

UNIT 654

SAN ELIJO STATE BEACH

GENERAL PLAN

November 1983



San Diego Coastal State Park System General Plan

Volume 6 – San Elijo State Beach

July 1984



SAN ELIJO STATE BEACH



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

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

Volume Number	Name
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 6 - San Elijo 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
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July 1984

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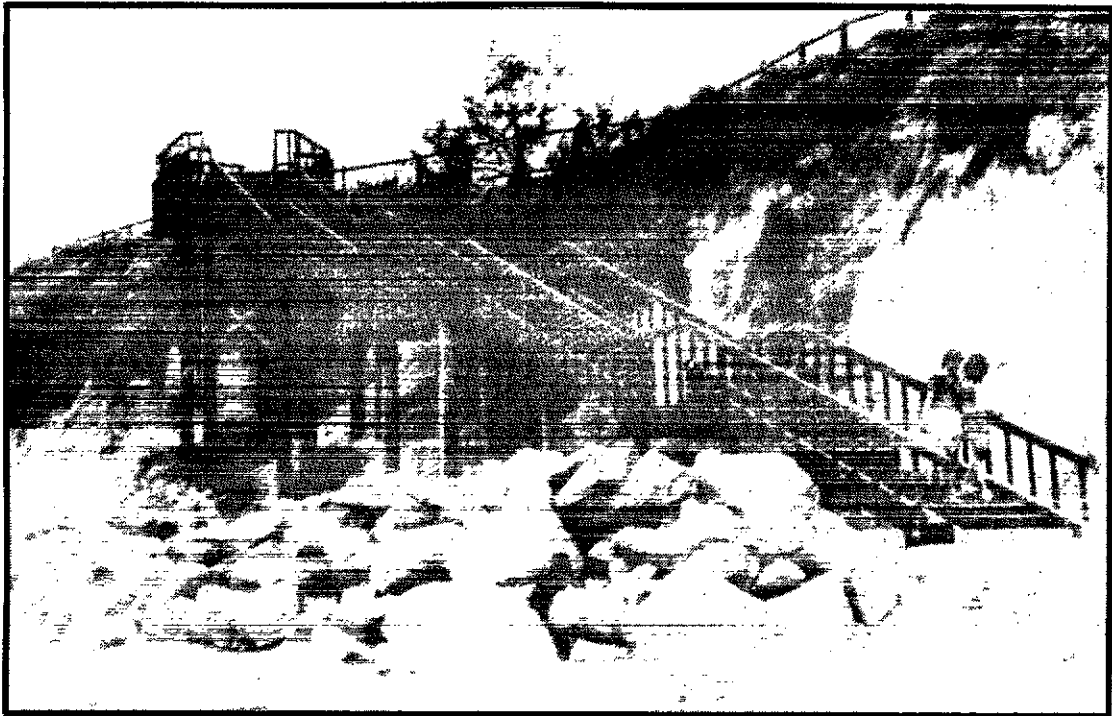
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General Data

San Elijo State Beach entrance station



San Elijo's blufftop camping and accessible beaches make this unit one of the most popular of the San Diego coast state beaches.



Beach access stairway

GENERAL DATA ON
SAN ELIJO STATE BEACH

Location: On the Pacific Ocean in San Diego County, within the unincorporated community of Cardiff-by-the-Sea, about 18 miles north of the City of San Diego. Access is via the old Coast Highway (San Diego County Route S-21).

Size: 42.21 acres, with 7,190 feet of ocean frontage.

Existing Facilities: A 171-unit campground (with five comfort stations), 86-space day-use parking lot (with two comfort stations), unit office, entrance station, concessions building, lifeguard tower, informal campfire center, and six beach access stairways.

Vegetation: Ornamental shrubs have been planted to provide screening between campsites and between the campground and the highway. Bladderpod and sea fig can be found on bluff slopes.

Wildlife: This unit provides habitat for shorebirds and gulls on the beach.

Outstanding Features: The beach frontage and the bluffs are the primary features.

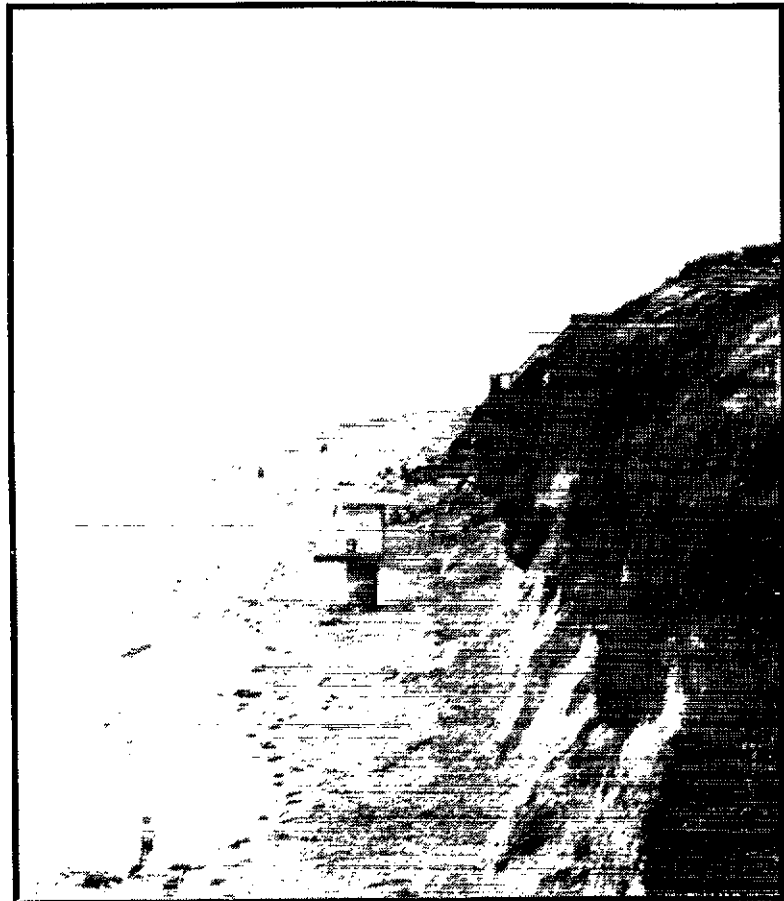
Historical and Archeological Values: The unit has been completely surveyed, and no archeological sites or features or historic sites have been located.

