

UNIT 653

LEUCADIA STATE BEACH

GENERAL PLAN

November 1983

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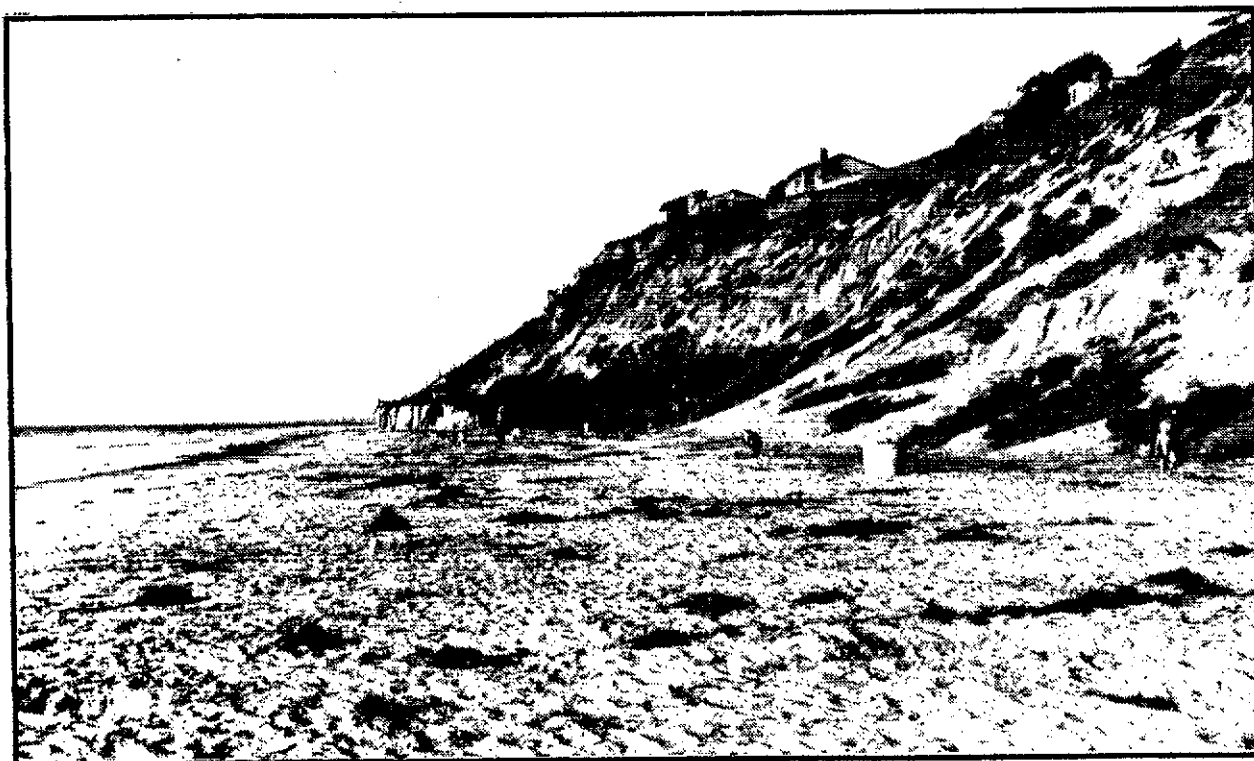
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San Diego Coastal State Park System General Plan

Volume 4 – Leucadia State Beach

July 1984



LEUCADIA STATE BEACH



State of California—The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

This is volume four of the general plan for nine coastal State Park System units in San Diego County. Below is a list of the nine booklets that comprise the San Diego Coastal State Park System General Plan.

| Volume Number | Name |
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| 1 | Summary and Regional Data |
| 2 | Carlsbad State Beach |
| 3 | South Carlsbad State Beach |
| 4 | Leucadia State Beach |
| 5 | Moonlight State Beach |
| 6 | San Elijo State Beach |
| 7 | Cardiff State Beach |
| 8 | Torrey Pines State Beach and State Reserve |
| 9 | Silver Strand State Beach |

DEPARTMENT OF PARKS AND RECREATION

STATE PARK AND RECREATION COMMISSION

P. O. BOX 2390, SACRAMENTO 95811



Resolution 78-83
adopted by the
State Park and Recreation Commission
at its regular meeting in San Diego on
November 4, 1983

WHEREAS, the Director of the Department of Parks and Recreation has presented to this Commission for approval the proposed General Plan for the San Diego Coastal State Park System; and

WHEREAS, this reflects the long-range development plans as to provide for the optimum use and enjoyment of the unit as well as the protection of its quality;

NOW, THEREFORE, BE IT RESOLVED that the State Park and Recreation Commission approves the Department of Parks and Recreation's General Plan for the San Diego Coastal State Park System, which includes South Carlsbad, Carlsbad, Silver Strand, Leucadia, Moonlight, San Elijo, and Cardiff State Beaches; preliminary dated July, 1983, subject to such environmental changes as the Director of Parks and Recreation shall determine advisable and necessary to implement carrying out the provisions and objectives of said plan.

I-2133L

San Diego Coastal State Park System
General Plan Volume 4 - Leucadia State Beach

GEORGE DEUKMEJIAN
Governor

GORDON K. VAN VLECK
Secretary for Resources

WM. S. BRINER
Director

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
P.O. Box 2390 Sacramento 95811



July 1984

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General Data



The summer character of Leucadia State Beach

(photo courtesy of DNOD)

GENERAL DATA ON
LEUCADIA STATE BEACH

Location: On the Pacific Ocean, in the unincorporated community of Leucadia (San Diego County), on Neptune Avenue between an existing parking facility north of Grandview Street to a point south of Europa Street. The unit is 21 miles north of the City of San Diego. Access is from two parking areas along Neptune Avenue at the north and central portions of the unit.

Size: A narrow coastal strip of 18.6 acres with about 7,520 feet of ocean frontage.

Existing Facilities: Two developed parking lots atop an 80-foot bluff with space for a total of 82 cars and 10 motorcycles, portable chemical comfort stations at each parking lot, and one beach access stairway down adjacent privately owned bluffs. The southern stairway was destroyed by landslide movement during November 1982.

Vegetation: This unit is primarily beach and two blufftop parking lots. There are no significant native plant communities.

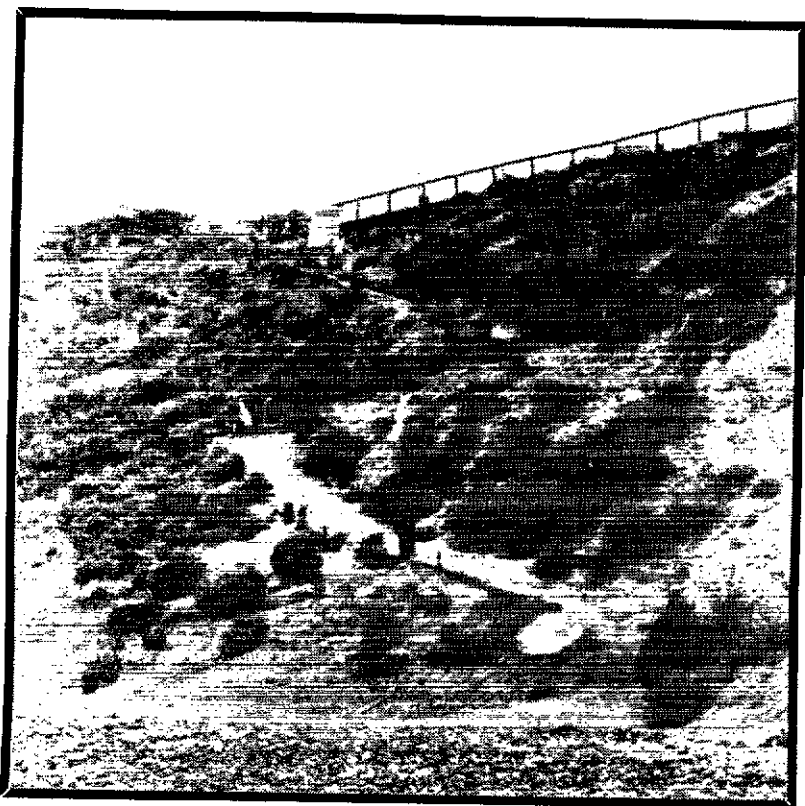
Wildlife: Leucadia State Beach provides habitat for shorebirds and gulls on the beach. The endangered California brown pelican can frequently be seen flying along the shoreline.

Outstanding Natural Features: The bluffs, which are unstable.

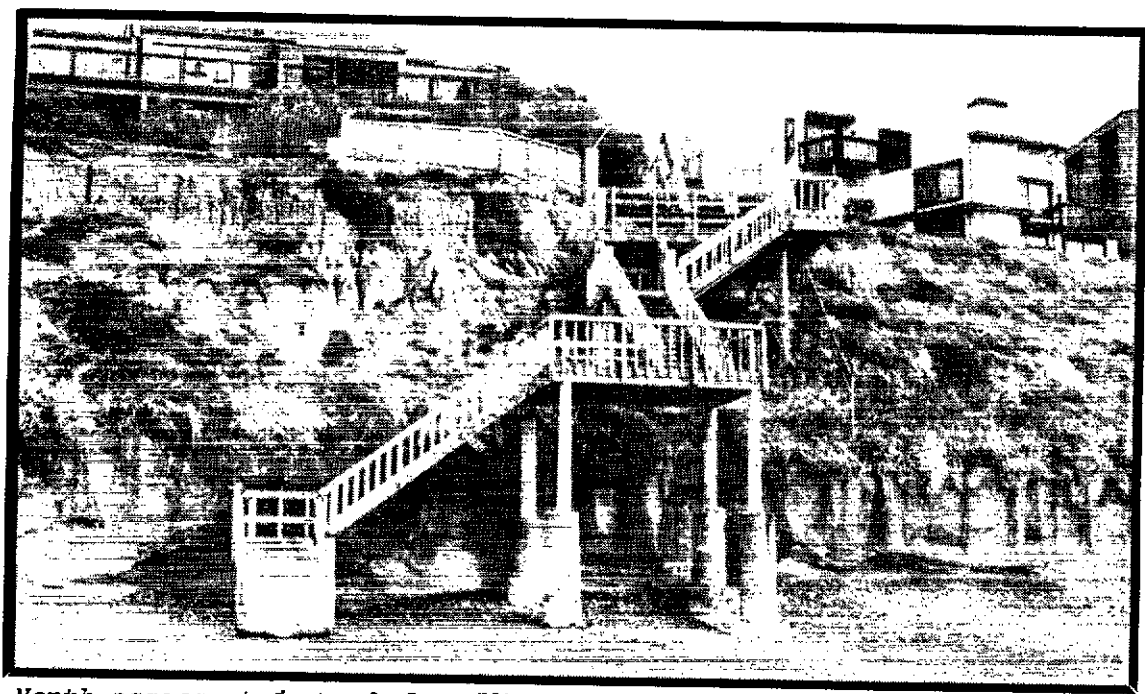
Historical and Archeological Values: There are no known historical or archeological values in this unit.

Ownership: The unit was acquired in 1949 from San Diego County. The north access was added in 1978, also from the county.

Resource Element



South access after 1982-83 storms



North access stairway before winter storms of 1982 and 1983

RESOURCE ELEMENT

This Resource Element was prepared to meet requirements 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 establishes long-range management objectives for the unit's natural and cultural resources. Specific actions or restrictions required to achieve these objectives are also included in this element. Maintenance operations and resource management details are left for inclusion in specific resource management programs to be prepared later.

