

**UNIT 652**

**SOUTH CARLSBAD STATE BEACH**

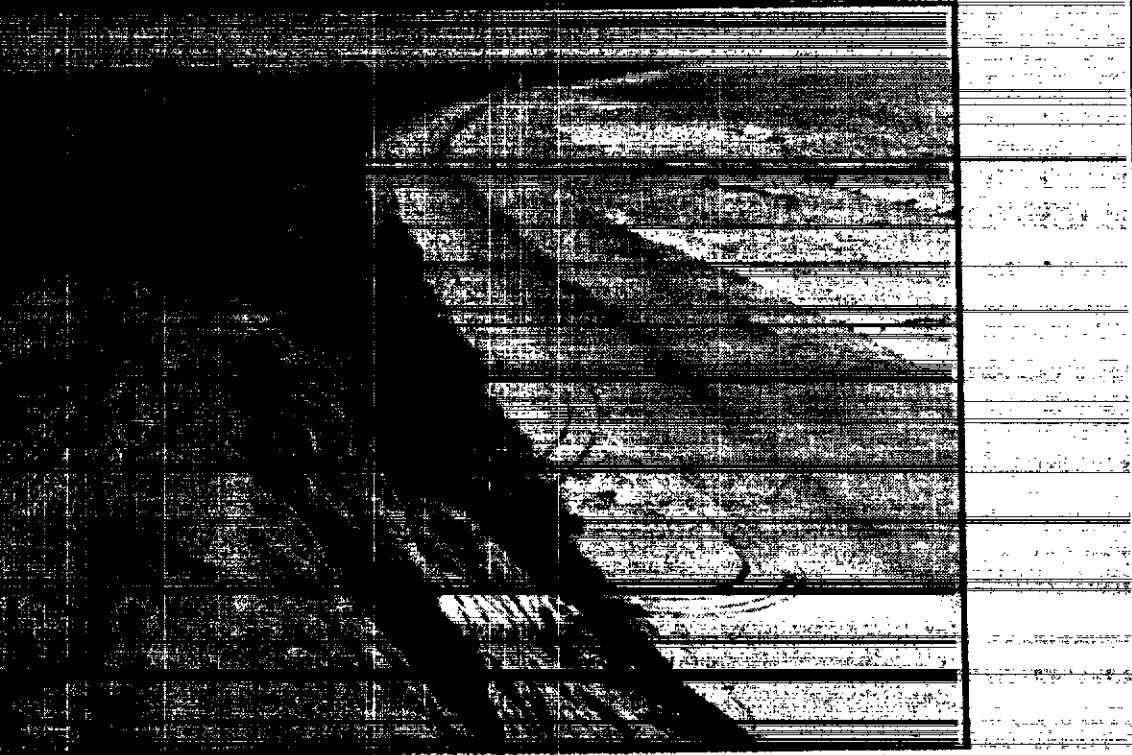
**GENERAL PLAN**

**November 1983**

# Coastal Park System General Plan

Carlsbad State Beach

July 1984



## CARLSBAD STATE BEACH

DEPARTMENT OF PARKS AND RECREATION

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

Volume Number	Name
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 3 - South Carlsbad 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

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*Area 1 -- Looking south toward the existing campground*

GENERAL DATA ON  
SOUTH CARLSBAD STATE BEACH

Location: On the Pacific Ocean, mostly in the southern portion of the City of Carlsbad (San Diego County), adjacent to Carlsbad Boulevard, extending from the Terra Mar community to Leucadia State Beach. The unit is 25 miles north of the City of San Diego and one mile south of Carlsbad State Beach. Access is from Carlsbad Boulevard.

Size: 110.4 acres with approximately 17,880 lineal feet of ocean frontage. The unit is comprised of four separated parcels.

Existing Facilities: A 226-unit family campground on a 60-foot high bluff adjacent to the ocean beach, 10 comfort stations, seven beach stairways, lifeguard tower and unit office, maintenance area, two trailer sanitation stations, small campfire center, and a concession building.

Vegetation: The unit has a diverse, mostly non-native, flora ranging from coastal strand to agricultural row crops. The campground is landscaped with ornamental shrubs.

There is no evidence of any rare or endangered plant species in this unit.

Wildlife: South Carlsbad State Beach hosts a variety of wildlife due to its habitat diversity. Beach, bluff, and wetland areas may seasonally support 15 land mammals (the most common being California ground squirrel), 26 land birds, and 28 water-oriented birds. Rare or endangered species that might periodically be seen here include: the California brown pelican, California least tern, Belding's savannah sparrow, and California black rail. In addition, five amphibians and reptiles and 23 marine mammals may be seen on or from the site. Common fish found offshore include primarily four species of interest to the visitor.

Outstanding Natural Features: The beach at the south end of the unit offers outstanding beach-oriented recreational opportunities. The coastal bluff provides panoramic views of the coastline.

Historical and Archeological Values: Two prehistoric sites have been recorded at this unit, SDI-9590 and SDI-9589. One of these sites, SDI-9589, will be excavated and reported before implementation of the general plan. Two previously identified sites (SDI-468 and W-111) were not located during this study. No other significant resources are known to exist at this site.

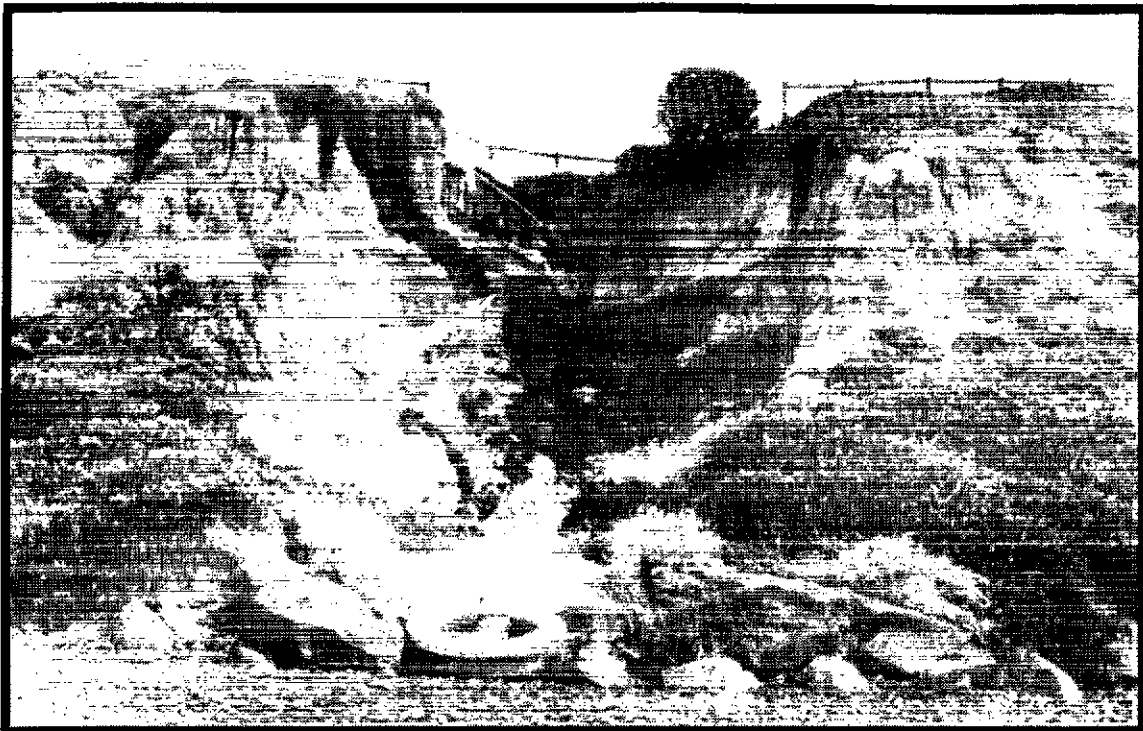
Ownership: A 14.22-acre parcel was acquired from the California Division of Highways in 1949 to establish this unit. Subsequent additions were 36.03 acres in 1961, 3.68 acres in 1964, 23.4 acres in 1974, 4 acres in 1976, 20 acres in 1976, and 9.07 acres in 1978.

Resource Element

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*Area 2 -- The existing campground*



*Drainage patterns need to be reexamined*

## 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 rather large collection of primary and secondary literature located in offices of the Department of Parks and Recreation in Sacramento and at the Area Office in Carlsbad. 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

At the unit's northern end is an undeveloped level terrace 40 feet (12 meters) above sea level, 150 feet (46 meters) wide by 1,450 feet (442 meters) long. An eroded bluff between the terrace and the narrow beach is nearly vertical. South of the level portion, the terrace is highly eroded and slopes toward the south. Further south, the terrace is cut by the Canyon de Las Encinas stream drainage.

Inland from the undeveloped terrace is a 16.5-acre (6.8-hectare) triangular parcel, 800 feet (244 meters) by 1,800 feet (549 meters), currently leased to a farmer and planted in row crops. To the north is a 1.8-acre (.74-hectare) strip of wetland 175 feet (53 meters) wide and 1,500 feet (457 meters) long, between a residential area and the Santa Fe Railroad tracks.

South of the Canyon de Las Encinas stream drainage, the terrace rises to form a 60-foot (18-meter) high bluff that extends south to Batiquitos Lagoon. The South Carlsbad campground is built on this 9,450-foot-long (2,880-meter) strip of terrace land. The campground is about 150 feet (46 meters) wide. Campground topography has been altered by the creation of artificial highs and lows which help to break up the flat terrace but which also result in major drainage and storm runoff problems on the cliff face.

At the mouth of Batiquitos Lagoon is a 700-foot (213-meter) stretch of beach outside State Park System ownership. South of the lagoon mouth is a 35-acre (14.3-hectare) triangular parcel with an adjacent 1,500-foot (457-meter) stretch of state beach. This parcel, at an elevation of only 5-10 feet (1.5-3 meters), is the former site of a trailer park and forms the southern end of South Carlsbad State Beach.

## 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 known as 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

Near the north end of South Carlsbad State Beach, the marine terrace is dissected by the Canyon de Las Encinas stream drainage. This intermittent stream drains a 2,868-acre (1,176-hectare) area of urban and agricultural land, including Palomar Airport and an associated industrial park.

The campground is built upon a Pleistocene terrace adjacent to the ocean cliff. Steel culverts carry runoff from the terrace to the beach. Failure of these culverts (due to inadequate design capacity, coupling failures, and/or corrosive failure) has resulted in massive cliff erosion that is threatening to end future use of many of the ocean-facing campsites. Modification of the topography at the time of campground construction is a significant factor in the ongoing problems associated with storm runoff that is unnaturally channeled over the cliffs.

Near the unit's southern end are San Marcos Creek and Batiquitos Lagoon. The 46-square mile (119.6-square km) watershed extends inland about 15 miles (24 km) and reaches a maximum elevation of about 1,700 feet (518 meters). The lagoon's opening to the sea is usually blocked by a sand bar, but is breached during periods of heavy rainfall. Neither the zone where the lagoon outflow reaches the beach nor any part of the lagoon is part of the state beach. When the lagoon is open, department emergency and maintenance vehicles are not able to cross the flowing water on the beach.

## Geology

The beach is composed mostly of cobbles. There is very little sandy beach, especially at high tide. The lack of sand is 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 where it is permanently 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, South Carlsbad 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 campground sits atop the Pleistocene-aged Lindavista Formation. This formation is subject to erosion from surface runoff and bluff undercutting, resulting in a severely gullied cliff face. Seacliff retreat and erosion are accelerated by visitors walking on the cliff faces, which creates trails. These activities remove vegetation and help form rill channels during rainstorms. South of the campground, the cliffs decrease in height until only beach sand separates Batiquitos Lagoon from the Pacific Ocean for about one-half mile.

Fault shear zones projecting inland northeastward have been noted in the seacliffs at the unit's northern end. These fault zones appear to be contrary to the normally northwestern structural grain of the area, and may represent wrench-type offsets. No post-Pleistocene movement has been documented along these zones.

The old Pacific Coast Highway used to run along the cliff edge at the unit's northern end. Seacliff retreat and inland relocation of major transportation routes have resulted in the abandonment of this section of the old highway. Road fragments remain in the seacliffs and litter the narrow beach below the steep cliffs.

As mentioned in the hydrology section, a major problem at South Carlsbad State Beach is erosion induced by the channeling of storm runoff from impervious surfaces (roads, buildings, and other upland developments) to culverts designed to carry water to the beach. These culverts have often failed, creating "blowouts" (massive erosion channels and gullies) which are a major safety hazard and threaten future use of this facility. Erosion related to these culverts is undercutting the campground.

#### Soils

The only soil at South Carlsbad 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 windblown 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 reworked 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

This unit has a diverse, mostly exotic (alien), flora ranging from coastal strand to agricultural row crops. Weedy and ornamental species dominate at an abandoned trailer park. Exotic ornamental shrubs are dominant at the campground.

The unit's northern end includes a clifftop mesa supporting a sea-fig closed herb community. This community has a few widely scattered shrubs, including tree tobacco (*Nicotiana glauca*) and golden bush (*Happalopapopus* spp.), and is dominated by sea-fig (*Carprobrotus aequilaterus*).

Inland from this mesa, between a residential subdivision and the Santa Fe Railroad tracks, is a wetland area supporting a willow (Salix spp.) very short scattered woodland/cattail very tall herb community.

The beach-fronting cliffs along the unit's entire length support a bladderpod very short scattered shrub/sea-fig closed herb community. These heavily vegetated bluff faces include a variety of native and exotic shrubs and herbs. This vegetation stabilizes the slopes and provides habitat for small mammals and terrestrial bird life.

At the unit's southern end (the site of the abandoned trailer park) landscape plants are competing with native plants and naturalized exotics. This community is golden wattle scattered tall shrub/sea-fig closed herb. It is an interesting community with golden wattle (Acacia longifolia), coyote bush (Baccharis pilularis), and toyon (Heteromeles arbutifolia) forming the scattered overstory with sea-fig and statice (Limonium perezii) the prominent members of the herb layer. Ornamental plants, including English ivy (Hedera helix), bougainvillea, and ornamental roses, left over from the trailer park development, are scattered throughout the area. A wetland at the northern edge of the trailer park includes willows (Salix spp.), bullrush (Juncus actus), and pampas grass (Cortaderia selloana).

There is a narrow strip of beach primrose scattered herb vegetation between the trailer park site and the beach.

Ornamental shrubs and herbs at the South Carlsbad campground, planted to provide screening between campsites and the highway, have displaced potential native plant habitat.

#### Animal Life

This unit provides habitat for shorebirds and gulls on the beach. Shorebirds include the snowy plover, killdeer, black-bellied plover, dunlin, dowitcher, godwit, sanderling, and sandpiper. The value of the beach habitat has been reduced by loss of beach sand. Public recreation activity disturbs shorebird habitat during the summer.

The endangered California brown pelican is frequently seen fishing offshore. The endangered California least tern is known to nest near Agua Hedionda Lagoon. The endangered Belding's savannah sparrow nests near Batiquitos Lagoon. South Carlsbad State Beach is not known to provide critical habitat for any of these endangered species.

Batiquitos Lagoon, adjacent to South Carlsbad State Beach, is an extremely important habitat for a wide variety of water-oriented birds.

#### Marine Life

The dominant marine habitat at South Carlsbad 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. These animals possess unusual behavioral, morphological, and physiological adaptations which allow them to counteract adverse environmental conditions. Cobble beaches are much harsher environments than sandy beaches. Among the cobbles, there is no water-holding capacity, and animals are not able to bury themselves and are often crushed as the cobbles roll about in the surf. As littoral sand continues to be lost from the beaches, 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 at the beach.

## Cultural Resources

### Native American Resources

Two small prehistoric sites were discovered and recorded during a complete survey of this unit. Both sites include marine shell fragments and percussion flaked and fire-fractured cobbles. The first site, SDi-9590, is a 14 meter x 7 meter shallow midden, south of the maintenance yard, that may once have been connected to a large midden on a terrace east of the Coast Highway. The second site, SDi-9589, includes two locations, 34 meters apart, in the sand dunes north of the old trailer park. Two small sandy shell mounds were found, with an abundance of mussel shell fragments, a few small unburned small mammal bone fragments, and over 200 fractured and percussion-flaked cobbles of chert, quartz, quartzite, felsite, and other materials.

Two prehistoric sites were previously recorded in the northern half of the unit: SDi-468 and W-111. However, neither site could be found at its reported location.

### Euroamerican Resources

There are no known historic sites or any significant Euroamerican cultural resource sites or features at South Carlsbad 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 wide-spread 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 Europeans settled in the area until 1769 when the Mission San Diego de Alcalá 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 frequent rich, green valleys.

Although Indian people in coastal San Diego County became known as 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 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 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 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.