Ownership: San Elijo State Beach was acquired from private owners in 1952.

Resource Element



San Elijo's 171-unit campground is a major recreation resource.



The beach and coastal bluff provide outstanding views.

RESOURCE ELEMENT

This Resource Element was prepared to meet requirements in Section 5002.2, Subsection (b) of Division 5, Chapter 1 of the Public Resources Code and Chapter 1, Section 4332 of Title 14 of the California Administrative Code. In compliance with this section of the Public Resources Code, the Resource Element establishes long-range management objectives for the unit's natural and cultural resources. Specific actions or restrictions required to achieve these objectives are also included in this element. Maintenance operations and resource management details are left for inclusion in specific resource management programs to be prepared later.

Summary and Evaluation of Resources

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

Natural Resources

Topography

A narrow marine terrace and the adjacent ocean beach are the major features. The elevation of the terrace bluffs ranges from about 60 feet (18 meters) at the northern end to sea level at the southern end, where the bluff ends at the mouth of San Elijo Lagoon. The unit includes 500 feet (152 meters) of lagoon frontage.

Climate

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

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

San Elijo State Beach is heavily developed. The campground development on the bluff top has capped much of the soil with impermeable material. The result is that runoff is much greater than it would be under natural conditions. Drainage from the campground is concentrated in drains and transported down the cliffs in steel culverts. The drainage system is similar to the one at

South Carlsbad State Beach, but there are fewer problems here with culvert failure and landslides, probably for three reasons: the culverts have a larger capacity, the natural topography has not been altered, and drainage from outside the unit is carried in a storm drain parallel to the beach south to San Elijo Lagoon.

Seepage of groundwater directly out of the cliff faces below the campground is causing erosion and accelerated weathering of the cliffs. This seepage may be accelerated by excessive irrigation of landscape plants at the campground and in the adjacent community, which causes the water table to be artificially raised. Groundwater movement downward is blocked by clay layers within the Eocene Delmar Formation (see Geology section). The water moves laterally along the top of the clay and exits at the cliff faces.

Geology

The campground is built atop 40-foot (13-meter)-high cliffs composed of the Eocene Delmar Formation, with no overlying terrace deposits. Most of the Delmar Formation is dusky yellowish-green sandy claystone interbedded with medium-gray coarse-grained sandstone. Gullying and slope wash are eroding the cliffs. At the north end of the state beach, there is a small old slump. The southern end of the bluffs is almost totally devoid of protective vegetation. The main lifeguard tower is built on this cliff, and the process of cliff erosion is threatening to undermine the tower's foundation.

North of the San Elijo campground in Encinitas, a Self-Realization Fellowship Temple was constructed in 1938, about 30 feet from the sea cliff edge. In 1941, after the bluff had been weakened by a combination of rain saturating the soil and erosion by wave action, the bluff collapsed and the temple building was destroyed. A similar landslide at San Elijo State Beach would destroy the campground.

The beach level is composed of sand and cobbles. During the winter, there is 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 and 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, San Elijo 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.

Soils

Chesterton fine sandy loam, the only soil that occurs at San Elijo State Beach, is moderately well drained fine sandy loam with a sandy clay subsoil. It formed from material weathered in place from soft ferruginous sandstone. The soil is moderately fertile. Permeability is very slow, and runoff is slow to medium. This soil has a moderate shrink-swell behavior due to the clay content of the subsoil.

Plant Life

Virtually all of the cliff top at San Elijo State Beach has been developed into a campground. Ornamental shrubs, planted to provide screening between campsites and between the campground and the highway, have completely displaced native vegetation at the campground.

The bluffs between the campground and the ocean have vegetation similar to the bluffs below the South Carlsbad campground: bladderpod (*Isomerus arborea*) very short scattered shrub/sea-fig (*Carpobrotus aequilaterus*) closed herb. Pampas grass (*Cortaderia selloana*) is locally common at the north end of the San Elijo bluffs. The south end of the bluffs is lower and steeper than the north end and supports very little vegetation.

Animal Life

This unit provides habitat for shorebirds, gulls, and ground squirrels. The value of the beach habitat has been reduced by loss of beach sand. Public recreation activity disturbs shorebird habitat during the summer.

San Elijo Lagoon, adjacent to San Elijo State Beach, provides extremely important habitat for a wide variety of water-oriented birds.

Marine Life

The dominant marine habitat at San Elijo 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. Relatively few animals and almost no plants exist here.

Those species that do live on the beach, including worms, bivalves, and sand crabs, 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. 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 beach, the diversity and quantity of intertidal organisms will probably decrease.

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

Cultural Resources

Native American Resources

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

Euroamerican Resources

There are no known historic sites or any significant Euroamerican cultural resource sites or features.

Historical Sketch

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

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

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 Alcala was founded at San Diego. In the same year, Governor of the Californias Gaspar de Portola began a land expedition northward up the coast.

On July 16, 1769, Portola's expedition camped along the banks of what is today San Elijo Lagoon, then a two-day journey from the little colonial settlement of San Diego. The explorers named the lagoon in honor of Saint Alexius. Friar Juan Crespi called it "Laguna de San Alijo" while engineer Manuel Costanso dubbed the area "Canada de San Alexas." The explorers passed on along a route which would become known as "El Camino Real," the Royal or King's Highway.

