recently as 1979. This area is at the northern end of the Eastern Area referred to in the Kangaroo Rat Recovery Plan. The area south of Los Osos Creek is in the historical distribution of the Morro Bay kangaroo rat.

Policy: The department shall work with the U.S. Fish and Wildlife Service and the State Department of Fish and Game to implement the Morro Bay Kangaroo Rat Recovery Plan, specifically in acquisition and protection of kangaroo rat habitat, habitat rehabilitation, and the captive breeding program. The department shall conduct a thorough survey of potential kangaroo rat habitat in the unit to assess its suitability for possible reintroduction sites. The department shall support research investigating the specific habitat requirements, population dynamics, mortality factors, ecology, and behavior of the Morro Bay kangaroo rat -- information required to ensure proper management of this subspecies and its habitat.

American Peregrine Falcon

The American peregrine falcon is an endangered raptor or predatory bird listed as endangered by both the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG). This rare bird is found in woodland and coastal areas, using coastal and inland wetland areas year-round in hunting for the shorebirds, ducks, songbirds, and pigeons that make up its diet. This swift predator captures its prey on the wing, an exciting display which makes the peregrine much sought after for use in the sport of falconry. The peregrine nests on protected ledges or potholes in high cliffs, usually in remote areas.

A number of factors have contributed to the serious decline suffered by peregrine populations throughout the United States. The major cause of the decline was food web contamination by the chlorinated hydrocarbon DDE, a metabolite of the pesticide DDT, which was found to be responsible for production of thin-shelled eggs and massive reproductive failures. Loss of habitat, illegal shooting, nest disturbance, illegal nest robbing activities for falconry purposes, and mortality due to lines and wires strung across wetland foraging areas further threaten the decimated populations.

The San Luis Obispo coast and Morro Bay State Park include important habitat for the peregrine falcon for both feeding and nesting. The coastal strand and coastal wetlands offer prime foraging habitat for the falcon, and Morro Rock, with a pair of nesting peregrines, is one of the few remaining active nest sites in California.

Policy: The department shall maintain active cooperation and coordination with the research and protection efforts of the U.S. Fish and Wildlife Service, the State Department of Fish and Game, and the Santa Cruz Predatory Bird Research Group in implementation of the Recovery Plan for the American Peregrine Falcon. The department shall maintain communication with State Department of Fish and Game wardens and
with the local community. Care shall be taken in planning for placement
of lines, such as power and telephone lines, fences, and barbed wire, to
locate them underground or away from heavily used areas, particularly
wetland, for protection of peregrines and other birds as well. If
possible, lines currently strung across open areas used by the peregrines
for foraging shall be relocated underground or away from heavily used
areas.

Monarch Butterfly

Well known for its attractive color and migratory habits, the monarch
butterfly is of scientific and interpretive interest. One of the two
populations of monarch butterflies in North America migrates annually south
through the Pacific states to a limited number of overwintering sites located
along the California coast. The butterflies are attracted to groves of
eucalyptus trees in the park, where they can find roost sites protected from
the elements and near a source of water, and a ready supply of nectar. The
monarch butterflies, however, evolved with native vegetation, and existed in
California prior to the introduction of eucalyptus.

With a nearly worldwide distribution, the monarch butterfly is not in danger
of extinction as a species, but the North American populations are very
vulnerable due to their overwintering strategy of congregating in large flocks
in small areas. Because the phenomenon of the North American migration could
be lost in the near future, the conservation of monarch butterfly overwintering
sites has been designated as a top priority of the International Union for the
Conservation of Nature and Natural Resources, and the monarch butterfly is
listed on the international treaty known as the Convention on the Conservation
of Migratory Species of Wild Animals.

Some of the eucalyptus groves in the unit, as non-native plant life displacing
native vegetation, are being considered for removal. Temporary protection of
groups of trees heavily used by monarch butterflies, gradual removal of
eucalyptus, and revegetation with native trees may allow these unique
creatures to gradually relocate to the native trees, or to established new
overwintering roost sites.

Policy: The eucalyptus groves shall be surveyed during the winter
roosting season of the monarch butterfly, and heavily-used groves shall
be identified and protected until the butterflies have relocated to
established native vegetation. The department shall support research
into the ecology of the monarch.

Feral Animal Control

In order to achieve a natural wildlife population in the park, feral animals
or uncontrolled domestic animals (cats, dogs, and pigs in particular) must be
controlled or eradicated. Cats and dogs may seriously threaten wildlife, a
visitor's experience can be disturbed by the sight or intimidating action of a
stray dog, and wild pigs can cause considerable environmental damage with
their rooting activities in moist areas. Feral cats released into the park or
escaped from nearby urban development are a particular problem. An excessive
number of cats occurs on Morro Rock, fed by well-meaning local residents.
Evidence of wild pig activities has been found in the Chorro Creek stream
channel.
Policy: It shall be the policy of the department to strictly enforce department rules and regulations regarding feral animals or uncontrolled domestic animals in the state park. Feral cats shall be removed as humanely as possible, and a continuing program of population management shall be designed and implemented. In order to protect native ecosystems and to prevent widespread damage, a feral pig management program shall be developed and implemented. Monitoring, control, or eradication of feral pigs shall be important elements of this plan.

Vector Control

Rodents, as well as other animals, may transmit diseases or support parasites capable of transmitting certain diseases to man. The probability of diseases reaching epizootic levels (disease levels in animals that resemble epidemic levels in humans) and becoming possible health hazards to humans is in many cases related directly to overpopulation of the animal host. As animal populations become crowded, the possibility of diseases increases. Population increases in ground squirrels have been noted in this area, and raccoons have many opportunities for contacting visitors while foraging in the campgrounds. A species of tick, Ixodes pacificus, identified from this area (Coon Creek Trail in Montana de Oro State Park) has been implicated in the transmission of lyme disease, a potentially fatal human disease.

Policy: The population of animals that are important vectors of disease, such as ground squirrels and raccoons, shall be visually monitored by field personnel while pursuing their regular duties. If significant increases in animal observations are reported in any particular area, a public health officer shall be consulted. Should epizootic levels of disease be found in areas frequented by the public, population control measures shall be carried out as necessary for public safety. Information on avoiding ticks and lyme disease symptoms to look for after contact with a tick shall also be made available.

Cultural Resources

Archeological Investigations

Like archeological resources in general, those found in Morro Bay State Park are non-renewable resources relating to California's past. They contain information necessary to reconstruct the complex mosaic of past cultures in our state covering many millennia. It is department policy to preserve such resources in place whenever possible. It is also important for the department to have as much data as possible on record about the resources it is charged to protect, and to present this information to the public as accurately as possible.

Policy: When land uses, facility development, or natural causes, such as erosion, create ongoing or unavoidable impacts to archeological sites, or where there is a necessity to know the nature of the subsurface deposits, the department shall initiate a project to study these sites in an effort to preserve their heritage values. Such studies shall include efforts to assess age, cultural affiliation, artifact content, and significant attributes of these sites. Information collected through these efforts shall be used to guide preservation, management, and interpretive actions.
Sites determined to be threatened shall prompt the department to take appropriate stabilization or protective measures to ensure against the inadvertent loss of heritage values.

Archeological Resources

Many archeological resources are known to exist at Morro Bay State Park, and there may be other such resources concealed by vegetation or more recent sand and soil deposits. It is possible that future disturbances, natural or cultural, will uncover such resources.

Policy: In the event that an archeological discovery is made at Morro Bay State Park, the incident shall immediately be reported to the appropriate department staff person, who will determine the validity and significance of the discovery, and will recommend appropriate protective or stabilization action. Specific management programs shall be developed when significant cultural resources are threatened, endangered, or are of special concern.

CCC Structures

There are many stone and native rock features in the unit that were built by the Civilian Conservation Corps in the 1930s, including a combination building, picnic tables and fireplaces in the campground, a stone bridge near Chorro Creek, and about two miles of culvert adjacent to roads. The CCC also reworked stone walls at the former Cabrillo Clubhouse location. The portal gate at the north entrance was built by the CCC, but design and construction of other projects may have been shared or completed by crews with the Works Project Administration (WPA) and the Emergency Recovery Act (ERA). There have been numerous repairs, alterations, replacements in kind, relocations, and some removals of these stone features in the subsequent 50 years, especially involving campground furniture and culverts. The extent and detail of these changes have not been determined. Additional stone features have been constructed using similar materials and construction techniques for parking lots, retaining walls, trails, and golf course tees as recently as April 1986.

The historic significance of stone features from the Civilian Conservation Corps era is tied to the social significance of the CCC as a successful large-scale federal public works agency of the Depression era. The public use facilities constructed by the CCC helped in development of many of the early State Park System units, and set high esthetic standards for craftsmanship, use of native and locally available materials, and functional designs.

The stone combination building in the campground, the stone portals at the north entrance, and stone features throughout the park are the most prominent structures and reminders of the Civilian Conservation Corps' work in Morro Bay State Park.

Policy: The department shall endeavor to conserve CCC-era stone features, and to repair or replace these features in kind. New facilities shall be compatible with the esthetic values of CCC stone work and the "park rustic" architectural style.
Shell Midden

Archeological site SL0-75 is a large and relatively deep shell midden occupying much of the original bayshore between White Point and the campground entrance. Its antiquity and scientific significance have not been determined. The site has been heavily affected by road and museum construction, and by golf course and campground development. It is suffering from minor erosion on White Point hill, and is likely to be further affected by a variety of minor and major projects in the future.

Policy: The department shall assess the extent of subsurface disturbance, the current integrity, and the potential significance of site SL0-75. Information collected by this project shall be used to guide future management efforts at this site.

Museum

The Morro Bay Museum of Natural History has a number of photographs, documents, interpretive displays, and archeological collections from sites in the area around Morro Bay. These are important historical, scientific, and interpretive resources that have not been fully inventoried and evaluated. These collections could benefit from additional improvements in curation.

Policy: The department shall manage the Morro Bay Museum of Natural History and its collections according to contemporary museum standards.

Esthetic Resources.

Natural Landscape Management

Scenic quality in Morro Bay State Park is derived from its diverse natural landscape. Rugged topography, a mosaic of vegetation, and abundant wildlife contribute to the esthetic features of this unit. Human-made structures and facilities encroach on the natural landscape, and detract from the scenic features in the unit. South Bay Boulevard and Turri Road traffic corridors, recreational facilities such as the marina and golf course, park residences and maintenance structures, and overhead utility lines constitute negative features that detract from the natural appearance of the park.

Policy: Management of Morro Bay State Park shall be toward maintenance of the natural landscape, and toward reduction or elimination of human-made intrusions. Residence structures and maintenance facilities shall be designed and landscaped to blend into the natural landscape, and/or be located in areas of low visibility.

Overhead utility lines in the park shall be placed underground where feasible.

Black Hill Scenic Vista

The view of the wetland and sandspit from the summit of Black Hill is outstanding. An existing trail system provides visitor access to the summit. Panoramic vistas are also possible in the vicinity of the upper water tank on the south slopes of Black Hill. However, eucalyptus and pine trees planted in this area interfere significantly with the view from this site.
Policy: The department shall maintain the scenic panoramas associated with views from Black Hill. Unnatural visual impediments such as exotic trees shall be removed in the summit and midslope. The water tanks shall be painted or screened to reduce their visual impact on the landscape.

Significant Geological Features

Morro Rock, Black Hill, Cerro Cabrillo, the unnamed 811-foot high peak southeast of Cerro Cabrillo, and a small knob (Turtle Rock) between Black Hill and Cerro Cabrillo possess outstanding geologic and scenic values.

Policy: The outstanding natural and scenic values of the "morros" in Morro Bay State Park, including Morro Rock, Black Hill, Cerro Cabrillo, the unnamed peak southeast of Cerro Cabrillo, and the small knob (Turtle Rock) between Black Hill and Cerro Cabrillo, shall be preserved in their natural condition. New facilities which degrade or mar the natural appearance of the morros, such as roads, powerlines, or communication towers, shall not be constructed in the park.

Recreation Resources

State Park Boundary Change

The tidelands and wetlands immediately south of Morro Bay State Park provide outstanding wildlife habitat. These lands, which are under the administrative jurisdiction of the State Lands Commission, possess the same natural and scenic values as the wetlands that are in the state park. Waterfowl hunting is allowed on this property, although it is prohibited in the adjacent state park (Title 14, Ch. 1, Sec. 4305). The species most commonly taken in the area is the black brant, although other waterfowl species are also taken occasionally.

Waterfowl hunting has significant impacts beyond the direct impact to the target species. The sounds of shotgun fire frighten birds, causing many to leave the area. Hunting conflicts with birders and others who come to the area for nature study, as well as those who are seeking a natural setting for quiet contemplation and solitude. Hunting adjacent to the Morro Bay Museum of Natural History, the museum, marina, and the community of Baywood Park is also a potential safety problem.

A potential solution to these conflicts between hunters and state park visitors would involve extending the boundary of the state park to include all the tidelands and wetlands east of a line from White Point south to the western edge of Baywood Park. This action would form a logical boundary for Morro Bay State Park. It would result in elimination of waterfowl hunting from a small area of the bay, while significantly increasing the portion of the bay where wildlife is fully protected. Waterfowl hunting would continue to be legal over most of the bay.

Policy: The department (DPR) shall work with the Department of Fish and Game, the State Lands Commission, appropriate local organizations, and concerned citizens to extend the boundaries of Morro Bay State Park to include all public tidelands and wetlands east of a line extending south from White Point to the western edge of Baywood Park.
Allowable Use Intensity

The California Public Resources Code, Section 5019.5, requires that a land carrying capacity survey be made prior to the preparation of any development plan for any park or recreation area. Section 5001.96 further requires that attendance be held within limits so established. Allowable use intensity is a refinement of the land carrying capacity concept, and is prepared as part of the Resource Element of the General Plan in fulfillment of the above code sections.

Allowable use intensity is just one of several factors considered in developing the Land Use Element of the General Plan. Other factors that may also be considered in determining land use for any unit of the State Park System are classification and purpose, recreation needs, design considerations, and social carrying capacity or the desired quality of the recreation experience.

Allowable use intensity determinations establish the limits of development and use an area can sustain without an unacceptable degree of deterioration in the character and value of the scenic, natural, and cultural resources. Determinations are based on analysis and integration of resource management and protection objectives, resource constraints, and resource sensitivities information.

Resource management objectives are defined by the Public Resources Code and other law, unit classifications and declarations of purpose, and specific declarations of resource management policy presented in this Resource Element.

Resource constraints are factors which would make visitor use or facility development unsafe, economically impractical, or undesirable. They are determined by evaluating such factors as erodibility and compaction potential of soils, geologic hazards, slope stability and relief, hydrologic conditions, potential for pollution of surface waters, and flooding.

Sensitivities are conditions, locations, or values of resources that warrant restricted use or development to protect resources. Sensitivities are evaluated by considering such factors as the ability of the ecosystem to withstand human impact (ecological sensitivity), not only in the short term but also over a more extended time span; the fragility and significance of archeological and historical resources; vegetation characteristics such as durability, fragility, and regeneration rates; and wildlife considerations such as tolerance to human activity, population levels, and stability. Sensitivities may also include scenic resources; rare, threatened, or endangered plants, animals, and habitats; unique or scientifically important botanic features; and other resources of regional or statewide significance.

Based on the preceding factors, allowable use intensities for lands in Morro Bay State Park were determined, and are shown on the allowable use intensity map. Four use intensity zones have been developed: very low, low, moderate, and high. The very low intensity use zone includes wetlands, the Heron Rookery Natural Preserve, and the Morro Rock Natural Preserve, including the falcon aerie. The low intensity use zone includes the wetland wildlife habitat areas, areas subject to flooding and tidal inundation, the heron rookery at Fairbanks Point, and Morro Rock, including the peregrine falcon aerie. It
also includes areas with slopes of more than 25%, scenic landmarks (peaks, ridgetops), and stream drainages (permanent and intermittent). The moderate use zone includes slopes of 16 to 25%, and archeological sites. The high intensity use zone includes sites of existing facilities (golf course, marina, campground) and areas of gentle slope without significant sensitivities.
LAND USE AND FACILITIES ELEMENT
Morro Bay State Park campground entrance

Morro Bay State Park marina
LAND USE AND FACILITIES ELEMENT

This element of the General Plan addresses the current and proposed land use and facilities at Morro Bay State Park. Land use determinations are made after careful consideration of all resource issues, and are a logical extension of the analysis of allowable use intensities (see Resource Element). The element also takes into consideration other important factors such as the regional and statewide recreational issues, existing land use conditions, and expressed local concerns. Facility determinations are based on the same planning rationale as land use, and should conform with the land use determinations. However, facility determinations consider more specifically the size and location of necessary or desirable facilities.

Regional Recreation Profile

The regional recreation profile provides a brief analysis of recreation needs by planning district (a grouping of contiguous counties with general economic and geographic similarities). The eleven planning districts in California are designated by the State Office of Planning and Research, and are generally consistent with the boundaries of the regional councils of government. Because California is a state with great social, economic, and geographic diversity, the division into manageable geographic units allows the department to more accurately identify recreation needs, problems, and priorities.

The Morro Bay State Park units are in Planning District 7, which includes five counties: San Luis Obispo, Santa Barbara, Monterey, San Benito, and Santa Cruz. This district contains about 4 percent of the state's population, yet only 2 percent of the district is urbanized. Therefore, much of the land is either undeveloped natural area or in agricultural use.

Economically, agriculture ranks first in District 7. Tourism and recreation-associated services comprise the second most important industry, centering around the cities of Santa Barbara, Santa Cruz, and the Monterey Peninsula, but relying on the region's wide beaches, spectacular natural beauty, and unspoiled areas for support.

The coastal areas (346 miles) offer most of the planning district's recreation opportunities, except for a variety of water-oriented recreation opportunities offered at several inland reservoirs. The district is a popular destination zone for tourists from the San Francisco Bay area, Southern California, and the Central Valley.

Of the 11,230 square miles in the planning district, one-third is in public ownership. The U.S. Forest Service (Las Padres National Forest) manages a considerable portion of that land, and is a principal recreation supplier. The California Department of Parks and Recreation manages 56 percent (63,000 acres) of the district's state-owned lands, and offers a diversity of recreational opportunities.

Recreational demand and deficiencies

Emphasizing the statewide demand for recreation in Planning District 7 is the fact that although 6 percent of all State Park System land area is in the district, almost 30 percent of total state park visitor use occurs in this region. Demand for coastal camping and picnicking is particularly high throughout the district.
Closely associated with recreation demand and deficiencies is population growth. During the 30 years between 1955 and 1985, California’s population doubled. During the same time period, attendance in the State Park System grew ten-fold. San Luis Obispo County, in which all the Morro Bay State Park units lie, is the fastest-growing coastal county in the state, and is seventh fastest statewide. Population in 1985 was 189,605, and is projected to increase to 301,851 by the year 2000.