Summary and Evaluation of Resources

The following resource information is summarized from a large collection of primary and secondary literature located in offices of the Department of Parks and Recreation in Sacramento and at the Area Office. A detailed inventory of features, prepared for this unit as part of the general plan process, is on file with the department.

Natural Resources

Topography

This unit consists of 5,380 feet (1,614 meters) of sand and cobble beach beneath 80-foot (24-meter) bluffs. The beach is below a residential area, and private ownership extends down the bluffs to the edge of the beach. State ownership extends up the bluff at two points where public access is provided from two small parking areas. The southern parking area includes a 400-foot (120-meter) stretch of state-owned bluff. A pathway on the bluff provides access to the lot. There is a 20-foot (6-meter) corridor down the bluff for the northern stairway.

Climate

The Mediterranean climate, characterized by warm, dry summers and cool, wet winters, is moderated by the unit's location next to the Pacific Ocean and by coastal fog. Extremes of heat or cold are unusual. Average maximum temperatures range from 64.6°F (17.9°C) in January to 77.3°F (24.9°C) in August.

Prevailing winds are from the west most of the year. Strong hot, dry, easterly winds, the Santa Anas, sometimes blow for several days, raising the temperature to 90-100°F (32-38°C). Santa Anas can occur anytime of year but are most prevalent in the fall.

85% of precipitation occurs between November and March. The annual average is about 10 inches (25 cm).

Hydrology

The two cliff-top parking areas are paved, and surface water generally flows from these parking areas to a city street. No streams or springs occur on the property. However, subsurface drainage is evident on the bluff faces below the parking lots.

Geology

The beach is composed mostly of sand and cobbles. During the winter, there is very little sand, especially at high tide, due to a deficit in the amount of littoral sand. Wave action generally moves sand southward along this stretch of coastline. Construction of Oceanside Harbor and the damming of rivers that previously transported large quantities of sediment to the beaches have disrupted the normal process of sand movement. The southward-moving sand eventually reaches the Scripps Submarine Canyon near La Jolla and is lost from the littoral cell. Each year, more sand is lost to the canyon than is replaced by transport of sediment down rivers, creating the deficit. As a result, Leucadia State Beach has less sand each year. Loss of sand exposes the ocean-facing cliffs and oceanside development to direct wave attack, especially during severe storms and high tides.

The bluffs are composed of dark green-gray silty claystone and mudstone, probably Eocene in age (Santiago Formation or Delmar Formation). The Pleistocene-aged Lindavista Formation overlies the older Eocene rock, which is exposed at low tide. The cliffs are subject to blockfalls and landslides. Runoff has caused gulying of the cliff faces. Vertical fractures in the cliffs provide erosion channels down the bluffs, adding to the risk of eventual failure of bluff sections.

Seacliff retreat is an ongoing process here. The cliffs above the state beach, mostly privately owned and heavily developed with cliff-edge residences, are experiencing gulying, landsliding, and blockfalls, which will probably eventually undermine the structures. The southern pedestrian stairway down the cliff to the beach had to be removed after a large landslide on December 1, 1982. The lower third of the bluff moved several feet downslope, damaging the walkway and creating a hazard. The walkway was removed, and this access has been signed to warn the public.

The northern pedestrian stairway (Grandview) was damaged on April 1, 1983 when an 82-foot section of the seacliff broke off from the bluff and fell onto the beach. As it fell, the massive block knocked down two flights of stairs and two landings of the Grandview stairway.

Wave erosion associated with storms and high tides, and the loss of beach sand which formerly protected the cliffs from direct wave attack, have resulted in undercutting the seacliffs. Until sufficient sand returns to the beach to buffer the bluffs from direct wave attack, the bluffs will continue to be subject to massive blockfalls. Areas immediately north and south of the Grandview stairway are now prime candidates for bluff failure, since they are now projecting from the cliff face.

Soils

The only soil at Leucadia State Beach is Marina loamy coarse sand, 2 to 9% slopes, which is somewhat excessively drained, very deep loamy coarse sand derived from weakly consolidated to noncoherent ferruginous sand. Fertility is medium and permeability is rapid.

Coastal beach and terrace escarpment land types are also found in this unit. Coastal beaches are gravelly and sandy deposits along the Pacific Ocean where

the shore is washed and rewashed by ocean waves. Terrace escarpments, between the terrace bluffs and the ocean beach, are not suitable for development due to steep slopes and severe erodibility.

Plant Life

No terrestrial vegetation is established on the beach. The two cliff-top parking areas are landscaped with ornamental shrubs and herbs. Sea-fig (*Carpobrotus aequilaterus*) is a dominant plant on the cliff. No significant native plant communities exist in the unit.

Animal Life

Leucadia State Beach provides habitat for shorebirds and gulls on the beach. Public recreation activity disturbs shorebird habitat during the summer. The endangered California brown pelican can be frequently seen flying offshore.

Marine Life

The dominant marine habitat at Leucadia State Beach is the intertidal sand and cobble beach. Both nearshore sandy and rocky sublittoral zones occur. The constant daily shifting of sand on the exposed beach makes it a harsh environment for most animals. Relatively few animals and almost no plants exist here.

Those species living on the beach include worms, bivalves, and sand crabs, which possess unusual behavioral, morphological, and physiological adaptations allowing them to counteract adverse environmental conditions. As littoral sand continues to be lost from the beach, the diversity and quantity of intertidal organisms will probably decrease.

Offshore fish include surfperch, croakers, corbina, and grunion. Surf fishing and fishing while snorkeling and scuba diving are common activities at the beach.

Cultural Resources

Native American Resources

The unit has been completely surveyed for Native American cultural resources, and there are no known archeological sites, features, or isolated artifacts.

Euroamerican Resources

There are no known historic sites or any significant Euroamerican cultural resource sites or features at Leucadia State Beach.

Historical Sketch

Human skeletal material found in cliffs at Del Mar near Torrey Pines State Beach has been dated to 28,000, 44,000, and 48,000 years B.P. (before present) by an experimental amino acid racemization dating technique. However, these dates are controversial and are considered to be hypothetical because they have not been confirmed by other dating techniques.

The earliest documented assemblage of tools in this area came from the banks of the San Dieguito River. This site in western San Diego County yielded a small number of leaf-shaped and weak-shouldered projectile points, knives, crescents, cores, flake scrapers, choppers, hammers, and engraving tools. The San Dieguito culture is considered to have been a regional variation of a widespread hunting tradition that came to southern California from the Great Basin.

The San Dieguito culture, based primarily on hunting, began 10-12,000 B.P. and lasted to 7,500-8,500 B.P. Four phases of the San Dieguito cultural tradition have been recognized, based on increasing refinement and specialization of tool types.

Archeological sites dating between 7,500 B.P. and 3,000 B.P. include numerous milling stones and mullers that were used to harvest wild seeds. Occupational middens became larger and deeper and include shellfish, some animal bones, and a few heavy projectile points.

A variety of burials have been found in milling stone sites but without elaborate or abundant grave goods. The regional variant of this horizon is called the La Jolla Complex. The La Jolla Complex is known from several sites along the shores, terraces, and nearby hills of the coastal plain, and reflects an economy based on shellfish and seed collecting.

After 5,000 years ago, mortars and pestles were added to handstones and mills for processing plant foods. The projectile points found are better made but are still relatively rare. The following intermediate period up to A.D. 1400 is not well defined in the San Diego area. Pottery was introduced from the east sometime after the beginning of the Christian era and marks the arrival of Yuman-speaking people in San Diego County.

Late Horizon sites after A.D. 1400 include finely chipped projectile points without stems, curved shell fishhooks, a variety of shell, bone, and stone ornaments, and elaborate mortuary customs.

European contact with this part of California began with Juan Rodriguez Cabrillo's 1542 voyage north from Navidad, Mexico. In 1602-1603, Sebastian Vizcaino surveyed this coastline, but no white people settled in the area until 1769 when the Mission San Diego de Alcala was founded at San Diego. In the same year, Gaspar de Portola began a land expedition northward up the coast. In mid-July, Portola's party reached the vicinity of the present Carlsbad State Beach. Friar Juan Crespi, who recorded their adventures in his diary, described broad, grassy mesas interrupted by rich, green valleys.

Although Indian people in coastal San Diego County were called Diegueno or Mission Indians, they are known by and prefer a variety of other names. Many ethnographers use Ipai to describe those living between San Diego and Agua Hedionda, and Tipai for those living in the territory from San Diego south past Ensenada, Mexico, and east beyond the Imperial Valley. Some inland Indian groups prefer the name Kumeyaay. The Luiseno occupied the coastal area to the north of Leucadia State Beach.

The Ipai hunted and gathered a wide variety of foods, with acorns making up a smaller part of their entire diet than those of many other California tribes. They had a well-developed trade system with peoples to the east, from whom

they obtained foodstuffs and obsidian. The Ipai rapidly integrated Spanish crops, domestic animals, and some tools into their subsistence economy. However, introduced species, especially sheep, competed with native flora and fauna that were traditional food sources.

The Ipai and the Tipai took poorly to mission life. Six years after the founding of the San Diego Mission, it was attacked by its "own" Indians.

The secularization of the missions in 1834 and the American takeover of California in 1846 left most Indians without a legal claim to the land. Access to traditional hunting and gathering areas, including the coast, was increasingly restricted. A series of small reservations was established in scattered inland areas beginning in 1875.

Neglected and bypassed by Euroamerican settlers, the area of Leucadia State Beach attracted little attention until after the completion of the California Southern Railroad through the area in 1881. Spanish and Mexican travelers had passed by to the east along various trails known collectively as the El Camino Real. Land grant boundaries of Rancho San Dieguito and Las Encinitas were also far to the east, though their cattle and sheep may have strayed to the hills overlooking the ocean.

The railroad and a land rush by health seekers and agricultural colonists in the mid-1880s brought change. A group of English colonists settled the area and named the community Leucadia after a small island off the coast of Greece. In time, much of the land passed into the hands of the South Coast Land Company, which hoped to develop sources of water and sell the land for high-yield farming.

The coastline had been simply referred to by Spanish and Mexican navigators as "La Costa" (the coast). In time, the name Ponto Beach was applied to this ocean frontage. (This reference may be associated with a nearby Santa Fe Railroad station called Ponto about one-half mile to the north.) Others named the beach for the small town of Leucadia or referred to it as "Beacon Beach," due to a government lease for an aero beacon.

In 1920, the South Coast Land Company deeded Ponto Beach, then slightly more than 10 and a half acres, to San Diego County. In 1949, the county deeded the beach to the State Park System and it was named Ponto State Beach. The name was later changed to honor the community in which it is located.

Esthetic Resources

Sweeping 180-degree panoramas of the ocean can be seen from the clifftop sites at Leucadia State Beach. The view from the beach is less dramatic and the focus tends to be closer, concentrating on the breaking waves along the surf line. Observation of human activity is part of the beach experience. Surfers, sunbathers, fishermen, and swimmers are prominent and positive visual elements of the beach environment. Animal life, including pelicans, shorebirds, whales, and porpoise, is also seen in or from the unit.

Urban development adjacent to the unit, including traffic and housing, detract from this positive scene. The numerous private stairways on the cliffs adjacent to the beach are visual intrusions on the natural setting. Low-flying aircraft and traffic can be loud and distracting.