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

The Ipai people hunted and gathered a wide variety of foods, with acorns making up a smaller part of their entire diet than those of many other California tribes. They had a well-developed trade system with peoples to the east, from whom they obtained foodstuffs and obsidian. The Ipai rapidly integrated Spanish crops, domestic animals, and some tools into their subsistence economy. However, introduced species, especially sheep, competed with native flora and fauna that were traditional food sources.

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

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

The coast in the vicinity of present-day San Elijo State Beach remained isolated for much of the 19th century. In July 1842 a land grant, Rancho Las Encinitas, was given to Andres Ybarra. Its western boundary was east of the coast. In 1860, during the early years of the American period, Joseph Mannassee and Marcus Shiller purchased the rancho but did not extend the holdings to the sea.

The coming of the railroad in the early 1880s caused an extreme interest in the coastal area. A number of small "boom towns" appeared, including a little service town known as San Elijo. While some land was acquired by real estate speculators, other parcels were sold by the U.S. Government under the various School Land Acts. In some cases, homesteads were filed. By 1884, the area bloomed with small farms producing various grains, beans, and small herds of cattle.

In the early part of the 1900s, a promoter, J. Frank Cullin, laid out a small town around the San Elijo station which he called Cardiff-By-the-Sea. The beach, however, was not developed, though the area was used for camping by travelers and workers from the nearby Del Mar racecourse. A department history notes that "a restaurant called 'The Breakers' was built on the highest point at the south end of the upland area" in 1915, and that "during the early 1920s the restaurant burned and was never replaced."

In 1952, the State of California acquired the property of future San Elijo State Beach from private owners and the San Diego Union Title and Trust Company.

The site of "The Breakers" restaurant, along with other small temporary building sites, are not identifiable, and there are no Euroamerican historical sites located at San Elijo State Beach.

Esthetic Resources

Sweeping 180-degree panoramas of the ocean can be seen from the cliff-top sites at San Elijo 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, can be seen in or from the unit.

Urban and industrial land uses adjacent to the unit, including traffic and commercial developments, detract from the beach scene. Low-flying aircraft and traffic can be loud and distracting.

Recreation Resources

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

Passive

Sunbathing
People Watching
Picnicking
Beachcombing
Sightseeing
Contemplation
Wildlife Observation

Active

Surf Fishing
Swimming
Skin Diving
Jogging
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

San Elijo 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 San Elijo State Beach is established as part of this general plan as follows:

The purpose of San Elijo 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 San Elijo 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. Important natural features shall not be degraded.

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 San Elijo State Beach includes all adjacent land, the offshore areas, and San Elijo 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 San Elijo 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:

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 San Elijo State Beach:

Abiotic Resources

Drainage

The San Elijo campground is built on a 60-foot (18-meter)-high terrace adjacent to an ocean-facing bluff. A considerable proportion 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 released at or above beach level.

The drainage system has a long history of failure due to corrosion from salt air and salt water, sedimentation, inadequate capacity, and/or vandalism. When the culverts fail during storms, severe erosion and landslides occur, creating "blowouts" (or massive erosion channels) and slump blocks which are major safety hazards and threaten the future existence of the blufftop developments. Failure to solve the unit's drainage problems will result in increasing public hazards, the loss of important natural resources, and eventual permanent loss of blufftop facilities.

Policy: A drainage plan shall be developed and implemented for San Elijo State Beach to minimize erosion, culvert failures, vandalism, and the unscentic quality of the drainage system. 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.

Monitoring Erosion and Sand Loss

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 San Elijo State Beach shall be established by field staff under supervision of the Southern Region and the Resource Protection Division. The monitoring program should include ground photos, taken at regular intervals at the same locations, to document beach profiles and seacliff retreat.

Landscape Irrigation

Overirrigation of ornamental landscape plants can raise the water table and create the potential for groundwater seepage out of the cliff faces, causing erosion.

Policy: The current irrigation system at San Elijo State Beach shall be converted to a drip irrigation system to reduce overwatering and groundwater seepage. Long-term plans should call for the removal of exotic (alien) vegetation that requires irrigation, and the eventual removal of the irrigation system.