Out of 28 selected recreation activities, those with the highest projected demand in San Luis Obispo County by the year 2000 are picnicking, ocean swimming, camping, hiking/backpacking, and nature appreciation. All things considered, Planning District 7 is projected to have a deficiency by 1990 of 6,450 campsites, 12,843 picnic sites, and 1,642 miles of trail.

**Existing Land Use Conditions**

All of the northwesterly portion of Morro Bay State Park lies within the city limits of the city of Morro Bay. Morro Bay is an incorporated city of approximately 10,000 people. Its population in 1970 was 7,110. Projections indicate that population growth will increase to 13,047 people by the year 2000. This growth rate is much higher than most other areas in the county. However, due to severe utility limitations, especially water, development has been more moderate than it might otherwise have been. The city’s economy is primarily oriented to the strong attraction of tourism/recreation activities and the desirability of the area as a place of retirement. It is the principal visitor-serving center for this section of the coast. The city operates five local parks and two beach areas, one on each side of the Morro Bay entrance. The community has a very strong orientation toward park and recreation values. It is expected to continue to maintain these values as the community grows.

A wide range of park and recreation uses occurs in the state park itself, most of which is concentrated in the western portion of the park, immediately to the south of the city of Morro Bay. The following is a list of these current uses:

- Golf, which includes a clubhouse restaurant and pro shop
- Nature study and education, which center around the Morro Bay Museum of Natural History
- Marina uses, which include docking, small-boat launching, parking, and food service
- Camping, which includes RV hookups and group camping
- Picnicking
- Hiking/walking
- Jogging
- Bicycle riding
-- Fishing
-- Birdwatching
-- Photography
-- Frisbee golf
-- Park maintenance and administrative uses

Land use in the northern and eastern portions of the park has been restricted due to the lack of developed access or public use facilities. Some informal use has occurred by hikers and mountain bikers.

Vehicular Access and Circulation

Morro Bay State Park has four vehicular access points and five public roadways through the park (see Figure 2). South Bay Boulevard is a major arterial between State Highway 1 and the south Morro Bay communities of Los Osos and Baywood Park. Although the posted speed along this road is 45 miles per hour, many vehicles exceed this limit. Turri Road is a two-lane road which roughly follows the north bank of Los Osos Creek, so it passes through the southern portion of the park. It serves primarily as access to a number of ranches to the east. Both Turri Road and South Bay Boulevard are county-owned thoroughfares.

The three remaining public roadways in the park are owned and maintained by the State Department of Parks and Recreation. Lower State Park Road intersects South Bay Boulevard on the east, near what is known as Twin Bridges. Safety improvements will be made to this intersection as part of a currently scheduled county road improvement proposal for South Bay Boulevard. From this intersection, Lower State Park Road follows the edge of the marsh, and continues through the park to connect with Main Street in the city of Morro Bay. It averages 22 feet in width, is striped, and serves as the main access road to the campground, the marina, and the museum of natural history. During peak use times, vehicles entering the campground often stack up on Lower State Park Road. This is a cause of concern to many.

Upper State Park Road, also known as Parkview Drive, intersects Lower State Park Road on the east, near South Bay Boulevard. It then continues westward, through the center of the Morro Bay State Park golf course. On the west end, it again connects with Lower State Park Road, near the entrance to the city of Morro Bay. This road primarily serves the golf course, although it also receives a significant amount of through traffic. Its average width is only 18 feet, and it has no center stripe. There are three main concerns with this road. First is its narrow width. Many accidents on this road are the result of vehicles being on the wrong side. Second is where the road passes directly in front of the third tee, a potentially hazardous condition. The third concern is the many vehicles that park along the road in the vicinity of the golf course clubhouse. The existing parking lot many times cannot accommodate all vehicles.
Figure - 2
EXISTING VEHICULAR ACCESS AND CIRCULATION
Black Hill Road is the only road which does not serve through traffic. It extends from an intersection on Upper State Park Road, near the third tee on the golf course, to a small parking area near the top of Black Hill. This road is quite steep and narrow, averaging 16 feet in width, and has no center strip. It serves as access to water tanks on the side of Black Hill, and to a trailhead leading to the top of Black Hill. Due to safety and other operational problems, a gate has been installed at the intersection with Upper State Park Road; the gate is closed at night.

For the purpose of gaining a better understanding of the traffic situation, a brief study was conducted by the department during the summer of 1987 (see appendix). It involved only traffic on Upper and Lower State Park Roads, using information gathered from both long-term traffic data and a short-term count of one week's duration. Short-term data show that total daily traffic volume on the lower road (3,095 vehicles) is nearly twice that on the upper road (1,660 vehicles). However, long-term data show only a slightly higher volume on the lower road. It is our opinion that this difference in volume is because the short-term information was gathered during July, which is one of the highest use periods for the park. Short-term information also reveals that on Upper State Park Road, there is more traffic traveling in a westbound direction, and the opposite is true for Lower State Park Road: more traffic flows in the eastbound direction. Furthermore, engineers involved in the short-term study estimate that as much as 70% of the traffic volume on these roads was passing through the park without using any of the recreation facilities.

Reports over the last three years indicate that the number of accidents is approximately equal for both roads (lower - 12; upper - 11). However, taking into consideration that, at times, traffic volume is one half that of the lower road, the accident rate on the upper road is much higher.

Engineering Evaluation

The purpose of the Engineering Evaluation is to provide a general background of the capabilities and problems related to the engineering and utility aspects of the proposed park development. This report is based on information from various public agencies, utilities, and records.

Information is very preliminary in nature, and does not constitute an in-depth engineering analysis that is necessary for the final design of any particular facility. Further studies and negotiations with utility providers will be required based on more comprehensive development plans for implementation of the General Plan’s proposals.

Water

The existing water supply service for the campground, marina, golf course, museum, maintenance facilities, and residence area is provided by wells owned by the City of Morro Bay. These wells pump water to water tanks located on Black Hill.

Although water service is not available for the public at the Cerro Cabrillo property, it was provided to the ranch house before the property was acquired. The source was a spring which fed water into a seven-foot-tall water tank several hundred feet from the ranch house. The tank and piping system are rusted out, and leak profusely.
Due to the limited water supplies in San Luis Obispo County, the availability of water will be one of the greatest constraints to implementing the facilities proposed in this General Plan. The city's only sources of water are the nearby groundwater basins, and it appears that this groundwater supply might not be sufficient during periodic droughts. Consequently, the California Coastal Commission, on December 14, 1977, reached the decision that the groundwater in the aquifers of the Morro and Chorro Groundwater Basins was completely developed. The basis for this decision was: (1) the amount being pumped from the aquifers exceeded earlier estimates of safe yield, and (2) high chloride concentrations, which could indicate salt water intrusion, had been found in the water of Chorro and Morro Basins.¹

Furthermore, the commission declared that it "cannot approve development beyond those already under consideration and review by the city or the commissions. Further development could only be approved if the city can show that there is adequate water available to provide for such development." As a result of this decision, the California Department of Water Resources and the city prepared the Morro Bay Area Water Management Plan.²

The Water Management Plan is divided into a summary of findings, conclusions, and recommendations. The findings which may influence implementation of the Morro Bay State Park General Plan include:³

1. The estimated demand for applied water in the study area was 4,800 acre-feet in 1979, and is expected to be 5,500 acre-feet in 1990, and 6,000 acre-feet in 2000.

2. The population for the city of Morro Bay was 7,109 in 1970 and 9,064 in 1980, and is projected to be 12,200 in 2000.

3. Present Morro Bay demands are met entirely with groundwater pumped from the Morro and Chorro groundwater basins.

4. Up to two-thirds of the groundwater in the Chorro and Morro basins could be used if new extraction facilities are properly constructed. Therefore, the available long-term yield of these basins is projected to be about 5,300 acre-feet per year.

5. The current water demand for the Morro Bay golf course is approximately 400 acre-feet per year.

6. The city is conducting an active program of water conservation, in cooperation with the California Coastal Commission, the Regional Water Quality Control Board, and the Department of Water Resources.

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² Ibid., p. 2.
³ Ibid., pp. 7-8.
Some of the conclusions in the Water Management Plan which relate to this General Plan include:

1. The amount of groundwater now being used and projected to be used in the year 2000 does not exceed the amount that the local groundwater basins can yield.

2. The city's current water problem during dry years is not because of the lack of water supply. The proper selection and location of wells would correct the problem.

3. A portion of treated wastewater now drained into the ocean from the Morro Bay-Cayucos Treatment Plant could be put to beneficial use if approved by the Regional Water Control Board and the State Department of Health Services. The golf course at Morro Bay State Park is a potential customer for this treated wastewater.

4. To solve the problems of high iron and manganese concentration found in some wells in Morro Valley, the city could either treat the water or replace the wells with new ones outside the problem area.

5. By imposing mandatory conservation during emergencies, the city could reduce per capita water use by up to 20%.

6. During drought, the city could temporarily obtain additional water from local farmers.

7. On the basis of past pumping experience, significant subsidence in the groundwater basins near Morro Bay is not likely.

Based on the above findings and conclusions, the Water Management Plan made these recommendations:

1. Additional wells and pipelines should be constructed in the Morro, Chorro, and possibly the Toro Basins.

2. Spreading basins should be constructed to be used when outflow to the ocean is high.

3. Temporary check dams should be installed in streams so excess storm water could help recharge the groundwater basins.

4. The long-range plan should be to import water from either the State Water Project or the Nacimiento Project.

4. Ibid., p. 10.
5. Ibid., pp. 11-12.
In addition to the concerns of the California Coastal Commission and the Water Management Plan, the city's Local Coastal Plan (LCP), approved in October 1982, also addresses the problems of groundwater depletion. This LCP adopts the proposals of the Water Management Plan, and describes a need for the city to prepare a more comprehensive plan, which shall include:

1. A wastewater reclamation project would provide an additional 770 acre-feet per year of water for golf course and agricultural purposes.

2. Water detention basins to collect storm water would contribute to recharge of the groundwater basin.

3. The surplus water that is available during normal and wet years at Whale Rock Reservoir should be delivered to the city's water system or recharge facilities.

4. Improved water system maintenance would produce a 10% gain in the amount of usable water (about 250 acre-feet per year).

5. Water conservation programs would reduce water demand by about 630 acre-feet per year.

6. City well locations should be modified.

7. Additional water supply sources should be investigated, including the Nacimiento Water Project, the State Water Project, and construction of local storage facilities.

The availability of water will be one of the most important factors in determining the size and location of the facilities proposed in this General Plan, particularly those located on the Cerro Cabrillo property.

**Sewage**

The campground, marina, golf course, museum, maintenance facilities, and residence area are connected to the City of Morro Bay's wastewater collection system. This sewage system delivers wastewater to the Morro Bay-Cayucos Waste Water Treatment Plant, a secondary treatment facility which discharges its effluent into the ocean north of Morro Rock. The only other wastewater treatment facility near Morro Bay State Park is the California Mens Colony Plant, about five miles east of the unit. This plant serves the California Mens Colony, county facilities, Cuesta College, and Camp San Luis Obispo, and discharges its effluent into Chorro Creek and irrigation spray fields.

The only method of sewage disposal that has been used on the Cerro Cabrillo property is septic tanks with leach lines. Although there is a septic tank near the existing ranch house on state park property, preliminary engineering investigations have indicated severe limitations on leaching on this property.

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The Water Management Plan suggests the possibility of using treated wastewater to irrigate the golf course at Morro Bay State Park. This wastewater could be delivered to the golf course via a proposed pipeline from the Morro Bay-Cayucos Treatment Plant. The Regional Water Quality Control Board and the State Department of Health would have to approve such a plan.

Due to the limitations on water use and the impermeability of soils on the Cerro Cabrillo property, sewage disposal will be one of the most important factors in determining the size and location of facilities proposed in this General Plan.

Electricity

Pacific Gas and Electric Company is the only power source for this unit. It supplies single and three-phase power to the campground.

Telephone

Telephone service is currently provided by Pacific Bell.

Gas

Natural gas service is available in some portions of the unit. However, none is currently available on the Cerro Cabrillo property. Liquid propane is an available alternative for new development on this property.

Waste Disposal

Solid waste disposal is currently provided by the Morro Bay Garbage Service Company.

Issues of Concern

After careful evaluation of all available information on existing conditions, and taking into consideration public concerns expressed through visitor surveys, discussions with local government staff, numerous letters, and several public meetings (see Introduction - Public Involvement Process), the following list was formulated to identify the most significant land use and facility issues of concern.

-- Although land uses such as the golf course and marina have been developed which are inconsistent with the classification of the unit as a state park, they fulfill valuable recreational needs in this area.

-- Land uses have developed over the years without the benefit of a comprehensive plan taking into consideration the relationship of one use with the others.

-- Increasing pressures on limited park resources are being caused by increasing urbanization.

-- Existing recreational land uses have all been heavily concentrated in the western half of the park. Public access and use throughout much of the remainder of the unit have been extremely limited.
Opportunities for park visitors to enjoy many natural and scenic resources by foot are limited.

Many facilities in the campground are aging and in need of replacement.

Current facilities do not adequately provide for day use or overnight recreational needs.

The marina area is poorly used and is in need of some maintenance.

Existing park maintenance and administrative facilities are disjointed, and some occupy valuable recreational land.

Vehicular circulation in some areas conflicts with natural and recreational use. It also has some potentially hazardous conditions.

Through traffic serves to benefit both the Morro Bay community and the park, and should continue.

In addition to the many natural values in Morro Bay State Park, visual qualities are also outstanding, and should be protected.

Utilities can pose a significant constraint to any development in this area.

**Land Use and Facility Goals**

In response to the issues of concern identified previously, and in order to guide the department in making recommendations for future use and development in Morro Bay State Park, the following set of goals was formulated:

1. Limit the expansion of recreational facilities in existing heavy use areas.
2. Expand recreational use and develop facilities in less used portions of the park.
3. Improve aging/overused facilities.
4. Improve the relationships among some uses in the park.
5. Expand opportunities for hiking and bicycling.
6. Improve vehicular access and circulation.
7. Increase safety for park visitors.
8. Resolve current utility constraints.
9. Consolidate park operations away from recreational use areas.
10. Improve natural, cultural, and scenic interpretation.
Land Use and Facility Recommendations

The following recommendations are made in order to maintain an optimum balance between providing quality visitor use facilities and preserving the outstanding natural and cultural resources of Morro Bay State Park. The recommendations are specifically intended to accomplish stated land use and facility goals by addressing those items which have been identified as significant issues of concern.

Land Use

-- It is recommended that the existing golf course and marina, which do not conform to the proposed Declaration of Purpose, be allowed to continue (see Resource Element). However, in accordance with Public Resources Code Section 5001.9, they shall not be expanded beyond their current geographic limits.

-- Major expansion of recreational uses to accommodate increased demands shall be located in the Cerro Cabrillo area east of South Bay Boulevard.

-- Four broad land use zones are recommended as a framework within which to guide future land use in the park. They are identified as follows, and on the Land Use Plan (see Map 2).

Resource Preservation Zone -- These areas encompass significant natural resources. Construction in this zone shall be limited solely to that which will preserve and help perpetuate the significant resources in this zone.

Scenic Open Space Zone -- Lands in this zone shall be kept as free as possible of visual intrusions on the landscape. Trails, vista points, and low-profile interpretive signs are appropriate.

Recreation Facilities Zone -- These areas provide for vehicular access and parking, along with other appropriate recreational facilities for public use.

Park Operations Zone -- These areas are deemed most appropriate for development of administrative and maintenance facilities because of their size, site characteristics, and proximity to available utilities.

Facilities

There are several facility recommendations that apply to the park in general. These are discussed first. After these, the remaining recommendations are discussed by geographic area. The recommendations are also identified on the Facilities Plan (see Map 4). A wide range of recreational facilities already exists in Morro Bay State Park. These are shown on the Existing Facilities Plan (see Map 3). A summary of all existing and proposed facilities is shown in Figure 3.
General Recommendations:

-- Architecture

- Where feasible, existing CCC stone features shall be preserved.
- The incorporation of CCC stone architectural style shall be considered in the design of any new or replacement facilities.

-- Roads

- Lower State Park Road from the eastern intersection with Upper State Park Road to the campground shall be realigned. The realignment shall intersect Upper State Park Road at a higher elevation, be located between the golf course and the campground, and reconnect with the existing alignment west of the campground, in the vicinity of the existing entrance to the marina. The old road alignment shall be reconstructed to provide a bicycle trail and foot path. The remainder of the right-of-way shall be restored to enhance transitional wetland habitat.

- Between the entrance to the Morro Bay Museum of Natural History and the Heron Rookery, Lower State Park Road shall be realigned slightly inland in order to improve safety and to enable a foot path, a Class I bicycle path, and a parking area to be located west of the road at Windy Cove.

- Upper State Park Road shall be widened to a minimum of 22 feet, and striped.

- An in-depth engineering study shall be completed to determine the feasibility of developing either an overpass or underpass for golfers in the vicinity of the clubhouse.

-- Trails

- A Class I bicycle trail shall be developed along the approximate alignment of Lower State Park Road.

- The department shall work with the County of San Luis Obispo to establish a Class II bicycle trail along the alignment of South Bay Boulevard.

- The department shall work with the Natural History Association and the Docent Association to establish a comprehensive system of hiking trails throughout the park.

-- Utilities

- The department shall initiate an in-depth engineering study to evaluate:
  1. The feasibility of providing utilities on the Cerro Cabrillo property east of South Bay Boulevard.
2. The feasibility of using reclaimed water for some park uses such as landscape irrigation.

3. The feasibility of providing a pump-out facility for boats in the marina, along with needed utilities for expansion of day use in this area.

Recommendations by Area:

-- Morro Rock
- Pave the existing parking/turnaround area.
- Develop an interpretive shelter.

-- Heron Rookery
- Pave the existing parking area to accommodate six cars.
- Develop an observation deck near the fence.
- Install a new interpretive shelter at or near the observation deck (see Interpretive Element).
- Pave the handicap walkway from the parking area to the observation area.

-- Museum/Windy Cove
- Improve trail connections to the Heron Rookery, White Point, the campground, and the wetland.
- Provide parking for two buses.
- Develop new interpretive displays in the museum (see Interpretive Element).
- Relocate parking at Windy Cove approximately 20 feet inland, in coordination with the road improvement mentioned above.

-- Marina
- Retain the existing configuration, and dredge the boat basin.
- Work with the County of San Luis Obispo, the U.S. Army Corps of Engineers, and other agencies to ensure that the existing channel between the marina and the main channel remains open and navigable.
- Install a boat-accessible pump-out facility if deemed feasible by the proposed engineering feasibility study mentioned above.
- Renovate the existing small boat launch ramp or provide a new ramp, and repair rock rip-rap around marina.
- Add 25-50 additional boat slips.
- Relocate the food service facility to the northwest in order to improve vehicular access to the small boat launch area.
- Develop a permanent food service facility to serve the marina and the museum (see Concessions Element).
- Remove the existing restroom building.
- Construct a new combination building, and develop 25 picnic sites at the east end of the marina.
- Renovate the existing parking layout, and add 25-50 parking spaces at the east end to serve the new picnic area.
- Install a wetland interpretive structure, a self-guiding interpretive trail, and an interpretive boardwalk at the east end of the marina (see Interpretive Element).