Recreation Resources

Virtually all recreation activities at Leucadia State Beach are beach and ocean oriented. A wide variety of activities occur, including:

Passive

Sunbathing
People Watching
Picnicking
Beachcombing
Sightseeing
Contemplation
Wildlife Observation

Active

Surf Fishing
Swimming
Skin Diving
Jogging
Beach Play
Boating
Surfing

Many of these activities, including sunbathing and jogging, do not require a beach environment, but the esthetic qualities of this beach make these activities more enjoyable here.

Resource Policy Formulation

Classification

Leucadia State Beach has been a unit of the State Park System since 1949. The unit was classified a state beach by the State Park and Recreation Commission in May 1969. The Public Resources Code defines a state beach as a type of state recreation unit as follows:

5019.56. State Recreation Units. State recreation units consist of areas selected, developed, and operated to provide outdoor recreational opportunities. Such units shall be designated by the Commission by naming, in accordance with the provisions of Article 1 (commencing with Section 5001) and this article relating to classification.

In the planning of improvements to be undertaken within state recreation units, consideration shall be given to compatibility of design with the surrounding scenic and environmental characteristics.

State recreation units may be established in the terrestrial or underwater environments of the state and shall be further classified as one of the following types: . . .

(d) State beaches, consisting of areas with frontage on the ocean, or bays designed to provide swimming, boating, fishing, and other beach-oriented recreational activities. Coastal areas containing ecological, geological, scenic, or cultural resources of significant value shall be preserved within state wildernesses, state reserves, state parks, or natural or cultural preserves.

Declaration of Purpose

The State Park and Recreation Commission approved the following declaration of purpose for all San Diego coast state beaches on June 19, 1964:

The purpose of San Diego coast state beaches is to make available to the people, for their benefit and enjoyment forever, the scenic and recreational resources inherent to the coastal beaches and adjacent uplands of San Diego County.

The function of the Division of Beaches and Parks at San Diego coast state beaches is to prescribe and execute appropriate programs which provide facilities and opportunities for maximum public use and enjoyment, in accordance with the declared purpose of the unit.

A new declaration of purpose for Leucadia State Beach is established as part of this general plan as follows:

The purpose of Leucadia State Beach is to make available to the people, for their benefit and enjoyment forever, the scenic, natural, cultural, and recreational resources of the ocean beach and related uplands.

The function of the California Department of Parks and Recreation at Leucadia State Beach shall be to preserve and protect public opportunities for ocean beach-oriented recreation in a high-quality environment. A natural setting for recreational activities shall be preserved.

Zone of Primary Interest

A zone of primary interest is that area in which the department would like to influence development and use so that a State Park System unit's resources will not be seriously jeopardized or degraded.

The zone at Leucadia State Beach includes all adjacent land, and the offshore areas.

In addition, the department is concerned about all lands, no matter how far from the unit, that can, through their development and use, adversely affect the unit's resources and features. Activities that continue to affect the unit include the generation of air pollution in southern California urban areas, and the damming of rivers and the building of breakwaters and other structures along the coast, which has caused the disruption of littoral sand movement.

Natural Resource Management Policies

The management of natural resources in the State Park System is governed by statutes, policies, and directives found in the Public Resources Code, California Administrative Code (Title 14), and the department's Resource Management Directives. Specific policies from the department's Resource Management Directives that pertain to the natural resources of Leucadia State Beach are: 13, 14, 15, 16, 18, 19, 33, 36, 38, 39, and 46. Directive 18, particularly relevant to planning southern California state beaches, says:

(18) Insofar as is possible in state beaches, the entire area of the sandy littorals will be available for recreational use and visual enjoyment. It is an objective of the department to avoid use of natural sandy beaches for parking, or for other supportive or secondary uses.

The Resources Agency established the Policy for Shoreline Erosion Protection on September 14, 1978, which applies to planning, purchasing, and improving State Park System units. The policy states, in part:

Development of the lands adjacent to large bodies of water carries with it an element of danger from wave action, which can threaten the safety of public and private property and recreational values.

It is the policy of the Resources Agency that the use of these lands avoid hazardous and costly situations caused by erosion and minimize or resolve existing problems. Only in those situations where structures or areas of public use are threatened should the state resort to funding or approving remedial projects. When necessary, projects should restore natural processes, retain shoreline characteristics, and provide recreational benefits to the extent possible.

The planning and improvement of parks and beaches should be done in a way consistent with protection against the potential erosion of the affected segment of the coastline, and any structures located in areas subject to erosion damage should be expendable or moveable.

In addition to policies, directives, and laws that apply statewide, the following specific natural resource management policies have been developed for Leucadia State Beach:

Bluff Fortification

Most of the cliff faces and clifftops adjacent to the state beach are privately owned. The clifftops are heavily developed with single-family dwellings, with lots extending down the bluffs to the unit boundary at the toe of the cliffs. The cliffs are being undercut at their bases by wave action and are being eroded by surface runoff. The cliffs will eventually retreat and in the process destroy the clifftop structures. Cliff failure may occur as a large-scale landslide as a result of inland irrigation and exposure to direct sea wave attack, or the failure may occur as very slow surface erosion and not result in any loss of structures for 50 years. Clifftop owners are attempting to slow the process of seacliff retreat by planting vegetation on the slopes and by fortifying the bluffs with retaining walls or gunite. Such actions are very expensive, are not permanent solutions, and destroy the scenic qualities of the bluffs.

Policy: The state-owned cliff faces at Leucadia State Beach shall not be fortified with retaining walls. Seacliff retreat is recognized as a natural process that cannot be permanently stopped. Erosion control should be limited to mitigating the detrimental effects of increased runoff from the clifftops and to planting native vegetation on the cliff faces. Seawalls shall not be constructed at the state beach.

Recent Landslide

During November and December 1982, high tides, strong winds, and the associated wave energy triggered a large landslide at the southern access to the state beach. The landslide movement was triggered by wave undercutting, which caused the concrete stairway to break and drop. The landslide continues to be active. Failures will continue until the entire slope readjusts itself to a gentler gradient. This area may remain unstable for several years. The northern stairway was damaged in April 1983.

Analysis of aerial photos shows this area to be historically active. The landslide was observed during an 1897 topographic survey performed by the railroad. It had been inactive until November 1982.

Policy: No new stairways shall be constructed at Leucadia State Beach accesses until a geological evaluation determines that the landslides are stable. Until safe access is provided, pedestrian access shall be discouraged at this location to minimize the public safety hazard, and to prevent future accelerated erosion caused by foot traffic.

Monitoring Sand Loss and Cliff Erosion

The problems of littoral sand loss and cliff erosion have been recognized as serious threats to facilities. Little information is available on erosion rates. If rates of loss were known, a management program could be developed for facility protection or replacement of lost facilities.

Policy: A regular program of monitoring rates of cliff erosion and the width and elevation of Leucadia State Beach shall be established by field staff under supervision of the Southern Region and the Resource Protection Division. The monitoring program should include ground photos, taken at regular intervals at the same locations, to document beach profiles and seacliff retreat.

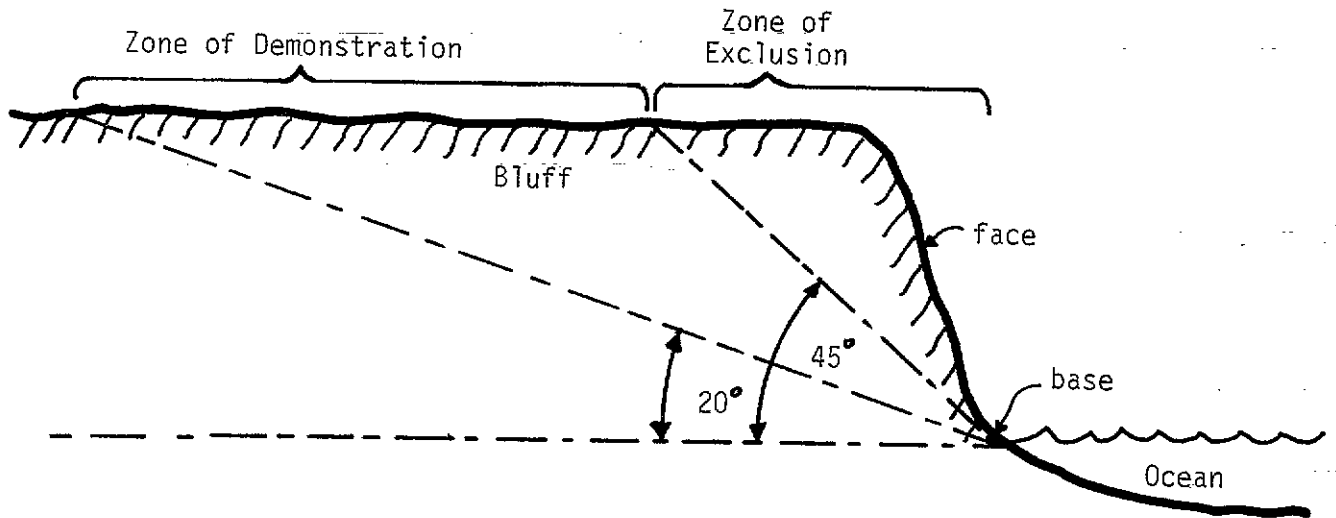
Bluff Setbacks

That seacliff retreat is an ongoing process should be taken into consideration when designing and placing facilities near cliff edges. To protect investments in facilities and to assure public safety, it is a sound principle to establish setback zones -- both "zones of exclusion," where facility development is precluded, and "zones of demonstration," where facility development is allowable if stability and geologic suitability can be demonstrated.

Policy: A zone of exclusion shall be established to include the base, face, and top of all bluffs and cliffs extending inland to a plane formed by a 45-degree angle from the horizontal at the base of the cliff or bluff. No new structures shall be constructed within this zone unless they are either moveable or expendable. Existing facilities, including buildings and campsites, may remain in use subject to regular inspections by field personnel in coordination with the department's geologist. A zone of demonstration shall be established in the unit to extend inland from the zone of exclusion to the intersection of the ground surface with a plane inclined 20 degrees from the horizontal from the toe of the cliff (see Figure 1).

Figure 1

Zones of Demonstration and Exclusion



Human-Caused Erosion

Foot traffic directly down cliff faces causes cliff erosion by dislodging soil and damaging protective vegetation. Vandalism of cliffs, including graffiti carved into the soft sandstone bluffs, also accelerates erosion.

Policy: Fencing or other appropriate means shall be used to discourage foot traffic down the cliff faces. Interpretive programs shall describe the permanent destructive effects of climbing on bluffs and carving graffiti into the cliffs.

Littoral Sand Loss

Loss of littoral beach sand at Leucadia State Beach has reduced recreational opportunities and animal life habitat. Sand loss exposes shoreline facilities and ocean-facing cliffs to direct wave attack. Littoral sand loss is a regional problem common to the entire San Diego County coastline. The U.S. Army Corps of Engineers is conducting a regional shoreline erosion study, including the Leucadia area. The study will include monitoring of littoral sand movement and may make recommendations concerning where artificial sand replenishment may be beneficial.

Policy: Littoral sand loss is recognized as a major threat to existing facilities and recreational resources. The department shall work with other agencies, including the San Diego Association of Governments and the U.S. Army Corps of Engineers, to develop regional solutions to the sand loss problem. Any major program of sand replenishment or retention must consider the regional nature of the problem and the regional impact of actions taken along a segment of the shoreline.