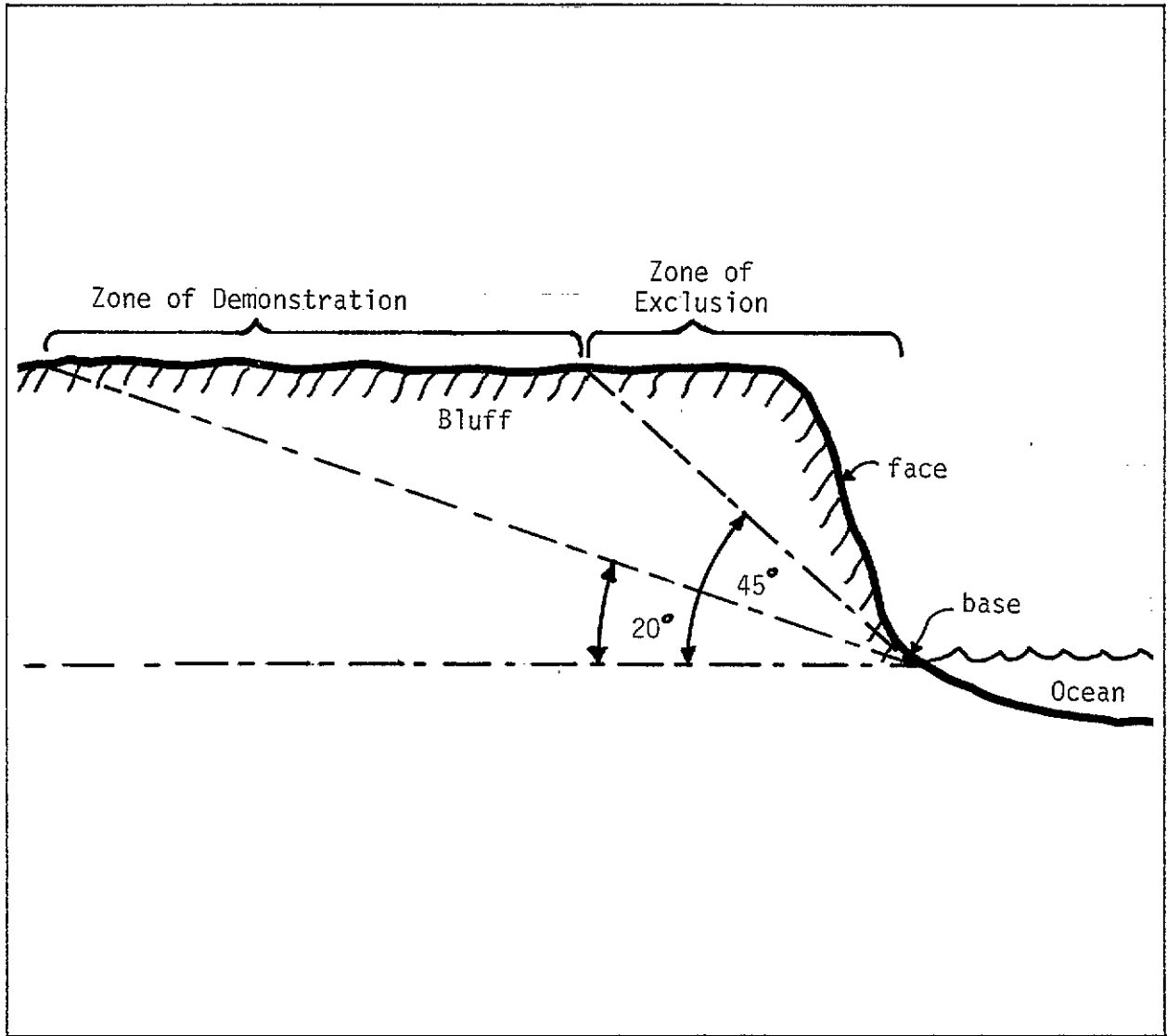
Bluff Setbacks

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 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 Fortification

Sediments derived from the cliffs contribute to the littoral sand supply in this area. The partially vegetated bluffs provide a scenic backdrop for ocean beach recreation activities. Fortification of the bluffs to prevent erosion would be very expensive and could cause the total loss of the adjacent beach environment.

Policy: The ocean-facing bluffs are important scenic and natural resources of San Elijo State Beach. The department shall not attempt to stop the erosion process by constructing seawalls or other fortifications on the bluffs.

Human-Caused Erosion

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

Policy: Fencing or other appropriate means shall be used to discourage foot traffic down the cliff faces. Stairways may 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 San Elijo 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 San Elijo area. The study will include the monitoring of littoral sand movement and may make recommendations concerning where artificial sand replenishment may be beneficial.

Policy: Littoral sand loss is recognized as a major threat to existing facilities and recreational resources. The department shall work with other agencies, including the San Diego Association of Governments, the California Department of Boating and Waterways, 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 Plantings

The San Elijo State Beach campground is landscaped with non-native shrubs to provide screening between campsites and to screen the campground from the highway. These exotic (alien) 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 removal of mature exotic species and replacement 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 use of native plants shall be considered in the design of all new developments at this unit.

Ground Squirrel Control

Ground squirrels are abundant at San Elijo State Beach, and 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. The reduction of preferred habitat will be considered as a primary method of control.

Cultural Resource Management Policies

Management of cultural resources at San Elijo 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 San Elijo State Beach: 3, 18, 19, 24, 25, 50, 51, 52, 54, 55, 56, 58, 59, 60, 69, 70, 71, and 72.

The inventory of features and this Resource Element have been prepared to comply with the Public Resources Code sections and Resource Management Directives listed above.

There are no known cultural resource sites in San Elijo State Beach. Subsurface testing is necessary to identify and evaluate a possible prehistoric site between campsites 45 and 47. The highly disturbed surface includes an assemblage of shell, bone, stone, and charcoal that are the remains of an aboriginal and/or contemporary campsite.

Policy: No additional construction or underground work should be permitted at campsites 45 and 47 until archeological testing determines if any subsurface deposits are present. Additional protection and mitigation measures may be required based on an evaluation of the integrity and significance of this possible site.

Policy: Any 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 such 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 at San Elijo State Beach as per Directive #59.

Allowable Use Intensity

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

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

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

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

The third, and most important, component in determining allowable use intensity involves an analysis of the natural and cultural resources to determine the area's physical limitations for development of facilities, and the ability of the ecosystem to withstand human impact (ecological sensitivity). This analysis is based on a number of environmental considerations, including: soils and their erosion and compaction potential; geological factors, such as slope stability and relief; hydrologic considerations, including the potential for pollution of surface waters, flooding, and depletion of surface and groundwater through water use; vegetation characteristics, such as durability, fragility, and regeneration rates; occurrence of paleontological strata; and wildlife considerations, such as tolerance to human activity, wildlife population levels, and stability. Additional considerations in determining ecological sensitivity are: rare and/or endangered plants and animals, unique botanical features and ecosystems, and examples of ecosystems of regional or statewide significance (marshes, riparian areas, and vernal pools).