--- Campground

- Renovate or replace all existing campground facilities.
- Remove aging trees, and plant understory landscaping to improve privacy between campsites.
- Relocate the campfire center.
- Provide an interpretive shelter and trailhead signing (see Interpretive Element).
- Remove all staff residences from the campground.
- Relocate the entrance station to the west side of the campground, in coordination with the realignment of Lower State Park Road.
- Reconstruct the portion of Lower State Park Road which will be abandoned as a result of realignment to provide a Class I bicycle trail, and a hiking trail connecting the campground with the wetland.

--- The Grove

- Retain as a staff housing area. In the event the department allows employee housing to continue at Morro Bay State Park, the most appropriate areas for this use would be the Grove and the proposed new park administrative area.
- Add landscape plantings to screen developments from the road.

--- South Bay Day Use Area

- Grade and make safety improvements to the existing access point off South Bay Boulevard.
- Develop parking with vehicle barriers for 10-25 cars.
- Install interpretive panels (see Interpretive Element).

--- Cerro Cabrillo Area
- Remove the old ranch house.
- Develop a new entrance road and contact station off Turri Road.
- Install a day use parking area for 25-50 cars.
- Install an interpretive shelter.
- Install a 50-100 unit campground.
- Develop a system of hiking trails to vista points and other points of interest.
- Develop a permanent group camp.

--- Park Administrative Area
- Develop and/or relocate from other areas offices, maintenance facilities, storage facilities, and possibly staff residences to serve as a new headquarters for the San Luis Obispo Coast District.

--- Chorro Willows
- Develop day use parking for 5-10 cars with vehicle barriers.
- Install an interpretive panel (see Interpretive Element).
- Develop hiking trails.
- Remove remnants of the abandoned group camp.

--- Golf Course
- Relocate the maintenance area to be more centralized to the front nine as well as the back nine holes, and so the access road to the maintenance area will not cross the fairway to one of the most dramatic holes on the course.
- Retain the existing 18 holes of play as is.
- Subject to engineering limitations, develop an overpass or underpass for golfers (see recommendations for the roads).
- Expand parking in the vicinity of the clubhouse by 25-50 cars to minimize parking on the shoulder of Upper State Park Road.
-- Black Hill

  o Develop a new trail around the north side, and improve trail connection with the campground.

  o Install low-profile interpretive panels in the vicinity of the existing parking area.

  o Retain the existing parking area as is.

Implementation Priorities

The priorities of this section are intended to be a general guideline for implementation of the recommendations in this plan. Over a period of time, these are likely to change, due to such factors as availability of funds or staff, unforeseen changes in resource conditions or off-site factors, or safety considerations. As each development is completed, it will be prudent to evaluate how the facilities are being used, and to determine what changes, if any, should be considered within the constraints of this plan.

-- Priority Group I

  o Realign the portion of Lower State Park Road from the intersection with Upper State Park Road to the campground, and convert the existing alignment into a hiking trail and Class I bicycle trail.

  o Renovate facilities in the existing campground.

  o Expand day use facilities at the east end of the marina.

  o Prepare an engineering study for expansion of utilities.

  o Develop a comprehensive trail system plan for the entire park.

  o Construct new interpretive exhibits in the Morro Bay Museum of Natural History.

-- Priority Group II

  o Develop exterior improvements to the Morro Bay Museum of Natural History.

  o Install improvements at the heron rookery.

  o Improve Lower State Park Road between the heron rookery and the Museum of Natural History.

  o Complete development of the Class I bicycle trail between the campground and the city of Morro Bay.

  o Install improvements at Morro Rock, Black Hill, Chorro Willows, and the South Bay Boulevard parking areas.
- Install initial utilities, access, parking, and trails for the Cerro Cabrillo day use area.
- Install marina improvements.

--- Priority Group III
- Install campground improvements in the Cerro Cabrillo area.
- Develop a new park administrative area.
- Install improvements to the golf course and Upper State Park Road.

Conformance With Local Coastal Plans

Most of the western portion of Morro Bay State Park is within the city limits of the city of Morro Bay. Development of this portion of the park is therefore governed by the city's local coastal plan. All remaining park land still lies within the coastal zone boundary. Therefore, the LCP for San Luis Obispo County governs all development in this area.

The city's LCP calls for continuation and improvement of park roads, improvements to the marina, development of a bicycle trail, a plan for use of reclaimed water, and protection for environmentally sensitive habitats. The county LCP calls for acquisition of sensitive bayfront wetlands and coastal access improvements. It also recommends development of hiking trails, campgrounds, and a multi-use area on the Cerro Cabrillo property.

This General Plan has attempted to address all recommendations by both the County of San Luis Obispo and the City of Morro Bay, and is in conformance with their local coastal plans.
### FACILITIES SUMMARY
### MORRO BAY STATE PARK

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Note: All parking spaces indicated in the table above are for day use only.
INTERPRETIVE ELEMENT

Objectives

The general purpose of interpretation in a state park is to: orient visitors; stimulate interest; and promote understanding and appreciation of the resources, thus making visits more meaningful and enjoyable. This Interpretive Element provides guidance for ongoing and future interpretive development at Morro Bay State Park. It identifies interpretive themes, makes specific proposals, and establishes priorities.

Interpretive Considerations

Environmental Influences

Visitor enjoyment of Morro Bay State Park is often directly related to the appeal of the environment in which it takes place. The Morro Bay area is subject to rain, wind, cold temperatures, cloudiness, and heavy fog. Weather influences visitation to the unit, as well as the types of interpretive facilities and programs which can be developed. The corrosive and abrasive effects of salt- and sand-laden sea breezes need to be considered in the design, placement, and construction of interpretive facilities. Another relevant environmental condition that may affect interpretation is bright sunlight, which may fade pictures and photographs on panels.

Interpretive consideration should be given to the safety of visitors as well as to preservation of the unit’s resources. Vandalism has been a problem, and interpretive development should be designed and placed to minimize this risk. Where the bluffs and hillsides are high and steep, erosion is in evidence, the result of natural processes at work, often accelerated by human activities. Destruction of the natural environment has similarly been increased because of unplanned "volunteer" trails and litter. Revegetation of some areas with indigenous species of the unit will be a continuing concern of the Department of Parks and Recreation. The fragility of the natural resources of Morro Bay imposes some limitations on interpretation. Restrictions on the allowable use, placed on the park by the Resource Element, are an effort to prevent deterioration of the park's environment. Consequently, the location and type of interpretive activities must support those limitations.

The roadways throughout the park present growing visitor and resource protection problems. The increasing traffic congestion and noise levels not only produce pollution, but also present hazards to visitors. Noisy traffic often prevents quiet enjoyment of the wetlands and the heron rookery.

Seasonal events, such as the nesting of great blue herons and great egrets, the winter gray whale migration, the roosting of monarch butterflies, grunion spawning, and the spring wildflower bloom, increase park visitation. These occurrences should be promoted in the park for new and returning visitors.
Visitors, Their Needs and Expectations

On average, almost 1.4 million people visit Morro Bay State Park each year. The unit has two types of use, camping and day use. Day-users outnumber campers, and are generally from the local area, although some come from outside the area, and stay in nearby overnight accommodations. They come to enjoy the golf course, the Morro Bay Museum of Natural History, the wetlands, the heron rookery, and the other varied recreational opportunities offered by the bay. Campers, many with their own recreational vehicles, come from greater distances. Some are traveling enroute to another destination, and only stop overnight, while others stay as long as allowed (seven consecutive days in the summer months). The campground is generally filled during the summer.

Visitors of all ages come to Morro Bay State Park. People come in family groups; individually; in organized church, senior citizen, conservation, and scout groups; and from day camps, as well as from public and private schools. Most visitors are relatively uninformed about the natural and cultural history of the unit, although a sizable percentage are biologists, geologists, or other knowledgeable students of natural history.

Visitors' principal needs and expectations are for a readily accessible, affordable, clean, safe, and scenic spot in which to pursue their chosen forms of recreation and relaxation. A prime visitor need is for a clear orientation to what is available to see and do, including when and where special activities are being conducted. Although not a strong expectation of the average visitor, interpretation can enhance the public's enjoyment and appreciation of the parklands, as well as promoting safety. From the department's perspective, interpretation is an excellent management tool for presenting resource and visitor protection information, as it explains the reasons behind rules, and thus encourages compliance.

It seems relatively uncommon for visitors to take full advantage of all the different kinds of recreational and educational resources offered by Morro Bay State Park. Visitors come to golf, to camp, to bird-watch, or to see the museum, among other activities; rarely do their activities overlap. An important challenge will be to create an integrated interpretive program which can serve to encourage full use of the entire park's resources.

Interpretation can play a much larger role in serving physically disabled visitors who are unable to actively engage in many forms of recreation. The special needs of disabled individuals and groups must be considered in planning interpretive programs and facilities for Morro Bay State Park.

Interpretive Period

The department will interpret a flow of history at Morro Bay State Park, from geologic times to the present.

Interpretive Themes

Interpretive themes for Morro Bay State Park separate into three loosely connected groups: resources, recreation, and management and safety (specific themes may fit more than one of these categories). Although the scope of
interpretive development will not be extensive in many parts of this unit, a range of appropriate interpretive themes has been presented in this section to provide flexibility for future interpretation, using a variety of media.

**Resources**

There is a wealth of resource-related themes to interpret at Morro Bay State Park. Natural history themes can be interpreted in two ways: through ecological associations, and also through singular outstanding elements. These approaches address both the interrelatedness of associated elements and the uniqueness of some of those same elements. In some instances, the themes covering resource-oriented topics have ramifications that aid in management of the unit and protection of the resources.

**Primary Theme:** The Ever-Changing Coast

Interpretation will focus on the geologic and human changes which have occurred along the San Luis Obispo coast, and which continue to affect the character of the Morro Bay area. It will feature explanations of the geologic forces that have uplifted the marine terraces and formed the coastal bluffs, and the volcanic activity which caused the creation of Morro Rock and the other morros. It will also look at the more recent developments of the causeway and breakwaters, and their effect on the coast.

**Sub-Themes:**

Monuments to Nature: Volcanic Lessons in Stone. Morro Rock and the nearby morros can teach lessons on plate tectonics, subduction zones, and vulcanism. These concepts will be explained, with particular attention given to illustrating how the geologic forces created the park's impressive stone monuments.

Shifting Shores: The Constant Movement of Beaches. The motion of sand particles, their up and downcoast movement, and the seasonal transport of sand with its impact on coastal beaches will be a subject for interpretation.

The Fluctuating Face of Morro Bay. Morro Bay's features constantly change. Streams continually carry and deposit soil and other debris to build mudflats and marshes. Natural forces, including rainfall, flooding, tidal currents, winds, and waves, mold and transform the bay's features, alternately filling in and scouring the bay. Every season is different, every year there is change.

**Primary Theme:** The Dynamic World of the Morro Bay Estuary

Interpretation will look at the functioning of Morro Bay's estuarine ecosystem. The fragility and complex interactions and interdependency of the organisms which occur within Morro Bay, including humanity, will be represented and interpreted to visitors. An ecosystem is a dynamic, not a static, entity. Consequently, interpretation will also encompass current seasonal changes that occur in Morro Bay.
Sub-Themes:

The Underwater Community. This theme will present the rich and varied life found in the marine habitat of Morro Bay. It will also include the oyster beds, and the diving birds, such as pelicans and terns, which feed on the fish at low and high tides.

Life in Flux: Where Saltwater Meets Freshwater. Interpretation will look at the diversity of life which is represented in the littoral habitat of the Morro Bay estuary. The salt marsh environment is a rapidly diminishing resource in California, and is important to a host of specially adapted plants and animals. The effects of periodic submergence and exposure to high and low tides on the tidal mudflats and salt marsh will be examined, along with food chain relationships. Interpretation will seek to foster an aesthetic appreciation of the wetland landscape, and an understanding of the need to protect it.

Morro Bay: Haven for Rare, Endangered, or Declining Species. Attention will be focused on rare and endangered species which find refuge in the Morro Bay estuary. Among those that may be interpreted are the peregrine falcon, Morro Bay kangaroo rat, and the California least tern.

Man's Critical Link to the Estuary. Life in the estuary is interconnected. The urbanization of the Morro Bay area has changed and will continue to affect the estuarine environment. The effects of agriculture and urbanization, dredging, the oyster industry, commercial fishing, oil exploration with its accompanying development, and recreation will be examined for their impact on the estuary.

Primary Theme: Survival in the Coastal Scrub Communities

The plants and animals that live in the scrub on the hillsides of Morro Bay State Park are adapted to lack of water, heat, sudden strong rainfall, and periodic desiccating winds. Only species that can adapt to these arduous conditions have survived and live in the area. To some visitors, the brushy hillsides adjoining the park's wetlands will seem devoid of life. Revelation of the many different life forms in these areas and the ways they have adapted to their harsh surroundings will be an important interpretive theme.

Sub-Themes:

The Riparian Community. During winter and spring, and sometimes the first part of summer, small creeks in Morro Bay State Park flow, and the plants along their banks flourish. When the water dries up, the plants die back, and the animals that have depended on this source to survive find water elsewhere. Although this cycle is brief, it is important to the ecology of the park as a whole, and its interpretation is part of understanding the adaptation for survival that is necessary in the natural world.

Eucalyptus Gone Wild. The dense forest of blue gums located in the park on the lower slopes of Black Hill are not native to California. Interpretation will explore the tree's history in the park, and its impact on the native vegetation.
Primary Theme: Special Species to Seek

Visitors will be directed toward unusual plant and animal species that may require some effort to find at Morro Bay State Park.

Sub-Themes:

A Bird for Each Habitat. Interpretation will examine the range of birds that make their home in the park, including least sandpipers, willets, great blue herons, sage sparrows, California quails, western meadowlarks, and Anna's and Allen's hummingbirds, to name a few.

Watching for Whales and Other Marine Mammals. Morro Bay State Park offers excellent views of the winter and spring migrations of the gray whale from the base of Morro Rock, as well as from Black Hill. Interpretation will encompass their size, habits, diet, navigation; when, where, and why they migrate; clues to their identification; courtship and rearing of the young; and a brief history of whaling, their threatened extinction, the need for protection, and the present status of the species. In addition, identifying information about other marine mammals commonly observed along this coastline, such as the sea otter, should be provided.

Tracking Down Mammals. Interpretation will help visitors recognize animal tracks and trails, holes and burrows, gnaw marks, droppings, and other clues in order to discover the presence of mammals in their different habitats.

Unusual Plants and Animals of Morro Bay. Those species that are uncommon in their appearance or habits, and are found nearby, will be highlighted. Interpretive approaches may include: "Remarkable Grunion" (the unusual spawning habits of the grunion), "Monarchs and Milkweed" (the long migration and clustering on "butterfly trees" and association with milkweed), the endangered Morro Bay kangaroo rat and the Morro blue butterfly, migratory waterfowl, and wildflowers in bloom, among other topics.

Primary Theme: The Changing Views of Morro Bay's Landscape

Interpretation will look at the lands around Morro Bay and how they have been used to serve a diversity of cultures and their needs, from subsistence to colonization and commerce to recreation, and how those cultures have affected the environment.

Sub-Themes:

The Chumash: Getting the Most Out of Their Natural World. A community of Native Americans called Chumash once depended on the resources found in Morro Bay State Park for survival. Their lives revolved around the seasonal changes in the environment, and the varying forms of resources available to them. Interpretation will provide visitors an understanding of these people and their long tradition of interaction with the environment.

The Spaniards Secure a Land for God and King. Early explorers, such as Juan Rodriguez Cabrillo and Sebastian Vizcaino, visited the Morro Bay area to help Spain gain knowledge of the territories it had claimed in California. More than a hundred years later, rumors of Russians in the northern Pacific
encouraged Spain's renewed interest in California. Franciscan padres, with
the support of the Spanish military, were sent into the region, to make
Christian converts, and to secure the land for the Spanish Empire.
Interpretation will examine how world events changed Spain's perspective of
California, and how this affected the Morro Bay area.

Morro Bay Ranchos: Coastal Enterprise on the Mexican Frontier. Property that
now comprises Morro Bay State Park was once part of several Mexican ranchos.
Interpretation will examine how Mexican citizens, granted property on
California's Mexican frontier, demonstrated both self-sufficiency and
commercial enterprise.

The Creation of a Recreational Area for All the People. In the late
nineteenth and early twentieth centuries, the Morro Bay area was "discovered"
as a vacation spot by Los Angeles and San Joaquin Valley residents.
Recognizing its potential, investors and developers in the area of present-day
Morro Bay State Park began to create recreational facilities for vacationers
in the 1920s, including a golf course, a clubhouse, bridle paths, stables, and
cabins. The story of acquisition and development of this state park will be
interpreted, with special attention given to the Civilian Conservation Corps,
which was responsible for constructing the original campgrounds, restrooms,
water lines, drainage ditches, picnic facilities, etc.

Secondary Theme: The State Park System Story

The development of the State Park System will be interpreted. Interpretation
will treat the coast as a region, orienting visitors to the resources and
recreational values of the nearby state beaches and parks, as well as notable
local parks administered by other agencies.

Recreation

The diverse recreational opportunities available at Morro Bay State Park will
be interpreted, along with appropriate regulations and safety tips.

Primary Theme: Having Fun Offshore

Opportunities wind surfing, sailing, and canoeing should be interpreted for
visitors unfamiliar with those sports. Techniques, regulations, and points of
access should be covered, and a tide schedule should be kept posted.

Primary Theme: Fishing for Sport

Interpretation will highlight edible fish and clams commonly caught in the
surf and on the beach, possibly including barred perch, jacksmelt, kelp
greenling, silver perch, starry flounder, walleye surfperch, and Gaper clam.
It will also cover the best time of the year to catch them, as well as fishing
techniques and applicable regulations.

Primary Theme: Dive into the Underwater World

Interpretation will illustrate appropriate skin and scuba diving equipment,
techniques, regulations, safety, and favorable water conditions.
Primary Theme: **Courtesy and Common Sense**

Morro Bay offers a wide range of recreational opportunities, including hiking, jogging, bicycling, bird-watching, golfing, camping, boating, etc. No one recreational activity "owns" the park, and many must share roads, trails, and facilities. Interpretation will remind visitors that safe, courteous use of the park is everyone’s responsibility, and will make their experience that much more enjoyable.