Cultural Resource Management Policies

Management of cultural resources at Leucadia State Beach is governed by state statutes and departmental policies and directives. The following portions of the Public Resources Code pertain to the management of cultural resources: Chapter 1.7, Section 5097.5 and Chapter 1.75, Section 5097.9.

The following Resource Management Directives pertain to the cultural resources of Leucadia State Beach: 3, 18, 19, 24, 25, 50, 51, 52, 54, 55, 56, 58, 59, 60, 69, 70, 71, and 72.

The inventory of features and this Resource Element have been prepared to comply with the Public Resources Code sections and Resource Management Directives listed above. There are no known cultural resource sites at Leucadia State Beach.

Policy: Any archeological or historical resources that may be discovered at Leucadia State Beach by department employees should be reported to the Resource Protection Division, which is responsible for maintaining a statewide inventory of cultural resources. Any discoveries should be protected in situ until they can be professionally described and evaluated (based on Resource Management Directives 25, 50, 51, 54, 58, and 70). A clearance is otherwise given for this general plan and its development, construction, and resource management projects as per Directive 59.

Allowable Use Intensity

California state law (Section 5019.5, Public Resources Code) requires that a land carrying-capacity survey be made before any park or recreational area development plan is prepared. As a step in determining carrying capacity, the department considers allowable use intensity.

Appropriate use intensity is determined by the analysis of three components: 1) management objectives, 2) visitor perceptions and attitudes, and 3) the impact of any development and use on natural and cultural resources.

The management objectives for Leucadia State Beach are generally set forth in the statutes defining a state beach (see the Classification section of this Resource Element).

The second component, visitor perceptions and attitudes, is sometimes referred to in relation to "social carrying capacity," and involves assessing the social objectives of the department, what recreationists perceive as an acceptable recreational environment, what degree of isolation or crowding is acceptable, and other perceptions and attitudes pertaining to the quality of visitor recreation experiences. These factors are very difficult to quantify. State Park System planners must take a leading role in increasing public awareness and appreciation of high-quality recreation experiences.

The third, and most important, component in determining allowable use intensity involves an analysis of the natural and cultural resources to determine the area's physical limitations for development of facilities, and the ability of the ecosystem to withstand human impact (ecological sensitivity). This analysis is based on a number of environmental

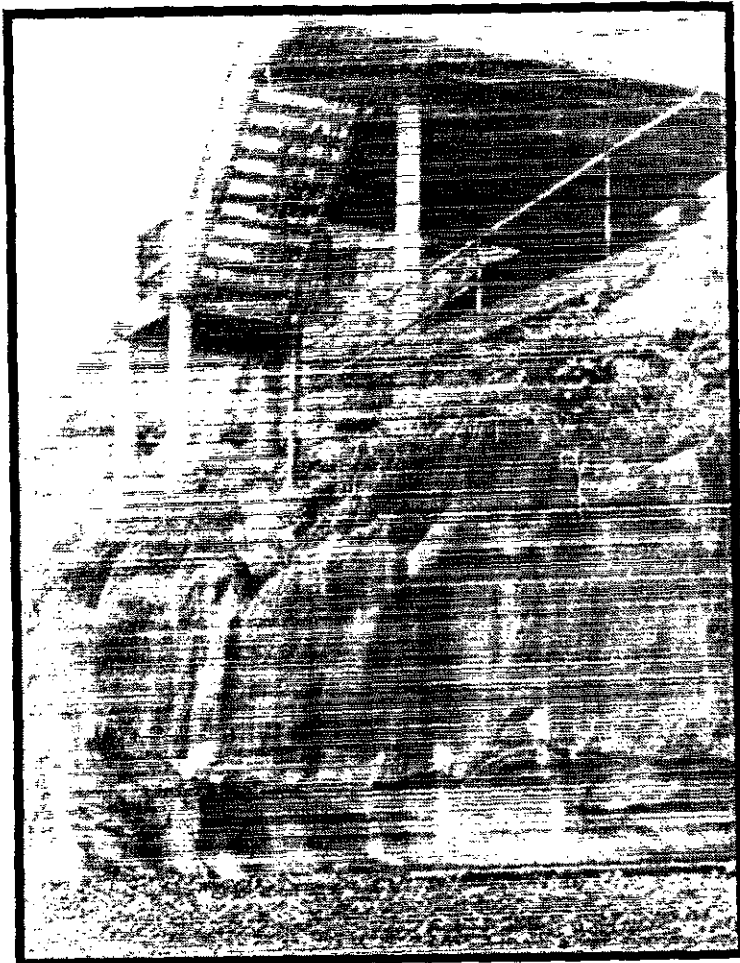
considerations, including: soils and their erosion and compaction potential; geological factors, such as slope stability and relief; hydrologic considerations, including the potential for pollution of surface waters, flooding, and depletion of surface and groundwater through water use; vegetation characteristics, such as durability, fragility, and regeneration rates; occurrence of paleontological strata; and wildlife considerations, such as tolerance to human activity, wildlife population levels, and stability. Additional considerations in determining ecological sensitivity are: rare and/or endangered plants and animals, unique botanical features and ecosystems, and examples of ecosystems of regional or statewide significance (marshes, riparian areas, and vernal pools).

Based on the preceding factors, four zones of allowable use intensity have been developed for the state beaches in San Diego County (all zones may not exist in each unit):

- I. Ocean beach. Capable of high-intensity use but subject to periodic inundation by ocean waves. No permanent facilities allowed within this zone.
- II. Ocean-facing cliffs. Defined as the zone inland from the toe of the cliff to a horizontal distance equal to the height of the cliff as measured from a vertical plane to the toe. Visitor use restricted to designated corridors to provide access from the terrace level to the beach. New construction only for stairways and trails; special construction methods shall be employed to reduce the potential for accelerating erosion and landsliding. Existing facilities may remain in use subject to regular inspections by field personnel in coordination with the department's geologist. Use of facilities shall be discontinued if determined to be unsafe.
- III. Sand dunes and low areas inland from beach. Subject to inundation only during unusually heavy storms, swells, and tsunamis. Any native vegetation in this zone should be protected. New developments are allowed in this zone, but risk of damage from ocean waves and shoreline erosion is significant.
- IV. Terrace lands. Capable of high-intensity public use and development with appropriate setbacks.

Ownership patterns and other limiting factors, including esthetic, socioeconomic, and design considerations, may indicate that a higher or lower use intensity is desirable in a particular area. If appropriate mitigating actions are incorporated in planning and design, and if risks are understood, higher use levels may be acceptable. In these cases, innovative approaches, such as portable buildings and controlled pedestrian accessways, will be used to provide recreation opportunities.

Land Use and Facilities Element



Maintaining the two accesses down the bluff is difficult during winter storms.



LAND USE AND FACILITIES ELEMENT

This element provides information on current land uses around the unit, explains current conditions in the unit, and recommends improvements.

For purposes of this plan, two study areas have been identified, which encompass the unit's two developed areas (see Existing Facilities Map):

- Area 1 -- The north developed area
- Area 2 -- The south developed area

Land Use Patterns of Surrounding Area

Leucadia provides the setting for this state beach. Residential development on three sides of the unit limits any unit expansion. Access to the unit is via residential streets from the coast highway, S-21 (old Highway 101). The coast highway is dominated by businesses that provide services for beach users.

Almost all the homes on either side of the unit's parking lots have access stairways extending down the bluff to the state beach. In several locations, owners have managed to draw small boats up the bluff from the beach so that they rest on the private slope. The net effect of these homes, stairways, and boats is a significant visual impact on the state beach. Erosion of the bluffs and seacliff retreat is a continuing problem for the homeowners, and many have installed retaining walls and other devices in an attempt to retard bluff erosion (see Resource Element).

Ownership

The unit was initially acquired in 1949, including the south developed area (Area 2). The north developed area (Area 1) was acquired in 1978 after being developed by San Diego County. The unit currently totals 18.6 acres. (Ownership information is shown on the department's drawing number 18611 and the San Diego County drawing number KH-3273.)

Existing Unit Conditions

Existing facilities (see Existing Facilities Map) are, by area:

- Area 1 -- A parking lot for 61 cars and 10 motorcycles
- One beach access stairway with beach shower, which was damaged in April 1983
- Trash receptacles and benches
- One portable chemical comfort station
- Landscaping

- Area 2 -- A parking lot for 21 cars
- Trash receptacles
- A beach access path
- Blufftop fencing
- One portable chemical comfort station

Existing land uses in both Areas 1 and 2 are parking, beach access down the bluff, and beach-oriented activities, with surfing a major use.

This small unit primarily serves the local population. The proximity of residential properties provides a high degree of local interest in activities occurring in the unit. Visitor attendance during the 1980-81 fiscal year was estimated at 472,000. Because no fees are collected, no actual counts are available.

While unit beach frontage is extensive (well over a mile), developable land is extremely limited. Present uses are considered appropriate and should be continued with only minor modification.

The following problems, by area, require attention:

- Both Areas -- No fees are collected to offset operating costs.
- Area 1 -- The stairway was damaged in April 1983.
- Area 2 -- A landslide in November 1982 destroyed the concrete beach access stairway. The bluff continues to slip, threatening the parking lot. A beach access pathway is currently in use at this location, and bluff erosion is a continuing problem.
- Further study is needed to determine if the condition of the cliff will allow safe public access to the beach via new stairways and/or paths.

Beach sand depletion is a continuing problem throughout the length of the unit. The section on beach erosion in Volume 1 of this plan discusses the current situation and indicates that a study by the Corps of Engineers will be completed in 1986. We hope that definitive regional solutions to this problem can be reached based on this study.

Facility Recommendations

The following list of recommended actions for the development of Leucadia State Beach is organized by area (as identified on the General Plan Index Map).

Area 1

- Install parking meters.
- Rehabilitate stairway.
- Install interpretive panels.

Area 2

- Rehabilitate the beach access after the landslide has stabilized. Use of the area will have to be discouraged until stability is reached (see Resource Element policy recommendations).
- Revegetate bluff face with unirrigated native plants as the landslide stabilizes.
- Install interpretive panels.
- Install parking meters.

Action on these proposals will permit present land use patterns to continue and will provide revenue from the unit to assist in funding improved services.

Special Considerations

State law requires that projects be designed to be accessible to the physically disabled. Leucadia State Beach does not lend itself topographically to beach access for those who cannot negotiate stairways. Parking lots and comfort stations will, however, accommodate disabled persons.

The department encourages local agencies to maximize bus service to the unit to augment the limited parking space. This will increase access while minimizing traffic congestion, air pollution, and parking problems for local residents.

Unresolved Planning Issues

Area 1's stairway will need further study before rehabilitation.

Instability of the landslide in Area 2 is a matter of concern. When this plan was written, it was not possible to predict the extent of ultimate slippage, which will be a product of geology, weather, tides, waves, and runoff patterns of storm water.

The pattern of bluff failure in this area suggests that an undetermined period of time will be required before a state of stability is achieved. It is necessary to monitor the bluff to determine when that will occur. Meanwhile, no rehabilitation will commence until the bluff is stable. Experience suggests that beach visitors will continue to traverse the area to get to the beach.