The land along the ocean from Point Loma north to San Juan Capistrano, known as La Costa (the coast), was isolated, bypassed, and unwanted. Ownership developed late and may be associated with the completion of a rail line north

from San Diego which reached the future site of Carlsbad in 1881. At the time, the original California Southern Railway Company track passed closer to the beach and, apparently, a warehouse was constructed at about the location of the unit's maintenance yard. The line was eventually moved to its current location and the warehouse was torn down.

The mesa south of Agua Hedionda Lagoon was acquired by the Minneapolis Beach Colony with the hopes of selling 5-acre parcels. On these parcels, the Colony held great hopes that mulberry trees would be planted and a great silkworm industry would develop. A house was carted in, but the colony failed. The owners of the Colony apparently set aside 1,400 of their 1,500 acres as an unnamed public park.

In the 1890s, a Coronado nurseryman leased 30 acres and grew trees from seed while the rest of the land passed into the hands of farmers who raised grains, beans, and vegetables.

The future site of South Carlsbad State Beach (then known as La Costa Beach) came into state ownership in the early 1920s when the State Division of Highways acquired land in the area for the coastal Highway 101. In 1949, the Division of Highways declared some property surplus and transferred 14.22 acres of coastal frontage to the then-Division of Beaches and Parks. The state contracted with San Diego County to operate the site as a recreation area. This contract was rescinded in October 1959, and the Department of Parks and Recreation took over staffing the unit. Since then, additions have been acquired from both public and private owners.

### Esthetic Resources

Sweeping 180-degree panoramas of the ocean can be seen from the clifftop sites at South Carlsbad 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.

The urban and industrial scene adjacent to the unit includes traffic on South Carlsbad Boulevard, housing developments, and the Encina Power Plant, which detract from the unit's scenery. Low-flying aircraft and traffic can be loud and distracting.

### Recreation Resources

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

#### Passive

Sunbathing  
People Watching  
Picnicking  
Beachcombing

#### Active

Surf Fishing  
Swimming  
Skin Diving  
Jogging

Sightseeing  
Contemplation  
Wildlife Observation

Volleyball  
Beach Play  
Boating  
Camping  
Bicycling  
Surfing

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

### Resource Policy Formulation

#### Classification

South Carlsbad State Beach has been a unit of the State Park System since November 18, 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 South Carlsbad State Beach is established as follows:

The purpose of South Carlsbad 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 South Carlsbad 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 South Carlsbad State Beach includes all adjacent land, the offshore areas, and the water bodies of Batiquitos Lagoon and Agua Hedionda Lagoon.

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 South Carlsbad 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 South Carlsbad State Beach:

#### Abiotic Resources

##### Drainage

The South Carlsbad campground is built on a 60-foot (18-meter) high terrace adjacent to an ocean-facing bluff. A considerable portion of the campground is covered with impervious surfaces (roads, buildings, parking lots, etc.) which have significantly increased normal runoff. Runoff is channeled into storm drains and carried down steel culverts where the water is theoretically released at beach level. However, in many cases the drains terminate well above beach level.

The drains have a long history of failure due to coupling failures, corrosion from salt air and saltwater, sedimentation, inadequate capacity, and vandalism. When the culverts fail during storms, severe erosion and landslides occur, creating massive erosion channels and slump blocks. These are major safety hazards and threaten the future of blufftop developments. Failure to solve the unit's drainage problems will result in increased public hazard, loss of important natural resources, and eventual permanent loss of blufftop facilities.

Policy: A drainage plan shall be developed and implemented for South Carlsbad State Beach to minimize erosion, culvert failures, vandalism, and the unscenic quality of drainage systems. The culverts shall be carefully maintained and regularly inspected. The normal useful life of the culverts shall be determined. Culverts shall be replaced when inspections indicate significant corrosion or when life expectancy is reached. Development of a new storm drain system to carry runoff parallel to the coastline rather than directly down cliff faces shall be

considered. Use of materials resistant to the corrosive effects of salt air and water shall be considered in the design of drainage systems. Creation of a comprehensive drainage plan must include the participation of the City of Carlsbad.

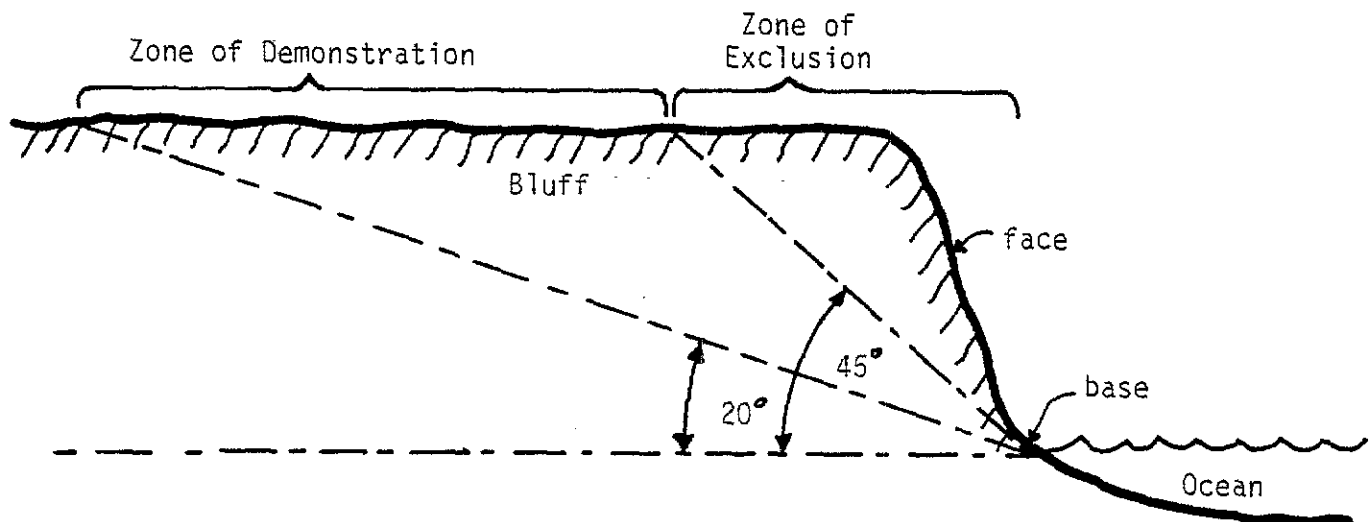
### Bluff Setbacks

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



## Bluff Fortifications

Sediments eroded from the sandy cliffs add to the littoral sand supply and are an important contribution to this area's beaches. The partially vegetated bluffs provide a scenic backdrop for ocean beach recreation activities. Fortifying the bluffs to slow natural seacliff retreat would be very expensive and could cause the total loss of the adjacent beach environment, as well as accelerate erosion around the fortification structure.

Policy: The ocean-facing cliffs are important scenic and natural resources of South Carlsbad State Beach. The department shall not attempt to stop the erosion process by constructing seawalls or other fortifications on the bluffs. Native plants may be used to reduce erosion rates.

## Monitoring Sand Loss and Bluff 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 South Carlsbad State Beach shall be established by field staff under the 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.

## Coastal Erosion

The low-lying south end of South Carlsbad State Beach is subject to direct wave erosion, beach sand depletion, and flooding from ocean water. The area was flooded by a combination of storm-generated ocean waves and high tides during January 1983.

Policy: No structures shall be constructed at beach level within South Carlsbad State Beach unless they are portable, expendable, or capable of withstanding direct wave attack. Consideration should be given to designing beach-level parking lots with permeable surfaces adjustable to changing elevations.

## Landscape Irrigation

Overirrigation of ornamental landscape plants can raise the water table and possibly lead to groundwater seepage out of the cliff faces, causing erosion and landslides.

Policy: Conversion of the current irrigation system at South Carlsbad State Beach to a drip irrigation system shall be considered to minimize overwatering and groundwater seepage. Long-term plans should consider the removal of exotic (alien) vegetation that requires irrigation, and the eventual removal of the irrigation system.



## 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 similar measures shall be used to discourage foot traffic down the cliff faces. Stairways should be provided down the cliffs where needed. 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 South Carlsbad 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 South Carlsbad 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 California Department of Boating and Waterways, the City of Carlsbad, 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.

## Biotic Resources

### Landscape Plants

The South Carlsbad State Beach campground is landscaped with non-native shrubs to provide screening between campsites and to screen the campground from the highway. These exotic species require irrigation and displace native plant habitats. Exotic shrubs should not be planted at the campground because irrigation water is expensive (the 1981 water bill for the San Diego Coast Area was \$30,000), native shrubs can provide necessary screening, and exotic vegetation displaces native plant communities, which are threatened by urban development throughout coastal San Diego County. Native shrubs, including toyon (Heteromeles arbutifolia), California sagebrush (Artimesia californica), and coyote bush (Baccharis pilularis var. consanguinea), are among the species that would be suitable substitutes for the exotic shrubs. Existing exotic shrubs are mature and very woody and are beginning to lose their effectiveness as screening.

Policy: A program shall be established to replace the overmature exotic (alien) shrub vegetation at the campground with native plants. The replacement of mature exotic species with native shrubs should be phased over several years to allow natives to become established before all

exotic shrubs are removed. As a first step, irrigation of the shrubs should be discontinued. Those that do not survive should be replaced with natives. The design of all new developments in this unit shall consider the use of drought-tolerant native plants which do not require permanent irrigation.

#### Ground Squirrels

Ground squirrels, which are abundant at South Carlsbad State Beach, burrow under pavement and along walkways, creating safety hazards and damaging facilities.

Policy: Ground squirrel populations shall be controlled to minimize public hazards and protect facilities. Reduction of preferred habitat will be considered a primary control method.

#### Cultural Resource Management Policies

Management of cultural resources at South Carlsbad State Beach is governed by state statutes and department 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 South Carlsbad 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.

#### Archeological Site SDi-9590

Archeological site SDi-9590 is a small midden that may once have been part of a very large coastal village. It is bounded by road cuts and buried utility lines on two sides and a graded parking area on the third side. The integrity of this shallow deposit with no features is considered only fair. It might contain some information that could add significantly to our knowledge of local chronology and local coastal and lagoon resource utilization, and perhaps provide answers to some regional questions about aboriginal subsistence, settlement, and trading patterns.

Policy: What has survived at SDi-9590 should be protected by avoiding any additional impacts from developments, such as a wider beach access road, parking, utility lines, or bike trail. If such developments are considered necessary or highly desirable, mitigation measures will be recommended and implemented.

#### Archeological Site SDi-9589

Archeological site SDi-9589 appears to be a small food-processing site located in the sand dunes south of the mouth of Batiquitos Lagoon. Mussel and clam shell fragments and a few chipped stones were found at two loci.

Locus A appeared to have been undisturbed when first discovered. It was later found to be partially vandalized, with about 10 percent of the mound having been dug illegally. Although the site lacks a deposit of midden soil, it appears to have good integrity of setting. Locus B has been about 50 percent destroyed by a common trail which crosses it from the highway to the beach.

The artifact assemblage appears to be limited to beach cobbles and fractured cobble fragments. Datable organic material has the potential for contributing to our knowledge of the local chronology. The faunal remains present can add to our knowledge of local coastal and lagoon resource utilization when properly collected and analyzed. SDi-9590 potentially contains some information that could add significantly to our knowledge of local and regional prehistoric subsistence, settlement, and trading patterns. No human remains are evident at SDi-9589, and a Native American cemetery is considered to be very unlikely.

Several departmental Resource Management Directives call for protection and preservation of prehistoric archeological sites:

- (51) The department shall endeavor to preserve intact any Native California Indian resources in the State Park System.
- (58) Cultural resources in the State Park System shall be protected against damaging and degrading influences....
- (69) As part of the resource inventory process, each unit of the State Park System shall be surveyed for archeological values, which when found shall be protected.... Such resources, when found to be of appropriate significance to the department, shall be included in applicable programs for preservation, investigation, and interpretation.

South Carlsbad State Beach is visited by more than one million people annually. New development is planned for the abandoned trailer court area south of SDi-9589 that will increase visitation for recreation. This is in keeping with the primary values for which the unit was established and classified and with the following Resource Management Directives:

- (18) Insofar as is possible in state beaches, the entire area of the sandy littorals will be available for recreational use and visual enjoyment....
- (73) Where recreational resources are primary in a State Park System unit, development and operation of facilities shall be aimed at making optimal public use of the recreational opportunities present. The environment may be managed, modified, or manipulated to enhance the recreational experience.

It would be difficult to preserve SDi-9589 in place without adversely affecting the unit's recreational values. Fencing these two loci would be contrary to these values. Capping the mounds with a protective cover of asphalt would also be inappropriate. Vegetative plantings would be difficult, of dubious value, and would require maintenance. Doing nothing will leave the two mounds exposed to vandals and relic collectors, and will permit informal paths to continue to wear away the deposit.

**Policy:** The archeological and interpretive values of SDI-9589 consist of artifacts, ecofacts, and information which should be protected and preserved through excavation, analysis, and curation. In addition, the following Resource Management Directives will pertain to this undertaking: 52, 53, 70, 71, and 72.

**Policy:** Any additional archeological or historical resources that may be discovered 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, subject to review of specific development and construction projects, in accordance with 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 South Carlsbad 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):

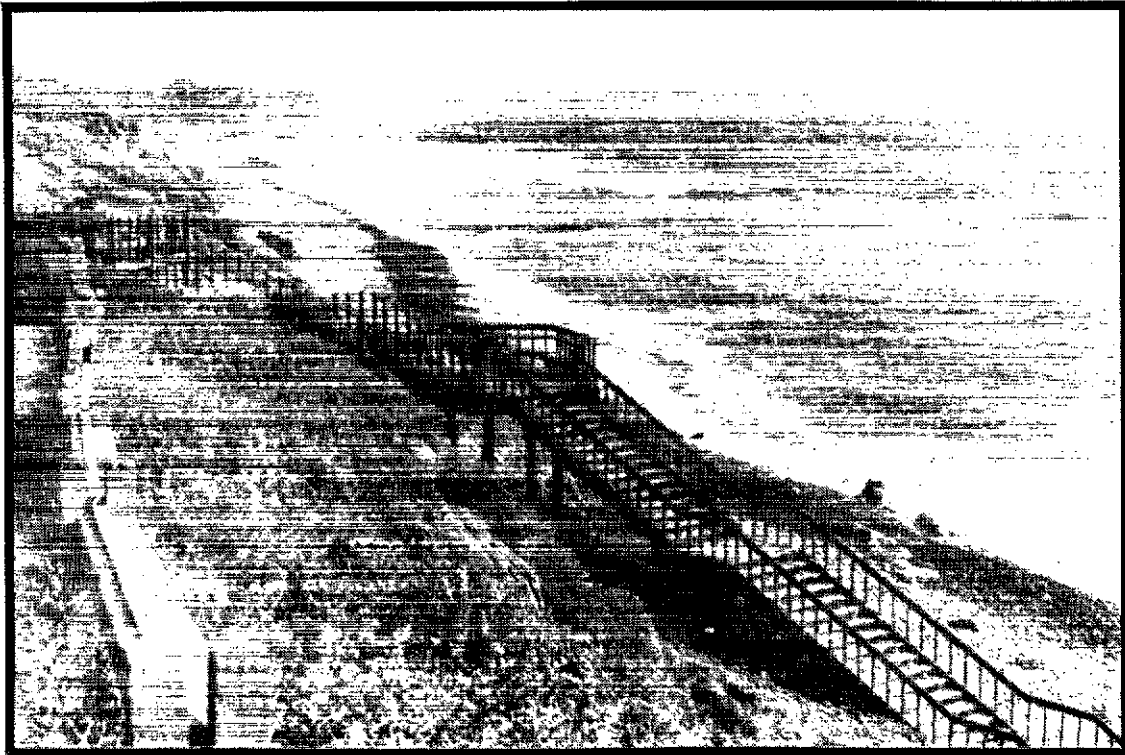
- I. Ocean beach. Capable of high-intensity use but subject to periodic inundation by ocean waves. No permanent structures allowed within this zone.
- II. Ocean-facing cliffs. Defined as the zone inland from the toe of the cliff to a horizontal distance equal to the height of the cliff as measured from 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, including buildings and campsites, 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.