**Management and Safety**

Interpretation will inform visitors how to use the parklands safely, as well as indicating ways to preserve the environment. It should support the unit staff involved with enforcing regulations, providing visitors the justification for regulations.

Primary Theme: **Be Safe at the Beach**

Interpretation will aid visitors by explaining the formation and hazards of rip currents, sleeper waves, and backwash. It should also warn visitors about other dangers, such as stinging jellyfish, stingrays, sunburn, and buried glass.

Primary Theme: **Protecting the Park is Your Responsibility**

The future environmental quality of the state park lies with each visitor. Interpretation will stress how erosion can be minimized and plants and animals preserved for generations, if visitors are mindful of the "rules" that protect the park. By staying on marked trails, visitors will also avoid hazards, such as unpleasant encounters with poison oak and ticks.

Secondary Theme: **Rebuilding the Natural Garden**

The constant use of the natural environment by visitors for recreation and the introduction of non-native plants can change the character of the park. From time to time, steps will be taken to replant or replace vegetation. Foot traffic may also be restricted to specific areas. These measures, with public cooperation, should soon restore the environment to its natural beauty.

Secondary Theme: **Management by Fire**

Periodically, the Department of Parks and Recreation uses prescribed fire as a tool to manage native plant communities. Once a naturally occurring event, fire is now used in the parklands in confined areas to restore and maintain native vegetation. Interpretation will explain the reasons for prescribed burns, and the benefits that are derived from them.

**Proposed Interpretation**

Facilities and Media

Orientation is probably one of the most important interpretive services that can be offered. This is true from the visitor's perspective, as well as from a resource and visitor protection point of view. Unit signing should be
improved at the principal entrances to Morro Bay State Park. Orientation/interpretive panels should be installed at the entrance to the campground, and at the Morro Bay Museum of Natural History.

The largest existing interpretive facility in the park is the Morro Bay Museum of Natural History, which opened in October 1962. It is sited on a volcanic outcropping overlooking Morro Rock, the sand spit of Montana de Oro State Park, and the harbor of Morro Bay. In 1986, it served more than 78,800 paid visitors.

The museum is important to the park, and for that matter, to the region. The museum gives park visitors a focus for their experiences, and allows them to relate directly with the resources. It helps people appreciate more of what they see at nearby parks, and explains concepts they may not readily understand. The museum makes them feel welcome, and offers opportunities to acquire additional interpretive material.

The museum, although well cared for, has a dated appearance that takes a phylogenetic or taxonomic approach to interpretation. There is no overall interpretive concept or theme that unifies the museum's exhibits, other than that they nearly all highlight some aspect of the natural history of the area. It should be noted that important stories have been overlooked in the exhibitory, such as the value and vulnerability of the Morro Bay estuary. In addition, several exhibit concepts deserve more prominent attention, while others deserve less. Some exhibit texts are excessively wordy. These are all criticisms that have been leveled at the museum by a museum assessment study conducted in 1986 through the American Association of Museums.

The museum houses other interpretive facilities. A Discovery Center displays regularly changing "hands-on" objects that take a fresh look at the world of Morro Bay. They also feature braille labels for visually impaired visitor. On the main exhibit floor is the museum's auditorium. Although well used, its small size limits attending audiences and its adaptability for a variety of uses. Adjacent to the exhibits, a gallery wall creates opportunities in the museum to display a changing array of art work inspired by the nearby parks. In the basement, an intimate classroom space, with tiered seating, was recently developed, along with a library. Called the Eileen Bowen Learning Center, it has been designed to provide greater flexibility in the museum's educational programs for school groups, docents, and others.

The Natural History Association of San Luis Obispo Coast, Inc., with its large docent and volunteer organization, is involved in nearly every aspect of the museum's operation. Almost all of the recent changes to the museum have been as a result of the concerted efforts of that organization. They provide a tremendous amount of support, doing construction and repair work on the museum and its exhibits, raising funds for museum programs, and providing volunteer staff to operate the museum and care for the collections, as well as giving time to many other interpretive services.

A priority for the museum should be development of a new interpretive plan that directs redevelopment of the exhibit area to a more stimulating, informative, and attractive interpretive environment. It is particularly important that exhibit improvements be thematic, reinforcing major concepts
for visitors. Disabled visitors should be considered in any future exhibit development. The interpretive plan should also evaluate the deficiencies of the museum in other areas, presenting recommendations for improvements.

Morro Bay State Park has a campfire center located to the east of the campgrounds, nearby park residences, and a maintenance yard. The campfire center should be relocated to a more inviting locale, between the campgrounds and the museum. This would not only encourage its use by campers, but docents as well, who may begin to view the facility as a natural extension of the museum, providing programs here in daylight hours, as well as during the evening. In addition, the relocated campfire center would create an alternative meeting space for groups too large to use the museum's auditorium.

The Morro Bay estuary is a very special environment. It offers visitors the opportunity to enjoy a vanishing landscape in California. Unfortunately, the nature of the estuary makes it very difficult for most visitors to get close enough to appreciate it. A boardwalk that takes visitors into the wetlands is proposed to bring people in closer contact with that environment. The boardwalk could originate near the campgrounds and extend into the wetland. It should be made accessible for disabled visitors, with interpretive signs kept at a low level. These signs should be as vandal-proof and as impervious to weather as possible. An exhibit shelter for interpretive panels should be placed at the walk's entrance, highlighting seasonal changes in the estuary (i.e., migrating birds, etc.).

Another special place in the park is the Heron Rookery Natural Preserve. Although the nests are only occupied for a few months of the year, during that period, they generate tremendous interest among the visiting public. The viewing area is rather informal, located next to a wire fence, and the dirt pathway, leading from an informal parking lot nearby, creates some impediments for disabled visitors. A paved path is proposed leading to a viewing deck. This would formalize the space, controlling visitation in the area a little better. It would also give visitors a sense that they are getting closer to the rookery. The viewing deck would be accessible to disabled visitors, and interpretive panels, located on the platform, would interpret the rookery.

Outdoor exhibits are useful interpretive tools for the park, if used appropriately and in moderation. They have the advantage of always being available, and requiring little or no staffing. Naturalists, docents, and exhibits cannot always available to perform interpretive services, nor should they be. Interpretation is meant to facilitate the formation of a personal relationship with natural and recreational resources. Letting the scenery speak for itself is an important part of this.

Exhibit shelters are proposed for several locations in the park. These include: the entrance to the wetland boardwalk, the relocated campfire center, the campground entrance, the new marina day use area, along the marina trail, outside the Morro Bay Museum of Natural History, the heron rookery overlook, the Chorro Willows parking area, the South Bay Boulevard parking area, the Cerro Cabrillo day-use area, and the Morro Rock parking area.

Most panels should be placed in exhibit cases that are impervious to the elements, not only to protect them from corrosion and vandalism, but also to make them appear attractive and substantial. Whether free-standing or attached

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to permanent structures, such as restrooms, the cases should be installed in well-lit, heavily used areas, where they will be seen often and better protected from vandalism.

The size of the panels and cases should be standardized, so seasonal exhibits or those that are worn out can be easily replaced. Modular cases and panels should be used throughout the San Luis Obispo Coast District, enabling the rotation of panels from unit to unit, especially panels with themes that have coast-wide value. A formally developed program of seasonally rotated panels is strongly suggested.

In addition to the standard-sized interpretive panels in the park, low level panoramic view/orientation panels are proposed for overlooks on Black Hill and the Cerro Cabrillo property. These panels should be substantial, and as vandal-proof as possible.

Publications, such as trail guides, monthly or seasonal visitor activity guides, bird and plant lists, orientation brochures, and books, are highly valuable interpretive media, and their development should be encouraged for the park. Publications have souvenir value, and they allow visitors, by way of text and bibliographies, to learn more about the park after they leave, or to prepare themselves for a return visit.

Visitor Activities

A walk led by a knowledgeable and inspiring guide can provide the most valuable interpretive experience for visitors. Talks, guided walks, campfire programs, and orientation services presented by park personnel, docents, and others are effective because they allow interactive communication, and are responsive to the immediate needs of visitors. Presentations outdoors also have the advantage of the resources immediately at hand to interpret in their full environmental context.

Variety in interpretive themes, approaches, and the trails used is important to keep this an engaging activity for repeat visitors, as well as docents and staff alike. Walks and talks can be given in the wetlands, along the beach, at Morro Rock, at the heron rookery, and along hillside trails and mountain overlooks. They can encompass a range of interesting and pertinent topics, including geology, a first-hand look at Morro Bay's estuarine ecosystem, chaparral and coastal scrub communities, gray whale watching, wildflowers, birds, Native American plant uses, etc.

Appropriate visitor activities for Morro Bay State Park should include formal and informal talks (on the unit's natural and historic resources and the State Park System); guided or self-guided walks; environmental education programs; bird watching; plant and animal study walks; camera walks; puppet shows; demonstrations (lifeguard rescue, aquatic safety, surf fishing, etc.); and Junior Ranger Programs. Trained and certified docents should be encouraged to aid the unit staff, augmenting the number and variety of interpretive programs offered to visitors on and off site.

It is highly desirable to extend interpretive efforts beyond the confines of the state park and into the local community. Outreach programs can serve people who cannot physically come to the unit, such as residents of
convalescent homes. Schools and community-oriented clubs and organizations are excellent audiences for interpretive talks. Time should be allocated for promoting and presenting off-site talks.

Interpretive Associations

The Natural History Association of San Luis Obispo Coast, Inc., is the department's official cooperating association for California state parks along the San Luis Obispo Coast. Since its founding in 1977, the Natural History Association, with its eight hundred members, has demonstrated tremendous initiative, and a willingness to support a diversity of programs in the park. Headquartered at the Morro Bay Museum of Natural History, the association provides most of the interpretive programs for Morro Bay State Park, including off-site programs in schools. It conducts the training of new docents; produces interpretive brochures and monthly newsletters; staffs the museum's information counter and gift shop; gives nature walks and interpretive talks; sponsors special events; raises funds for planned development, programs, and maintenance of the park and its facilities; prepares exhibits; maintains collections; and picks up litter in the park, to name a few activities. More than one hundred fifty members are active docents who have a sincere commitment to the park.

Morro Bay State Park also has other community support from organizations who occasionally present interpretive programs. Among others, they include the Morro Coast Audubon Society, Inc. and the Sierra Club.

Interpretive Concessions

A general statement of concession policy, adopted by the California State Park and Recreation Commission, reads as follows:

Recognizing the diverse missions of the Department of Parks and Recreation relative to providing recreation opportunities and preserving and interpreting natural and historic resources, it shall be the department's policy to enter into concession contracts for the provision of products, facilities, programs, and management and visitor services which will provide for the enhancement of visitor use and enjoyment, as well as visitor safety and convenience.

Such concessions should not create added financial burden on the state and, wherever possible, shall either reduce costs or generate revenues that aid in maintaining and expanding the State Park System. In carrying out this policy, the department shall observe and adhere to the provisions of the Public Resources Code that forbid commercial exploitation of resources in units of the State Park System, and that limit the kinds of improvements and activities that are allowed in certain types of units.

Appropriate concession activities for Morro Bay State Park include the existing sales counter in the Morro Bay Museum of Natural History, as well as other concession activities that are interpretive in character.
Interpretive Collections

Morro Bay State Park's interpretive collections represent the principal focus of the museum, natural history, although there are a considerable number of Native American artifacts in the collections. Through the recent efforts of the Natural History Association, a new storage facility has been developed in the basement of the museum, with working space for cleaning, repairing, and preserving the collections. With the exception of a moisture problem that needs to be dealt with immediately, the facility should provide adequate storage and work space for years to come.

The shortage of paid staff often thrusts the tasks of maintenance and documentation of the collections onto volunteers. While volunteers can be enthusiastic, they may not necessarily have the training or expertise required for proper collections management. A regularly offered comprehensive training program for staff and volunteers is proposed to improve the level of collections management in the unit. This program should include development of a guide for collections management to help the museum maintain a consistently high level of collections care from year to year. It should also include a risk management plan which will enable the unit to identify and correct potential areas of risk for the collections, and provide sound direction in case of theft, fire, flood, earthquake, or problems with toxic chemicals.

Photographic collections can be one of the most useful tools for park interpreters. A thorough photographic survey of the natural and cultural resources of Morro Bay State Park should be an ongoing interpretive project. Early photographs of the historic and natural resources of the unit should be gathered, organized, documented, and preserved. Good, protective, and easily retrievable slide and print storage systems should be provided for the originals.

Recommendations

The following ongoing interpretive activities will continue to be encouraged:

- Guided walks, demonstrations, interpretive presentations, campfire programs, and Junior Ranger programs, when projected visitor participation warrant these efforts.

- Development and updating of monthly or seasonal visitor activity guides; bird, animal, and plant lists; orientation brochures, books, and bibliographies highlighting the state park's resources.

- Continued development and improvement of the Eileen Bowen Learning Center library.

- Maintenance of active outreach programs.

- Revision and improvement of the teacher's guide for Morro Bay State Park, to facilitate visitation by school groups.

- Continually improving a comprehensive training program for staff and docents.
Development priority will be given to the interpretive activities listed below. Implementation will occur by area, along with other facility improvements recommended in the Land Use and Facilities Element.

-- Fabricate and install new orientation/interpretive shelters at the campground entrance, the new marina day use area, along the marina trail, outside the Morro Bay Museum of Natural History, the Chorro Willows parking area, the South Bay Boulevard parking area, the Cerro Cabrillo day use area, and the Morro Rock parking area.

-- Develop a series of standard-size interpretive panels based on the themes described, and plan a seasonal rotation program for them.

-- Relocate the campfire center, and install new interpretive exhibit shelters here.

-- Develop a wetland boardwalk with low sight-level interpretive exhibits.

-- Develop a new interpretive plan for the Morro Bay Museum of Natural History, with specific recommendations for the exhibits, and, in consultation with an architect, recommendations for other improvements in the facility.

-- Fund and construct new interpretive exhibits at the Morro Bay Museum of Natural History, along with improvements to the facility, as recommended in the interpretive plan.

-- Establish new self-guiding trails with accompanying brochures focusing on the previously described interpretive themes.

-- Develop panoramic view/orientation panels for overlooks on the Cerro Cabrillo day-use area and Black Hill.

-- Pave the path to the heron rookery from the nearby parking area, and install an observation deck with an interpretive exhibit shelter and panels.

-- Create audio-visual programs based on the previously described interpretive themes for use in and outside the park.
OPERATIONS ELEMENT

This element defines how the operations staff will carry out its responsibilities to operate and care for the park, protect the resources, serve park visitors, provide interpretive opportunity, enforce the law, ensure proper park use, and maintain facilities within statewide standards for maintenance.

The Operations Element outlines broad operational goals for the unit, within the objectives for implementing the General Plan. This element assesses the impact of the General Plan's resource management policies and land use/facilities proposals on the unit's existing operations. It identifies existing and potential operations problems, and strategies for solution.

The operational responsibilities are carried out by personnel at the unit, who are organized in the North Sector of the San Luis Obispo Coast District. The district superintendent provides supervision for three sectors; the district superintendent reports to the regional director of the Central Coast Region in Monterey. At the unit level, operating functions are divided into visitor services and maintenance; administrative services are provided at the district level.

Figure 4

PARK OPERATIONS ORGANIZATIONAL STRUCTURE

Chief Deputy Director - Operations

Regional Director

Central Coast Region

District Superintendent

San Luis Obispo Coast District

North Sector

Morro Bay State Park

Visitor Services

Maintenance Services

Existing Operation

Operations Summary

Morro Bay State Park receives an annual visitation of almost 1.4 million people. The park is open to the public every day. Year-round permanent and seasonal staffing provides for routine visitor services and maintenance functions. The busy season includes mid-spring through mid-fall, and holidays. These periods require additional daily services provided by seasonal staffing; entrance station operations and housekeeping are operated by seasonal employees. Museum docents provide staffing at the entrance to the museum.
Special Considerations

1. Public Protection

Law enforcement in the park requires a highly visible presence. The close proximity of the campground to a residential area and a major highway have led to a pattern of numerous minor crimes committed in the park. Local law enforcement's interpretation of concurrent jurisdiction requires that state park personnel respond to all crimes within park boundaries.

2. Maintenance and Housekeeping

With the current facilities and the already increasing use of the unit, greater emphasis is having to be placed on the additional demands associated with this increased use. More refuse, litter, and maintenance adds to the workload, and the staff will have to develop ways to best deal with this increase, and still maintain other areas of responsibility at the present high level. Exposure to the marine environment erodes equipment and hardware at a much faster rate than that which occurs elsewhere. Special care is required to retard the corrosion.

3. Community Interest

This unit is heavily used due to its scenic values, unique natural resources, recreational opportunities, and ease of availability. The opportunity to camp so close to the bay, to golf in a scenic location, to observe natural history phenomena, to use museum resources, and to use marina facilities make it a favorite of many people. Development of more usable facilities, while pleasing visitors, will also concern residents in the area by increasing visitation, and the problems associated with that increase.

4. Public Safety

The safety of visitors at Morro Bay State Park is a prime concern. Cliff rescues at Morro Rock, water rescues in the ocean or bay, and medical emergencies on and off-road in the park require well-trained personnel, four-wheel-drive capability, emergency and first-aid equipment, and radio communications for quick and appropriate response. Radio communication between responding agencies will be a problem that will have to be addressed in an accident handling plan.

5. Utility Emergencies

There is an ever-present danger of a radiological release from the Diablo Canyon Nuclear Power Plant. The park staff would have to implement emergency procedures which will be identified in a comprehensive evacuation plan. The plan will also require coordination of park efforts with the California Highway Patrol and Caltrans. This coordination of efforts will require a park representative to be at the county Office of Emergency Services building.
6. Off-Highway Vehicles

Off-highway vehicle activity will continue to be a problem for the park. There is access to the area from virtually all trail heads, and by smaller off-highway vehicle users that elect to drive instead of walk. It is recommended that access routes be blocked, that signs be posted at all entrance locations, and that enforcement staff take strict enforcement action.

7. Easements and Rights-Of-Way

Morro Bay is, in part, bordered by private properties, and will have to be monitored to avoid and control encroachments. City and county roads run through or beside a good portion of the park.

Other easements for utilities will also have to be monitored to ensure public access and safety. A gas line right-of-way is in the vicinity of the proposed camping area on the Cerro Cabrillo property.

8. Jurisdictions

Operations depend on maintenance of close working relationships among the state park and all of the agencies we deal with locally. The district superintendent carefully coordinates with federal, state, county, and city governments, and provides for liaison with elected officials to ensure that with good communications, problems and conflicts can be anticipated and avoided.

9. Resource Protection

Natural, historical, and cultural resources management is an important function of the staff at Morro Bay State Park. The rapidly increasing use of the unit, together with growth in the population of the county, have combined to place pressure on Morro Bay State Park resources. Problems in control of feral animals, loose dogs, oil spills, exotic plants, and private property encroachment are on the upswing. Water quality and siltation problems along the creeks and in the estuary and bay are requiring careful study and management. Museum and satellite unit collections continue to grow and to be used, requiring increased care. Cultural sites exposed by the elements or close to trails need to be protected and monitored.