Local Coastal Plan Conformance

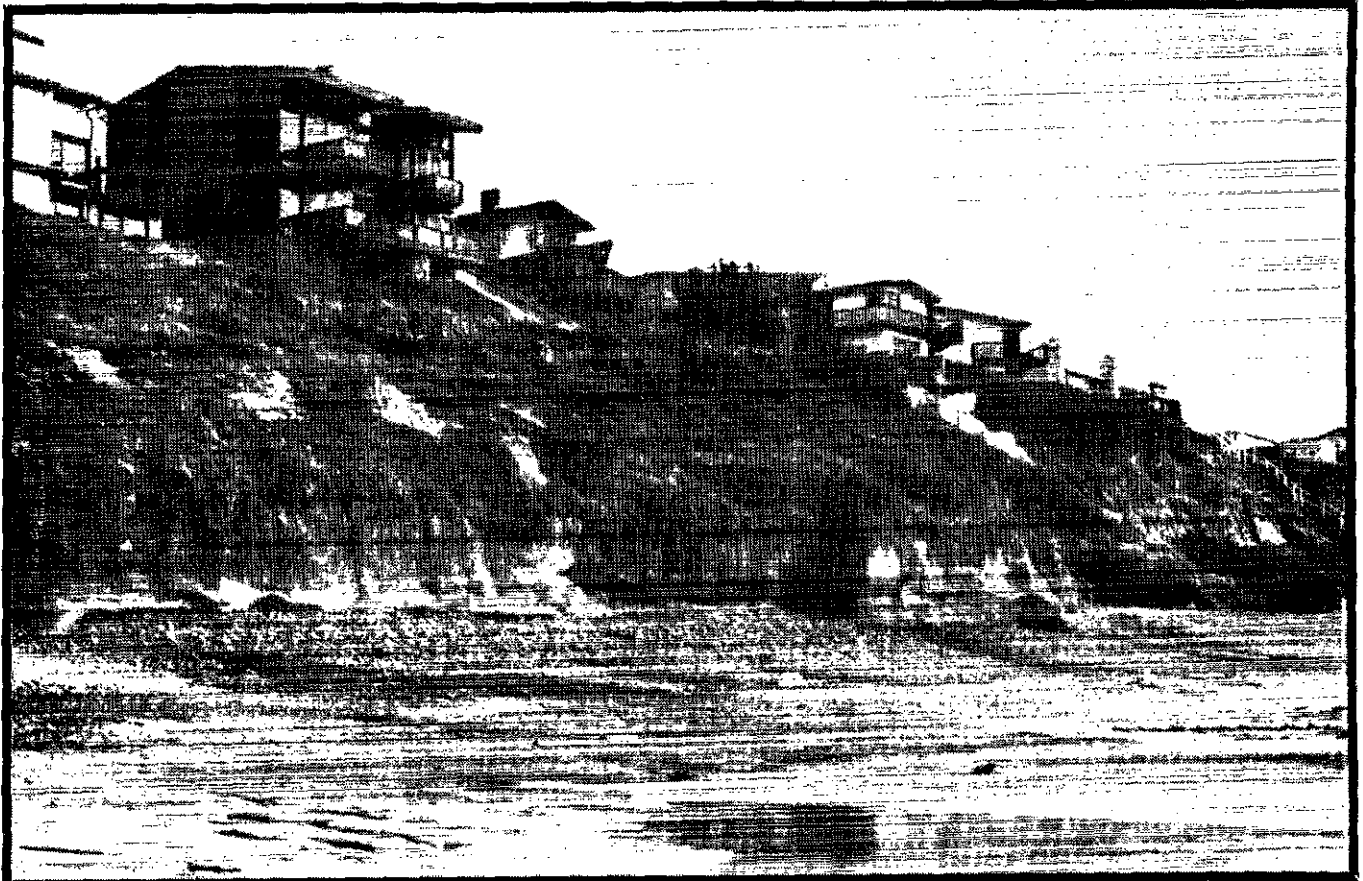
Policy 23 of the San Dieguito Local Coastal Plan identifies Leucadia State Beach as a "medium intensity use level facility" for coastal access. The proposals contained in this general plan essentially conform to the LCP with the exception of Policy 24, which calls for free access as opposed to charging fees.

Sequence of Action

Action on the general plan proposals should be taken in the following order:

1. Determine if safe access can be provided across the active mudslide in Areas 1 and 2.
2. Rehabilitate beach access stairways in Areas 1 and 2.
3. Install interpretive panels.
4. Install parking meters.

Interpretive Element



The state does not own the bluffs, except at the two access points (Areas 1 and 2).

INTERPRETIVE ELEMENT

This general plan element outlines what interpretation would be appropriate at Leucadia State Beach. (The unit's interpretive prospectus on file with the department contains additional information.)

Methods and Media

Opportunities for any form of interpretation at Leucadia State Beach are extremely limited. There are few locations suitable for the placement of exhibits. There are no permanent structures except for the remaining beach stairway. Since the potential for vandalism is very high, any interpretive exhibits at Leucadia State Beach should be made of very durable materials and should be put in strong metal cases. Exhibits would also have to be attached to solidly built structures and be placed in areas that are well-lighted at night.

When the North Coast Interpretive Association is fully established, docents may become qualified to offer personal services, particularly rescue demonstrations.

Interpretive Themes

Any interpretive theme development at Leucadia State Beach will be restricted to the subjects of recreation and safety due to the limited possibilities for placement of exhibits and the extensive interpretation of natural and cultural themes that will take place at nearby state beaches.

The Recreational Uses of Surf

Safe use of the surf should be interpreted to visitors. Subjects should include wave formation and its relationship to surfing, and techniques of board and body surfing.

Staying Safe at the Beach

Visitors should be informed about water hazards and the prevention of beach-related accidents, as well as rescue techniques. Subjects should include rip currents (what they are and how a swimmer can get out of one, general swimming and ocean safety tips, and rescue techniques and equipment), and how to avoid other beach hazards (jellyfish, stingrays, buried fires, and glass).

Visitor Facilities

There are now no interpretive facilities at Leucadia State Beach. Because of the high vandalism probability, the most suitable location for any interpretive exhibits would be attached to permanent, preferably concrete, structures. Interpretive signs on beach access stairways would probably attract vandals.

Since it is doubtful that permanent restroom facilities will be constructed in the future, interpretive panels and cases could be installed on concrete pedestals to inform visitors about the recreational potentials of the beach and possible hazards. Displays might include a metal relief map of the ocean floor in this vicinity to help explain wave formation in relation to surfing. It would not be practical to include a tide schedule, since the unit is not staffed and the schedule could not be kept up-to-date.

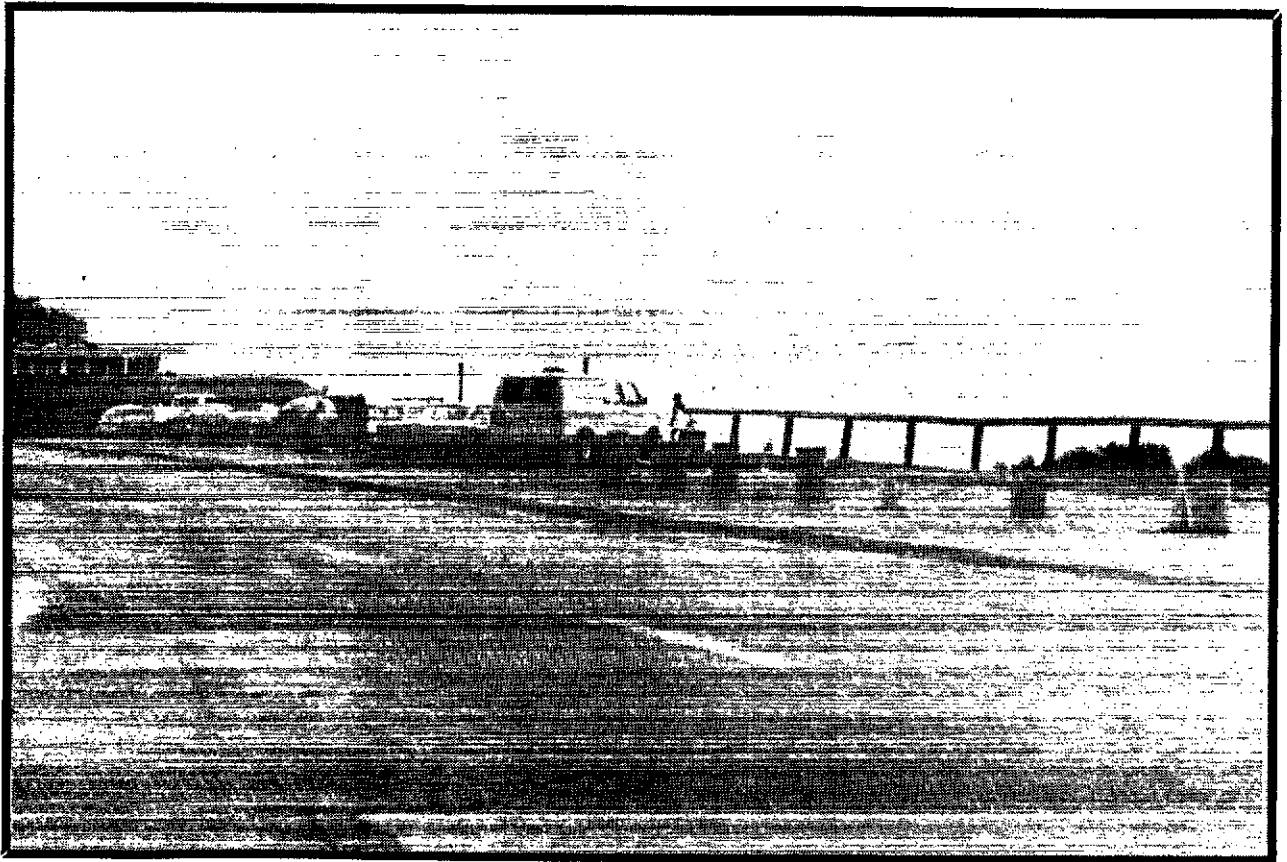
Visitor Activities

Because the unit has no permanent ranger or lifeguard staff, activities such as rescue technique demonstrations cannot occur unless a volunteer group is interested in providing them, or staff from nearby state beaches is assigned for that purpose.

Recommendations

- Work with the State Department of Transportation (Caltrans) to provide regional orientation panels at roadside reststops along Interstates 5 and 8 in San Diego County. The panels would orient motorists and potential State Park System visitors to the diverse recreational opportunities offered in the system, and provide detailed information on the San Diego coast units.
- Install interpretive panels when permanent structures are constructed.
- If docents or staff are available, provide demonstrations and other personal services.

Operations Element



Area 2 parking lot

OPERATIONS ELEMENT

Current Conditions

Leucadia State Beach is in the San Diego Coast management area of the department's Southern Region. The area staff currently:

- Provides lifeguard and law enforcement services
- Maintains two parking lots, a beach access stairway and pathway, and landscaping
- Contracts for chemical toilet servicing
- Provides litter pickup

Future Conditions

The proposals in this general plan will not substantially change the unit's current operational requirements, other than for servicing of new parking meters. The proposals will permit present use of this unit to continue and provide revenue to help offset operating costs.

Revenue Generation

A policy on parking meter installation or a rate structure have not been established by the department. The following hypothetical structure might be considered:

- Number of proposed parking spaces at various locations: 82.
- Normal beach visitation period per vehicle: six hours.
- Current day-use fee at coastal units: \$3.00.
- Meter rate per hour to provide \$3.00 in six hours: \$.50.
- Number of days per year of capacity use: 100.
- Revenue generated per year:

$$\begin{array}{r} 82 \text{ spaces} \times \$.50 = \$42 \text{ revenue per hour} \\ \times \quad 12 \text{ hours per day} \\ \hline \quad \quad \quad \$504 \text{ revenue per day} \\ \times \quad 100 \text{ days per year} \\ \hline \quad \quad \quad \$50,400 \text{ annual revenue} \end{array}$$

This example is provided simply to examine the revenue potential of meters. Maintenance costs for meters in the coastal environment will be high, and public acceptance of meters is unknown. If revenue is to be generated at this unit, however, there appears to be no practical alternative.