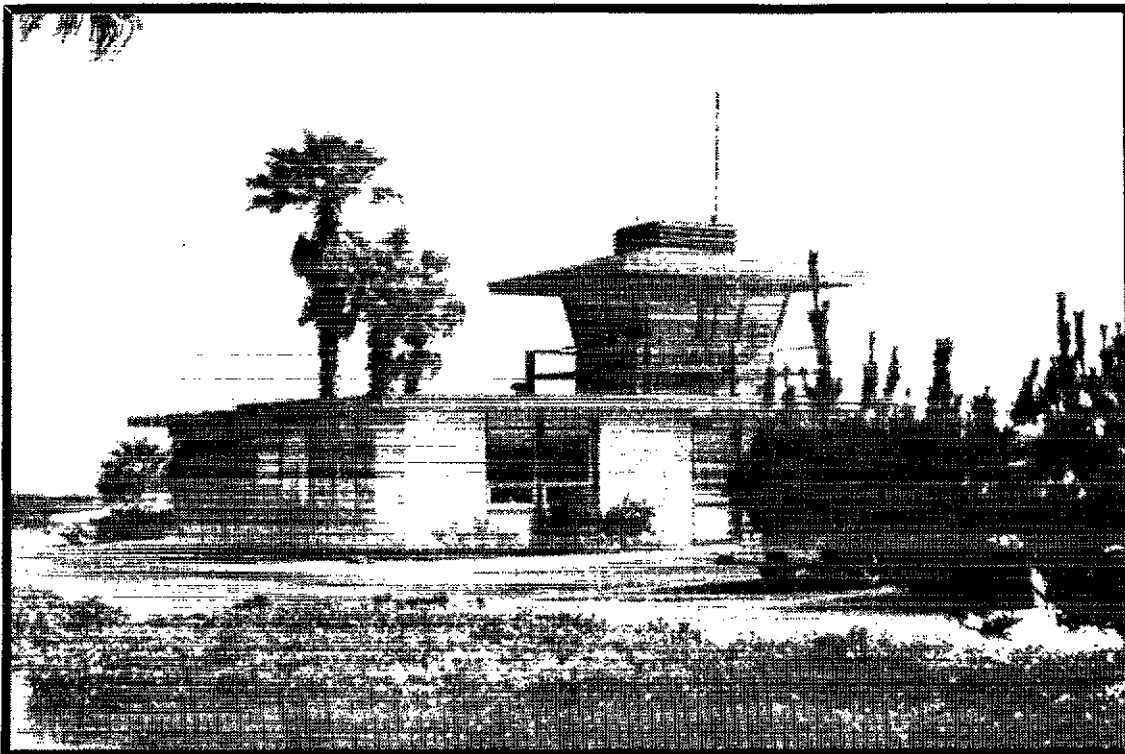


# Land Use and Facilities Element

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*Area 2 -- Beach access stairway at the campground*



*Area 2 -- Park office and lifeguard control tower*



## LAND USE AND FACILITIES ELEMENT

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

For purposes of this plan, three study areas have been identified, which encompass five existing unit parcels and additional lands of interest to ultimate unit operation and development (see General Plan Index Map). These areas are:

- Area 1    --    The undeveloped area extending from the Terra Mar community to the campground
- Area 2    --    The campground
- Area 3    --    The undeveloped area south of the campground (also known as Ponto Beach)

### Land Use Patterns of Surrounding Area

The City of Carlsbad has jurisdiction over lands extending to a point just above Batiquitos Lagoon. Lands contiguous to the unit are characterized by scattered agricultural uses interwoven with developing urban housing. S-21 (Carlsbad Boulevard, old Highway 101) is a divided four-lane highway that forms most of the eastern boundary of the unit. At the unit's north end the Palomar Airport Road interchange crosses the unit.

Batiquitos Lagoon, which is not owned by the department, is under the protection of the California Department of Fish and Game.

The City of Carlsbad is currently reviewing a proposed major residential and commercial development inland of Carlsbad Boulevard and immediately upcoast of Batiquitos Lagoon. The city has also proposed long-range plans to extend Poinsettia Lane to Carlsbad Boulevard.

We expect that the entire area around the unit and Batiquitos Lagoon will ultimately be totally urban, with residential development likely to be most dominant. Any efforts to expand the unit or adjust circulation patterns should be a high priority undertaking to avoid excessive costs and inconvenience.

### Ownership

Total current unit ownership is 110.4 acres.

Ownership patterns of the unit are fragmented primarily due to the sequence of acquisition. (Detailed ownership information is contained in DPR drawing number 17579, Land Ownership Record, dated April 20, 1982.)

The following is an outline of the department's property, by area:

Area 1 (ocean frontage property) was acquired in four separate transactions between 1961 and 1978. In 1961, 36.03 acres were received from the California Division of Highways. An additional 3.68 acres were acquired from the Division of Highways in 1964. A .2-acre parcel in 1974 and a 9.07-acre parcel in 1978 were acquired from private owners. The 23.2-acre inland portion of Area 1, separated from the oceanfront property by Carlsbad Boulevard, was received in 1974.

Area 2 (the campground) was acquired in three transactions between 1949 and 1976. A 14.22-acre parcel was acquired from the Division of Highways in 1949. An additional 36.03-acre parcel was acquired in 1961, and 4 more acres were added in 1976.

Area 3 (a former trailer park) is separated from Area 2 by a small parcel of land controlled by San Diego County at the mouth of Batiquitos Lagoon. The 20-acre property was acquired in 1976.

There are a number of encumbrances in the unit, but most do not affect present or proposed uses. One significant encumbrance is a 60-foot wide, nonexclusive road easement which crosses Area 3. This easement provides access to a private parcel contiguous to and immediately downcoast of Area 3.

The department holds recreation easements over several parcels at the south end of Area 3. With the exception of a .39-acre parcel of private land, department control of the beach extends to Leucadia State Beach. Two upland parcels are part of these easements and are discussed in the Facility Recommendations section.

#### Existing Unit Conditions

Four separated parcels of South Carlsbad State Beach are located in the City of Carlsbad, and the downcoast segment (Area 3) is in the unincorporated portion of San Diego County. Visitor attendance in 1980-81 was estimated at 1,178,000.

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

- Area 1    --    No developed facilities
- Area 2    --    226 family campsites
- One unit office
- One maintenance area
- One entrance station
- Two trailer sanitation stations
- One campfire center
- One retail concession

- 10 comfort stations
- Seven beach access stairways

Area 3 -- No developed facilities

Public use of the unit is currently concentrated in Area 2 where developed facilities provide outstanding camping opportunities with ocean views and beach access.

Area 1 is little used due to lack of facilities. The inland parcel is cultivated and is not used for park purposes at this time. Its isolation from the beach by roadways limits its potential for park use until a safe, pedestrian-oriented beach access is provided. The department's property on the ocean side of Carlsbad Boulevard is currently used by surfers who park along Carlsbad Boulevard and climb down to the beach along informal pathways.

Area 3 is popular because of the fine summer beach, but use is limited by the lack of parking space and restrooms.

The following problems, by area, require attention:

- Area 1 -- The inland DPR property is isolated from the beach by Carlsbad Boulevard and the Palomar Airport Road interchange.
- Oceanfront bluffs are experiencing severe erosion from pedestrian traffic and natural causes.
- There is no development to accommodate current use, and parking along Carlsbad Boulevard is causing congestion.
- Beach use is concentrated in a few places where parking is possible, but parking space is inadequate.
- Abandoned fencing and old highway pavement create visual blight at numerous locations.
- The department and city own portions of a wetland immediately behind the Terra Mar community. This section could be more effectively managed by a single agency.
- Area 2 -- Several campsites are in jeopardy because of bluff erosion and seacliff retreat. Storm runoff patterns need to be examined for possible modification to minimize bluff erosion. Existing irrigation equipment contributes to bluff instability.
- Camping facilities are inadequate to meet current demands.
- The proposed extension of Poinsettia Lane to Carlsbad Boulevard will require reworking the campground entrance.
- The maintenance area is inadequate.

- There is no small-boat launch facility at the unit.
- Formalized bicycle camping opportunities are inadequate.
- Area 3 -- There is a need for developed parking, comfort stations, and esthetic improvement to meet current and future demands.
- A boundary adjustment is needed.

Based on public involvement, research, and coordination with City of Carlsbad officials, the staff has accepted the following assumptions as the basis for working toward solutions to these identified problems:

1. Beach sand depletion and bluff erosion are continuing natural processes all along the coast.
2. The future extension of Poinsettia Lane to Carlsbad Boulevard will occur.
3. The area around South Carlsbad State Beach will become increasingly urban.
4. Carlsbad Boulevard acts as a present and future buffer against urbanized land uses.

#### Facility Recommendations

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

Commission approval of the general plan will apply only to those recommendations specifically involving DPR property at the time of commission action. Recommendations involving land not owned or controlled by DPR are provided to coordinate DPR efforts with appropriate owners or agencies and do not constitute a commitment on the part of DPR to unilaterally act on the proposal or acquire property.

#### Area 1

Major alterations of Carlsbad Boulevard will be accomplished in this area by widening the northbound lanes from two to four lanes in Areas 1 and 2 and by eliminating the Carlsbad Boulevard/Palomar Airport Road interchange, replacing it with a "tee" intersection. The present interchange area and the southbound lanes could thus be available for internal unit circulation and recreation development. These actions would substantially improve the development possibilities and management of this area. The City of Carlsbad holds title to the interchange and roadways and supports this approach. This proposal, once implemented, will provide for these additional proposals:

- Develop area office and maintenance facility.
- Develop 40-bed hostel. (This proposal is consistent with the department's Coast Hostel Facilities Plan, January 1978.)

- Develop 75-person group camp with comfort station and 20 car parking spaces.
- Develop 160-person group picnic site with comfort station and 40 car parking spaces.
- Develop entry station.
- Develop six portable day-use comfort stations.
- Develop five beach access stairways.
- Develop +800 day-use parking spaces, using existing roadway pavement where possible.
- Revegetate bluff faces with native plants.
- Landscape developed areas.
- Install interpretive panels.
- Provide portable lifeguard stands as needed.
- Declare surplus the wetland behind the Terra Mar community for management as a wetland/open space area by another government agency. Cooperation with the City of Carlsbad will be necessary.

Action on these proposals will allow Area 1 to be managed as a complete recreational unit under the control of an entrance station.

## Area 2

Area 2 is affected by proposed alterations to Carlsbad Boulevard and the City of Carlsbad's proposal to extend Poinsettia Lane to Carlsbad Boulevard. Extending Poinsettia Lane will provide a direct link from the existing campground entrance to Interstate 5. Alterations proposed for Carlsbad Boulevard will free existing southbound lanes for campground expansion. The City of Carlsbad holds title to the Carlsbad Boulevard right-of-way and supports this approach. Other proposals are:

- Redesign entry road to accommodate extension of Poinsettia Lane and the use of the southbound lanes of Carlsbad Boulevard for recreation development.
- Develop 140 campsites on the southbound lanes of Carlsbad Boulevard with necessary road connections. Some existing sites will be deleted by this construction.
- Study and redesign the existing storm water drainage system to minimize bluff erosion.
- Develop 15 bike-in campsites.
- Rehabilitate existing campfire center.

- Relocate two existing trailer sanitation stations to entry area and add one additional station.
- Revegetate bluff areas with native plants where needed.
- Convert existing landscaping to drought-tolerant species and revise irrigation system to incorporate a drip-type system.
- Relocate maintenance area to Area 1. Convert existing maintenance area to lifeguard headquarters.
- Develop small-boat launch facility with parking for 60 cars.
- Install interpretive panels.

### Area 3

- Develop day-use parking for 400 cars.
- Develop entrance station.
- Develop two portable comfort stations.
- Develop access walks.
- Acquire +2.4 acres from San Diego County.
- Acquire ±.39 acres of private property.
- Declare Lots 427 and 428 surplus. However, Lot 428 should remain in some public jurisdiction for bluff protection.
- Install interpretive panels.

These facilities and actions are needed to meet present and future recreation demands. Recreational opportunities will be improved by spreading vehicle parking along the length of the useable beach. Sanitation facilities and formal pedestrian access will go far toward minimizing sanitation and erosion problems. Table 1 is a summary of key recreational facilities before and after implementation.

Table 1  
Facilities Summary

<u>Facility</u>	<u>Existing on DPR Property</u>	<u>After Implementation</u>
Area Office	0	1
Unit Office	1	1
Family Campsites	226	356
Bike-In Campsites	0	15
Group Campground	0	1
Group Picnic Area	0	1
Hostel	0	1
Maintenance Area	1	1
Trailer Sanitation Stations	2	3
Entrance Stations	1	3
Campfire Center	1	1
Day-Use Parking Spaces	0	1,250
Comfort Stations	10	17
Beach Access Stairways	7	12
Small-Boat Launch Facility	0	1
Concession Facility	1	1

Note: "After Implementation" figures include existing facilities.

General plan proposals involve the potential acquisition of lands in Areas 2 and 3, as well as the deletion of land in Areas 1 and 3 (see Table 2).

Table 2  
Acreage After Plan Implementation

Existing Acreage	=	110.40 acres
Proposed Additions		
-- Carlsbad Boulevard Alterations (approximate)	+	45.00 acres
-- Area 3 Beach Parcel	+	00.39 acres
New Total		<u>155.79 acres</u>
Proposed Surplus Property (not currently listed in unit acreage so no change in acreage figure is involved)		
-- Area 1	-	7.00 acres
-- Area 3, Parcels 427 and 428	-	00.68 acres

## Special Considerations

State law requires that projects be designed to be accessible to the physically disabled. Maximum possible access will be provided in all development designs at this unit. South Carlsbad State Beach currently provides camping opportunities for the disabled. Future development of beach access in Area 3, where bluffs do not impede those in wheelchairs or on crutches, will expand recreational opportunities. Braille signing will be provided where needed.

## Local Coastal Plan Conformance

This general plan substantially conforms to the Carlsbad Local Coastal Plan adopted and certified on June 3, 1981, with the following exceptions:

Policy 6-9 recommends considering conversion of the existing campground at South Carlsbad State Beach to day use if camping facilities can be provided nearby. Policy 6-4 points out the need for additional campsites.

We feel that the existing campground should be retained at its present location and expanded by developing the southbound lanes of Carlsbad Boulevard. This makes the best use of the existing investment in facilities, while proposed day-use developments in Areas 1 and 3 eliminate the need for the campground's conversion to day use.

Policy 7-9 directs this department to develop the inland parcel in Area 1 to provide 1,500 parking spaces for day-use access. Jitney service is recommended to distribute users along the length of the state beach.

We feel that development proposed in this general plan distributes users along the state beach while avoiding the need for an expensive jitney service. We further think that proposed parking reflects beach capacity more realistically than the LCP requirement.

Policy 7-15 again calls for converting the campground to day use. We feel that the general plan proposals are most desirable for meeting identified needs.

## Sequence of Action

The sequence of implementation of this general plan should be governed by the need to increase beach access as rapidly as possible to relieve traffic congestion along Carlsbad Boulevard.

Area 3 can be developed more quickly than Areas 1 or 2 because proposed alterations of Carlsbad Boulevard must occur before recreation facility development in Areas 1 and 2. Area 3 parking redevelopment will be a relatively straightforward effort.

Therefore, the alterations of Carlsbad Boulevard should follow the development of Area 3, with the subsequent development of Areas 1 and 2, in that order.

The one exception to the above sequence is the need for early development of the San Diego Coast Area headquarters/maintenance complex. This complex is proposed in the Area 1 portion of the South Carlsbad general plan and is



intended to serve the following units: Carlsbad SB, South Carlsbad SB, Leucadia SB, Moonlight SB, San Elijo SB, Cardiff SB, Torrey Pines SB and Reserve, and Silver Strand SB.

The existing unit maintenance yard at South Carlsbad SB, which serves the San Diego Coast Area, cannot be expanded due to unstable bluffs. Over the past few years, the Area's needs have grown beyond the capability of the existing facility.