10. Morro Bay Museum of Natural History

Programs and exhibits at the museum currently serve more than 80,000 people per year. The group of volunteers involved in museum services and programs is up to 230, while the Natural History Association roster shows more than 800 members. Programs and needs continue to grow. Increasing sophistication is needed in volunteer management and training, collections management, exhibitry, program planning, and business administration. The paid state park staff size, considering the programs and services, is at a minimal level. More help in terms of additional staffing and support services will be needed to serve the increase in visitation.
11. Marina

While the Morro Bay State Park marina is operated by a concessionaire, it requires monitoring and management by district and sector personnel. Problems at the marina include illegal campers, theft, security of buildings and boats, enforcement of the Harbors and Navigation Code, handling of abandoned vehicles, and maintenance of the bathroom and the parking area. Water quality in the vicinity of the marina is being degraded by the overflow of boat holding tanks. This requires constant monitoring. Proper management response will involve increased enforcement and additional expenditure of funds for a marine sanitary disposal station, and an additional restroom with shower facilities.

12. Golf Course

The County of San Luis Obispo has an agreement with state parks to manage the golf course operations. The pro shop is handled by a concessionaire through the county, while the grounds are maintained by county personnel. The operation requires monitoring and patrol by district and sector personnel for such problems as encroachments from private property along the golf course perimeter, traffic-related and vandalism damage to golf course and private property, security alarm response by state park personnel, damages caused by stray golf balls, and damage to trees which are roosting sites for the monarch butterfly.

The current operating agreement with the county for operation of the Morro Bay golf course will end in the year 2000. Operational considerations will be a major factor in the evaluation of future management alternatives for the course (see Concessions Element).

General Plan Implementation

Goals and Objectives

Morro Bay State Park was established to preserve for the people of California its natural, esthetic, recreational, and cultural values. The Department of Parks and Recreation's primary objective is to provide for its protection and preservation, and to provide for public use, enjoyment, and understanding of the park, consistent with its classification.

Operational Problems and Solutions

The preceding list of special considerations includes existing problems undergoing resolution. As development and facilities increase, public visitation will also increase. Each of the following factors will create important new impacts on operations.

1. Development of the Cerro Cabrillo Property

Development of this property creates a new focus for public use. The campground, day use, hiking trails, and other facilities will be designed for minimum maintenance requirements, but high-impact camping and day use workloads cannot be absorbed by existing operational resources; additional personnel, equipment, and operating expenses will be required to provide new public services.

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2. Development and Expansion — Marina

The increase in slip spaces, an increase in parking lot capacity, and development of a new picnic area will create more workload for personnel. Facilities will be designed for minimum maintenance requirements, but the additional workload cannot be absorbed; additional operations resources are necessary.

3. Resource Management

The Resource Element for Morro Bay State Park identifies several major resource management programs which will increase operations responsibility. Protection of native flora and fauna, control of exotic species and feral animals, active management of fragile wetlands and other ecosystems, water quality, wildlife habitat, and care of cultural, esthetic, and historical resources are critical programs. Protecting and actively managing these resources and educating the visiting public and staff will create more demands on operations and administrative staff.

Operational Impacts

New day use and campground facility development is proposed for the park. New resource management programs and professional curatorial services are proposed. The new facilities, services, and programs will constitute major park maintenance, visitor services, and administrative items.

State Park Volunteers

1. Camp Host Program

The camp host program will be used to allow both maintenance and ranger personnel the time for more critical park problems.

2. Docent Program

A docent organization has been formed in the district, and it is very active at Morro Bay State Park. With the additional day use, trails, camping, and resource management efforts, the docent program will be enhanced to increase the interpretive activities in these areas.
CONCESSIONS ELEMENT

The Concessions Element of the General Plan consists of an evaluation of existing and potential concession activities, an inventory of additional visitor services, and a statement of appropriate concession policies and guidelines consistent with the unit's classification.

A Concessions Element is a required aspect of general planning for all park units. The Public Resources Code, Section 5080.02 et seq., describes the manner in which concessions can be operated in the State Park System.

Definition

A concession is defined as authority to permit uses of state park lands and/or facilities for a specified period of time. The intent is to provide the public with goods, services, or facilities which the department cannot provide as conveniently or efficiently, or to permit limited uses of state park lands for other purposes compatible with the public interest and consistent with the Public Resources Code.

Purpose

It is the department's policy to enter into concession contracts for provision of services, products, facilities, programs, and management and/or visitor services which will provide for enhancement of recreational and educational experiences in concert with visitor safety and convenience. Such concessions should not create additional financial burden on the state, and, wherever possible, shall reduce costs and/or generate revenues to aid in maintaining and expanding the State Park System.

Compatibility

Concession developments, programs, or services must be compatible with a unit's classification, and in accordance with the Public Resources Code.

General Concession Policies

1. The economic feasibility of proposed concessions shall be analyzed by the Office of Economic and Fiscal Affairs, with participation and review by the Resource Protection Division, the Office of Interpretive Services, the Development Division, the Operations Division, the Acquisition Division, and the Statewide Planning Section. Final approval for development and operation of a proposed concession will be made by the director of the Department of Parks and Recreation.

2. It is the policy of the department to cultivate and encourage small business and ethnic and racial minority-owned/operated businesses as concessionaires in the State Park System.

3. Specific concession proposal shall be analyzed on a case-by-case basis, as submitted to the department.
4. It is the department's policy to generally avoid entering into convenience-type concession agreements for facilities, products, or programs that are adequately provided for a short distance outside state park unit boundaries, when such travel will not unduly endanger or inconvenience visitors, or lead to an unreasonable consumption of transportation fuels.

5. It is the policy of the department that concessions shall provide facilities, products, programs, or services at prices competitive with similar businesses outside State Park System units.

**Current and Recommended Concessions**

There are two concession-operated facilities in Morro Bay State Park, the state park marina and the state park golf course. Specific facility recommendations for these areas are discussed in the Land Use and Facilities Element of this plan.

**Marina**

The state park marina is operated by a private concessionaire under an agreement directly with the Department of Parks and Recreation. This agreement is for a term of five years, ending September 1, 1990, and includes, among other things, the rental of boat slips, providing food service, and the sale of bait and fishing tackle.

It is the determination of this plan that the services provided under this concession agreement do enhance the public recreational experience at Morro Bay State Park, as long as the quality of maintenance and services is kept at a high level.

**Recommendations:**

-- Subject to the findings in this plan and in accordance with the classification of the unit, continue the provision of these services under a concession agreement.

-- The next concession contract entered into should include as many facility improvements as practical (see Land Use and Facilities Element).

**Golf Course**

The Department of Parks and Recreation has entered into an operating agreement with the County of San Luis Obispo for the care, maintenance, development, operation, and control of the Morro Bay State Park golf course. This agreement is for a term of 30 years, ending August 6, 2000. The County of San Luis Obispo has, in turn, entered into an agreement with a private concessionaire for operation of the course and clubhouse. Maintenance of the course is accomplished by county staff.

The course has been well maintained, and is currently operating at near capacity. It has been very clearly shown throughout the development of this plan that the golf course serves a very popular need, and enhances the public recreational experience of Morro Bay State Park.
Recommendations:

-- Continue the existing operating agreement with San Luis Obispo County for the duration of its term.

-- Prepare a concessions feasibility report by no later than two years before the end of the term of the existing operating agreement with the county. This report shall be submitted to the director for his or her consideration in determining how the golf course should be administered after the year 2000.

-- Any recommended facility improvements not implemented by the time the current contract expires shall be included as items of consideration in the new contract.
ENVIRONMENTAL IMPACT ELEMENT
ENVIRONMENTAL IMPACT ELEMENT

The Environmental Impact Element serves as the environmental impact report required by the California Environmental Quality Act (CEQA) and the state EIR Guidelines.

The Environmental Impact Element incorporates by reference the other elements of the General Plan (the Project Description and the Description of the Existing Environment). It should be recognized that the level of detail of the Environmental Impact Element is commensurate with that of the General Plan. As site-specific development and resource management plans are proposed, they will be subjected to further environmental review, and the appropriate environmental documents will be prepared, if necessary.

This Environmental Impact Element covers the proposals for resource management and protection, land use, and facility development.

Project Description

See the Resource, Land Use and Facilities, and Interpretive Elements.

Description of the Existing Environment

See the Resource and Land Use and Facilities Elements.

Significant Environmental Effects

1. Expansion of trails at Morro Bay State Park could accelerate soil erosion and result in vegetation loss through removal of soil in construction and incidental destruction by the public.

2. Fire suppression activities could adversely affect vegetation and soil stability at Morro Bay State Park.

3. Trail construction could affect archeological resources.

4. Two rare species of manzanita occur in the unit; trail construction and incidental destruction by the public could reduce the number of individual plants.

5. Morro Bay State Park is in the historical range of the state and federally listed endangered Morro Bay kangaroo rat. Potential habitat for the state and federally listed endangered salt marsh bird's beak may occur in the unit wetlands. Increased human activity may disturb habitat and, thereby, reduce the range of this species.

6. Assuming the maximum development proposed in the Land Use Element (100 campsites at the Cerro Cabrillo property, 25 picnic sites at the marina, and 50 boat slips at the marina), full occupation, and a peak flow multiplier factor of two, the sewage flow increase would be approximately 16,000 gallons per day, representing about 0.8% of the current sewer treatment plant capacity. The water consumption increase would be the same without the peak flow multiplier factor. The City of Morro Bay has imposed development constraints to limit the rate of new water requirements.
Unavoidable Environmental Effects

1. Removal of vegetation, construction and maintenance of roads and trails, and creation of impervious surface areas will accelerate soil erosion in disturbed areas.

2. Water and sewage requirements would increase with development of user facilities. Development of these facilities would be dependent on the availability of supply or capacity.

Mitigation Measures

1. All excavation proposals will be reviewed by department historians and/or archeologists. Excavations or ground disturbances in known culturally sensitive areas will be monitored. If any cultural resources are accidentally uncovered during development, all work will cease until the site has been checked by an archeologist or historian, and appropriate mitigation is developed.

2. New utility lines, where they could be visual intrusions or hazards to foraging peregrine falcons, will be installed underground next to roads, where possible.

3. Facilities will be sited to reduce vegetation loss.

4. The department will maintain a prescribed burn program to reduce excessive fuel accumulations, and to restore fire to its natural role in the ecosystem at Morro Bay State Park. During periods of extreme fire hazard, certain uses or activities, such as campfires, may be curtailed or restricted in the unit.

5. Trail alignments will be selected and developed with the cooperation of resource specialists, unit staff, and user groups to reduce soil erosion, vegetation loss, and degradation of cultural values.

6. A wildfire management plan will be developed for Morro Bay State Park to reduce resource impacts from fire suppression activities, such as grading to create firebreaks or emergency access for fire-fighting vehicles.

7. Low flow water heads, toilets, etc. will be used to reduce water requirements.

Alternatives

Several alternative facility development configurations and levels of development were considered and presented to the public during the evolution of the proposed plan. The alternatives considered, but not selected as the proposed plan, are discussed here, along with the no project alternative. The alternatives of less or more intensive development are not ruled out with adoption of the General Plan. The General Plan is only a guideline for development. Additional or more intensive development may be possible to a minor degree, within the environmental constraints and General Plan guidelines, to meet increased or changing recreational demands. Conversely, in preparation
of site development plans, previously unknown environmental constraints may require less intensive development. The facility development proposals indicate what is estimated to be an acceptable range.

Alternative 1

Alternative 1 would enlarge the existing campground, relocate holes 14 and 15 of the golf course, widen the golf course road for through traffic, and remove the heron rookery parking. This would consolidate the camping in one area, requiring only one contact station. The existing park road along the bay and wetland could be removed, providing safe and direct access to the shoreline.

Alternative 2

Alternative 2 would provide for construction of a day use parking area and restrooms, a mountain bike loop, and a hang gliding area at the Cerro Cabrillo property. There is some controversy regarding the environmental impacts of mountain bikes and their compatibility with other users.

Alternative 3

Alternative 3 would relocate the back nine holes to the north side of Black Hill, construct a new clubhouse and parking area, and remove the Black Hill parking area. This would allow expansion of the campground into the area vacated by the golf course. The previously undeveloped area on the north side of Black Hill would be altered to a landscaped golf course.

Alternative 4

The wetland parking area located at the east end of the marina and the facilities at Chorro Willows could be removed, and these areas returned to a natural condition. Recreational use at the wetland parking areas would be curtailed by the lack of facilities. The Chorro Willows group camp has been closed due to flooding for several years.

Alternative 5

Alternative 5 is the no project alternative. Development and resource management would remain unchanged. The increased demand for camping and day use facilities would still be unsatisfied. Access to the shoreline from the campground would be hampered by the existing park road. Public access to areas of the unit would be curtailed by the lack of parking and trails.

Relationship Between Short-Term Uses and Maintenance or Enhancement of Long-Term Productivity

The proposed long-term and short-term use is preservation and recreation. The resources will be protected, and should another use prove more beneficial to the public than preservation, the resources will be available. There is no intent to enhance potential productivity; the natural resource value may be improved through resource management programs such as native plant revegetation, wetland restoration, or prescribed wildfire management.
Irreversible Environmental Changes

No new land areas or natural resources will be irreversibly committed with implementation of the plan. Development proposals generally involve areas of previous impact or suitability for development, and the nature of the development is such that it could be removed, and the sites returned to a near pre-development condition. Only the building materials and the energy consumed in construction, operation, and maintenance may be considered an irreversible commitment of resources.

Growth-Inducing Impacts

There will be a minor growth-inducing impact due to increased recreational capacity and staffing. Increased recreational capacity may influence demand for support facilities such as service stations, grocery stores, restaurants, and sports equipment outlets. However, the impact is not expected to be significant, given the level of the proposed facility development; most of the facility development is proposed to enhance or better accommodate existing use. The potential increased use relative to the existing regional supply of visitor support facilities is relatively small. The demands created by staff increases would be typical of residential needs (schools, hospitals, etc.), and would be minor.

Effects Found Not Significant

1. Traffic volumes should not significantly increase. The proposed facilities would not substantially increase visitor capacity. Generally, they accommodate or enhance the existing use. Population growth and changing recreational use patterns will have greater impact on the level of recreational use.

2. The proposed development will create new impervious surface areas which will alter the rate and timing of runoff. However, in comparison to the total watershed area, the increase will not be significant.

3. Air quality and noise impacts were not considered significant.

4. Waste production and fuel consumption will rise proportionally with public use.
SELECTED REFERENCES

MORRO BAY STATE PARK
SELECTED REFERENCES

Sources

California Department of Parks and Recreation
Sept.  "Resource Inventory, Morro Bay State Park." Sacramento: Department of Parks and Recreation, Natural Heritage and Cultural Heritage Sections, Resources Protection Division.

California Polytechnic State University
Dec.  "Resource Inventory, Marine Life: Cayucos State Beach, Morro Strand State Beach, Atascadero State Beach, Morro Bay State Park, Montana de Oro State Park." San Luis Obispo: California Polytechnic State University, Biological Sciences Department.

Davis, Dan

Gates, Dorothy L. and Jane H. Bailey

Gerdes, Gene L., Edward R. J. Primbs, and Bruce M. Browning

Grant, Cambell

Greenwood, Roberta S.

Kroeber, A. L.

Morro Coast Audubon Society, Inc.
1985  The Birds of San Luis Obispo County, California.

Robinson, W. W.
1957  The Story of San Luis Obispo County. San Luis Obispo: Insurance and Trust Co.

Santa Barbara Museum of Natural History Education Center
1986  California's Chumash Indians. Santa Barbara: John Dan tel, publisher.
Swanson, Richard L.

Tays, George

Wieman, Harold

D-3343L/3346L

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ABOUT YOU AND YOUR TRAVEL?

1. Which park unit are you visiting today? (If you are visiting more than one park, please use additional questionnaires. Please use only one questionnaire per park unit).
   - □ Montana de Oro State Park
   - □ Atascadero State Beach
   - □ Morro Bay State Park
   - □ Morro Strand State Beach
   - □ Los Osos Oaks State Reserve
   - □ Cayucos State Beach

2. How often do you visit this park?
   - □ This is first visit
   - □ 3-4 times a week or more
   - □ 1-3 times a week
   - □ 2-3 times a month
   - □ Once a month
   - □ 1-6 times a year

3. How long does your visit usually last?
   - □ Less than an hour
   - □ A few days
   - □ Less than a day
   - □ One week or more
   - □ Overnight

4. In what city and state do you live?
   - Los Angeles, CA

5. Your age: 48

6. What is your primary destination on this trip?
   - □ This area is it
   - □ San Simeon/Big Sur/ Monterey
   - □ Santa Cruz/San Francisco and further north
   - □ Central Valley and further east
   - □ Los Angeles and further south

7. Where did you stay overnight? How many nights?
   - □ Montana de Oro State Park
   - □ Morro Bay State Park
   - □ Atascadero State Beach
   - □ Town of Morro Bay
   - □ Los Osos/San Luis Obispo/Baywood Park
   - □ San Simeon/Cambria
   - □ Other

8. What type of accommodations did you use?
   - □ Motel
   - □ Tent
   - □ RV
   - □ Bed & Breakfast
   - □ Friend’s Home
   - □ Other

9. How many people are in your party? 3

10. How did you arrive at the park?
    - □ Car
    - □ Bike
    - □ On foot
    - □ Bus
    - □ RV

WHY DO YOU COME TO THIS PARK?

11. Indicate only those activities below that interest you and which you would want to have emphasized within the park (use a scale of 1 to 10, with 1 being the most interest to you).
    - 1. Walking
    - 2. Hiking
    - 3. Bicycling
    - 4. Jogging
    - 5. Horseback riding
    - 6. Mountain biking
    - 7. Picnicking
    - 8. Camping
    - 9. Photography
    - 10. Nature observation
    - 11. Birdwatching
    - 12. Others

12. What do you think is special about this park? (Use a scale of 1 to 10, with 1 being the best, etc.)
    - 1. Quiet
    - 2. Scenery
    - 3. Nature
    - 4. It's nearby
    - 5. Weather
    - 6. Ocean
    - 7. Recreational Opportunities

13. What unique or fragile resources known to you at this park require special care or protection?
    - BIRD SANCTUARY

VISITOR SERVICES & FACILITIES?