Concessions Element



Leucadia State Beach is a popular surfing area.

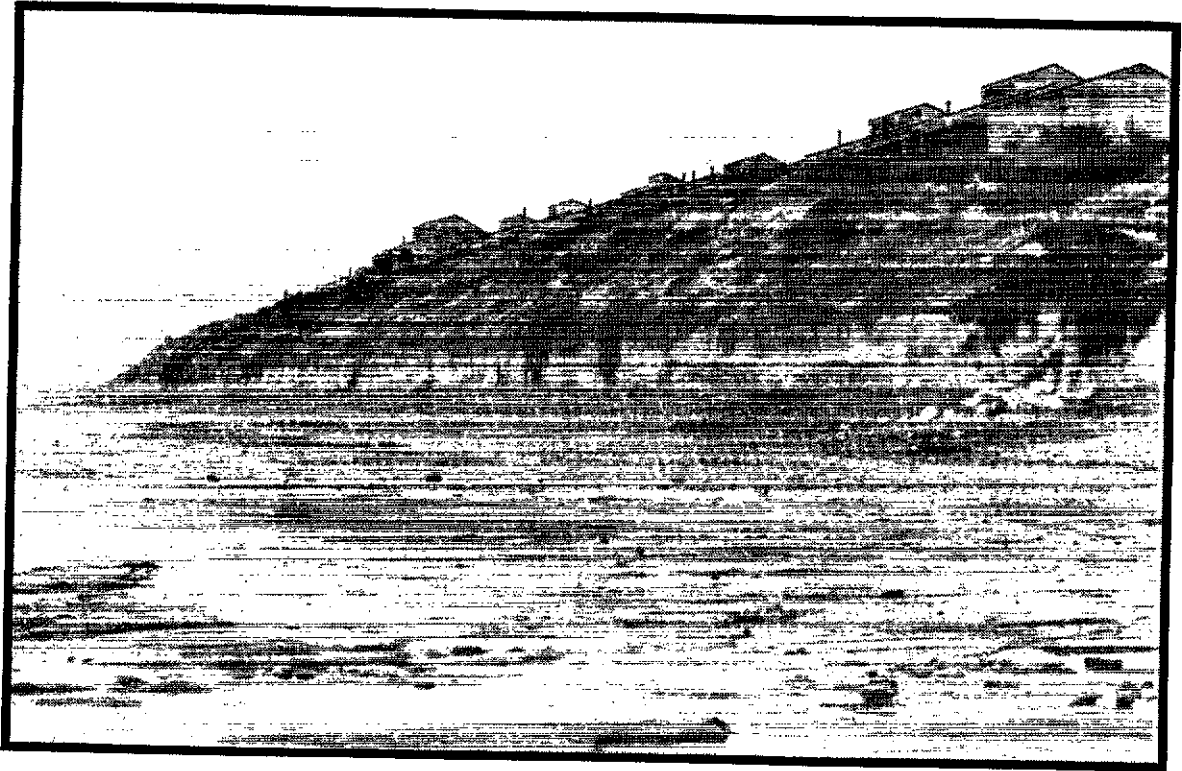
CONCESSIONS ELEMENT

No concession facilities are proposed for this unit based on an analysis of user needs and the development potential of the unit.

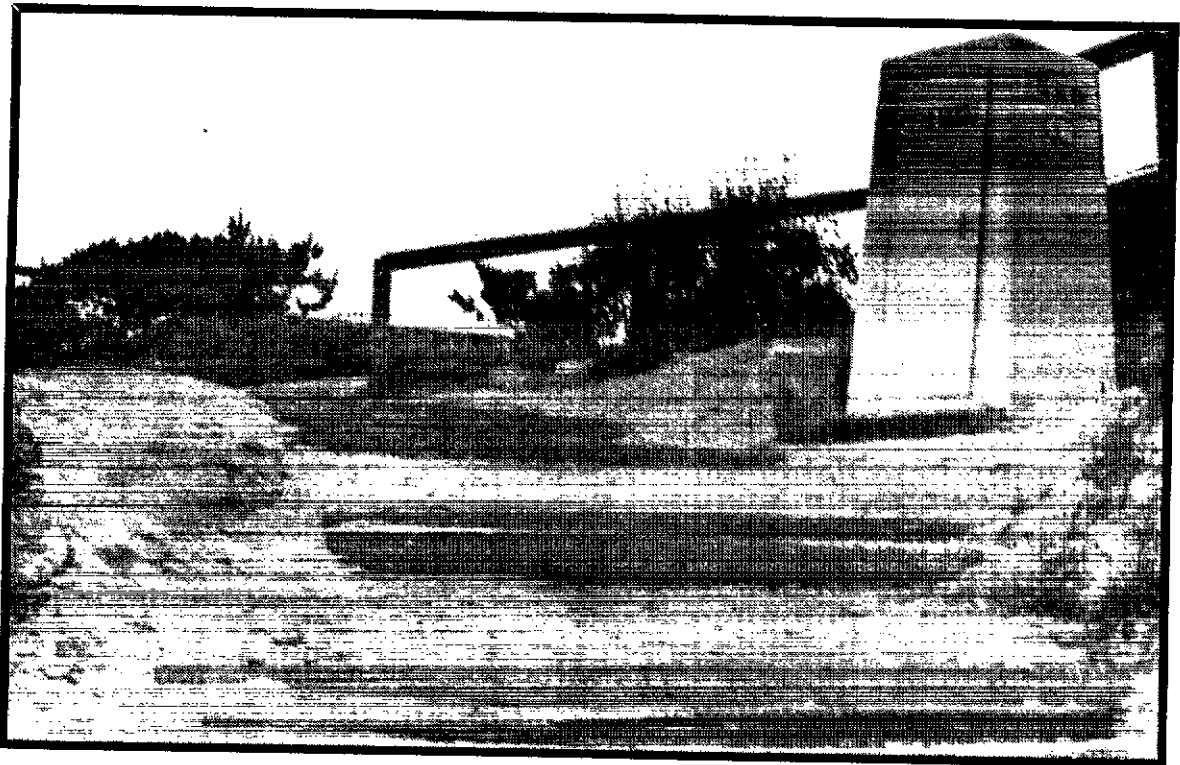
Nor are any operating agreements with local agencies, which might take over operation of state-owned facilities, envisioned at this time.



Environmental Impact Element



Facilities are relatively primitive in this urban unit.



ENVIRONMENTAL IMPACT ELEMENT

Explanatory Note

In accordance with SB 1892, Chapter 615, this general plan (with this Environmental Impact Element) constitutes a report on the project for the purposes of the California Environmental Quality Act. The plan indicates management policies and development plans proposed for Leucadia State Beach. The Draft Environmental Impact Element (or Environmental Impact Report) analyzes and reports potential impacts of these policies and plans on the environment.

Because the general plan is broad in scope, the Draft Environmental Impact Element is a broad, general assessment of environmental impacts. Should specific plans be proposed and budgeted for implementation, more detailed environmental assessments will be prepared along with documentation required by the California Environmental Quality Act. The level of detail of this Environmental Impact Element corresponds to that of the general plan (California Administrative Code, Section 15147).

This Draft Environmental Impact Element has been prepared according to the amended mandates of the California Environmental Quality Act, which call for an objective assessment of the proposed project's environmental consequences. Those aspects of the proposed project with the greatest potential to cause an adverse change in the environment have been emphasized. Existing environmental conditions and effects that are not expected to cause a substantial adverse change in the environment are briefly discussed. Also, published documents such as county general plan elements and local coastal plan elements are incorporated into this report by reference to avoid unnecessary repetition.

Pursuant to the Public Resources Code, Section 5002.2a, and the California Administrative Code, Section 15147, and also to avoid needless repetition, the Environmental Impact Element incorporates by reference all information contained in the preceding elements of this document.

To begin the general plan process, the inventory of features of a State Park System unit (a documentation of the unit's natural, cultural, and recreational resources) is critically analyzed in terms of the purpose, philosophy, and objectives of the unit. Specific policies for the management of the unit's resources are then formulated. (The inventories of features for all units in this general plan are on file with the department's Resource Protection Division in Sacramento.) State Park System planners then work within the framework of the Resource Element to develop unit plans.

Development proposed for this unit reflects the policies presented in the Resource Element of this plan. User facilities that have been selected will promote public use and encourage enjoyment of the unit without impairing and devastating the natural and cultural values. Throughout this planning process, a continuing analysis of possible impacts is made so that mitigating measures, such as decreasing use intensity, can be designed into the general plan to provide recreational opportunities to complement and preserve the unit's valuable resources.

Description of the Project

Please refer to the Land Use and Facilities Element.

Description of the Environmental Setting

Please refer to the Resource Element for descriptions of topography, climate, hydrology, geology, soils, biota, and other resources. For information on land use, see the Land Use and Facilities Element.

Air Quality

Leucadia State Beach is located in the San Diego Air Basin. The overall air quality of San Diego County is good. During 1981, California Air Quality Standards were equaled or exceeded for three pollutants: ozone, nitrogen dioxide, and particulate matter. The standard for ozone was equaled or exceeded on 192 days, nitrogen dioxide one day, and particulate matter 41 days during the year.

Ozone is the most important atmospheric contaminant in San Diego County. A major reason for the high levels of ozone in the county is the pollutant transport from more densely populated areas to the north in Los Angeles, San Bernardino, and Orange counties. As a result, ozone levels are lower along the coast and increase as one moves eastward and inland.

Automobile exhaust is the major source for nitrogen dioxide, sulfur dioxide, and carbon monoxide. The major sources for particulate matter are the automobile, sea salt along the coast, and erosion from agriculture.

The air quality of Leucadia State Beach is very good. The closest air quality monitoring station is located in Solana Beach, about six miles to the south. The air quality at Leucadia State Beach is similar to that of Solana Beach.

During 1981, the Solana Beach air quality monitoring station only collected data on ozone levels. The California Air Quality Standard for ozone was equaled or exceeded 55 days during the year. During 1979, the California Air Quality Standard was equaled or exceeded 35 times.

Noise

The major outside sources of noise at Leucadia State Beach are automobile traffic, train traffic, and residential development. Neptune Avenue, a two-lane road, runs adjacent to Areas 1 and 2. The Pacific Coast Highway is a four-lane highway and runs, on an average, 800 feet from Areas 1 and 2. The Santa Fe Railroad is about 1,020 feet from Areas 1 and 2. The noise generated by the traffic on Neptune Avenue and the Pacific Coast Highway is estimated to be in the 60-70 dBA range. The noise produced by the railroad is in about the 55 dBA range. (Train noise is not constant; an average of 14 trains pass through Leucadia each day.)

On the beach, the main sources of noise are the surf and people. Noise from the roads is not usually heard by people using the beach.

Palomar Airport, another minor source of noise, is located about five miles northeast of the state beach. Noise from takeoffs and landings can be expected to range from 67-97 dBA at 1,000-foot elevation by single and twin-engine propeller craft and executive jets, which are the types of aircraft using the airport. Since the airport is five miles from the beach, the planes are usually at higher elevations than 1,000 feet and, therefore, the noise level is less.