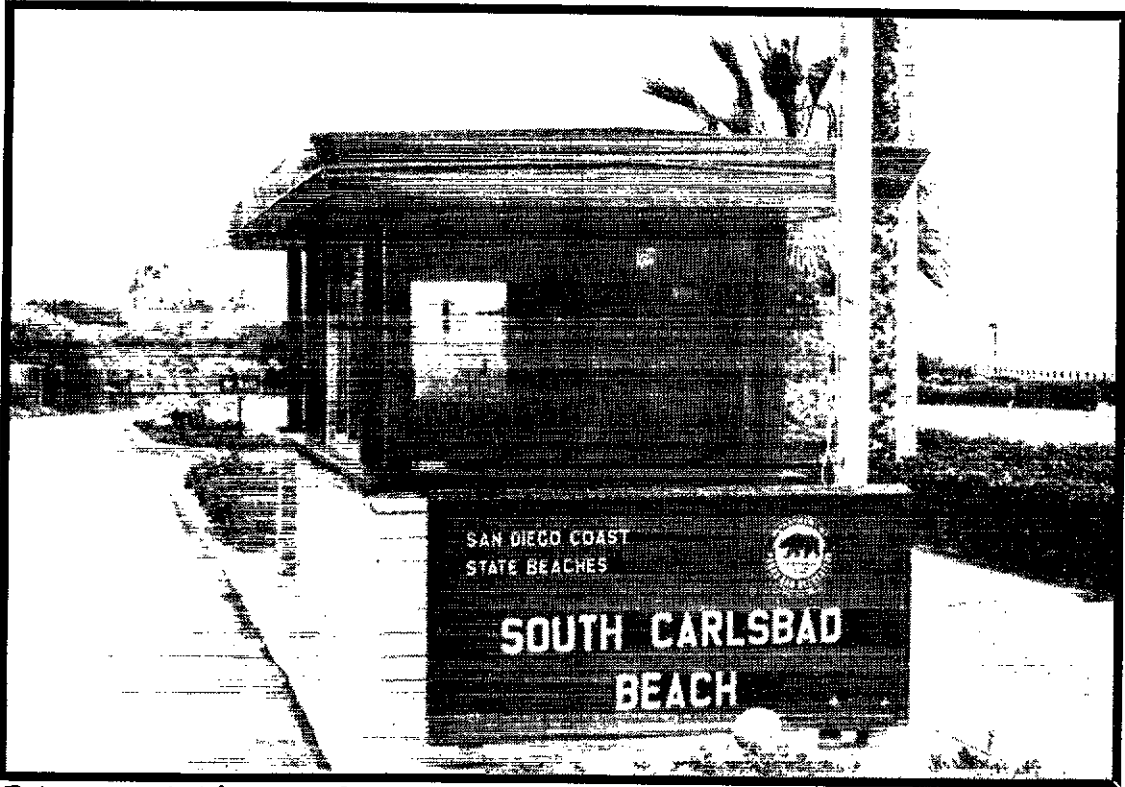
An additional high priority is a buffer planting along Manzano Drive to screen the proposed maintenance yard and future recreation development from the Terra Mar community.

The proposed San Diego Coast Area operations/maintenance headquarters and buffer planting are recommended for early implementation because of the need to maintain facilities and serve the community.

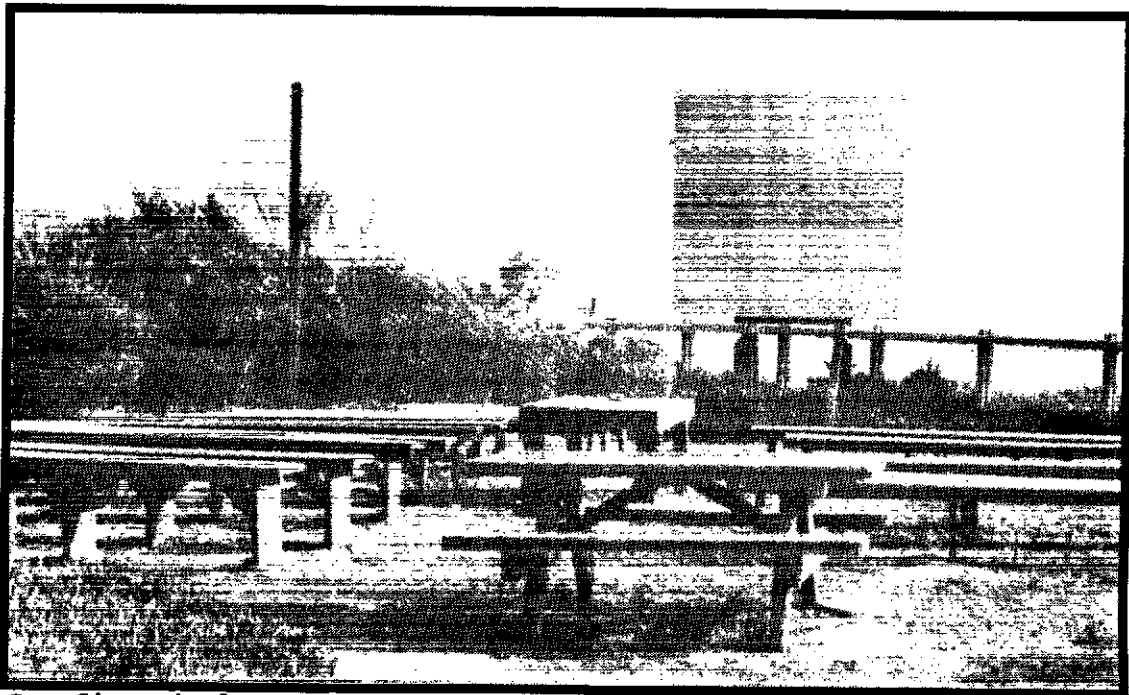


Interpretive Element

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*Entrance station at the campground*



*Campfire circle at the campground*

## INTERPRETIVE ELEMENT

This general plan element outlines interpretive programs and facilities to enhance the recreational experience available at South Carlsbad State Beach. (The unit's interpretive prospectus on file with the department contains additional information.)

### Methods and Media

The most popular media at the state beach at this time are those involving personal services: interpretive walks and demonstrations, campfire programs, and children's programs. These successful programs should be continued, and additional self-guiding activities at the state beach and at related off-site locations, such as Batiquitos Lagoon, should be developed. The North Coast Interpretive Association has recently been created to help department staff provide personal services to state beach users in this area, among other functions. Audio-visual presentations at campfire programs should continue to be used to supplement personal presentations. However, the campfire center should be redesigned to provide better space for these programs.

Exhibits now available at South Carlsbad State Beach consist of a few panels on the outside of the administration building, covering natural history topics. There are also small panels on the restrooms explaining the use of solar power there to heat the hot water. More interpretive panels and more attractive presentations are needed. Panels would also be appropriate at selected day-use areas and at the concessions building.

### Interpretive Period

The department will interpret a flow of history at South Carlsbad State Beach.

### Interpretive Themes

Interpretive themes proposed for South Carlsbad State Beach fall into three loosely connected groups: resources, recreation, and safety and management.

### Resources

#### The Changing Coast

Interpretation should address both beach and bluffs. Visitors should understand how the summer beach differs from the winter beach, where beach sand comes from and where it goes, and the meaning of such terms as "littoral drift," "littoral cells," and "sand budget." In addition, marine terrace formation, natural bluff erosion, and human-accelerated erosion and its prevention should be interpreted.

#### A Sequence of Habitats

The most important habitat types found at and around the state beach should be interpreted for beach visitors, with emphasis on how the physical and vegetative makeup of each area determines what wildlife will be present. The

spectrum of habitats interpreted should include the sandy beach community, the various coastal strand associations, the landscaped area within the campground, the marsh habitat around Batiquitos Lagoon, and the water environment of the lagoon.

#### Animals You Can See Here

Beach visitors should receive information on the grey whale: dimensions, habits, migration, breeding, clues to identification, etc. Other marine animals and birds commonly seen from the beach and at Batiquitos Lagoon should also be interpreted.

#### Bygone Beachcombers

Use of the beach environment by the Ipai and their history since European contact should be interpreted to beach visitors. Interpretation should also cover early Hispanic and American recreational uses of the beach.

#### Recreation

##### Recreational Uses of the Surf and the Lagoon

Opportunities for board and body surfing, wind surfing, and boating should be explained to visitors unfamiliar with this beach and the lagoon. Techniques, regulations, and developed points of access should be covered.

##### Sport Fishing

This theme will deal with edible fish caught in the surf and lagoon. Special emphasis will be given to the grunion because of its unique spawning behavior. Techniques for catching them and applicable regulations will be covered.

#### Safety and Management

##### Staying Safe at the Beach

Interpretation should aid visitors by explaining the formation of rip currents, how swimmers can escape them, and rescue techniques. It should also cover other hazards, such as stinging jellyfish, stingrays, sunburn, and buried fires and glass.

##### Preventing Erosion and Keeping our State Beach Intact

This theme will address the cumulative effects of individual impacts on the unstable bluffs at the beach. It will stress how each tiny runoff gully, ground squirrel hole, and volunteer trail can eventually lead to the loss of large portions of the bluffs. Interpretation will remind visitors to stay off the bluff face and use the stairways for their own safety and to prolong the life of the facilities atop the bluffs.

## It's Costing You

The cumulative effects and environmental degradations, unhealthy conditions, and costs to the taxpayers caused by individual acts of littering and vandalism should be interpreted to beach users. This theme should also touch on the value of reclaiming recyclable materials.

### Visitor Facilities

Interpretive exhibits should be better designed for many of the unit's existing facilities, as well as created for some proposed facilities. Interpretive panels should be the chief medium used at this unit. Panels should be put in display cases that are impervious to the elements, to protect them from corrosion and vandalism and also to make them look attractive and substantial. Panels and cases should be installed on permanent structures in well-lighted places that are easily monitored by patrolling staff. Panels and cases should be of a standardized size, so that seasonal exhibits, or those that are worn out, can be easily replaced.

Specific recommended locations for interpretive panels are:

1. At the unit office, where a more attractive display area should be designed. This is the best place for the existing panel showing daily beach conditions (tide, surf, etc.), and for a bulletin board to post special bulletins and personal notices, because unit staff can easily keep these neat and up-to-date in this location. Display panels can relate to all thematic groups: resources, recreation, and safety and management. Seasonal exhibits could be most easily rotated here.
2. At each of the seven existing beach access stairways, and those proposed for the day-use area, one or two panels can be displayed on beach safety, recreation, and management.
3. At the proposed group camp and group picnic area, where panels should deal with resources and recreational opportunities.
4. At the concessions building, an excellent place for interpretive displays, particularly because of its proximity to the campfire center. Resource-oriented panels would be most appropriate here. The concession should also sell some resource-oriented publications.
5. At the unit's southern end, where there are no bluffs and where access for physically disabled people is best, a special effort should be made to interpret the unit's resources. Interpretive panels should be placed for easy reading from a wheelchair. Braille panels should also be provided.

A mobile exhibit trailer could be used along most of the San Diego County coastline and should be very popular at South Carlsbad State Beach. Interpretation could be very dynamic, covering in more detail such topics as marine terrace formation, ocean currents, sand movement, and erosion. Photographs and artifacts should be employed to give an idea of what early southern California beach recreation was like.

The trailer could also become a roving interpretive center, useful as an educational tool for the department. During months of low visitation at this unit and other beaches, the trailer could be taken to schools throughout the region.

Another facility tentatively planned for South Carlsbad State Beach is a hostel. If this building is constructed, it should have a display orienting visitors to this beach as well as others in the vicinity. Resource and recreation theme exhibits would also be appropriate for display there.

Existing interpretation of restroom solar heating is understated. A panel should be prepared for exhibit in one of the central areas of the campground to explain the process in more detail.

Scheduled caravans to take campers from South Carlsbad State Beach to Torrey Pines State Reserve should leave from the unit administrative office. The proposed interpretive center at Los Penasquitos Lagoon will cover regional, and particularly wetland, resources in more depth than will be possible or desired at South Carlsbad State Beach. This center will also deal more fully with cultural themes than exhibits at the individual state beaches. Native California Indian culture and history should be covered at the center, as well as the history of recreation along the north San Diego County coast.

Other off-site locations where interpretation should occur are the highway reststops en route to the San Diego coast region. These should orient people to all the state beaches and describe the facilities and activities available at each.

#### Visitor Activities

Successful programs involving personal services should continue. These include talks, ranger-led walks, demonstrations, campfire programs, and children's programs. Current programs should be augmented as staffing permits or, when the interpretive association becomes established, as qualified docents become available. Potential docent- or ranger-led programs include nature walks on the beach and to Batiquitos Lagoon. Docents could also supplement the lifeguards in giving beach demonstrations, particularly those dealing with the safe use of the surf for various forms of recreation (board and body surfing, swimming, and surf fishing).

#### Revenue-Generating Activities

South Carlsbad State Beach attracts a large attendance, which offers excellent revenue potentials. The most obvious place for such activities to be centered is in the concessions building because people go there expecting to spend money. Besides a wide array of quality merchandise, including publications, photographs, posters, and gift items, the concession ought to offer beach towels and t-shirts with appropriate interpretive messages on them.

Publications and related objects could also be sold at the unit office by unit staff or volunteers from the interpretive association.



Visitors to the proposed interpretive trailer could be charged a modest entry fee when the trailer is on State Park System property. School children should enter for free.

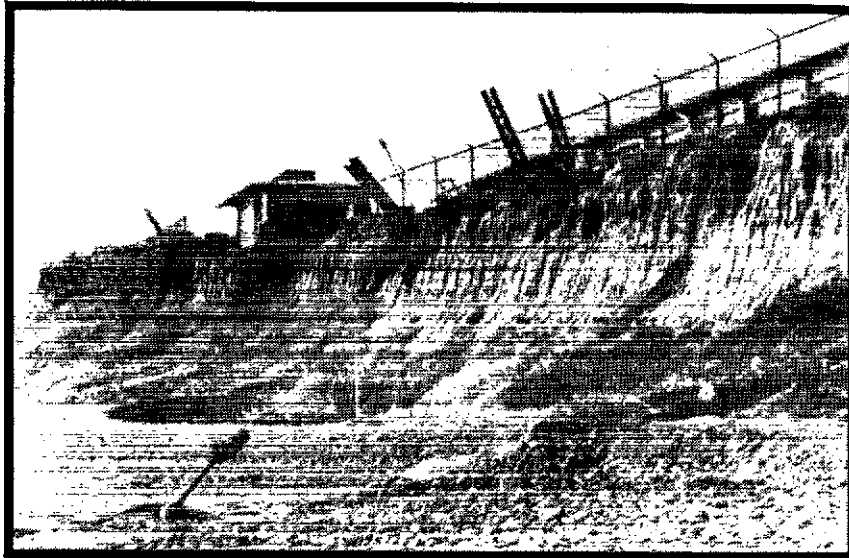
#### Recommendations

- When funding permits, install interpretive panels at the concessions building, on beach access stairways, at the unit office, and at new facilities when they are constructed.
- Provide a mobile regional interpretive exhibit trailer at this unit.
- Develop teachers aid packet for visiting school groups.
- 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.
- Continue and add to the personal services programs at South Carlsbad State Beach.
- Initiate a feasibility study of putting interpretive messages on saleable items. If this appears workable, such items should be obtained for sale.
- Foster the growth of the North Coast Interpretive Association to provide personal services interpretation to visitors.
- When funding permits, redesign the campfire center.

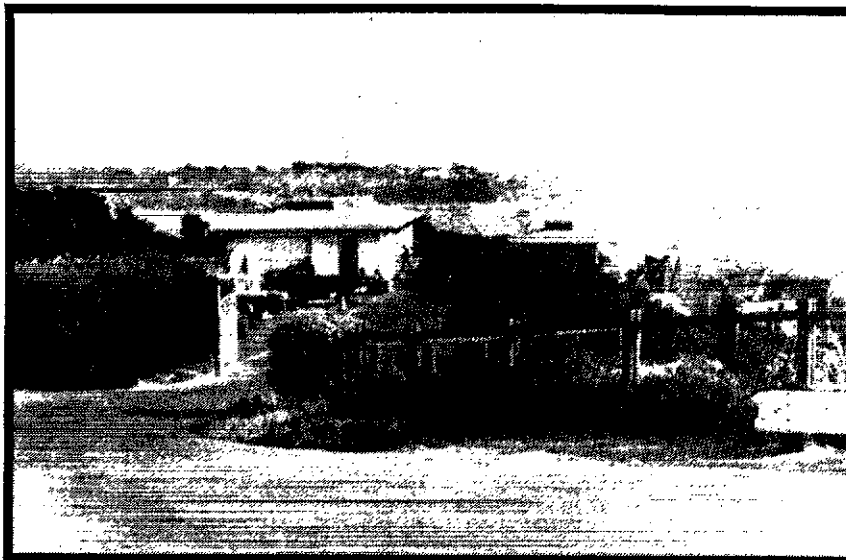


# Operations Element

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*Bluff erosion in front of maintenance yard*



*Area 2 -- Maintenance yard*

## OPERATIONS ELEMENT

### Current Conditions

South Carlsbad State Beach is in the San Diego Coast management area of the department's Southern Region. Current operations involve essentially Area 2, where an existing campground is located. Services in Areas 1 and 3 are primarily limited to litter pickup, policing, and lifeguard activities. Area 2 involves full-time staffing at the campground, with the exception of winter seasons when the campground is closed on alternate years. Winter camping is rotated between South Carlsbad State Beach and San Elijo State Beach to allow for maintenance and to accommodate reduced demand during this season.