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

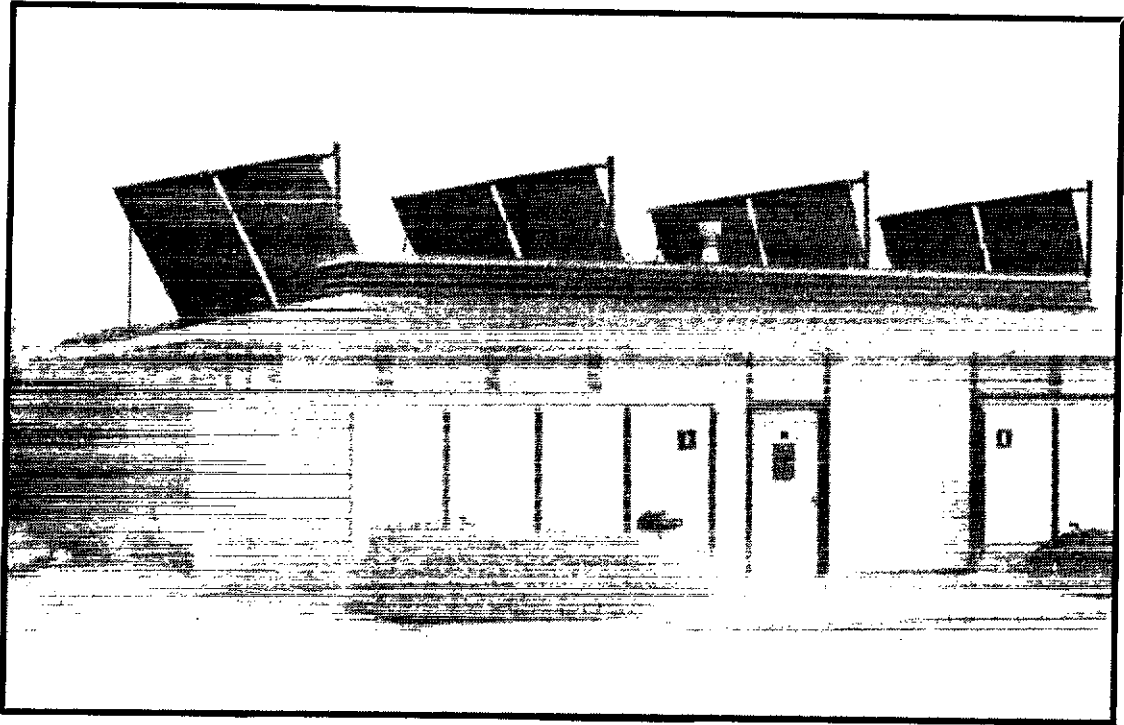
- I. Ocean beach. Capable of high-intensity use but subject to periodic inundation by ocean waves. No permanent facilities allowed within this zone.
- II. Ocean-facing cliffs. Defined as the zone inland from the toe of the cliff to a horizontal distance equal to the height of the cliff as measured from a vertical plane to the toe. Visitor use restricted to designated corridors to provide access from the terrace level to the beach. New construction only for stairways and trails; special

construction methods shall be employed to reduce the potential for accelerating erosion and landsliding. Existing facilities, 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



The rehabilitation of existing comfort stations is just one of the proposals to upgrade existing facilities at San Elijo State Beach.



The little used day-use parking lot would be developed into a camping area for self-contained vehicles. Some overflow camping parking would continue to be provided.

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, the following three study areas have been identified, which encompass the department's holdings (see Existing Facilities Map):

- Area 1 -- The undeveloped northern section of the beach extending about 4,500 feet south from the northern boundary
- Area 2 -- The existing day-use area
- Area 3 -- The existing campground

Land Use Patterns of Surrounding Area

San Elijo State Beach is located in the community of Cardiff. It is bounded on the east by County Highway S-21 (old Coast Highway) and the inland, paralleling Atchison, Topeka and Santa Fe Railroad tracks. These two features buffer the unit from the intensive urban development inland, which includes a complete range of commercial establishments.

The mouth of San Elijo Lagoon comprises the southern boundary, and urban development forms the northern boundary. This setting limits any consideration of unit expansion.

Existing Unit Conditions

San Elijo State Beach is an intensely developed 42.21-acre site that is extremely popular for its camping and day-use recreational opportunities. Visitor attendance during the 1980-81 fiscal year was estimated at 575,000.

The unit was acquired in 1952. Ownership information is shown on DPR drawing number 15844, Land Ownership Record, dated May 1977. There are numerous drainage and utility easements on the property.

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

- Area 1 -- None
- Area 2 -- Day-use parking for 86 cars
- Two comfort stations
- Maintenance services shop building
- Maintenance/service area
- Two beach access stairways
- Beach access ramp

- Area 3 -- Entrance station
- 171 family campsites
- Five comfort stations
- Lifeguard tower
- Campfire center
- Four beach access stairways
- Beach access ramp
- Concession building
- Unit office

Public use of the unit is currently concentrated in Areas 2 and 3 due to the developed facilities. Area 1 is comprised of a narrow beach fronting a steep bluff face that extends to the road shoulder above. Area 1 offers no development potential because of its topographic character. Access to Area 1 will necessarily continue to be from developed blufftop facilities in Area 2.

The following problems, by area, require attention:

- Area 1 -- Use is limited due to the lack of developable land.
- Area 2 -- The existing day-use development is only accessible through the Area 1 campground. This circulation pattern is awkward because day-use traffic is more frequent than camping traffic. The circuitous access, combined with parking fees, discourages public use of Area 2 for day-use access.
 - Considerable parking is occurring along the highway shoulders in Area 2, creating traffic congestion and unsafe pedestrian crossings of the highway. The primary beach users here are surfers. The department has no control over parking on the highway, but the lack of safe pedestrian access dictates that parking be discouraged.
 - The two existing highway access ramps into Area 2 are unneeded and misleading to the motoring public. These ramps should be removed.
 - The existing maintenance building and service area are inadequate to meet current needs. Public access through the middle of the facility presents security and esthetic problems.
 - There is a need for extra parking space for the campground.