The following data concerns Santa Fe Railroad operations in the vicinity.

| <u>Train Type and Direction</u> | <u>Length (ft.)</u> | <u>Speed (mph)</u> | <u>Number Equivalent Daily Operations</u> |
|---------------------------------|---------------------|--------------------|---|
| Freight North | 2,500 | 60 | 33 |
| Freight South | 2,500 | 60 | 23 |
| Passenger North | 655 | 90 | 16 |
| Passenger South | 655 | 90 | 7 |

(Source: City of Carlsbad, Draft Environmental Impact Report for the Widening and Extension of Poinsettia Lane, March 10, 1983.)

Human Community Factors

The 1980 census population of Leucadia was 9,478, with 1,541 persons of Spanish origin, 7,684 White, 27 Black, and 226 persons of other races.

The median age of the population of Leucadia is 30.3 years. The median age for persons of Spanish origin is 23 years, White 32.7 years, Black 27.5 years, and other races 29.3 years.

There are 3,815 households in the City of Leucadia, with an average of 2.44 persons per family.

Public Services

Water and Sewer

Water is provided to the state beach by the San Dieguito Water District. Water is used for landscape irrigation. The area is sewered, but the state beach is not connected since chemical toilets are used. The chemical toilets are pumped and cleaned by contract. The sewage is disposed of by the contractor.

Traffic

Access to the two parking areas at Leucadia State Beach is by way of Neptune Avenue. Leucadia Boulevard and Grandview, both two-lane roads, cross Neptune Avenue.

The area adjacent to the state beach is residential. Currently, there are no circulation problems with regard to Leucadia State Beach.

The average daily traffic (ADT) on the Pacific Coast Highway (a four-lane road, two northbound and two southbound) in the vicinity of Leucadia Boulevard during October 1977 was 6,150 (northbound). An ADT for southbound was not available, but it is expected that southbound ADT would be similar.

The peak hour of use for the Pacific Coast Highway in the Leucadia Boulevard area is 11 a.m. The peak-hour volume is expected to be about 10% of the ADT, or about 1,230 vehicles/hour.

Fire/Paramedic

Routine first-aid is administered to state beach visitors by state park rangers and lifeguards. In cases of life-threatening injuries, paramedics from the San Diego County Fire Station in Encinitas are called. The response time for the county fire department is about five to 10 minutes, depending on the location of the victim and traffic conditions. If the victim is located in an area not readily accessible to an ambulance, the "Life Light" emergency helicopter from the University of California Medical Center is requested. The response time for the helicopter is 15 minutes within 30 miles and 30 minutes within 60 miles.

If an accident occurs at the base of the bluff or on the beach, the victim can be reached by four-wheel drive vehicle during low tide. Rangers and/or lifeguards from either South Carlsbad or Moonlight State Beaches could be dispatched. Response time from either state beach is about five to 10 minutes. If the accident occurred during high tide, access to the beach would have to be by way of the stairway to the bluff.

Police

Law enforcement at Leucadia State Beach is handled by State Park System personnel. Both state park rangers and lifeguards are designated as state park peace officers and are responsible for law enforcement on State Park System lands. The San Diego County sheriff's Encinitas Station is occasionally called for backup. Response time is about five to 20 minutes, depending on the deputy's location and traffic.

Cultural Resources

For information on Native American and Euroamerican resources, please refer to the Resource Element.

Scenic and Recreational Values

Please refer to the Resource Element.

Environmental Impacts of the Proposed Project

Significant Environmental Effects

Since there are not going to be any substantial changes from present conditions at Leucadia State Beach, no significant environmental effects are expected. The only development that is to take place is the rehabilitation of the Area 2 beach access stairway once the bluff failure has reached a point of natural stability and the revegetation of the bluff face with unirrigated native plants has taken place.

Mitigation Measures Proposed to Eliminate or Minimize Effects

The proposed revegetation of the bluff face, after the bluff failure has reached a point of natural stability, is a mitigation measure to slow down the natural erosion forces.

Unavoidable Environmental Effects

The rehabilitation of the beach access stairway will require disturbance of the bluff face, and the amount of erosion will probably be accelerated until vegetation is established.

Alternatives to the Proposed Project

1. NO PROJECT: This alternative would allow the status quo to continue. It was not selected because the department wants to have facilities produce revenue to help offset the cost of operation and maintenance.
2. INSTALL PERMANENT RESTROOM FACILITIES: This alternative would involve the construction of permanent restroom facilities to replace the existing chemical toilets. The permanent facilities would be built in the parking lots, and this would mean a reduction in the number of parking spaces available to visitors. Construction of permanent facilities would involve minor ground disturbance for foundations and utility lines.

This alternative was not chosen because it was determined that the project would not be cost effective and that the facility would be subject to severe vandalism due to its isolation.

The Relationship Between Local Short-Term Use of Man's Environment and the Maintenance of Long-Term Productivity

The current short-term use of Leucadia State Beach is for enjoyment of the coastal scenery and access to the beach. If the land were not within the State Park System, the short-term use of the unit would probably be residential development.

The general plan continues the current short-term use of the unit and should not alter the existing use, but should generate revenues for the State Park System to help defray the costs of operation and maintenance.

The development proposed in the general plan will not alter the unit's potential for long-term productivity. The relationship between the short-term use and the long-term productivity of the unit is complementary, one in which the proposed short-term use retains and expands the environment's long-term productivity.

Irreversible Environmental Changes and Irretrievable Commitments of Resources Should the Proposed Project be Implemented

Nonrenewable resources, such as oil, gasoline, and construction materials, will be used to rehabilitate the beach access stairway once the bluff failure has reached a point of natural stability.

Growth-Inducing Impacts of the Proposed Project

The general plan calls for no expansion of facilities beyond what currently exists, and the level of use will remain about the same. The development proposed in the general plan will not have a growth-inducing impact on the area surrounding the state beach. No increase in use is anticipated as a result of the implementation of the general plan.

Effects Found Not to be Significant

The implementation of the general plan will not have a significant effect on climate, noise quality, population density, community development, sewage, flora, fauna, or transportation.

Organizations and References Consulted

California Department of Boating and Waterways
California Department of Fish and Game
California Department of Housing and Community Development
County of San Diego Department of Planning and Land Use
County of San Diego Department of Traffic Engineering
County of San Diego Sheriff's Department
Southern California Association of Governments

* * *

California Air Resources Board, Summary of 1979 Air Quality Data, 1980.

California Air Resources Board, Summary of 1981 Air Quality Data, 1982.

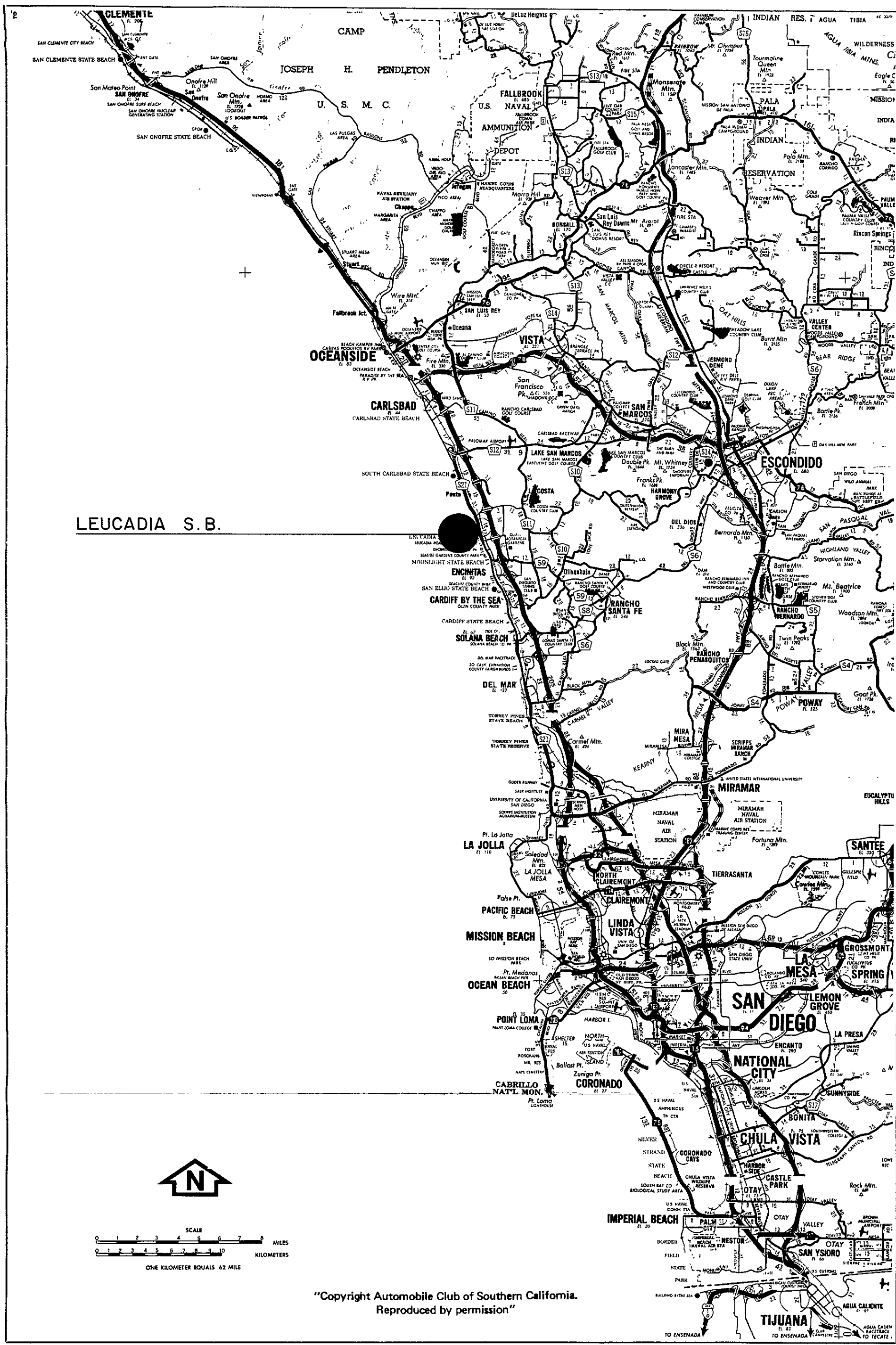
United States Department of Commerce, Bureau of the Census, 1980 Census of Population, July 1982.

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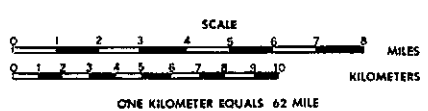
Maps



The existing access points will be maintained.