Staff services at the Area 2 campground include:

- Maintenance of 226 campsites with connecting roads and parking
- Interpretive activities
- Law enforcement and lifeguard services
- Staffing of entrance station
- Maintenance of 10 comfort stations, two trailer sanitation stations, seven beach access stairways, and equipment
- Litter pickup and trash removal

### Future Conditions

Implementation of the general plan will substantially increase the workload of staff at the unit by adding the following responsibilities to present demands:

- Areas 1 and 3 will become major day-use areas. Each will require staffing at the entrance stations, and maintenance of extensive new facilities. All facets of the existing operation will be expanded to meet the needs of increased visitation.

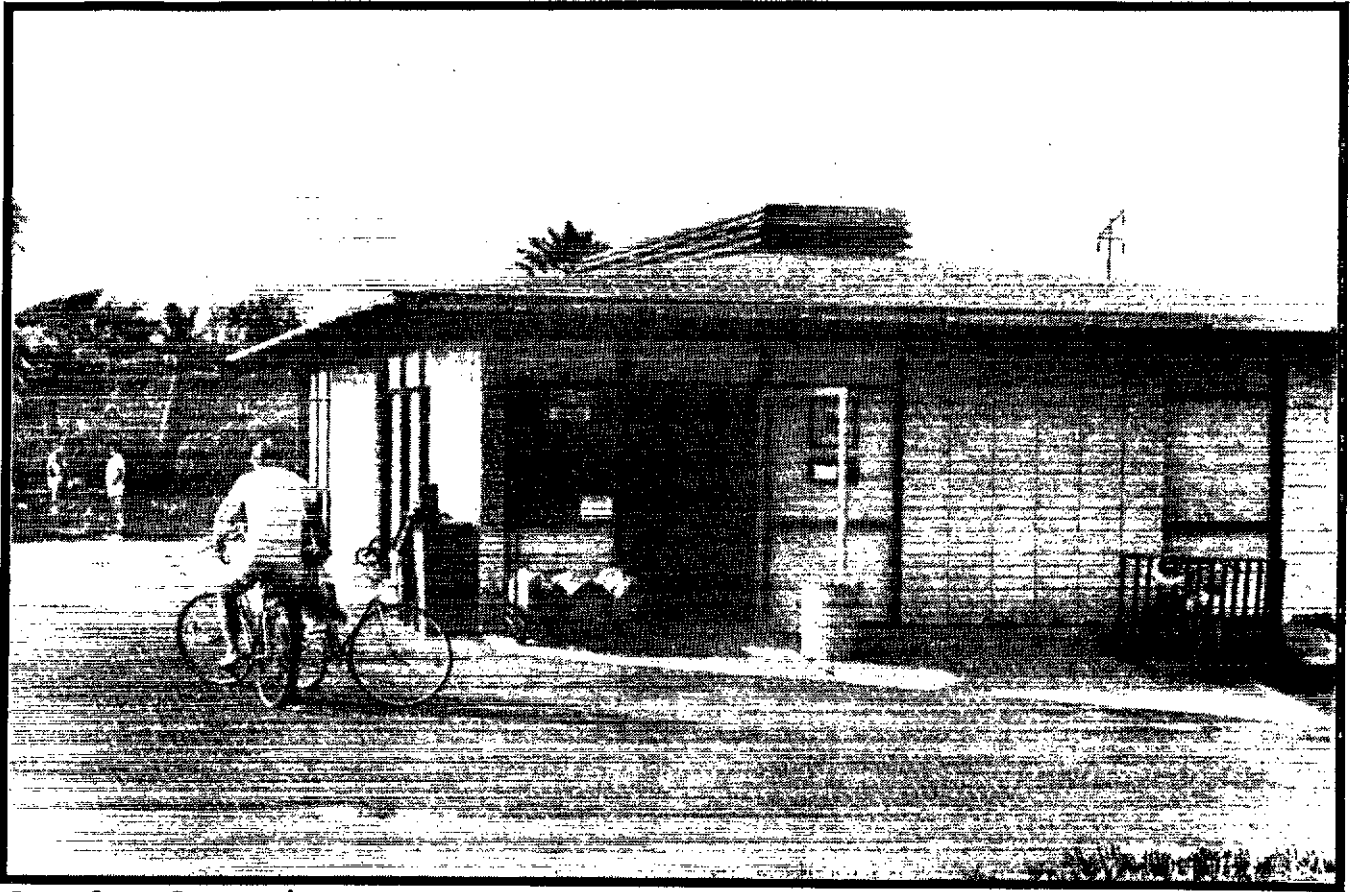
### Revenue Generation

Helping to offset increased demands on staff and the budget will be significant increases in revenue. All areas of the unit will be providing increased returns once expansion occurs and additional services are provided.



# Concessions Element

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Area 2 -- Concession



## CONCESSIONS ELEMENT

South Carlsbad State Beach currently supports a single retail concession near the campground entrance. This facility provides needed food, beverages, and other items to campers. It is proposed that this concession operation continue in its present form.

No new concession facilities are proposed in this general plan. Offsite commercial activity is sufficient to meet the day-use needs of users in Areas 1 and 2.



# Environmental Impact Element

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Area 2 — Cobble beach after winter storms

## 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 South Carlsbad 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. 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

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 192 days, nitrogen dioxide one day, and particulate matter 41 days during the year.

Ozone is the most important atmospheric pollutant 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. 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 closest air quality monitoring station to South Carlsbad State Beach is in the City of Oceanside, about 7 miles to the north. The air quality of Oceanside is very good; therefore, it is expected that the air quality of South Carlsbad State Beach is similar. During 1981 at that station, only two pollutants (ozone and particulate matter) equaled or exceeded California Air Quality Standards. Standards for ozone and particulate matter were equaled or exceeded 48 and 24 days, respectively, compared to 22 and 20 days in 1979.

### Noise

The noise experienced at South Carlsbad State Beach is generated by automobile, aircraft, and train traffic, the surf, and human activity. The southbound lane of the Pacific Coast Highway is adjacent to the campground at South Carlsbad State Beach. The northbound lane is less than 200 feet from the campground. The Atchison, Topeka, and Santa Fe Railroad runs parallel to the Pacific Coast Highway and is about 700 feet east of the state beach.

The noise level generated by automobile traffic at 100 feet is in the 55-75 dBA range. The railroad generates noises in the 55-65 dBA range at a distance of 700 feet.

Palomar Airport is located about 3 miles northeast of the state beach. The propeller and jet aircraft which use the airport are usually expected to generate noise in the 67-97 dBA range. Since the airport is 3 miles away, the planes are usually higher than 1,000 feet when they pass over the state beach and the noise level would be 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 Carlsbad was 35,490, with 29,450 (83%) White, 213 (.6%) Black, and 4,790 (13%) of Spanish origin. Of the total population, 50% (17,703) are female.

Carlsbad has 9,750 families, with 8,549 (88%) White, 52 (.53%) Black, and 919 (9.4%) of Spanish origin. The city grew 137.5% from 1970-1980 (14,944 - 35,490). The median income per household is \$22,354.

### Public Services

#### Water and Sewer

Water and sewer services are supplied to South Carlsbad State Beach by the City of Carlsbad.

#### Traffic

Access to South Carlsbad State Beach is via the Pacific Coast Highway, known as Carlsbad Boulevard in this area. The divided roadway, with two lanes northbound and two lanes southbound, is currently operating at Level of Service A, which means free-flowing. The ultimate average daily traffic (ADT) capacity is estimated at 40,000 vehicles, while recent ADT (measured on July 14, 1982) was 4,878 northbound and 5,148 southbound. Peak-hour volume is estimated at 10% of ADT, or 487 northbound and 514 southbound.

The City of Carlsbad is scheduled to widen and extend Poinsettia Lane to Carlsbad Boulevard by June 1984.

In 1982, 12 accidents were reported on the Pacific Coast Highway between Palomar Airport and La Costa Avenue.

#### Fire/Paramedic

The emergency call response time by the Carlsbad City Fire Department, from the headquarters station on Elm Street, is about 10 minutes. In life-threatening situations, paramedic personnel arrive one to five minutes later, depending on the location at the beach and traffic. Routine first-aid is administered to beach visitors by state park lifeguards and rangers.

## Police

Law enforcement at South Carlsbad State Beach is handled by state park personnel. Both state park lifeguards and state park rangers are designated as state park peace officers and are responsible for law enforcement on State Park System land. The Carlsbad City Police are occasionally called as back-up by state park personnel. Response time is about five to 10 minutes, depending on the location of the police unit, the location within the unit, 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

The greatest adverse environmental impacts of the proposed project would be as a result of construction activities, physical alterations of the land, and the increased distribution of people and activities throughout the project.

The most significant changes include the placement of structures (maintenance, area office, hostel, and comfort and entrance stations), widening of Carlsbad Boulevard, interchange redevelopment and entrance road, development of campsites (both family and bicycle), parking lots and paths, and trailer sanitation stations.

### Impacts on Geology and/or Soils

The site work necessary for the placement of facilities and undergrounding of utilities will disturb the ground surface and increase the erosion potential.

The increased amount of impermeable surface area, such as roads, walkways, and parking lots, will increase surface water runoff. Not only will the quantity increase, so too will the velocity, which will increase erosion.

The widening of Carlsbad Boulevard and the development of the "T" intersection will require grading and possibly the importation of fill materials.

### Impacts on Hydrology

The development proposed in the general plan will result in an increase in runoff. If the facilities are not designed to accommodate the increase in runoff, flooding or serious erosion could result.



## Impacts on Vegetation

Vegetation will be removed to accommodate the proposed development outlined in the general plan. No rare or endangered species are to be affected. The majority of vegetation to be removed consists of non-native ornamental types of plants.

In Area 1-A, vegetation will be removed for the placement of the 50-vehicle parking lot. Ornamental shrubs will also be removed for campground expansion and the 400-space parking lot at the south end (Area 3).

## Impacts on Air Quality

The development of the facilities outlined in the general plan will add day-use parking and camping spaces, leading to an increase in vehicle traffic and associated air pollution.

Construction equipment and activities will release air pollutants into the atmosphere, such as exhaust and dust.

The additional day-use and camping facilities will result in an increase in smoke from barbecues and campstoves.

## Impacts on Traffic

The development proposed in the general plan will require major modifications to existing circulation patterns.

The Palomar Airport road interchange will be acquired from the City of Carlsbad, and a "T" intersection will be developed.

The southbound lane of Carlsbad Boulevard and the median strip will be converted to campsites. To compensate for the loss of the southbound lane, the northbound lane will be widened to accommodate both north and southbound traffic.

Poinsettia Lane will be widened and extended southward by the City of Carlsbad to meet Carlsbad Boulevard. The entrance to South Carlsbad State Beach will be changed to align with Poinsettia Lane.

The development of the "T" intersection will require road realignment, signing, restriping, and the installation of traffic signals. The Department of Parks and Recreation will work with the City of Carlsbad Traffic Department in the development of the intersection.

## Mitigation Measures Proposed to Eliminate or Minimize Effects

1. The areas to be developed will be landscaped with native vegetation.
2. Disturbed surface areas will be seeded, or treated with other erosion-reduction measures.
3. Large impervious surface areas (parking lots) will be engineered to adequately handle the increased quantity and velocity of surface water runoff. Energy dissipators will be installed where necessary.

4. The bluff faces will be revegetated with native plants.
5. The existing storm water system will be redesigned to minimize the amount of erosion.
6. The existing landscaping will be converted to drought-tolerant native species.
7. The existing water irrigation system will be converted to a "drip" system.

#### Unavoidable Environmental Effects

1. Vegetation will be removed.
2. Surface topography will be altered for facility placement.
3. Surface water runoff will increase.
4. Erosion will increase temporarily following construction.
5. Increase in traffic.
6. Increase in water and electrical demand.
7. Increase in sewage generation.
8. Nonrenewable resources will be consumed.
9. Surface water runoff will contain pollutants (from the parking areas).

#### Alternatives to the Proposed Project

1. **NO PROJECT:** The selection of this alternative would mean the status quo would continue. It was rejected because it does not allow the Department of Parks and Recreation to meet current demand for recreational facilities.
2. **DO NOT DEVELOP AREA 3:** The impacts identified for the proposed project would be about the same, except for a decrease in paved surface area. There would be a decrease by 400 in the number of available parking spaces. The impact on local traffic conditions would be lessened. Construction and maintenance costs would be less. This alternative was not selected because it does not provide quality facilities in an area that gets a great deal of use.
3. **DEVELOP WITHOUT THE USE OF THE SOUTHBOUND LANE OF CARLSBAD BOULEVARD:** Under this alternative environmental impacts would be less, corresponding to the decrease in the amount of development. If the southbound lane of Carlsbad Boulevard is not utilized or available, there would be no expansion of camping facilities, fewer parking spaces, and no "T" intersection. There would also be no need for expanding the northbound lane of Carlsbad Boulevard.

The development of the area north of the Palomar Airport Road interchange would probably be possible. Access from the parking area north of the interchange to the beach would be via an at-grade crossing which would require the installation of a traffic signal on Palomar Airport Road.

With this alternative, the following impacts would still occur: vegetation would be removed, agricultural land would be converted to recreational land, impermeable surface area would increase, utilities and water consumption would increase, and traffic would be greater.

This alternative would cost less than the proposed project, but it was rejected because it does not allow a large number of parking spaces to be constructed close to one of the most desirable portions of the beach. It also does not allow an adequate expansion of camping facilities to meet current demand.

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

The current short-term use of South Carlsbad State Beach is for camping and other beach-related recreation.

The current use will be expanded by implementation of this general plan. Short-term uses will include camping, picnicking, and ocean-related activities. The increased use and associated development is based on design criteria that enhance this productivity. The facilities will be developed to enhance user enjoyment while minimizing deterioration of the resources.

The short-term land uses proposed in this general plan include measures designed to protect the resources of South Carlsbad State Beach and therefore protect its long-term productivity. Project implementation will eliminate use not compatible with the resources. The relationship between short-term use and long-term productivity at South Carlsbad State Beach is complementary, one in which the short-term use retains and expands the environment's long-term productivity.

#### Irreversible Changes and Irretrievable Commitments of Resources Which Would Be Involved Should the Project Be Implemented

If future demands or environmental priorities change, and this site is deemed more suitable for some other use, the area will not have been altered enough by project implementation to preclude changes in its use. The proposed development will convert some undeveloped land into land sustaining minimal resource-oriented recreation facilities. It is probable that some wildlife and vegetation resources will be lost or displaced due to development or increased visitation. Some nonrenewable resources will be lost in the form of oil, gasoline, and other products required for the production of energy necessary to complete the proposed development, and in the form of materials for proposed construction.

### Growth-Inducing Impacts

There will be minimal growth-inducing impacts associated with development of South Carlsbad State Beach. It is possible that the local economy in the vicinity of the unit will be slightly stimulated by initial construction activities and the influx of more visitors. Growth-inducing impacts are considered to be insignificant.

### Effects Found Not To Be Significant

The development and rehabilitation outlined in this general plan will not have a significant adverse impact on the following: climate, population, community development, water, sewer, police and fire services, hydrology, biota, air quality, noise, land use, cultural resources, and scenic values.

### Organizations and References Consulted

California Department of Fish and Game  
City of Carlsbad Fire Department  
City of Carlsbad Engineering Department  
City of Carlsbad Planning Department  
County of San Diego Department of Planning and Land Use  
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.

City of Carlsbad, Poinsettia Lane Widening and Extension, Draft Environmental Impact Report, March 10, 1983.