- The two existing comfort stations currently provide only cold showers.
 - Existing storm drainage patterns need to be examined to minimize bluff erosion.
- Area 3
- Additional campsites are needed to meet current demand.
 - The unit lacks a trailer sanitation station.
 - The entrance station needs additional stack-up space for fee collection to reduce congestion.
 - The campfire center needs rehabilitation.
 - Storm drainage patterns need to be examined to minimize bluff erosion.
 - An emergency exit to the highway is needed for lifeguard vehicles at a location other than the entrance.

Land Use Recommendations

The following is a listing of recommended actions relating to land uses at San Elijo State Beach. The recommendations are organized by area as identified on the General Plan Index and Conceptual Maps.

Area 1

- This area is receiving minimal beach use because of the lack of developable land for parking and sanitary facilities. This is a less densely populated recreation area for those willing to forego basic amenities and convenient access. It is recommended that this area's land use pattern be continued.

Area 2

- This area has been identified for day use in the past. It does not function well in this capacity because of its location at the end of an overnight facility and its accessibility from informal highway parking. There is a need for additional camping opportunities at this unit, and this area would function more effectively as an extension of the existing campground. Consequently, it is recommended that Area 2 be designated as a part of the campground for overnight use. The existing maintenance area is recommended for ultimate relocation at South Carlsbad State Beach where an areawide maintenance facility is proposed. This proposal is contingent on the South Carlsbad facility development.

Area 3

- Retain its present designation for overnight use.

Facility Recommendations

The following is a listing of recommended actions relating to the development of San Elijo State Beach. The recommendations are organized by area as shown on the General Plan Index and Conceptual Maps.

Area 1

- No development proposed in this area.

Area 2

- Remove highway access ramps in two locations.
- Develop secure boundary fencing.
- Rehabilitate two existing comfort stations and install solar-heated hot water systems.
- Modify an existing parking lot to accommodate 21 campsites for self-contained recreation vehicles.
- Realign and develop access road.
- Modify existing maintenance area to accommodate eight campsites for self-contained recreational vehicles.
- Develop a parking lot for 24 cars.
- Develop walkways as shown on Conceptual Map.
- Remove existing pavement as shown on Conceptual Map.
- Restudy storm drain patterns to minimize bluff erosion.

Area 3

- Develop 10 new family campsites.
- Develop five "bike-in/hike-in" campsites.
- Widen entrance road to provide two lanes of stack-up space.
- Rehabilitate existing campfire center.
- Develop a gated highway access ramp for use by lifeguard emergency vehicles.
- Develop three interpretive kiosks.
- Install interpretive panels at four locations.
- Rehabilitate five comfort stations.

- Develop a concession-oriented ramada with tables.
- Develop two trailer sanitation stations.
- Restudy storm drainage patterns to minimize bluff erosion.

Implementation of these proposals will expand recreational opportunities at San Elijo State Beach by increasing the number of available campsites and providing outdoor tables and a ramada at the concession facility. Service to the public will be improved by rehabilitating comfort stations, providing a trailer sanitation facility, reducing congestion at the entrance, providing emergency highway access for lifeguard vehicles, and improving circulation in Area 2. Operational characteristics will improve with an expanded maintenance facility and the removal of the unneeded highway ramps in Area 2. Table 1 provides 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>
Unit Office	1	1
Family Campsites	171	215
"Bike-In/Hike-In" Campsites	0	5
Comfort Stations	7	7
Beach Access Stairs	6	6
Lifeguard Tower	1	1
Entrance Station	1	1
Maintenance Building	1	0
Concession	1	1
Trailer Sanitation Station	0	2
Campfire Center	1	1

Note: "After Implementation" figures include existing facilities.

Special Considerations

State law requires that projects be designed to be accessible to the physically disabled. San Elijo State Beach currently provides camping opportunities for the disabled. Future improvements will be designed to maximize accessibility for all segments of the population.

Unresolved Planning Issue

A request was made at the October 1982 public involvement meetings that the underwater area fronting San Elijo State Beach be included in the department's underwater parks program. In November 1982, staff requested that the department's Underwater Parks Advisory Committee review the area to determine if sufficient resources were present in the area to warrant such a designation.

The advisory committee has completed its investigation and there is no specific recommendation in this plan. When a complete evaluation of the area by the advisory committee is finished, either a recommendation will be brought before the commission for reclassification once the department has acquired jurisdiction over the area, or the area will retain its current designation as a state seashore.

Local Coastal Plan Conformance

This plan is substantially in conformance with the San Dieguito Land Use Plan certified by the Coastal Commission on June 10, 1981.