14. Do you think additional or increased visitor services/facilities are needed? □ YES □ NO
    If yes, rate the items below using a scale of 0 to 5 (0 being no increase/addition, 5 being the greatest need for an increase/addition).
    - 1. Hiking Trail
    - 2. Bicycle Trail
    - 3. Mountain Bike Trail
    - 4. Jogging Trail
    - 5. Horse Trail
    - 6. Interpretive Trail
    - 7. Bike Rental Facility
    - 8. Horse Rental Facility
    - 9. Horse Staging Area
    - 10. Shuttle Bus System
    - 11. Comfort Station
    - 12. Snack Bar
    - 13. Family Picnic Sites
    - 14. Group Picnic Area
    - 15. Interpretive Center
    - 17. Junior Ranger Program
    - 18. Tent Campground
    - 19. RV Campground
    - 20. Hike-In Campground
    - 21. Bike-In Camp
    - 22. Group Campground
    - 23. Campfire Center
    - 24. Sanitation Station
    - 25. Camp Store
    - 26. Others

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15. When you visit this park, do you want to be provided more information on:

☐ Cultural features (Native American history, Mexican California, ranching, etc.)
☐ Natural features (dunes, morros, vegetation, wildlife, etc.)
☐ Recreational opportunities (other parks in area, activities, etc.)
☐ No additional interpretation/information needed

WHAT KIND OF A PARK SHOULD THIS BE?

16. What is your general philosophy about the use of land at this park?

☐ Minimum development, preserve the resources
☐ Leave the park the way it is
☐ Provide more recreation opportunities
☐ Maximum development while preserving the resources

17. What detracts from your visit to this park?

☐ Nothing
☐ Not enough visitor facilities
☐ Park land area too small
☐ Not enough recreation opportunities
☐ Many areas inaccessible
☐ Commercialism
☐ Overdeveloped
☐ Traffic
☐ Vandalism
☐ Weather
☐ Litter
☐ Too crowded
☐ Hard to get to
☐ Other

18. What is the single most important change or improvement, if any, you would like to see at this park?


THANKS AGAIN FOR YOUR PARTICIPATION!

If you would like to be on our mailing list for future planning activities or for results of this survey, please provide your name and mailing address.


B U S I N E S S R E P L Y M A I L

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P.O. BOX 2390
SACRAMENTO, CA 95811

ATTENTION: JILL VANNEMAN
Morro Bay Area State Park Units

The First Public Meeting

Please join us in planning the future of the Morro Bay Area state park units. Our first public meeting will be held:

November 12, 1986, 7 p.m.
Los Osos Junior High School
1555 El Morro Street
Los Osos

State park planners will explain the general plan process and the role of public involvement in developing the plan. A presentation of the draft Resource Element, highlighting the significant cultural and natural resources of the park, will include policies recommended by the Departmental staff for protection and management of these resources. An "issues and concerns" workshop will be held followed by a question and comment period.

General Plan Underway

The California Department of Parks and Recreation is developing a plan to guide the future of the state park units in the Morro Bay Area: Atascadero State Beach, Morro Strand State Beach, Morro Bay State Park, Montana de Oro State Park and Los Osos Oaks State Reserve.

The purpose of the plan will be to provide general guidelines for management of the resources and development of facilities at the parks. The general plan for these units will serve as a flexible, comprehensive and long-range planning document. To do this effectively the general plan must:

- identify the cultural and natural resources of the parks.
- identify existing and future problems and provide solutions.
- determine land use, park development, and visitor activities which are compatible with the park and surrounding areas.
- determine the potential environmental impacts of the land uses and visitor activities.
- establish policies for maintenance and operation, protection and preservation of the resources, development of facilities and interpretation of resource values.

Throughout the general plan process, the public is a vital member of the planning team. Your participation is requested at the public workshops to be held during the next year. At our first meeting we need your help in identifying issues and concerns: what recreation opportunities are needed, what facilities you would like developed, what lands should remain in their natural condition, and which natural, historic, and cultural values should be enhanced or interpreted. How can our parks be improved to meet your needs; what is good and bad about their operation and management?

Park planners will use this information to develop several alternative plans to be presented to you at a second workshop in February 1987. There you will be asked to evaluate the alternatives and help formulate a single plan. Our staff will then refine the single plan into a draft general plan for your review at a third public meeting in May 1987. The final document will be submitted to the State Park and Recreation Commission in Spring 1988. There, too, you will have an opportunity to comment on the plan.

Resource Element Available

During the last year resource specialists from the Department of Parks and Recreation inventoried the resources of the Morro Bay Area state park units and wrote draft Resource Elements (the first section of the general plan document). The Resource Elements summarize the Resource Inventories and set forth specific policies for the proper management and protection of each unit's natural, cultural, scenic, and...
recreational resources. This part of the general plan is written first so that it can act as a guide for developing other elements of the plan.

Key portions of the Resource Elements will be discussed at the public meeting on November 12. Copies of the document will be available for public review at the meeting or may be reviewed during the month of November at the Department of Parks and Recreation San Luis Obispo Coast District Office (3340 South Higuera Street, San Luis Obispo) or the Morro Bay Museum of Natural History at Morro Bay State Park.

**User Survey**

Many of you are aware that the Department of Parks and Recreation distributed a user survey to park visitors this summer. Between Memorial Day and Labor Day weekends 5000 surveys were distributed at Montana de Oro and Morro Bay State Parks, Los Osos Oaks State Reserve and Atascadero State Beach. (There are no developed facilities at Morro Strand State Beach and therefore no way to get surveys to the users at this unit). The response has been tremendous with a return rate of almost 25%.

The purpose of the user survey was to generate information about the types of visitors to the units, what activities they participate in, what their problems are in using the parks, how visitors think the parks can be improved to better meet visitor needs.

We publish the results of the survey here. Be aware that the survey data may not reflect fully the kinds of use the parks receive nor the desires of all who use them. A good deal of day-use occurs, especially by local residents, where the visitors make no contact with the entrance stations or campgrounds where the surveys were distributed. We hope that input from local residents attending the public workshops to be held in the next few months will give us a more complete picture of park use.

<table>
<thead>
<tr>
<th>Atascadero</th>
<th>Morro Bay</th>
<th>Montana de Oro</th>
<th>Los Osos Oaks</th>
</tr>
</thead>
<tbody>
<tr>
<td>SB</td>
<td>SP</td>
<td>DP</td>
<td>SR</td>
</tr>
</tbody>
</table>

1. Which park unit are you visiting today?
   TOTAL RESPONSES: 1189
   - Atascadero SB: 190
   - Morro Bay SP: 719
   - Montana de Oro DP: 252
   - Los Osos Oaks SR: 28

2. How often do you visit this park?
   - First visit: 50%
   - 1-6 times/year: 45%
   - Once/month: 3%
   - 2-3 times/month: 1%
   - 1-3 times/week: 1%
   - 3-4 times/week: 1%
   - No response: -

3. How long does your visit usually last?
   - A few days: 47%
   - Overnight: 43%
   - One week/More: 5%
   - Less/hour: 1%
   - Less/day: 2%
   - No response: 2%

4. Where do you live?
   - Local: 7%
   - Out of State: 17%
   - North Coast Calif.: 4%
   - Northern Calif.: 2%
   - San Francisco Bay Area: 6%
   - Monterey Bay Area: 2%
   - Central Valley: 32%
   - Santa Barbara-Ventura Area: 2%
   - Los Angeles Area: 11%
   - Orange-San Diego Area: 10%
   - Southeastern Calif.: 2%
   - No response: 5%

5. What is your age?
   - 8-24: 4%
   - 25-34: 18%
   - 35-44: 23%
   - 45-54: 13%
   - 55-64: 20%
   - 65+: 20%
   - No response: 2%

6. What is your primary destination on this trip?
   - This area: 55%
   - San Francisco and north: 20%
   - LA and south: 13%
   - San Simeon/Big Sur: 7%
   - Central Valley: 4%
   - No response: 1%
7A. Where did you stay overnight?

<table>
<thead>
<tr>
<th>Park</th>
<th>1%</th>
<th>2%</th>
<th>3%</th>
<th>4%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morro Bay State Park</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montana de Oro State Park</td>
<td>1%</td>
<td>.2%</td>
<td>.3%</td>
<td>.4%</td>
</tr>
<tr>
<td>Atascadero State Park</td>
<td>80%</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of Morro Bay</td>
<td>1%</td>
<td>7.7%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>SLO/Los Osos/Baywd Prk</td>
<td></td>
<td>2.5%</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>San Simeon/Cambria</td>
<td>2%</td>
<td>.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local resident</td>
<td>5%</td>
<td>5.5%</td>
<td>11%</td>
<td>79%</td>
</tr>
<tr>
<td>Other</td>
<td>8%</td>
<td>.8%</td>
<td>3%</td>
<td>13%</td>
</tr>
<tr>
<td>No response</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
<td></td>
</tr>
</tbody>
</table>

7B. Average Overnight Stay (for non-local visitors)

<table>
<thead>
<tr>
<th></th>
<th>Nights</th>
<th>2.72</th>
<th>3</th>
<th>3.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>No response</td>
<td>20%</td>
<td>20%</td>
<td>7%</td>
<td></td>
</tr>
</tbody>
</table>

8. What type of accommodation did you use?

<table>
<thead>
<tr>
<th>Type</th>
<th>1%</th>
<th>9%</th>
<th>3%</th>
<th>10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tent</td>
<td>19%</td>
<td>27%</td>
<td>41%</td>
<td>4%</td>
</tr>
<tr>
<td>RV</td>
<td>71%</td>
<td>49%</td>
<td>37%</td>
<td>7%</td>
</tr>
<tr>
<td>B&amp;B</td>
<td></td>
<td>.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friend’s Home</td>
<td>3%</td>
<td>6%</td>
<td>2%</td>
<td>14%</td>
</tr>
<tr>
<td>Under the stars</td>
<td>1%</td>
<td>.5%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Own home/local resident</td>
<td>4%</td>
<td>6%</td>
<td>11%</td>
<td>61%</td>
</tr>
<tr>
<td>No response</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
<td></td>
</tr>
</tbody>
</table>

9. How many people In your party?

| Average size of party | 2.7 | 2.9 | 3.6 | 2.1 |

10. How did you arrive at the park?

<table>
<thead>
<tr>
<th></th>
<th>34%</th>
<th>50%</th>
<th>60%</th>
<th>79%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RV</td>
<td>63%</td>
<td>48%</td>
<td>36%</td>
<td>7%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>1%</td>
<td>.5%</td>
<td>1%</td>
<td>4%</td>
</tr>
<tr>
<td>On foot</td>
<td>1%</td>
<td>.1%</td>
<td>.5%</td>
<td>10%</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>1%</td>
<td>.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horseback</td>
<td></td>
<td></td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td></td>
<td>.5%</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

11. What activities do you want emphasized at the park?

<table>
<thead>
<tr>
<th>Atascadero SB</th>
<th>Morro Bay SP</th>
<th>Montana de Oro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camping-75%</td>
<td>Camping-40%</td>
<td>Walking-75%</td>
</tr>
<tr>
<td>Walking-46%</td>
<td>Walking-40%</td>
<td>Nature obs.-46%</td>
</tr>
<tr>
<td>Beachcombing-46%</td>
<td>Nature obs.-37%</td>
<td>Walking-41%</td>
</tr>
<tr>
<td>Nature Obs.-33%</td>
<td>Visit museum-33%</td>
<td>Hiking-36%</td>
</tr>
<tr>
<td>Nature Obs.-33%</td>
<td>Visit museum-33%</td>
<td>Hiking-36%</td>
</tr>
<tr>
<td>Sunbathing-32%</td>
<td>Beachcombing-21%</td>
<td>Birdwatching-25%</td>
</tr>
<tr>
<td>Birdwatching-18%</td>
<td>Birdwatching-21%</td>
<td>Riding-30%</td>
</tr>
<tr>
<td>Fishing-16%</td>
<td>Hiking-19%</td>
<td>Birdwatching-16%</td>
</tr>
<tr>
<td>Photography-13%</td>
<td>Photography-15%</td>
<td>Photography-15%</td>
</tr>
<tr>
<td>Swimming-11%</td>
<td>Fishing-15%</td>
<td>Sunbathing-9%</td>
</tr>
<tr>
<td>Bicycling-7%</td>
<td>Pionicking-12%</td>
<td>Swimming-9%</td>
</tr>
</tbody>
</table>

12. What do you think is special about this park? The top-rated 4 per unit:

<table>
<thead>
<tr>
<th></th>
<th>Scenery</th>
<th>Scenery</th>
<th>Quiet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ocean</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beach</td>
<td>Nature</td>
<td>Quiet</td>
<td>Nature</td>
</tr>
<tr>
<td>Relaxation</td>
<td>Quiet</td>
<td>Nature</td>
<td>Scenery</td>
</tr>
<tr>
<td>Scenery</td>
<td>Ocean</td>
<td>Ocean</td>
<td>Relaxation</td>
</tr>
</tbody>
</table>

13. What unique or fragile resources require special protection?

- Response to this question indicated that many people know of important resources and understand the need to protect them. No new information about the resources was discovered.

14. What new or improved facilities are needed?

<table>
<thead>
<tr>
<th>Atascadero</th>
<th>Montana de Oro</th>
</tr>
</thead>
<tbody>
<tr>
<td>None-27%</td>
<td>None-37%</td>
</tr>
<tr>
<td>Showers-31%</td>
<td>Toilets-22%</td>
</tr>
<tr>
<td>San. sta.-23%</td>
<td>Interp. trail-22%</td>
</tr>
<tr>
<td>RV Camp-13%</td>
<td>Env. Ctr.-18%</td>
</tr>
<tr>
<td>Campstore-9%</td>
<td>Hiking trail-16%</td>
</tr>
<tr>
<td>Restrooms-7%</td>
<td>Tent Camp-16%</td>
</tr>
<tr>
<td>Campfire Ctr.-7%</td>
<td>Interp. Ctr.-16%</td>
</tr>
<tr>
<td>Tent Camp-6%</td>
<td>Horse trail-16%</td>
</tr>
<tr>
<td></td>
<td>Hike-inCmp-13%</td>
</tr>
<tr>
<td>Morro Bay</td>
<td>Campstore-12%</td>
</tr>
<tr>
<td>None-53%</td>
<td>Eq. Staging-12%</td>
</tr>
<tr>
<td>Restrooms-11%</td>
<td>Jr. Rgr. Prog.-11%</td>
</tr>
<tr>
<td>RV Camp-15%</td>
<td>Fam. Picnic-11%</td>
</tr>
<tr>
<td>Hiking trail-14%</td>
<td>Bike-in Cmp-10%</td>
</tr>
<tr>
<td>Campstore-13%</td>
<td>Showers-9%</td>
</tr>
<tr>
<td>Interpr. trail-11%</td>
<td>Bike Trail-9%</td>
</tr>
<tr>
<td>Bicycle trail-11%</td>
<td>Horse Rental-9%</td>
</tr>
<tr>
<td>C.S./Shwr.-10%</td>
<td>RV Camp-9%</td>
</tr>
<tr>
<td>Bike rental-9%</td>
<td>Group Camp-8%</td>
</tr>
<tr>
<td>Tent Camp-8%</td>
<td>Sani. station-8%</td>
</tr>
</tbody>
</table>

15. What do you want more information about as you visit the park?

<table>
<thead>
<tr>
<th>Atascadero</th>
<th>Morro Bay</th>
<th>Montana</th>
<th>Los Osos</th>
<th>de Oro</th>
<th>Oaks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing</td>
<td>36%</td>
<td>24%</td>
<td>25%</td>
<td>43%</td>
<td></td>
</tr>
<tr>
<td>Natural Resources</td>
<td>12%</td>
<td>18%</td>
<td>25%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Natural Resources</td>
<td>35%</td>
<td>41%</td>
<td>59%</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>Recreational Activities</td>
<td>29%</td>
<td>26%</td>
<td>20%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>13%</td>
<td>18%</td>
<td>8%</td>
<td>11%</td>
<td></td>
</tr>
</tbody>
</table>

16. What is your general philosophy of land use at this park?

<table>
<thead>
<tr>
<th>Atascadero</th>
<th>Morro Bay</th>
<th>Montana</th>
<th>Los Osos</th>
<th>de Oro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum development</td>
<td>36%</td>
<td>27%</td>
<td>45%</td>
<td>39%</td>
</tr>
<tr>
<td>No response</td>
<td>9%</td>
<td>7%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Leaves as is</td>
<td>25%</td>
<td>36%</td>
<td>36%</td>
<td>50%</td>
</tr>
<tr>
<td>No response</td>
<td>9%</td>
<td>7%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Maximum development</td>
<td>20%</td>
<td>15%</td>
<td>12%</td>
<td></td>
</tr>
</tbody>
</table>
17. What detracts from your visit to this park?

Atascadero SB
Nothing-31%
Too crowded-16%
No showers-10%
Too small-8%
Vandalism-8%
Litter-8%
Not enough facilities-7%
No response-14%

Morro Bay SP
Nothing-45%
Too crowded-10%
Too small-5%
Traffic-5%
Weather-5%
Not enough facilities-4%
Litter-3%
No response-23%

Montana de Oro SP
Nothing-40%
Too small-21%
Litter-9%
Too crowded-6%
Areas inaccessible-7%
Vandalism-7%
Not enough facilities-7%
Weather-6%
Traffic-6%
Noise-5%
Lack of flush toilets or showers-5%

Los Osos Oaks SR
Nothing-54%
Too small-11%
Traffic-11%
Hard to find-7%
Not enough facilities-7%
Litter-7%
Vandalism-3%

18. What is the single most important change or improvement you would like to see at this park?

Suggestions made included a wide range of improvements. The ones included here represent a summary of those mentioned most often.

ATASCADERO STATE BEACH
Hot showers
Better campsites: larger sites, better screening, less parking lot atmosphere, fire rings and table for each site, RV hook-ups.
Better reservation system

MORRO BAY STATE PARK
More restrooms/showers
Better restroom maintenance
More hook-ups
Bike trail
Better campsites: larger, less crowded, more privacy; better screening; separate RV and tent areas.
Control noise: enforce quiet hours, no generators, radios, barking dogs, group campers, or road noise.
More campfire programs and activities with rangers.
Control vehicle traffic through park.

MONTANA DE ORO STATE PARK
Improve restrooms: hot showers, flush toilets.
Acquire more land to the south.
More camping area/sites: larger campsites/better privacy, screening.
Improve water system: provide running water, hose bibbs closer to sites.
Improve Hazard Canyon horse camp facilities and road.
Improve trails: better maintenance, keep bikes off, allow dogs on horse trails, provide trail maps.
Improve facilities: develop tent camping in private land to the south; develop environmental and wilderness camping; separate RVs and tents; develop a park entrance with info; eliminate RV use; provide longer RV sites with hook-ups; park store and laundermat.
Improve operations: hire more staff, control racoons, enforce leash law, keep park cleaner, improve reservation system.
Improve interpretation: provide more campfire programs, information, ranger hikes, nature activities and self-guided interpretive walks.
Provide improved resource protection for the tidepools, oyster beds and mud flats; control poison oak, leave the eucalyptus trees.