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

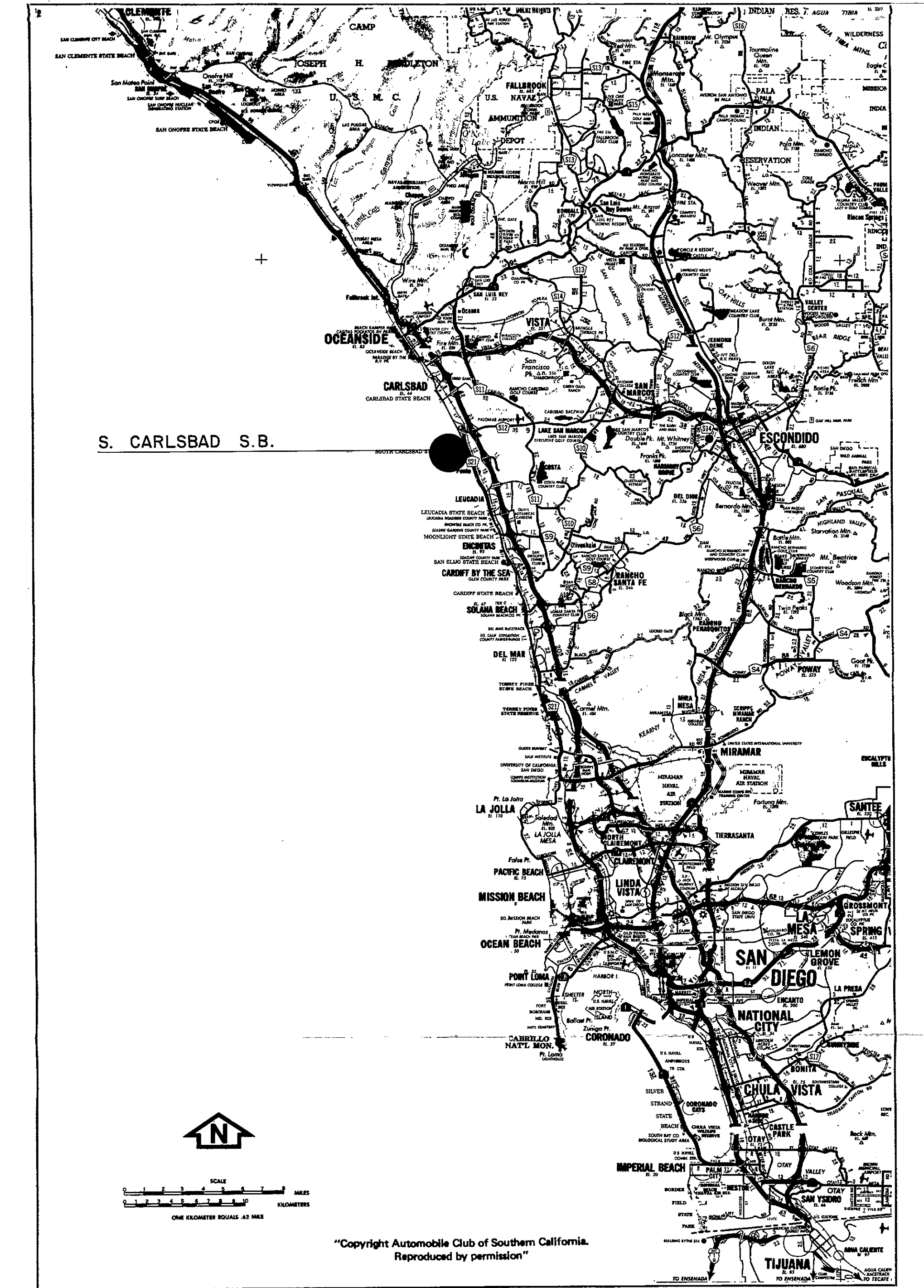
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Maps

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*Area 3 -- Developed parking space and comfort facilities are needed to provide improved access.*



S. CARLSBAD S.B.

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DRAWING NO.  
19148  
SHEET NO.  
1 OF 10

SOUTH CARLSBAD STATE BEACH  
SAN DIEGO COAST  
GENERAL PLAN  
VICINITY MAP

RESOURCES AGENCY OF CALIFORNIA  
DEPARTMENT OF PARKS AND RECREATION

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

REVISIONS	DATE	DESIGNED


SOUTH CARLSBAD STATE BEACH  
**GENERAL PLAN**

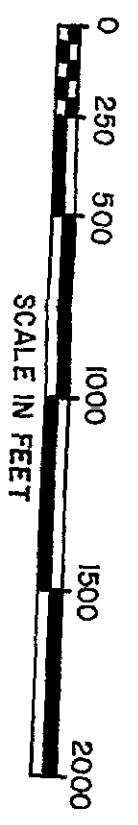
**AREA 1**  
 ● NO EXISTING DEVELOPED FACILITIES IN THIS AREA

**AREA 2**  
 ● NORTHERN LIMIT OF AREA. SEE SHEET 3 FOR EXISTING FACILITIES

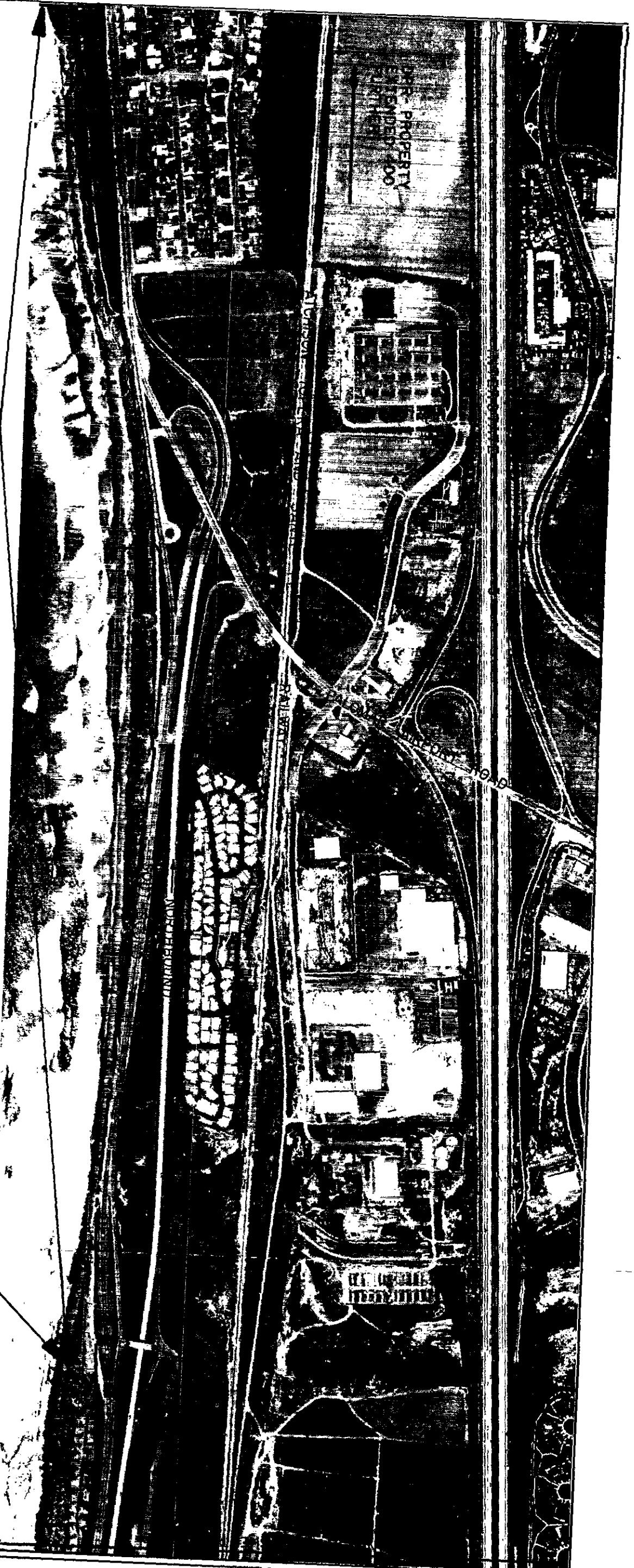
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NOTE: PHOTO BASE COURTESY OF THE DEPARTMENT OF NAVIGATION AND OCEAN DEVELOPMENT. PHOTO BASE DATE 4-23-78.



AREA 1



SOUTH CARLSBAD STATE BEACH  
 SAN DIEGO COAST  
 GENERAL PLAN  
 EXISTING FACILITIES MAP

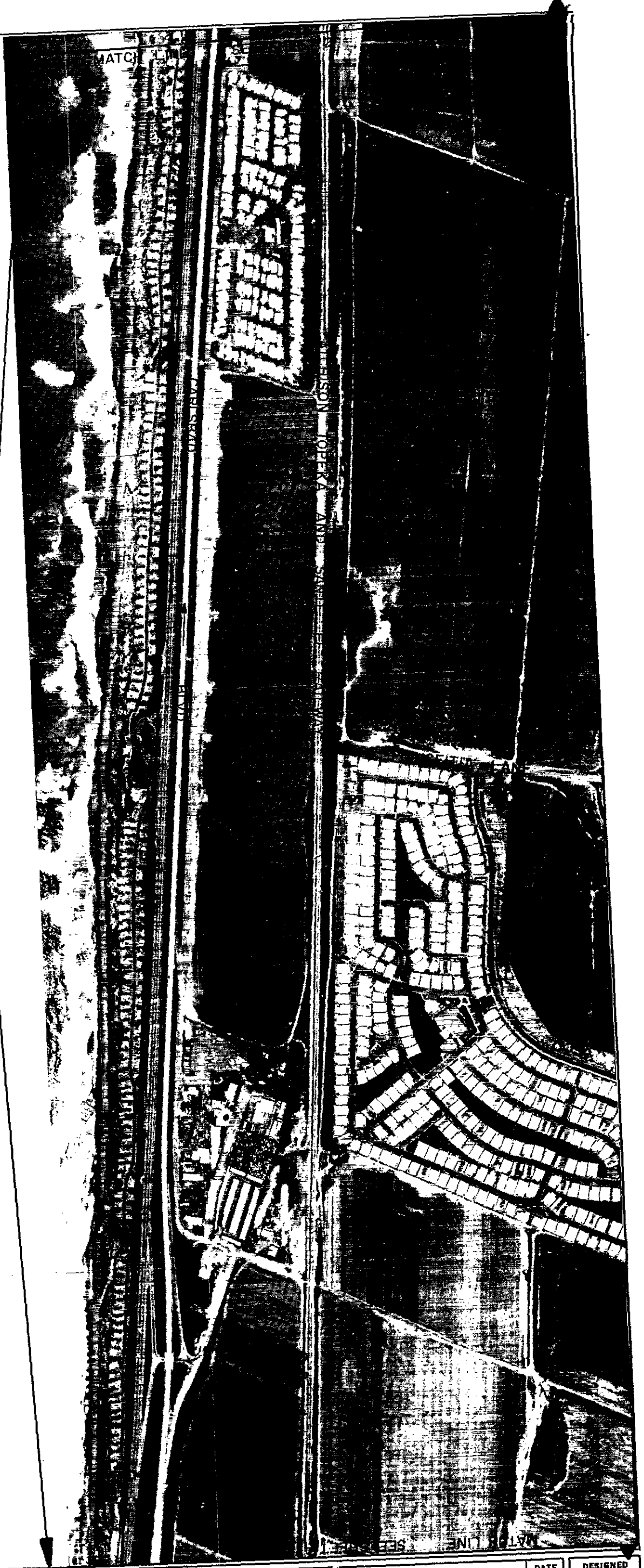
RESOURCES AGENCY OF CALIFORNIA  
 DEPARTMENT OF PARKS AND RECREATION  
 APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

REVISIONS	DATE	DESIGNED

DRAWING NO.  
**19148**  
 SHEET NO.  
**2** OF **10**



# SOUTH CARLSBAD STATE BEACH GENERAL PLAN

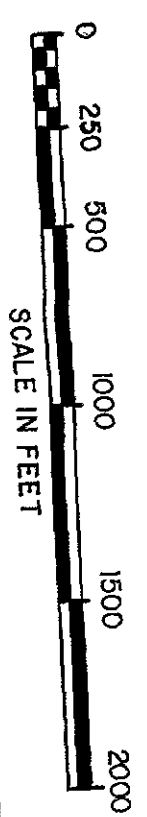


- AREA 2**
- ENTRANCE STATION
  - 226 FAMILY CAMPSITES
  - 1 CONCESSION
- 10 COMFORT STATIONS
  - 2 TRAILER SANITATION STATIONS
  - OFFICE
- MAINTENANCE AREA
  - 1 CAMPFIRE CENTER
  - 7 BEACH ACCESS STAIRS

**LEGEND**

--- DPR BOUNDARY

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SHEET No. 3 of 10

DRAWING No. 19148

SOUTH CARLSBAD STATE BEACH  
SAN DIEGO COAST  
GENERAL PLAN  
EXISTING FACILITIES MAP

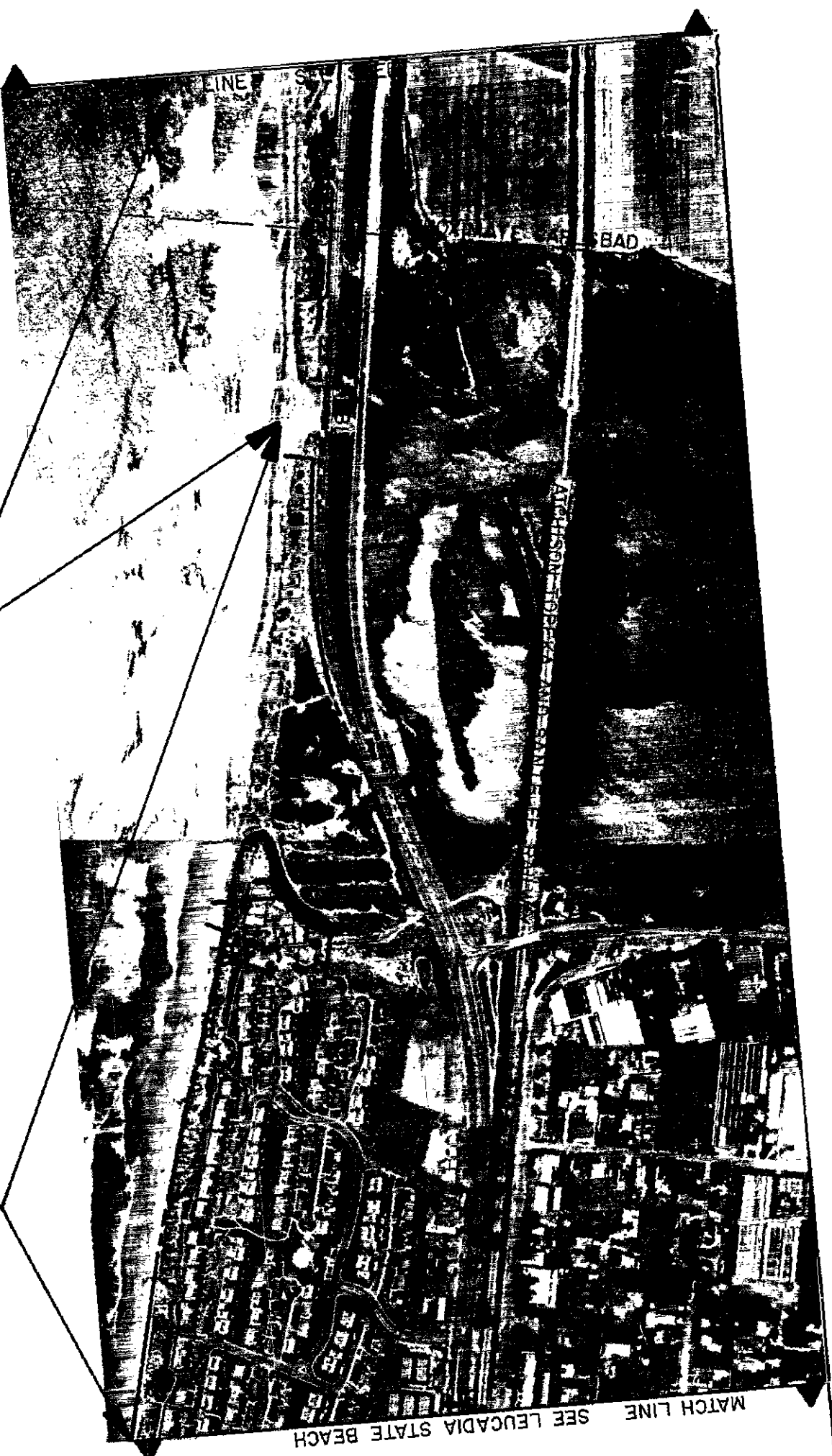
RESOURCES AGENCY OF CALIFORNIA  
DEPARTMENT OF PARKS AND RECREATION

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

REVISIONS	DATE	DESIGNED

DRAWN \_\_\_\_\_  
CHECKED \_\_\_\_\_

# SOUTH CARLSBAD STATE BEACH GENERAL PLAN



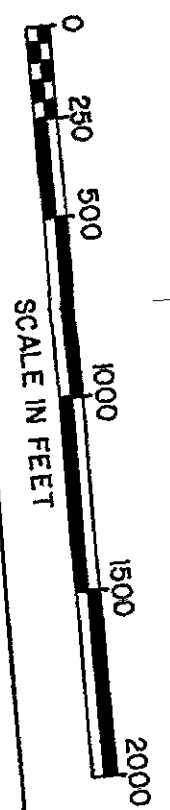
**AREA 2**  
● SOUTHERN LIMIT OF  
AREA 2. SEE SHEET  
3 FOR EXISTING FACILITIES