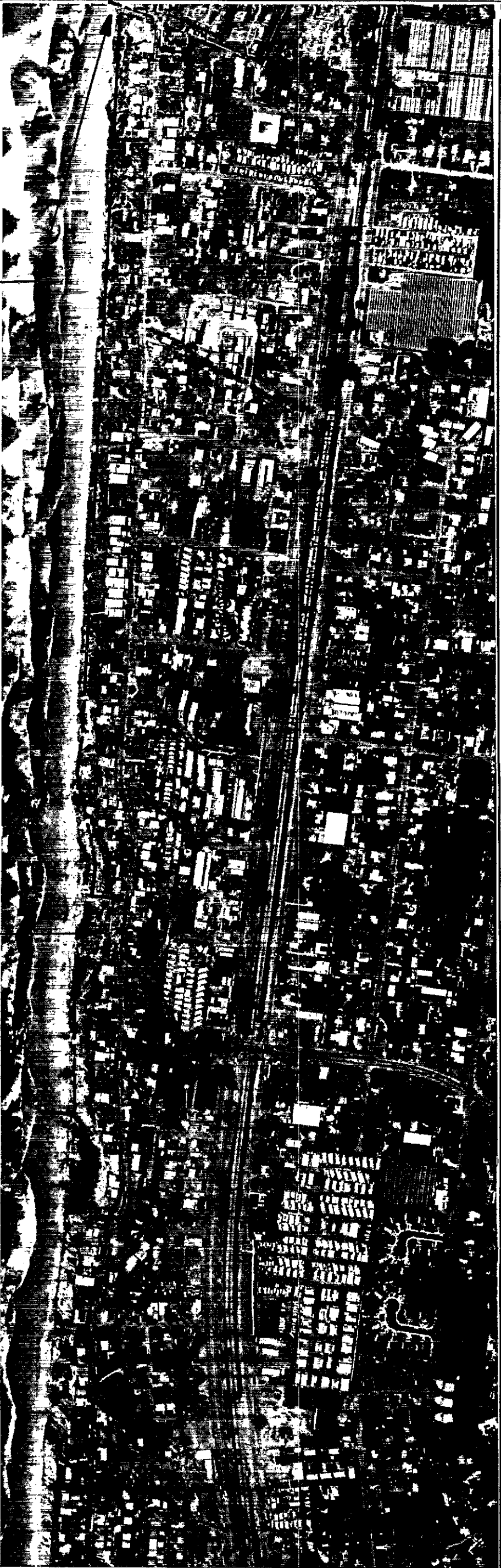


LEUCADIA S.B.



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| SHEET NO. 1 of 4 | LEUCADIA STATE BEACH SAN DIEGO COAST GENERAL PLAN VICINITY MAP | RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION | REVISIONS | | DATE | DESIGNED |
| | DRAWING NO. 19149 | APPROVED _____ DATE _____ | | | | DRAWN |
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AREA 1

- PARKING FOR 61 CARS
- PORTABLE COMFORT STATION
- BEACH ACCESS
- LANDSCAPING

AREA 2

- PARKING FOR 21 CARS
- PORTABLE COMFORT STATION
- BEACH ACCESS

LEUCADIA STATE BEACH

GENERAL PLAN

LEGEND

—— DPR BOUNDARY

NOTE: PHOTO BASE COURTESY OF THE DEPARTMENT OF NAVIGATION AND OCEAN DEVELOPMENT, PHOTO BASE DATE 4-23-78.



| | |
|-------------|--------|
| DRAWING NO. | 19149 |
| SHEET NO. | 2 OF 4 |

LEUCADIA STATE BEACH
**SAN DIEGO COAST
 GENERAL PLAN**
 EXISTING FACILITIES MAP

RESOURCES AGENCY OF CALIFORNIA
 DEPARTMENT OF PARKS AND RECREATION

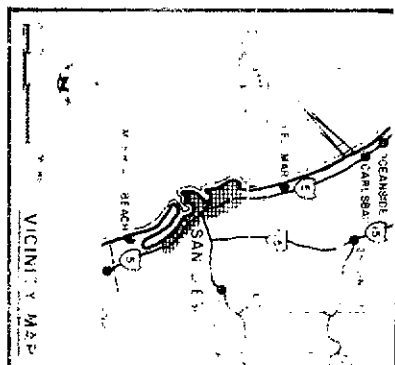
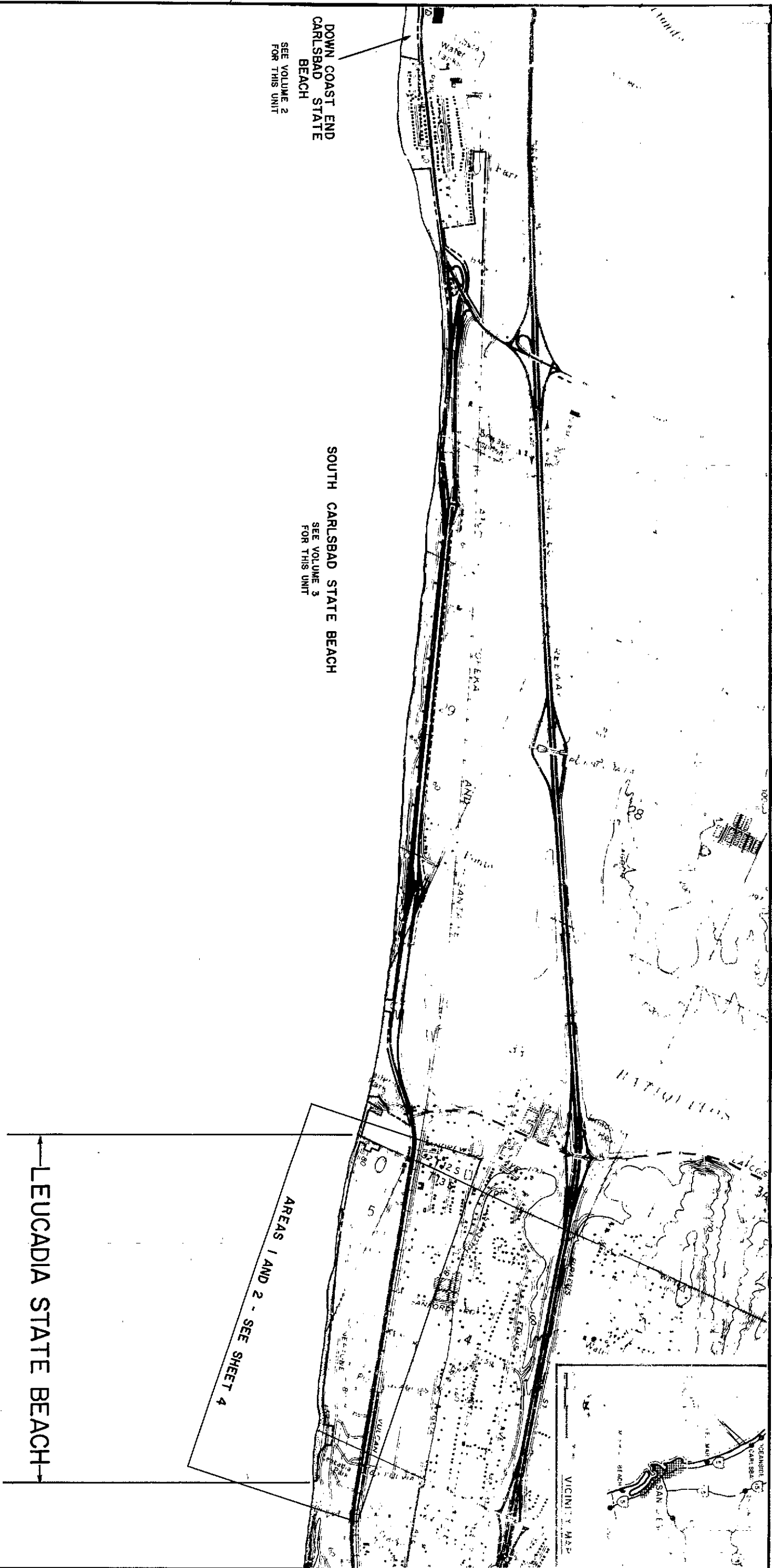
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| REVISIONS | DATE | DESIGNED |
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| | | DRAWN |
| | | CHECKED |

LEUCADIA STATE BEACH GENERAL PLAN

DOWN COAST END
CARLSBAD STATE
BEACH
SEE VOLUME 2
FOR THIS UNIT

SOUTH CARLSBAD STATE BEACH
SEE VOLUME 3
FOR THIS UNIT



--- EXISTING DPR OWNERSHIP
— AREA OF CONCEPTUAL MAP

← LEUCADIA STATE BEACH →



DRAWING NO.
19149
SHEET NO.
3 of 4

LEUCADIA STATE BEACH
SAN DIEGO COAST GENERAL PLAN
INDEX MAP

RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF PARKS AND RECREATION
APPROVED _____ DATE _____

| REVISIONS | DATE | DESIGNED |
|-----------|------|----------|
| | | DRAWN |
| | | CHECKED |

LEUCADIA STATE BEACH GENERAL PLAN

LEUCADIA STATE BEACH

- AREA 1**
- EXISTING PARKING FOR 61 CARS AND 10 MOTORCYCLES
 - EXISTING PORTABLE CHEMICAL COMFORT STATION
 - REHABILITATE EXISTING BEACH ACCESS ROUTE
 - EXISTING BEACH SHOWER
 - PROPOSED PARKING METERS
 - PROPOSED INTERPRETIVE PANEL



NOTE:
SEE S CARLSBAD
STATE BEACH G.P.
FOR DPR OWNERSHIP
IN THIS AREA

ROAD GATED

PACIFIC OCEAN

Leucadia

Archibson
Tropick
COAST
and
SOUTH
HIGHWAY
Railroad

JUPITER ST
TASON ST
S 21
PHOENIX ST
RESISTANCE STREET
GLAUCUS ST
DIANA ST
JASPER ST
PULPIT ST

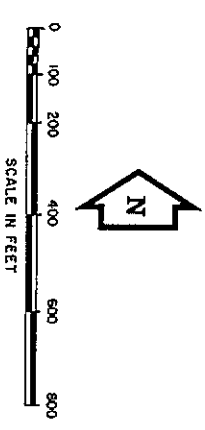
NOTE:
SOURCE OF OWNERSHIP INFORMATION
DPR DRAWING NUMBER 18611 AND
COUNTY OF SAN DIEGO DRAWING NUMBER KH 3273.

NOTE:
THE PURPOSE OF THIS PLAN IS TO DETERMINE LAND
USE DESIGNATIONS ONLY. DESIGN DETAILS ARE
SHOWN TO DEMONSTRATE FEASIBILITY AND ARE
SUBJECT TO CHANGE.

- AREA 2**
- EXISTING PARKING FOR 21 CARS
 - EXISTING PORTABLE CHEMICAL COMFORT STATION
 - PROPOSED REHABILITATION OF BEACH ACCESS ROUTE
 - PROPOSED RESTORATION OF BLUFF VEGETATION WITH UNIRRIGATED NATIVE PLANTS
 - PROPOSED INTERPRETIVE PANEL
 - PROPOSED PARKING METERS



- LEGEND**
- STATE PARK OWNERSHIP BOUNDARY
 - P** EXISTING PARKING SPACE - TOTAL
 - P** 82 CARS
 - M** 10 MOTORCYCLES
 - AT** EXISTING COMFORT STATIONS
 - EXISTING AND PROPOSED BEACH ACCESS
 - EXISTING CONTOURS (5' INTERVAL)
 - RECOMMENDED ACTION



| | | | | | | |
|-----------------------------|---------------------------------|--|--|----------------|------------|----------|
| DRAWING NO. 19149 | LEUCADIA STATE BEACH | | RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION | REVISIONS | DATE | DESIGNED |
| | SAN DIEGO COAST GENERAL PLAN | | | | | DRAWN |
| | CONCEPTUAL DETAIL - AREAS 1 & 2 | | | APPROVED _____ | DATE _____ | CHECKED |
| SHEET NO. 4 OF 4 | | | | | | |

THE SAN DIEGO COASTAL STATE PARK SYSTEM GENERAL PLAN

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