19. What kind of place should this park be? The following is a selection of comments that reflect the range, diversity and sometimes conflicting responses received.

ATASCADERO STATE BEACH
"Just like it is."
"An overnight stop", and "A campground with hot showers, hook-ups and dump station."
"Keep it natural, clean with park rangers giving talks on wildlife, sand dunes, tide."
"A quiet place to sleep and enjoy the beach."

MORRO BAY STATE PARK
"Just as it is."

"A quiet, natural setting for camping and relaxing."

"Nature's home: full of birds, squirrels, critters. Morro Bay is all it can be without major change. Campsites are not segregated enough to make it a true outdoor experience."

MONTANA DE ORO STATE PARK
"Leave it as it is: primitive, quiet, unspoiled, undeveloped."
"Special place for horse people to camp and ride."
"Environmental camping, hiking and undeveloped beaches."
"It should stay as it is. Morro Bay State Park has hook-ups, showers and dump station for those needing such services. Atascadero State Beach has ocean camping. Montana de Oro is special as a primitive park- we need these!"

"Montana de Oro is special as a primitive park: we need these!"

"RV hook-ups and more sites."
"Larger."
"Limited access. Keep the road bumpy and not well-paved."
"Easy access to natural resources."
LOS OSOS OAKS STATE RESERVE

"As it is."

"A natural preserve," "undeveloped sanctuary," "quiet and apart from the city," "a walk-in picnic area."

20. Additional Comments Again, it would be impossible to record all the comments received. Here is just a sampling:

ATASCADERO STATE BEACH
- Would like to see this park landscaped with native vegetation and shrubs. Plant sites between privacy.
- One of our favorite state parks.
- Rangers friendly and helpful. Excellent attitude.
- Reservation system stinks!
- Cleaner restrooms please.
- Take away the tall smoke stacks.
- Length limit of 24" is not enforced.
- Remove the sand dunes to give better views of ocean.
- If you add hook-ups it will end up too crowded and noisy.

"Atascadero State Beach is one of our favorite state parks."

- Why do you give the closest ocean sites to tents? We made a reservation.
- Enforce no generators between 8PM and 10AM.
- Atascadero S.B. seems well-utilized. Its small size does not warrant expansion of facilities.

MORRO BAY STATE PARK
- We love this park! It is clean, well-kept, with COURTEOUS personnel, very clean restrooms.
- Go back to more rangers. They were always informative and pleasant. Now they are overworked and cranky.
- We were treated with friendliness. This is not always the case in State Parks.
- The park is deluged with RVs. I hope strong restrictions will be placed on them. A maximum designation of 70% tents and 30% RV should be made. There are few developed sites for tents elsewhere in this area.
- The generators, road traffic, smoke, lack of privacy and inconsiderate group campers forced us to find a motel in the middle of the night.
- I would like to see all our State Parks developed to accommodate many more campers and RVs, with facilities for more hook-ups.
- Our first and last visit. We still don't know what we paid $12 for.
- Large RVs w/g generators should go elsewhere. The State should not compete with commercial RV parks.

"Our first and last visit. Still don't know what we paid $12 for."

- Morro Bay campground seems to need a rest, an opportunity for recuperation and intensive maintenance work.
- Shellfish deserve a break. How many oysters do we need? Limit the oyster population.
- The museum nature walks are great.

MONTANA DE ORO STATE PARK
- Acquire more land to the south.
- For us this park is one of the most beautiful and peaceful places in California. We sincerely hope it can stay like this.
- I would like running water and hot showers to make this area perfect.
- Don't add more facilities (even if the toilets stink!)
- After staying in some of the overcrowded state parks, it was very refreshing to be in this quiet, relatively unspoiled park. We will certainly come again. We loved the ocean views along the bluff trails, and the sightings of pelicans, seals, otters, and cormorants.
- I've camped all over the U.S. and this is the nicest campground I've been to, primitive but clean.
- This park has a tremendous amount of land and very few campsites. There should not be any additional purchase of land until the present park is developed to accommodate more visitors.

"Let those who want to bring the city with them go elsewhere."

- Leave it as it is. Let those who want to bring the city with them go elsewhere. Any increased development and usage would decrease the quality of the area. There are plenty of people here already.
- We appreciate the large campsite.
- Ranger and hostess both were nice and helpful.
- Do not remove eucalyptus trees.
- Thin eucalyptus to restore native vegetation.

LOS OSOS OAKS SR
- I was shocked at how small this area is.
- To protect ground-nesting birds, remind people dogs are not allowed.
- I thought the trail markers were well-done, just enough for a self-guided trail.

Update

Update is published by the California Department of Parks and Recreation. For additional information direct your questions to Morro Bay Area State Park Units General Planning Team, P.O. Box 942896, Sacramento, CA 94289. 001. Attn: Jill Vanneman (916) 323-4269.

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The Planning Process...

Where we are:

- Step 1 Organizing the Planning Job
- Step 2 Gathering Information
- Step 3 Developing Alternatives
- Step 4 Composing a Single Plan
- Step 5 CEQA Review Process
- Step 6 State Park and Commission Hearing

State of California
Department of Parks and Recreation
Morro Bay Area State Park Units
General Planning Team
P.O. Box 942896
Sacramento, CA 94296-0001
For Your Information

If you are receiving Update for the first time, the California Department of Parks and Recreation is now in the process of preparing a comprehensive general plan for the five Morro Bay area state park units: Montana de Oro State Park, Morro Bay State Park, Atascadero State Beach, Morro Strand State Beach, and Los Osos Oaks State Reserve. On November 12, 1986, the first in a series of local public involvement workshops was held. During the summer of 1986 user surveys were also distributed to gather public concerns and ideas. This newsletter is published to inform you of the issues and concerns which have been identified, the progress of the planning process and of upcoming events.

First Public Meeting

One hundred twelve people attended our first public meeting on November 12, 1986. What a great turnout! We would like to thank each of you for your participation and for sharing your ideas with us. For such a large attendance we were exceptionally pleased with the orderly progress and productivity of the meeting.

The meeting began with an introduction of our departmental planning team and a discussion of the purpose and content of the general plan.

The draft Resource Element was presented, highlighting the significant cultural and natural resources of each unit. This discussion also included policies recommended by the departmental staff for protection and management of these resources. (The draft Resource Element can be reviewed at the Department of Parks and Recreation San Luis Obispo Coast District Office, 3220 South Higuera Street, San Luis Obispo, or the Morro Bay Museum of Natural History at Morro Bay State Park).

Upcoming Public Workshop

The results of the user survey and first public workshop will help us to develop land use alternatives. These alternatives will contain specific proposals regarding such things as road alignments, parking improvements, camping capacities, day-use improvements, interpretive facilities, and marina or golf course alterations. We will present the proposed alternatives for your evaluation and discussion at the next public workshop which will be held:

MARCH 18, 1987, 7 - 10 PM
LOS OSOS JUNIOR HIGH SCHOOL
1555 EL MORRO STREET
LOS OSOS

If you wish to communicate with us before then, write us at our return address, or call us at (916) 323-5067 or 323-4269.
After a brief question and answer period, workshop participants formed 14 separate groups. These groups spent the next hour and a half discussing specific park issues related to resources, camping, day-use, the Morro Bay S.P. Golf Course and marina, the Morro Bay park road, Camp K.E.E.P., interpretation, and other issues of concern identified by the group participants. Each work group then presented its ideas to the workshop as a whole. It was a lengthy but very productive evening.

The following is a summary of the comments, concerns, and ideas expressed by workshop participants as well as others who have contacted us. These comments are not intended to represent a public consensus on any particular issue, but simply an indication of the variety of issues and concerns expressed.

**Resource Issues**

- Do not remove eucalyptus trees.
- Gradually replace some eucalyptus with natives.
- Plant some oak trees in treeless areas.
- Protect the water quality of bay and wetlands.
- Do not replant sand dunes.
- Maintain wilderness and pristine nature of Montana de Oro.
- Protect tide pools.
- Control obnoxious weeds.

- Eliminate hunting.
- Assess impact of hunting on park resources.
- Protect Monarch butterfly habitat.

**Camping**

- Update existing facilities rather than expand.
- Separate one-night campers from others.
- Improve and expand campgrounds.
- Provide more camping at Montana de Oro.
- Need more restrooms in all units.
- Reopen Chorro Willows group camp area.
- Develop water at Montana de Oro.
- Develop new camping east of South Bay Blvd.
- Eliminate enroute camping in marina parking lot.
- Keep children away from Orcas St. bridge at Atascadero S.B.
- Have year around camp hosts.
- Provide more garbage containers at Atascadero / Montana de Oro.
- Eliminate over-use of existing campgrounds.
- Develop additional environmental campsites at Montana de Oro.
- Provide R.V. camping on new property east of South Bay Blvd.
- Provide more bike camping.

**Day-use Facilities**

- Expand facilities at Montana de Oro.
- Improve poorly located Morro Bay facilities.
- Provide emergency telephones.
- Provide better maintenance of existing facilities.
- Improve day-use access to sand dunes.
- Improve day-use launch ramp at marina.
- Improve parking and day-use facilities at Los Osos Oaks.
- Develop more facilities at Morro Strand.
- Improve and expand facilities at Hazard Cyn.
- Need day-use area at marina.
- Need picnic area at Morro Rock.
- Improve separation of day-use and camping.

**Morro Bay Golf Course and Marina**

- Do not expand marina, improve it.
- Improve safety of marina.
- Retain a percentage of the slips for live-aboards.
- Dredge and upgrade marina.
- Add more slips to marina.
- Improve marina area for recreation.
- Provide more shore facilities for marina users.
- Need dry storage racks for small boats.
- Provide pump-out facility.
• Use reclaimed water on golf course.
• Need a harbor master at marina.
• Leave golf course as is.

**Morro Bay Park Road**

• Widen roadway.
• Need a bike path.
• Provide walking and bike path on inside of road.
• Put speed bumps on road.
• Limit speed to 15 MPH.
• Take trees out on curve.
• Consider one-way traffic flow.
• Upgrade road through golf course.
• Close road through golf course.

**Camp K.E.E.P.**

• Keep it as it is for children.
• Open it to the public if schools can still use it.
• Add a separate environmental center for the public.
• Expand and allow permanent buildings.
• Do not make it permanent.
• If expanded it should be available to others.
• It should be open to the general public.
• Use old CCC camp area at Camp San Luis.
• Use Spooner house for environmental education.
• Develop public environmental education in another location.
• Open it to all SLO county schools, but not the general public.

**Interpretation**

• Provide maps for things of special interest.
• Need more self-guided tours.
• Provide more trail signs.
• Expand campfire program.
• Need more interpretive staff and museum curators.
• Provide interpretation of Kangaroo Rats.
• Continue doing a great job.
• Enlarge auditorium at museum.
• Montana de Oro needs interpretive center.
• Remove interpretive signs at Los Osos Oaks because of continued vandalism.
• Ensure that contemporary museum standards are met.
• Provide more printed handouts.
• Improve interpretive displays at museum.
• Have more rotating displays at museum.
• Provide more guides than more signs.
• Provide hands-on aquarium at museum.

**Other Issues**

• No hunting in bird sanctuary.
• Do not allow damming of feeder streams.
• Provide for hang gliding east of S. Bay Blvd.
• Prohibit off-road vehicles in any park.
• Purchase Fields ranch at Montana de Oro.
• Provide more patrol staff for public safety.
• Reconstruct Black Hill trail.
• Develop mountain bike trails.
• Restrict dogs in sensitive resource areas.
• Screen ranger residence area at Montana de Oro from public view.
• Provide safe bike trail to Montana de Oro.
• Reopen bay channel north of Morro Rock.

**New Planner**

On December 2, 1986, a new staff member joined our planning team. Jim Quayle is a licensed Landscape Architect with over 12 years of experience. He worked as a project manager in our Acquisition Division before coming to the Development Division. His experience with the most recent acquisitions for the local state park units has increased his already strong familiarity with many issues in the Morro Bay area. His initial familiarity dates from the four years he spent as a student at Cal Poly, San Luis Obispo, and the two years he worked for a developer in Avila Beach.
THE PLANNING PROCESS...

Where we are:

☐ Step 1 Organizing the planning job
☐ Step 2 Gathering information
☒ Step 3 Developing alternatives
☐ Step 4 Composing a single plan
☐ Step 5 CEQA review process
☐ Step 6 State Park and Recreation Commission Hearing

State of California
Department of Parks and Recreation
Morro Bay Area State Park Units
General Planning Team
P. O. Box 942896
Sacramento, CA 94296-0001
To our new readers...

The California Department of Parks and Recreation is preparing a comprehensive general plan for the five Morro Bay area state park units. Public involvement is a crucial component of the planning process. *Update* is published at critical points in the planning process so that you know what the planning team is doing, what issues and ideas have been expressed to us by the public, and when upcoming meetings will be held so that you will have an opportunity to participate.

During the summer of 1986 a user survey was distributed to visitors at the Morro Bay area state park units. The results of almost 1200 responses were summarized in Issue One of *Update*. Issue Two reported the results of the first local public meeting held November 12, 1986 to gather public comments and concerns regarding planning of the park units and to present the draft Resource Elements, which highlight the significant cultural and natural resources of the unit along with recommended policies for the protection and management of those resources. This issue of *Update* reports the results of the last public workshop, held March 18, 1987, when the planning team presented alternative land use and facilities plans for each unit and asked the workshop participants to evaluate the different plans.

March Workshop Results

Between 200 and 250 people attended the last workshop, a much greater turn-out than we had anticipated. Most written and oral comments from the public concerned Morro Bay State Park. During the meeting the planning team heard a lot of vocal opposition to any changes to the golf course. The following is a summary of both the workgroup and individual workbook reports.

Montana de Oro

Thirteen individuals turned in evaluation forms and another twenty-three people worked together in groups of 5 to 7 to evaluate the Montana de Oro alternatives. Each group agreed by consensus on its preferred alternative for eight different areas of the park: Pecho Road, Hazard Canyon, and Sandspit Beach Access; Hazard Canyon Horse Camp, Camp KEEP, Spooners Cove, Islay Creek, Coon Creek, and Trails.
Pecho Road
Group 2 preferred that only minor safety improvements be made to the road, while Groups 2, 3, and 4 voted to widen the road and provide bike lanes. Group 3 was concerned that any road improvements not lead to increased speed. Groups 2 and 3 thought certain turn-outs along the road should be developed as vista points and for additional day-use parking. Group 1 thought a park entrance station was a good idea, but without fee collection.

The results of the 13 individual evaluation forms turned in are summarized below for Pecho Road.
Minor improvements: 5.
Widen road/provide bike lanes: 9.
Develop turn-outs along road: 8.
Develop entrance station: 7.

Hazard Canyon and Sandspit Beach Access
All four groups agreed on the concept of eliminating park access from Army Road and developing a new sandspit parking area from a new access road about 1/2 mile south of Army Road. All four groups agreed on eliminating roadside beach access parking at Hazard Canyon, and developing a new 80-car parking area and restroom south of the existing beach access trail. Group 2 was concerned that there be one designated beach access trail at Hazard Canyon to reduce bluff erosion caused by the use of several existing trails. Group 1 suggested that a phone be provided at the parking area.

Individual Report Results
Develop new 80-car parking lot: 10.
Eliminate Army Road access; develop new access road and parking area: 11.

Hazard Canyon Horse Camp
Groups 1, 2, and 4 like the idea of a day-use equestrian staging area with a restroom and picnic sites. Group 1 thought the existing access road should be improved or a new one developed, and that the existing horse camp facilities should be improved and the capacity increased. Group 1 also suggested that parking be provided in this area for hikers and mountain bikers. Group 3 thought the area is fine just the way it is, but needs better maintenance. Groups 1, 2, and 3 suggested that a phone be provided.

Individual Report Results
Improve access: 6.
Develop day-use horse staging area, restroom and picnic sites: 9.
Upgrade horse camp and increase capacity: 4.

Camp KEEP (Kern County Environmental Education Program)
All four groups preferred that an environmental education center be developed for use by many groups and school districts, but that Kern County continue to operate on an interim basis. Group 2 thought that the existing ranger residences should be relocated. Group 3 suggested that the Camp KEEP area be designed to accommodate a youth hostel as well as an environmental education center, while Group 4 thought the area would be suitable for a group camp/day-use facility.

Individual Report Results
Develop environmental education center: 12.
Relocate existing ranger residences: 7.
Develop youth hostel: 2.
Develop multi-use group camp/day-use facility: 2.

Spooneers Cove
Group 3 wanted the area to remain as is with minor access improvements and interpretive signs. Groups 1, 2, and 4 thought the existing facilities should be upgraded, although each suggested different ways of doing that. Paving, increased picnic sites, permanent restrooms, outdoor showers, and interpretive signs were preferred by Group 1, while Group 2 said "no showers and no paving". Group 4 thought parking on the beach should be eliminated, but liked the other proposed improvements.

Individual Report Results
Remain as is and make minor access improvements: 3.
Upgrade facilities: 10.

Islay Creek
Group 3 would like the existing campground to remain as is. Groups 1, 2, and 4 thought the facility should be upgraded with improved restrooms, running water, and landscape screening. Adaptation of the ranch house as a combination park office and interpretive center is a good idea according to Groups 2, 3 and 4. Groups 1 and 2 voted to remove the barn in Islay Creek Canyon, although Group 2 wanted it to remain "until really dangerous". Group 4 wanted to leave the barn alone while Group 3 suggested that it be improved for use as a rain and shade shelter.

Individual Report Results
Campground to remain as is: 3.
Upgrade campground and provide restrooms, showers, landscape screening: 9.
Adapt ranch house as park office/interpretive center: 11.
Remove Islay Creek barn: 2.
Leave barn/improve it: 5.
Coon Creek
Three groups, 1, 2, and 3, agreed on upgrading the Coon Creek day-use facilities with a paved parking area, increased picnic sites and permanent restrooms. Group 2, however, thought that only additional picnic sites are needed.

Groups 1 and 3 favored development of a new 50-75 unit campground, but both groups felt it should be “primitive”. Only one group wanted interpretive panels added to the coastal bluff trailhead.

Individual Report Results
Upgrade day-use facilities: pave, increase picnic sites, permanent restrooms: 11.
Develop new 50 to 75-unit campground: 4.
Add interpretive panels to Bluff Trail: 2.

Trails
All four groups favored establishment of the State Coastal Trail link through the park. Group 1 thought mountain bike trails and additional equestrian trails should be established. Group 2 was unable to reach a consensus regarding trails: “Part of the group feels strongly that equestrian and mountain bike use should be maintained and expanded. Others are concerned about environmental damage from these uses”. Group 3 favored establishment of additional trails, designating existing trails as "multiple use", and installation of trail yield signs. Group 4 thought that some existing trails outside sensitive areas should be designated multiple-use to accommodate mountain bike use. Groups 2 and 3 like the concept of a system of trail camps, though Group 3 was concerned about the fire hazard.