**AREA 3**  
● NO EXISTING DEVELOPED  
FACILITIES IN THIS AREA

## LEGEND

--- DPR BOUNDARY

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

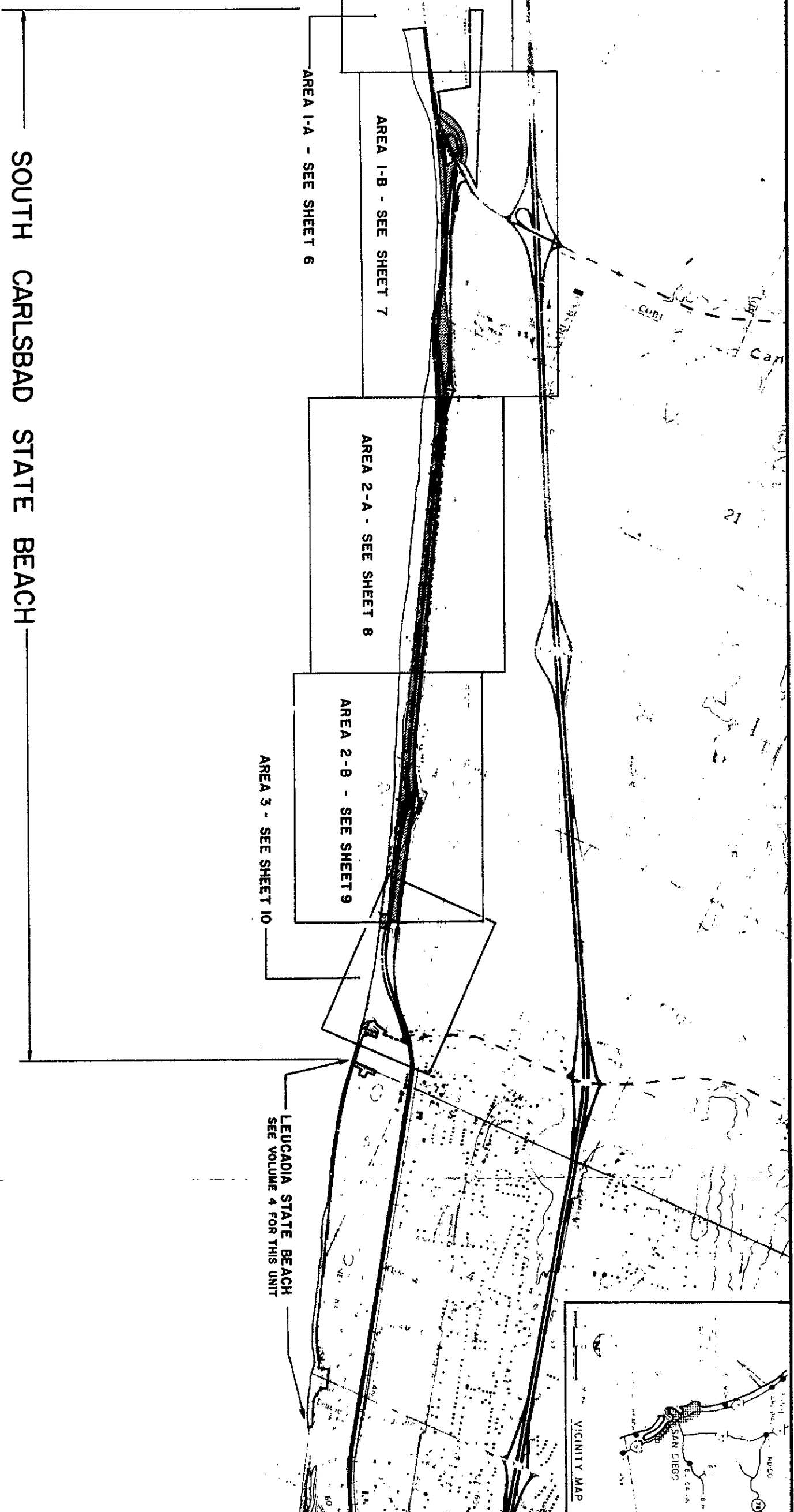


MATCH LINE SEE LEUCADIA STATE BEACH

SHEET NO. 4 OF 10 71	DRAWING NO. 19148	SOUTH CARLSBAD STATE BEACH SAN DIEGO COAST GENERAL PLAN EXISTING FACILITIES MAP	RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION		DESIGNED
			APPROVED _____	DATE _____	DRAWN
					CHECKED
			REVISIONS	DATE	

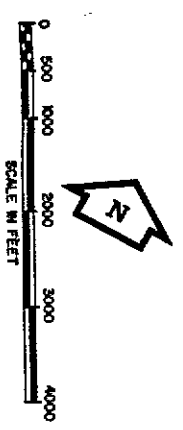
# GENERAL PLAN

SOUTH CARLSBAD STATE BEACH



SOUTH CARLSBAD STATE BEACH

- LEGEND**
- EXISTING DPR OWNERSHIP
  - ▨ AREA OF INTEREST TO DPR
  - AREA OF CONCEPTUAL MAP

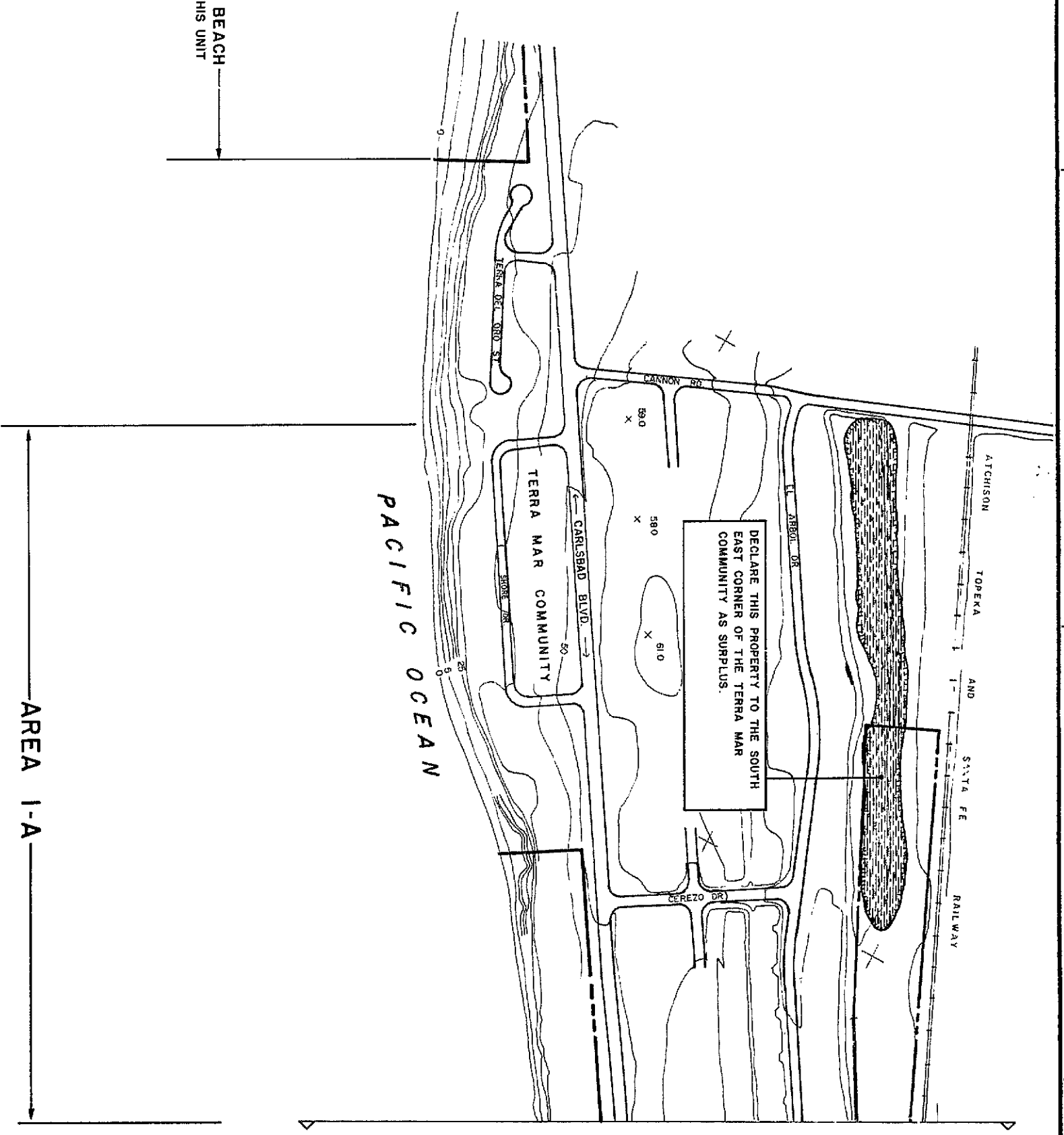


DRAWING NO. <b>19148</b> SHEET NO. <b>5</b> OF <b>10</b>	SOUTH CARLSBAD STATE BEACH		RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION	REVISIONS	DATE	DESIGNED
	<b>SAN DIEGO COAST GENERAL PLAN</b>					DRAWN
	INDEX MAP					CHECKED

# GENERAL PLAN

SOUTH CARLSBAD STATE BEACH - AREA 1-A

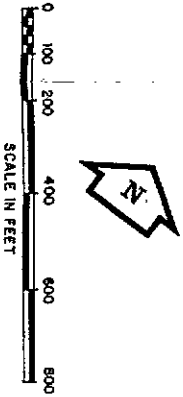
CARLSBAD STATE BEACH  
SEE VOLUME 2 FOR THIS UNIT



AREA 1-A

NOTE:  
SOURCE OF OWNERSHIP INFORMATION  
DPR DRAWING NO. 17597, DATED APRIL 1982

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.



### LEGEND

- STATE PARK OWNERSHIP BOUNDARY
- EXISTING CONTOURS (5' INTERVAL)

DRAWING NO. <b>19148</b>	SHEET NO. <b>6</b> OF <b>10</b>	SOUTH CARLSBAD STATE BEACH		RESOURCES AGENCY OF CALIFORNIA		REVISIONS	DATE	DESIGNED
		<b>SAN DIEGO COAST GENERAL PLAN</b>		DEPARTMENT OF PARKS AND RECREATION				DRAWN
CONCEPTUAL DETAIL - AREA 1-A		APPROVED _____		DATE _____				CHECKED

# GENERAL PLAN

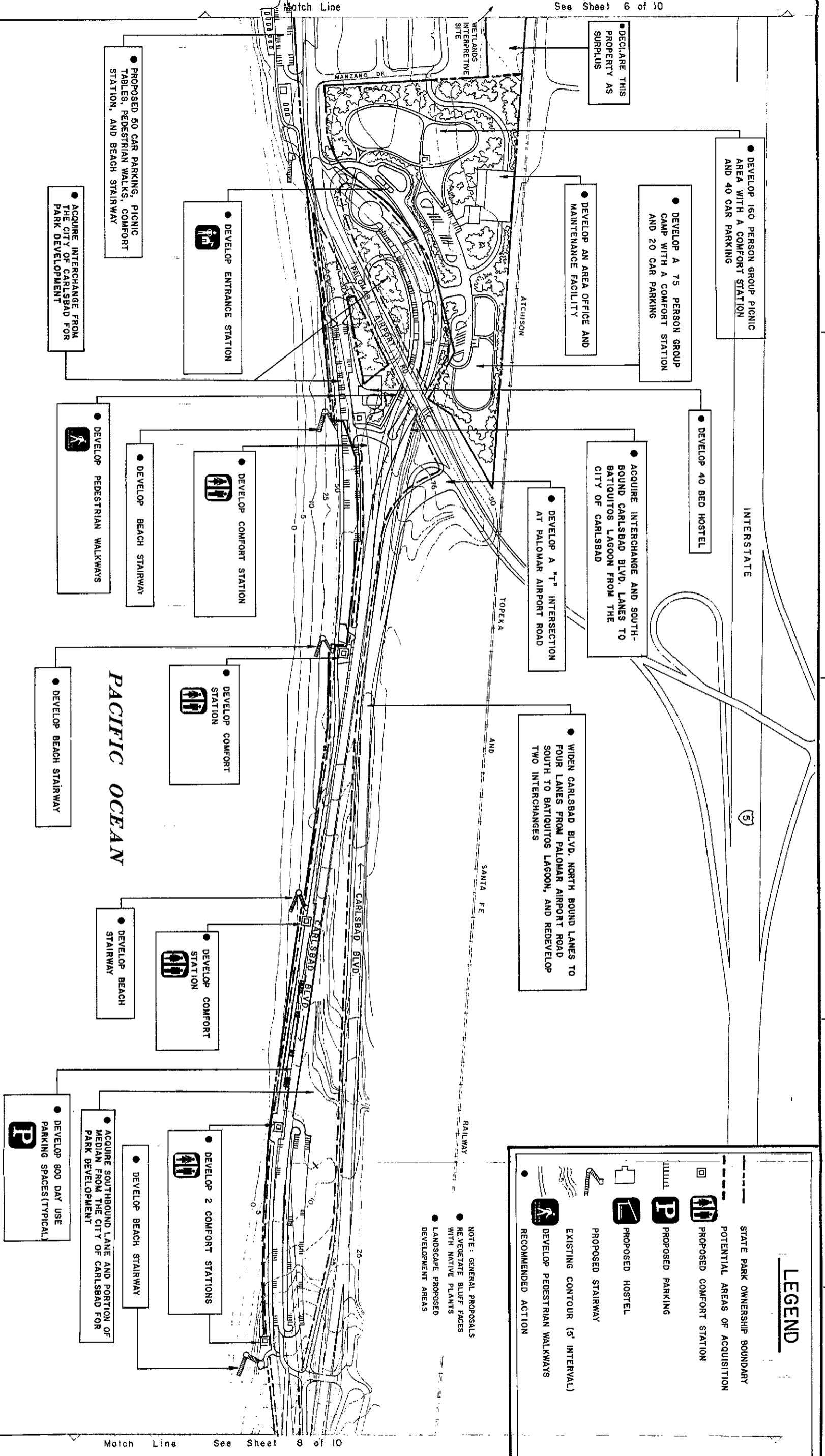
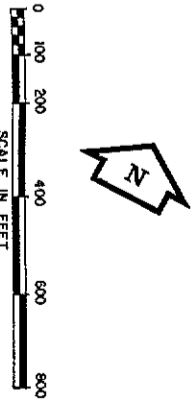
## SOUTH CARLSBAD STATE BEACH - AREA 1-B

### AREA 1-B

NOTE:  
ACQUISITION PROPOSALS SHOWN HERE ARE INTENDED FOR LONG RANGE PLANNING PURPOSES ONLY AND ARE NOT A COMMITMENT TO ACQUIRE.

NOTE:  
SOURCE OF OWNERSHIP INFORMATION  
DPR DRAWING NO. 17597, DATED APRIL 1982

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.