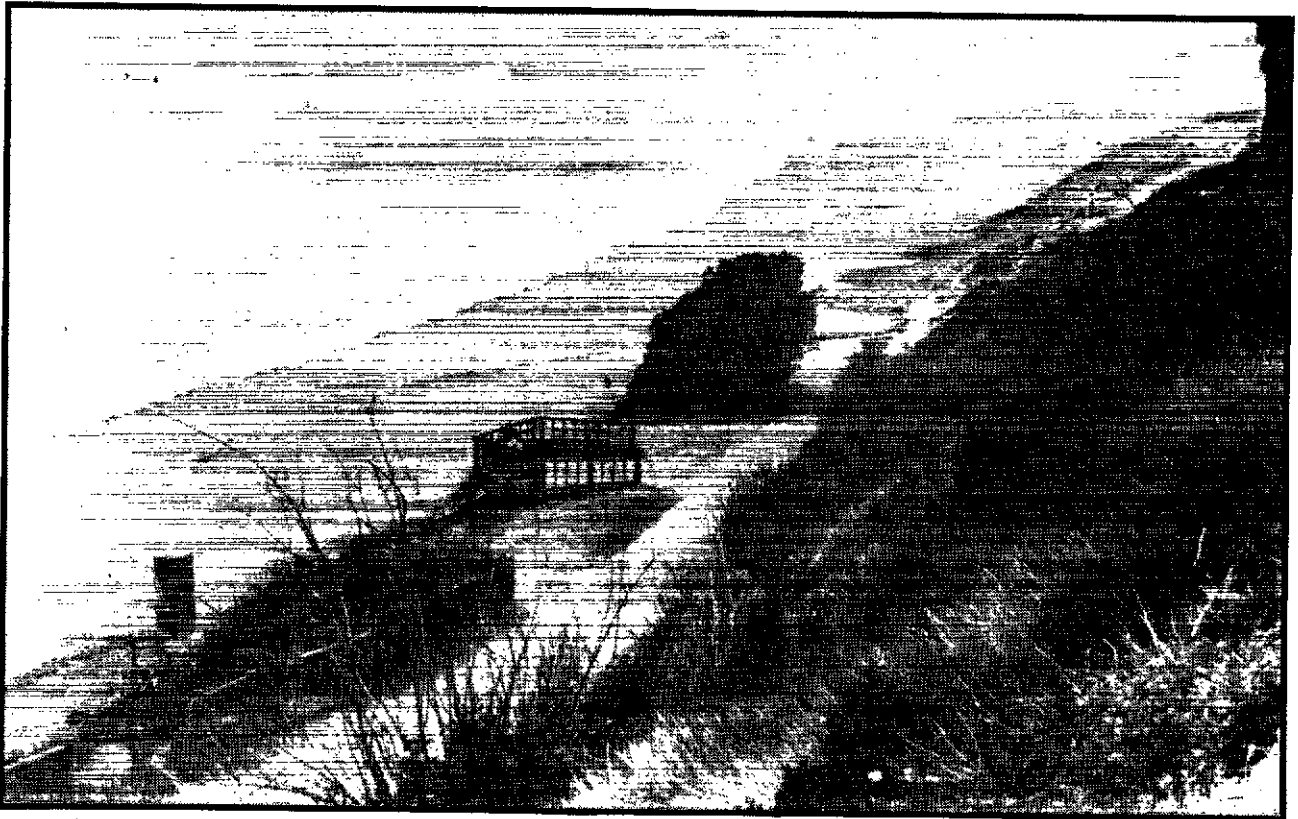
Sequence of Action

The restudy and correction of storm drainage problems related to bluff erosion constitutes the most critical need of the unit.

Expansion of camping opportunities through the conversion of Area 2's parking lots and maintenance facility rates as the next highest priority.

The remaining small-scale improvements should follow these two efforts or be combined with them.

Interpretive Element



The interpretive programs at San Elijo have long been successful. This plan recommends continuing these programs and adding some other activities to improve interpretation of the unit's resources.

INTERPRETIVE ELEMENT

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

Methods and Media

The following paragraph taken from the 1975 Draft Interpretive Plan still applies at San Elijo State Beach:

Interpretive methods which can be utilized advantageously at San Elijo include the personal contact approach as well as the use of audio-visual programs, self-guided tours, exhibits, and publications. Campfire programs, ranger-led walks, demonstrations, and talks out of the park, are all desirable interpretive means especially at this beach park where frequent ranger-visitor contact might alleviate some of the vandalism and enforcement problems.

This Interpretive Element recommends that successful programs be continued. It also suggests additional guided and self-guided activities at the state beach and at related off-site locations, such as San Elijo Lagoon, where these might be appropriate. Audio-visual presentations at campfire programs can be an effective interpretive tool if used to supplement personal presentations.

Exhibits now available at San Elijo State Beach consist of some natural history displays at the unit office about whales, plankton, gulls, and seashells. There is also a panel inside the office on riptide hazards. These displays, as well as the way they are exhibited, have a slipshod and neglected appearance. The newly formed interpretive association at San Elijo plans on using department volunteer funding to enclose the patio next to the office to provide a more integrated interpretive space and some additional exhibits.

There are some revenue-generating possibilities in incorporating interpretation with saleable items at the concession. This would involve printing a message on a visible surface. The concession and the unit office should also make various publications available for sale to the public (see section on Revenue-Generating Activities).

Another interpretive service would be caravans to take campers to Torrey Pines State Reserve where they could visit the proposed interpretive center at Los Penasquitos Lagoon. Regional beach and wetland interpretation will take place at this facility.

To provide high-quality interpretation for the entire San Diego coast beach system (while avoiding the problems of vandalism and corrosive salt spray in the air), the department, as funding permits, should develop an exhibit trailer for use at the string of state beaches with similar resources. This should be a very popular facility to visit.

Interpretive Period

The department will interpret a flow of history at San Elijo State Beach.

Interpretive Themes

Interpretive themes proposed for San Elijo State Beach fall into three loosely connected groups: resources, recreation, and safety and management (though specific themes may fit in more than one of these categories).

Resources

There are a wealth of resource-related themes to interpret at San Elijo State Beach. Natural history themes can be interpreted in two ways: through ecological associations and also through singular outstanding species. This approach addresses both the interrelatedness of associated species and the uniqueness of some of those same species. In some instances, themes covering resource-oriented topics have ramifications that aid in unit management and resource protection.

The Changing Coast

Interpretation of this theme should deal with such topics as how the beach was formed, where the beach sand comes from and how it moves downcoast in this region, and why the beach changes with the seasons, explaining the concepts of "littoral drift," "littoral cells," and "the sand budget." Interpretation should also explain the process that uplifted the marine terraces and formed the coastal bluffs, and show that bluff erosion is a natural process in this area. It should go on to show how human intrusions have accelerated erosion and should stress prevention.