Individual Report Results
Establish additional equestrian trails: 7.
Establish State Coastal trail link through park: 13.
Establish or designate mountain bike trails: 11.
Develop trail camps: 8.

Los Osos Oaks
State Reserve

One group was formed to evaluate the different plans for this unit. A number of individuals comments were also received.

The group consensus, along with six individual comments, was that parking should not be provided on the interior of the unit, roadside parking should be provided to replace that to be eliminated by the county widening of Los Osos Valley Road, and that additional land should be acquired when available to provide parking that will not impact the unit resources. The group and seven individuals recommended that additional trails be provided in the western portion of this unit. Other comments / suggestions: provide a unit sign (four people), leave the unit as it is (1 person), provide parking within the unit (1 person), add a restroom, limit dog use, no cutting of eucalyptus (1 comment each).

Morro Rock
All five groups agreed that the parking and turn-around area on the south side of the rock should be improved and interpretation provided. 19 individual comments supported this concept, 10 individuals wanted the area to remain as is. Additional suggestions: reopen the harbor entrance north of the rock (2 people), widen the road to the rock (1 person).

Vehicular Access and Circulation
The consensus of three groups and 10 individuals was to close park roads to thru traffic. One group and 11 individuals thought existing roads should be left as is with minor safety improvements. Development of a bypass road was supported by 10 people. Nine individuals recommended that the golf course road be widened along with improvements such as an overpass/underpass for golfer safety. Additional concerns / suggestions: maintain open access to the museum (1 group and 8 individual comments), develop a bike path through the park (1 group and 1 individual), improve both park roads (1 group), realign South Bay Boulevard to the east (2 individuals).

Morro Bay
State Park

Five groups (a total of almost 40 people) worked together to arrive at a consensus for each area of the park. In addition, a large number of individual evaluations were received which expressed concern about one or more areas of the park, such as the golf course. It has been difficult to evaluate some of the information we received for various reasons. However, for many areas a consensus is quite clear.

Heron Rookery
The majority of responses favored improvement of interpretation at the rookery (four groups and seven individuals). Two groups and 19 individuals wanted it left as is. One group and one individual...
recommended that the existing parking area be removed. Five responses recommended trail improvements to accommodate the handicapped.

Windy Cove
Two groups and 10 individuals responded that they want the area to remain as is. Improved trail connections from this area to the museum and the campground were preferred by 3 groups and 8 individuals. Additional suggestions: relocate the existing parking (1 group and 5 individuals), provide a picnic area (5 people).

Natural History Museum
White Point
All five groups and 23 individual comments supported updating the museum displays and realignment of the trail to the top of White Point to avoid archaeological resources. Additional suggestions: Enlarge the museum theatre (2 groups and 5 individuals), remove trees from the rock (1 group and 1 individual), provide more museum staff (1 group and 1 individual), increase museum parking (2 individuals), eliminate the trail to White Point (1 person).

Golf Course
This area of the park received the largest number of comments. Four of the 5 groups, along with 30 individuals, did not wish to see the golf course changed. Three groups and 11 individuals concurred that the golf course parking be expanded and improved. Twelve individuals recommended that an additional nine holes be added to the course. One group wanted a trail developed for the interpretation of the Monarch butterfly habitat. Other recommendations: realign holes 14 and 15 to allow some expansion of the campground (1 person), continue use of non-potable water for golf-course irrigation (one group), realign the golf course parking lot (2 people), relocate the back nine holes behind Black Hill (1 person), realign holes 13, 14, and 15 (1 person), increase fees for non-county golfers, correct vehicle/golfer conflict between holes 2 and 3.

Marina
Three of the five groups and 13 individuals want the existing marina retained and improved. Two of the groups, along with 13 individuals, would like to see a small-boat launch ramp installed. Two groups and 7 individuals recommended that picnic facilities be added in this area. Two groups and 7 individuals also want enroute camping eliminated in the marina area. One group and 5 individuals want additional slips provided. One group and 2 individuals asked that the area be left as it is.

Marsh Parking Area (Hunters Lot)
Three groups and 6 people want interpretive displays, trails, and a boardwalk to be added to the area. One group and 6 people recommended that parking be upgraded with access provided from the marina. One group and 2 people would like to see picnic sites and a restroom provided in this area. One group and 5 people would like to see parking eliminated. One person was opposed to a boardwalk or any additional trails in the marsh.

Campground
All five groups agreed that a permanent group camp should be developed. Two groups and 6 individuals felt that the existing campground should be improved but not enlarged. Two groups and 13 people felt that it should be left as is. One group and 6 individuals felt that the campground should be improved and enlarged. Other comments / recommendations: relocate all camping to the east of South Bay Boulevard (2 people), expand camping east of the existing campground (2 people), enlarge other campgrounds in the Morro Bay area (1 person), remove trees in the campground, develop a bike path and exercise trail in the campground (1 person), locate RV camping near the freeway on the back side of Black Hill.

Black Hill
Four of the five groups and 18 persons would like to have trailhead signage and connections to the existing campground improved. Three of the groups along with 4 individuals would like an interpretive display. Other suggestions: enlarge the parking for a school bus turn-around (1 group and 4 individuals), eliminate vehicular access (4 individuals), leave area as is (2 people), control trail erosion (1 person).

Operations,
Maintenance, and
Staff Residence Areas
Three of the groups and 8 individuals would like a centralized administrative facility located on Turri Road. One group and 9 individuals desire that these areas remain as they are. One group expressed concern about visual esthetics regardless of what is done. One individual suggested that staff housing be relocated rather than eliminated.

Chorro Willows
Three of the groups and 6 individuals want a small day-use parking area developed. One group and twelve individuals want trail access only in this area. One group and two individuals want RV camping developed in this area. Three individuals want the area
raised and permanent group camping developed here.

**Baptista Ranch**

Three groups and 8 individuals want only parking, interpretive exhibits, and trails developed on this property. Two groups and 12 individuals want a mountain bike trail and other trails developed. One group, along with 6 individuals, recommended that hang-gliding be allowed on this property. One group and 3 others want the property left as is. Five people want the property used for day-use and enroute camping. Other suggestions: no equestrian trails (2 people), develop an 18-hole golf course (1 person).

**South Bay Blvd.**

Four of the five groups recommended that day-use continue with improved access and interpretation. One group and 6 individuals would like a portion of this area returned to marsh habitat. One person opposed any marsh interpretive panels in this area.

**Atascadero State Beach**

Only individual comments were received for this unit. Twelve people made 31 comments about various areas of this park.

**Campground**

None of the alternative options for the campground received more than two votes.

**Coastal Access Points**

Three people recommended that a stairway be added at Yerba Buena and Beachcomber. One person supported development of a stairway at Beachcomber and Orcas Street. One person expressed concern that parking be provided near all beach access points. One person recommended that access from Beachcomber be eliminated.

**Cloisters Site**

Four of the twelve comments received for this area recommended that the existing parking area be upgraded and paved for 50-75 vehicles and that a permanent restroom and interpretive material be installed. Three others recommended that a picnic area be installed. Three others also expressed that vehicular access to the sand dunes to the south should be eliminated. Other suggestions included providing fencing, signing, designated pedestrian beach access, dune stabilization plantings, an entrance station and additional camping, and state purchase of the VRM property.

**Other Recommendations**

Three individuals concurred that the existing name is confusing and should be changed to be combined with Morro Strand State Beach. Two other comments were received to designate off-shore lands as an underwater park.

**Update**

*Update* is published by the California Department of Parks and Recreation. For additional information, direct your questions to Morro Bay Area State Park Units General Planning Team, P.O. Box 942898, Sacramento, CA 94296-001. Attn: Jim Quayle (916) 323-5067, or Jill Vanneman (916) 323-4269.
The Planning Process...
Where we are:

- Step 1: Organizing the Planning Job
- Step 2: Gathering Information
- Step 3: Developing Alternatives
- Step 4: Composing a Single Plan
- Step 5: CEQA Review Process
- Step 6: State Park and Recreation Commission Hearing
General Plan Progress...

Planners from the California Department of Parks and Recreation have been working since April, 1986, with the people of the Morro Bay area in an effort to prepare general plans for the Morro Bay area state park units that will meet the needs of both local residents and statewide users. Alternative plans were prepared from the information collected at workshops held in Los Osos in November, 1986. These alternative plans were evaluated in March, 1987, in a workshop at which the people told our planners what should be in the final plan. A single plan for each of the park units is summarized in this issue of Update and will be available for review and comments at a public meeting in September (see back for details).

Final Proposals: The Single Plans

This issue of Update summarizes the planning team's recommendations for changes or improvements in facilities at the Morro Bay area state park units. Recommendations for resource preservation and management policies at the parks were presented at the first public meeting.

Montana de Oro State Park
Several policies are recommended in the Resource Element for protection of the natural and cultural resources at this park, including:
- designation of the barrier dune complex as a natural preserve;
- acquisition of the watershed lands of upper Hazard, Islay, and (Continued on page 2).
Coon Creeks;
- restoration of degraded riparian areas;
- protection of the unit's 16 rare or endangered plant species, and development of management programs, when appropriate, for animal species that are threatened, endangered or of special concern;
- management of the Coon Creek / Islay Creek roadless area in a manner consistent with long-term perpetuation of its wilderness character; and,
- nomination of the sand dunes' 30 prehistoric archeological sites to the National Register of Historic Places as an Archeological District.

In conjunction with protection of the sandspit and the endangered kangaroo rat habitat, the Facilities Plan for Montana de Oro recommends eliminating public park access from Army Road in an effort to control illegal OHV use and resultant erosion and habitat destruction. The plan proposes that the park boundary be fenced, with only emergency vehicle access to the beach allowed, and that kangaroo rat habitat be restored. To provide continued beach access to this portion of the unit's coastline, the plan recommends development of a new parking area and access road off Pecho Road to the south.

Beach access at Hazard Canyon will continue, although a new parking area will be established south of the canyon, across from the entrance road to Camp KEEP, while the existing trail to the beach from the south side will be improved. This proposal will improve visitor safety and eliminate the unsightly appearance of cars parked along this narrow stretch of road.

The plan calls for development of an environmental education center just south of the existing Camp KEEP facility, and a new 50-75 unit family campground and small group camp just north of Camp KEEP. The existing ranger residences will be relocated to what is now Camp KEEP, as will the park's storage / maintenance area (now at the Spooner Ranch). The plan also proposes a small day-use picnic area (20 sites) where the ranger residences are now located. Locating new facilities in the general Camp KEEP area will orient new visitor recreation access and use to the primary beach resource which is located north of the mouth of Hazard Canyon. The proposed location of the new facilities will also concentrate new development in an area where the natural scene has already been impacted by human use and where existing trees and landform will minimize visual impact.

The existing campground at Islay Creek will remain, without expansion, but with improvements to provide more screening between sites and better sanitary facilities. The Spooner Ranch House will be improved to serve dual use as both an interpretive center and park office.

One of the plan's recommendations is to designate the unit's offshore lands as an underwater park. Spooners Cove is now heavily used by scuba divers, since the primary underwater resource is located between Spooners Cove and Point Buchon. Minimal new facilities to be provided at Spooners Cove as part of the underwater park designation would include a changing room and outdoor shower for scuba divers. Additional picnic sites and minor access and parking improvements are the only other changes proposed for this area.

The plan also proposes improvement of the bluff-top parking area above Spooners Cove, the addition of picnic sites and improvement of sanitary facilities and parking at Coon Creek.

The plan proposes few changes to the Horse Camp in Hazard Canyon: widening of the existing access road and upgrading of the existing camp-sites, sanitary facilities, and utilities. The one new facility recommended for this area is a 20-car day-use horse staging area.

Trail proposals include development of a coastal trail link, establishment of additional hiking and horse trails, and development of a rest area in upper Islay Creek where the existing barn is located.

The plan also recommends acquiring Pecho Road from the County to be operated and maintained as a park road and improved to provide bicycle access.

Los Osos Oaks S.R.

The plan proposes that interim parking be developed along Los Osos Valley Road when County road widening takes place. Parking for 4-8 cars would be located approximately 100 feet east of the current head-in parking. The plan recommends that a small piece of property to the east of the reserve be purchased to provide safe and adequate permanent parking facilities which will not impact resources within the unit.

Other proposals for the unit include the installation of a park sign, expansion of the trail system, and addition of an interpretive panel at the new parking area.

Update

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Morro Bay State Park

This park unit is the most developed of the state parks in the area and provides a wide variety of recreational opportunities for statewide users. The golf course and marina are used primarily by the local community. The general plan proposes no major changes to the golf course; recommended improvements are to expand the clubhouse parking lot, provide a pedestrian/golf cart overpass on the upper road for golfers, and relocate the maintenance area to a more central and better screened location. No golf holes will be eliminated. Recommendations for the marina include 25-50 new boat slips, and the addition of a new day-use picnic area and expanded parking on the east side of the marina.

In order to continue to provide a high quality camping experience the plan proposes that the existing campground be renovated and expanded to the east where an existing park residence and maintenance facility are now located. A proposed new administrative/maintenance area to be developed off Turri Road on the Baptista property would provide the necessary facilities for day-to-day operation and maintenance of the San Luis Obispo Coast state parks.

To meet existing and future recreational demands, the plan proposes that the Baptista property be developed, with access from a new park road off Turri Road. In addition to a new 50-100 unit campground, the plan recommends development of a trail system, with several vista points, connecting to the western part of the park. Any developments on the Baptista property will need to be carefully placed to minimize visual impacts.

Both the golf-course (upper) road and the lower state park road serve as local commuter routes between the Los Osos/Baywood Park communities and the City of Morro Bay. Both roads will remain thru-traffic routes and continue to function essentially as they are now. However, the plan recommends that a portion of the lower road be realigned to run between the campground and the golf course. This will enable the campground entrance to be relocated to provide more vehicle stack-up space at the entrance without tying up thru-traffic. It will enhance the quality of the visitor experience by making it possible for the visitor to walk to various areas within the park without having to cross a busy thru-road. And it will improve visitor safety and enable a Class I bike path.
and a hiking trail to be placed along the marsh without any major grading immediately adjacent to the marsh. Along the marsh the proposed road realignment would be at a higher elevation, thereby maximizing scenic views of the marsh. Two roadside parking areas are proposed for viewing and access to the marsh edge. A portion of the existing alignment of the lower road is not wide enough to safely allow vehicles to stop and park for viewing the marsh nor to adequately accommodate both a road and a separate bicycle/pedestrian trail.

The plan recommends development of a bus and overflow parking area for the Museum of Natural History. Trails from the heron rookery, campground, and marsh should be oriented to the museum. Due to archeological values at White Point, physical limitations, and engineering considerations, expansion of the museum is not proposed.

These are the major proposals of the single plan for Morro Bay State Park. Additional recommendations are shown on the map.

Atascadero State Beach
Due to the great demand for camping in the area, the plan proposes that the existing campground continue to serve this need rather than being converted partially or fully to day-use as was proposed in one of the “alternatives” plans. The plan proposes formalizing and improving the appearance of the existing day-use at “The Cloisters” site. Development of beach accessways for day-users is proposed at two locations near the campground: See other specific recommendations on the plan.
Morro Strand S.B.
This unit will continue to serve only day-use recreation needs. No new permanent facilities are proposed, primarily because the beach-level elevation of the unit exposes it to storm wave damage. Recommendations consist of enhancing and protecting the existing use areas.
Upcoming Public Meetings

Plans for the five Morro Bay Area state park units will be heard on different evenings.

Montana de Oro State Park
and Los Osos Oaks State Reserve plans will be presented:

Tuesday
September 1 7PM
Veterans Building
209 East Surf Street
Morro Bay

Plans for Morro Bay State Park,
Atascadero and Morro Strand
State Beaches will be presented:

Wednesday
September 2 7PM
Veterans Building
209 East Surf Street
Morro Bay

This is your last opportunity to comment on the plans and make revisions before they go to the printers. After publication, the plans will be reviewed by public agencies, interest groups and concerned individuals. Then they will go to the State Park and Recreation Commission with staff recommendation for approval in Spring, 1988. The planning staff believes the plans reflect the desires of the people of the Morro Bay area and the state for resource preservation and quality recreational experiences. Please come and share your thoughts with us in this important final phase of the planning process.
Memorandum

To: Don Hook  
   Senior Landscape Architect

From: Department of Parks and Recreation - Office of Field Services

Subject: Traffic Study at Morro Bay State Park.

I have obtained the information you requested in our May meeting in regard to the traffic volume and flow patterns within Morro Bay State Park. These conclusions were derived by the interpretation of traffic volume counters and short term visual counts. This interpretation was assisted by personnel who are versed in the traffic volume studies at the Caltrans District Office in San Luis Obispo.

At this time, using the data obtained in this study, it is concluded that only thirty percent of the vehicles observed on this road were there to take advantage of the recreation facilities offered in the park. The balance of the traffic (seventy percent) apparently is using the park road for other purposes.

The other matters in regard to the traffic volume and flow patterns can be obtained by interpretation of the attached map, and the spot traffic count in the narrative portion of the attachments.

If you have any questions or if I can be of additional assistance, please contact me at (916)-322-5636 or ATSS 492-5636.

Gary T. Johnson  
Associate Civil Engineer.

Attachments

cc Charles A. Horel  
   Jim Quayle  
   Dave Sears, San Luis Obispo District  
   Kathleen Watton, San Luis Obispo District  
   Diane McGrath, San Luis Obispo District  
   Dick Feltyn, Central Coast Regional District
* Counters placed on long term basis by park personnel.
** Traffic volumes are a 6-day average count.
DATE: 1 JULY 87
TIME: 16:57 TO 17:18 HR.
21 MIN. COUNT

OBSERVED:
1. MOST VEH. HAD TWO OCCUPANTS.
2. 4-5 VEH. WERE R.V.
   IN NATURE.

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#### Year: 57  
#### Month: 11  
#### Control Station: 1227

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\[\text{Co.} \times \text{Rte.} = \text{Post Mile}\]

#### California State Highway System Traffic Count Control Station Record

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</tbody>
</table>

\[\text{Co.} \times \text{Rte.} = \text{Post Mile}\]

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**Note:** The tables contain data records for traffic counts on specific dates and hours, with columns for various days and hours, and rows for different hours and days. The data seems to be organized in a tabular format with specific entries for each time slot and date.
Miscellaneous Vehicle Counts

Golf Course Parking Lot

1 Jul 87    1725hr.
Veh parked along side road  42 parked veh.
46 total

2 Jul 87    0856hr
1625hr
85 parked veh.
66 parked veh.

Marina Parking Lot:

1 Jul 87    1728hr to 1744hr
Vehicles Exiting  34 parked veh.
Vehicles Entering  6

2 Jul 87    0931hr
Total vehicles in parking lot  76

End Of Report.