### LEGEND

- STATE PARK OWNERSHIP BOUNDARY
- POTENTIAL AREAS OF ACQUISITION
- PROPOSED COMFORT STATION
- PROPOSED PARKING
- PROPOSED HOSTEL
- PROPOSED STAIRWAY
- EXISTING CONTOUR (5' INTERVAL)
- DEVELOP PEDESTRIAN WALKWAYS
- RECOMMENDED ACTION

NOTE: GENERAL PROPOSALS  
 • REVEGETATE BLUFF FACES WITH NATIVE PLANTS  
 • LANDSCAPE PROPOSED DEVELOPMENT AREAS

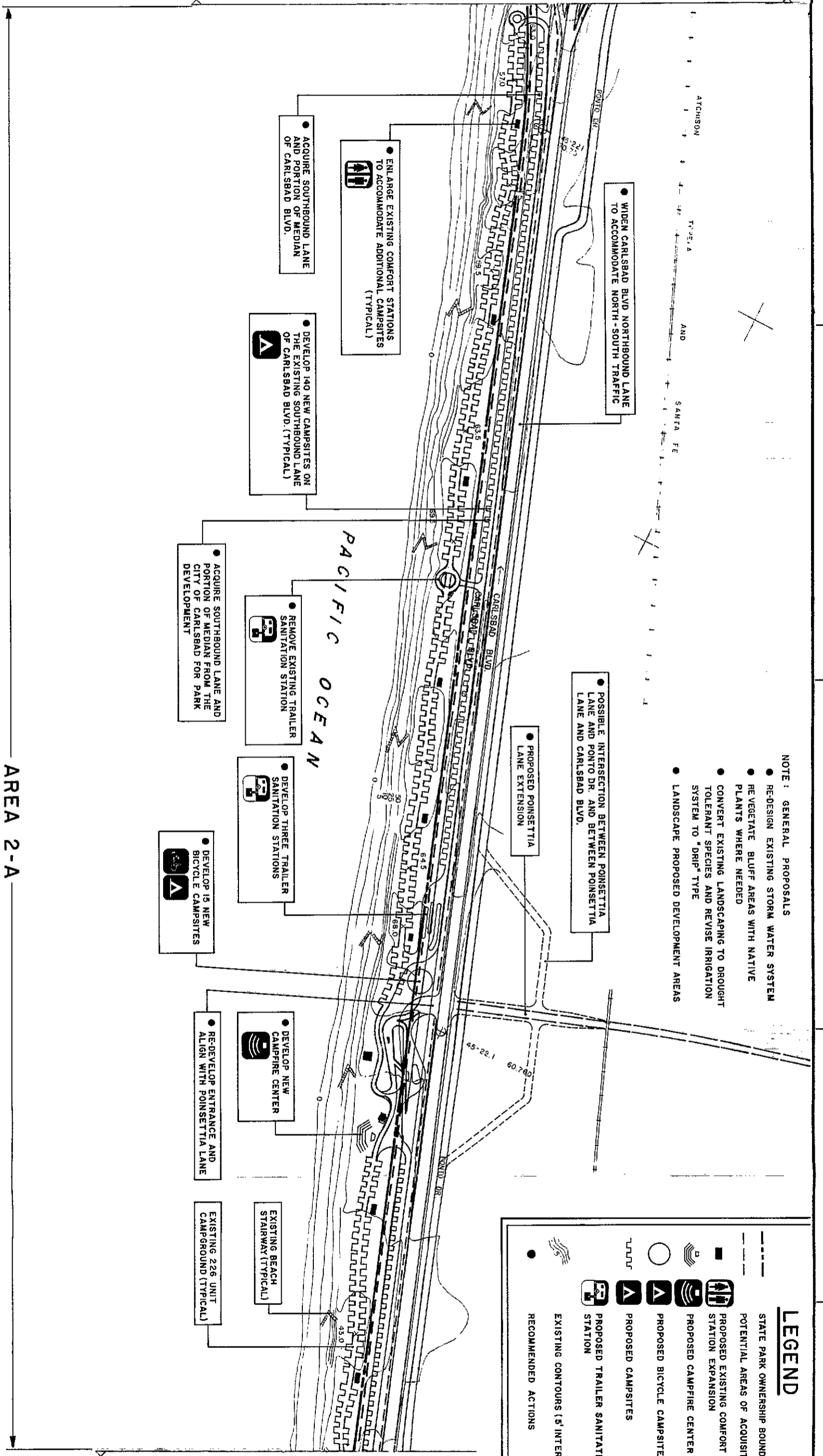
SOUTH CARLSBAD STATE BEACH  
**SAN DIEGO COAST GENERAL PLAN**  
 CONCEPTUAL DETAIL - AREA 1-B

RESOURCES AGENCY OF CALIFORNIA  
 DEPARTMENT OF PARKS AND RECREATION

APPROVED \_\_\_\_\_ DATE \_\_\_\_\_

REVISIONS	DATE	DESIGNED

DRAWING NO. 19148  
 SHEET NO. 7 OF 10



**NOTE: GENERAL PROPOSALS**

- RE-DESIGN EXISTING STORM WATER SYSTEM
- RE-VEGETATE BLUFF AREAS WITH NATIVE PLANTS WHERE NEEDED
- CONVERT EXISTING LANDSCAPING TO DROUGHT TOLERANT SPECIES AND REVISE IRRIGATION SYSTEM TO "DRIP" TYPE
- LANDSCAPE PROPOSED DEVELOPMENT AREAS

**LEGEND**

- STATE PARK OWNERSHIP BOUNDARY
- - - POTENTIAL AREAS OF ACQUISITION
- PROPOSED EXISTING COMFORT STATION EXPANSION
- ▲ PROPOSED CAMPFIRE CENTER
- ▲ PROPOSED BICYCLE CAMPSITES
- ▲ PROPOSED CAMPSITES
- ▲ PROPOSED TRAILER SANITATION STATION
- EXISTING CONTOURS (5' INTERVAL)
- RECOMMENDED ACTIONS

AREA 2-A

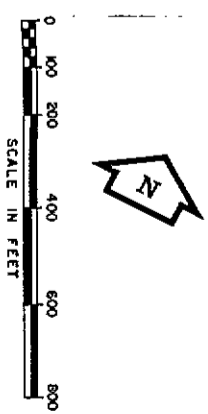
# SOUTH CARLSBAD STATE BEACH - AREA 2-A

# GENERAL PLAN

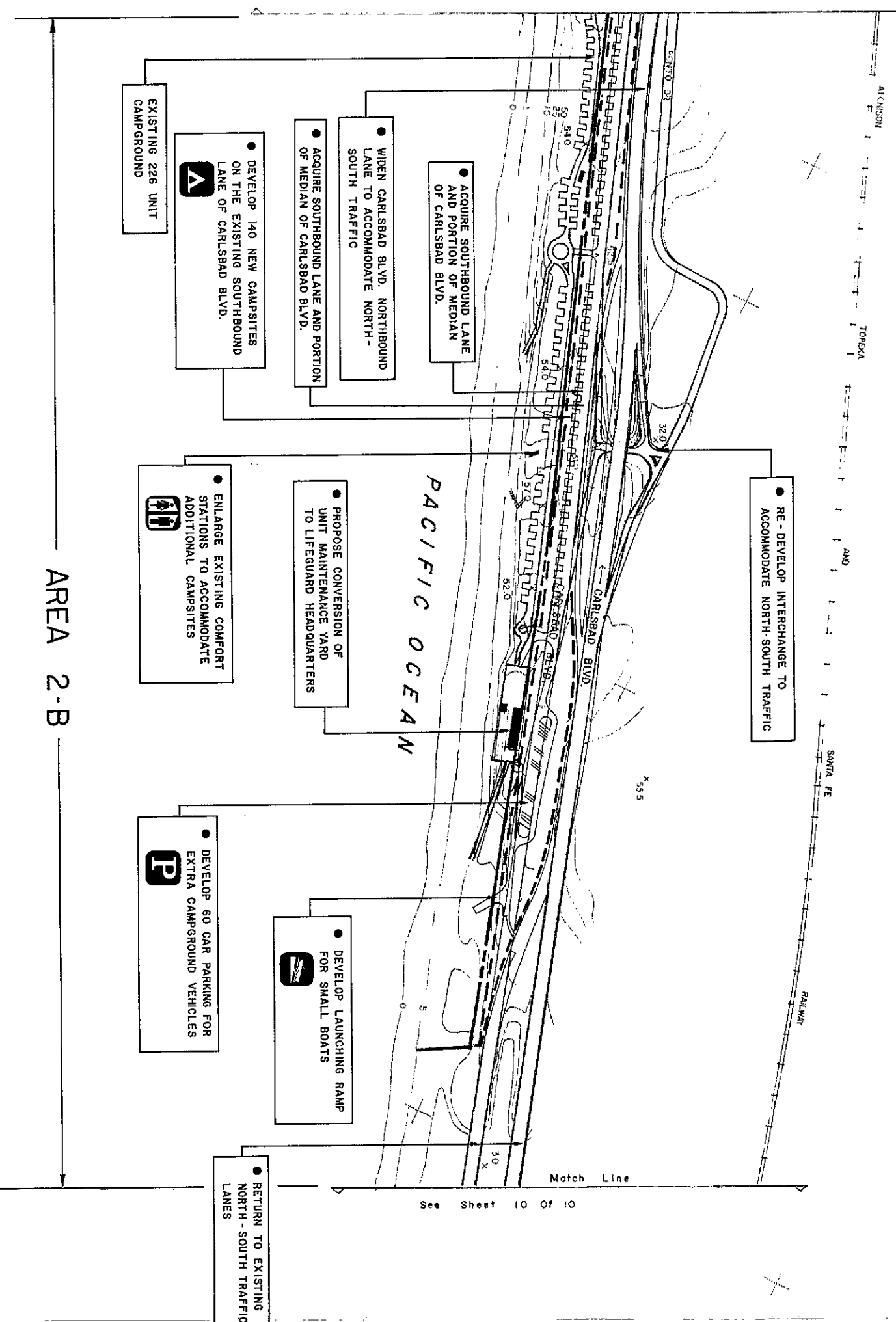
SOUTH CARLSBAD STATE BEACH - AREA 2-A

**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.

**NOTE:**  
ACQUISITION PROPOSALS SHOWN HERE ARE INTENDED FOR LONG RANGE PLANNING PURPOSES ONLY AND ARE NOT A COMMITMENT TO ACQUIRE.



REVISIONS	DATE	DESIGNED



# GENERAL PLAN

SOUTH CARLSBAD STATE BEACH - AREA 2-B

NOTE  
SOURCE OF OWNERSHIP INFORMATION  
DRP DRAWING NO 17597, DATED APRIL 1982

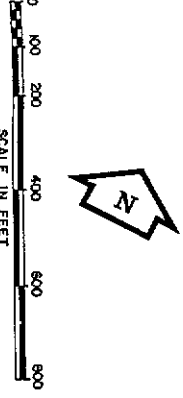
NOTE:  
THE PURPOSE OF THIS PLAN IS TO DETERMINE LAND USE DESIGNATIONS ONLY. DESIGN DETAILS ARE SHOWN TO DEMONSTRATE FEASIBILITY AND ARE SUBJECT TO CHANGE.

LEGEND	
	STATE PARK OWNERSHIP BOUNDARY
	POTENTIAL AREAS OF ACQUISITION
	PROPOSED CAMPING
	PROPOSED LAUNCHING FACILITY
	PROPOSED PARKING
	PROPOSED EXPANSION OF EXISTING COMFORT STATIONS
	EXISTING CONTOURS (5' INTERVAL)
	RECOMMENDED ACTION

NOTE: GENERAL PROPOSALS

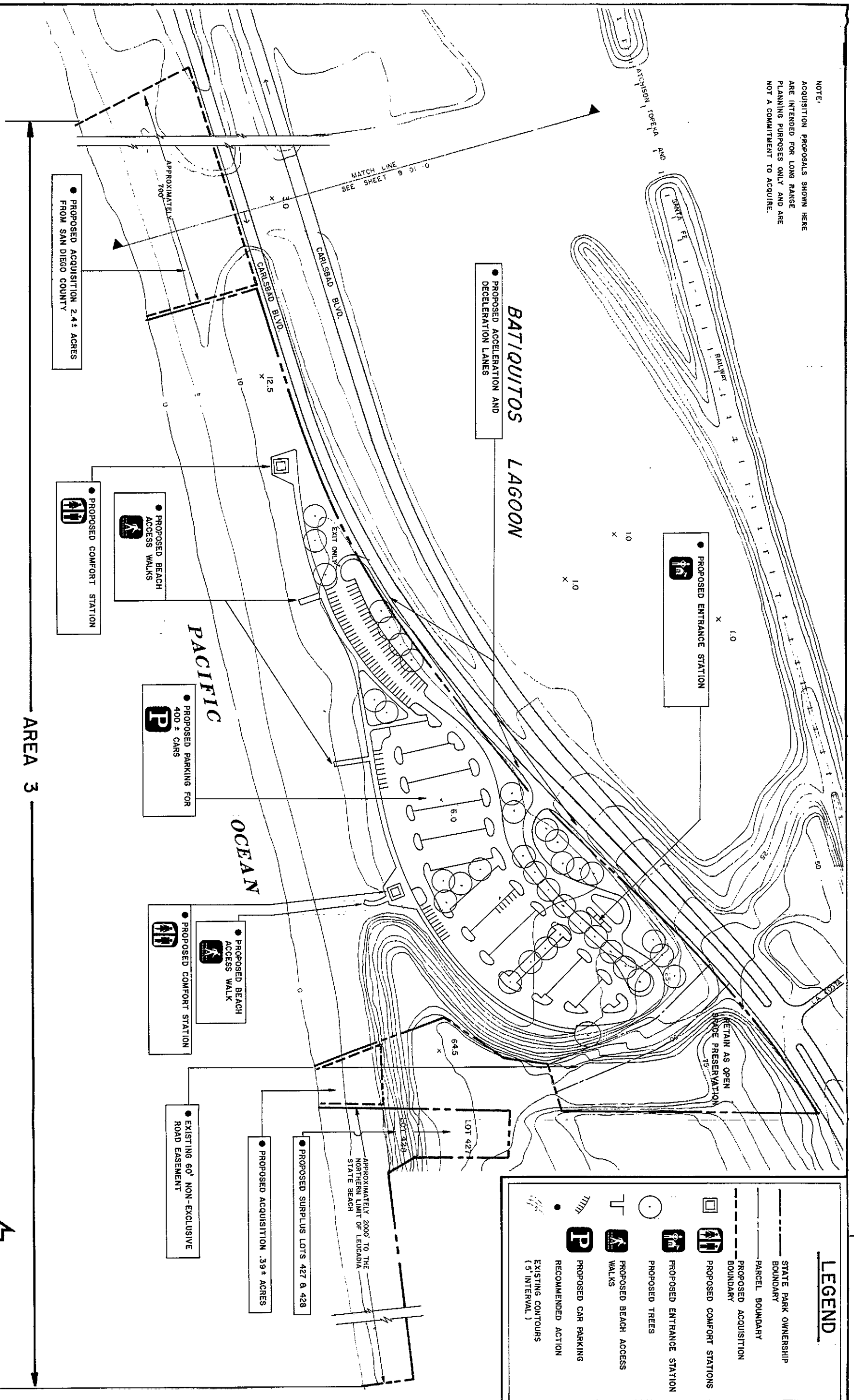
- REDESIGN EXISTING STORM WATER SYSTEM
- REVEGETATE BLUFF AREAS WITH NATIVE PLANTS WHERE NEEDED
- CONVERT EXISTING LANDSCAPING TO DROUGHT TOLERANT SPECIES AND REVISE IRRIGATION SYSTEM TO "DRIP" TYPE
- LANDSCAPE PROPOSED DEVELOPMENT AREAS

NOTE:  
ACQUISITION PROPOSALS SHOWN HERE ARE INTENDED FOR LONG RANGE PLANNING PURPOSES ONLY AND ARE NOT A COMMITMENT TO ACQUIRE.



DRAWING NO. <b>19148</b>	SHEET NO. <b>9</b> OF <b>10</b>	SOUTH CARLSBAD STATE BEACH		RESOURCES AGENCY OF CALIFORNIA	
		SAN DIEGO COAST GENERAL PLAN		DEPARTMENT OF PARKS AND RECREATION	
CONCEPTUAL DETAIL - AREA 2-B		APPROVED _____	DATE _____	DESIGNED _____	DRAWN _____
				REVISIONS	DATE

NOTE:  
ACQUISITION PROPOSALS SHOWN HERE  
ARE INTENDED FOR LONG RANGE  
PLANNING PURPOSES ONLY AND ARE  
NOT A COMMITMENT TO ACQUIRE.



**SOUTH CARLSBAD STATE BEACH - AREA 3**  
**GENERAL PLAN**

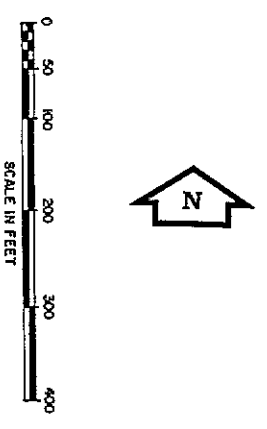
AREA 3

**LEGEND**

- STATE PARK OWNERSHIP BOUNDARY
- PARCEL BOUNDARY
- PROPOSED ACQUISITION BOUNDARY
- PROPOSED COMFORT STATIONS
- PROPOSED ENTRANCE STATION
- PROPOSED TREES
- PROPOSED BEACH ACCESS WALKS
- PROPOSED CAR PARKING
- EXISTING CONTOURS (5' INTERVAL)

NOTE:  
PROPERTY INFORMATION TAKEN FROM  
DPR DRAWING NUMBER 17579

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.



DRAWING NO. <b>19148</b>	SOUTH CARLSBAD STATE BEACH		RESOURCES AGENCY OF CALIFORNIA		REVISIONS	DATE	DESIGNED
	<b>SAN DIEGO COAST GENERAL PLAN</b>		DEPARTMENT OF PARKS AND RECREATION				DRAWN
	CONCEPTUAL DETAIL - AREA 3		APPROVED _____	DATE _____			CHECKED



# SAN DIEGO COASTAL STATE PARK SYSTEM GENERAL PLAN

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Sam Jackson, Associate Architect

John Johnson, Associate Landscape Architect

John Johnson, Associate Landscape Architect

John Johnson, Associate Landscape Architect

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John Johnson, Resource Ecologist

John Johnson, State Park Historian I

John Johnson, State Park Historian I

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John Johnson, Architectologist I

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John Johnson, Supervising Landscape Architect (acting)

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John Johnson, Delineator

John Johnson, Delineator

## DESIGNING AND EDITORIAL ASSISTANCE BY:

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## THE DEPARTMENT GRATEFULLY ACKNOWLEDGES THE ASSISTANCE OF:

The many citizens who contributed time and energy and helped shape this plan.

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