A Sequence of Habitats

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

The underwater community: This theme will interpret the rich offshore flora and fauna found in the region of San Elijo State Beach.

Tidepools as mini-worlds: Though tides are rarely low enough to uncover pools at San Elijo State Beach, these features deserve interpretation, which should explain where to find the pools, what is the tidepool environment, what are common plant and animal species, and how to explore pools safely.

The sandy beach community: The varied lifestyles and life forms of the common invertebrate and vertebrate animals found on San Diego beaches should be interpreted by themes including "The Life Underfoot" (invertebrates such as the sand crab, *Emerita*, which live in the sand in the wave wash zone), "A Bill for Every Purpose" (shorebirds, their specialized feeding techniques, size differences, and migratory patterns which minimize interspecies food competition), and "Flotsam and Jetsam" (evidence of various life forms found washed up on the beach, such as shark egg cases, jellyfish, and kelp, and the animals which scavenge these castaways).

Bluff ecology: This theme will deal further with the continually evolving and eroding bluffs in this region of the California coastline, particularly with the plants and animals that are adapted to live on the bluff face.

Wetlands ecology, critters great and small: This theme will interpret the prolific nature of a healthy estuarine system and its related uplands, describing tidal influence, major species present, and food chain relationships. Interpretation should also foster an esthetic appreciation of the marsh landscape.

Species to Seek

Beach visitors should receive information on plant and animal species that are unusual or require some effort to locate. Individual themes are:

Whale watching and other marine mammals you can see here: San Elijo State Beach offers excellent views of the winter and spring migrations of the grey whale. Subjects that should be covered include: size, habits, diet, navigation; when, where, and why they migrate; clues to identification such as views of heads, backs, flukes, and typical spouting patterns; courtship and rearing of the young; and a brief history of whaling, their threatened extinction, need for protection, and the present status of the species. In addition, this theme should provide identifying information for other marine mammals commonly observed along this coastline.

Unusual plants and animals: This theme will deal with species that have unusual appearances or habits. Some examples include the grunion that periodically "run" to spawn on the beach, phosphorescent plankton, and some of the beautiful nudibranches that live in the offshore waters.

Bygone Beachcombers

Use of the beach and wetland environments by the Ipai, and their history since European contact, should be interpreted to beach visitors. Interpretation should also cover the Hispanic and American era histories of the San Elijo area.

The State Park System Story

Why and how the state beach came into public ownership should be interpreted for visitors. This theme will also treat this coast as a region, orienting visitors to the resource and recreational values of the string of state beaches, as well as of the parks owned by other agencies.

Recreation

The diverse recreational opportunities available at and around San Elijo State Beach should be interpreted.

Recreational Uses of the Surf and the Lagoon

Opportunities for board and body surfing, wind surfing, and boating should be interpreted for visitors unfamiliar with this beach and the lagoon. Techniques, regulations, and developed points of access should be covered and a tide schedule should be maintained.

Sport Fishing

Interpretation of this theme will deal with those ocean and lagoon fish that are commonly caught to be eaten. Special emphasis will be placed on the grunion because of its unique spawning behavior. Techniques for catching them and applicable regulations will be covered.

Scuba Diving

Interpretation should deal with equipment, techniques, safety, regulations, and favorable conditions for scuba diving, and should include demonstrations.

Safety and Management

An important interpretive function should be informing visitors about how to use the beach safely. This should aid unit staff in enforcing regulations by telling visitors the justifications for these regulations.

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

It's Costing You!

The combined effects of individual acts of littering and vandalism (environmental degradation, unhealthy conditions, and cost to taxpayers) should be interpreted to beach users. This theme should also touch on the value of reclaiming recyclable materials.

Visitor Facilities

Existing interpretive facilities at San Elijo State Beach are a campfire center and a few panels and displays at the unit office. The unit office, located near the campground entrance, is at the hub of activity at the campground. The concessions building, laundromat, and a beach access stairway are all clustered nearby. The campfire center, on the other hand, is at the southern extremity of the campground in a fairly isolated area. Interpretation at the unit office and at the campfire center should be independent of one another.

Access to the interpretive exhibits in the unit office is severely restricted. They should be outdoors. Field staff, working with the newly formed volunteer organization, is enclosing the outdoor patio at the unit office for use as a display area. A more permanent interpretive area may be suitable in the open space south of the concessions building at the head of the beach access stairway. This area could combine picnic facilities with a ramada and structures holding interpretive exhibits.

The interpretive panel should be the primary medium used by the department at this state beach. Panels should be put in display cases that are impervious to the elements -- not only to protect them from corrosion and vandalism, but also to make them appear attractive and substantial. Panels and cases should be installed on permanent structures in places that are well-lighted at night and also easily visible to patrolling unit staff.

Panels and cases should be of a standard size, so that worn-out or seasonal exhibits can be easily replaced with new panels as needed. Modular cases and panels should be used throughout the San Diego coast area so that exhibits can be rotated from beach to beach for maximum effectiveness and efficiency.

Specific recommended locations for interpretive panels at this unit are:

1. At the "main" interpretive area near the unit office, either in the enclosed patio or at the proposed new interpretive-picnic area. This will also be the best location for a board showing daily beach conditions (tides, surf, etc.) and for a bulletin board to post special notices and personal messages, because it will be the easiest place for unit staff to keep neat and information up-to-date.

The best use for this concentrated interpretive space would be as a place to focus attention on as many of the numerous resource-related themes as possible. Because unit staff would be nearby and could devote the necessary attention to this area, it would also be the best place at the unit for interpreting seasonal topics such as whale and waterfowl migrations and grunion "runs".

2. Each beach access stairway should be used to display one or two panels on recreation, beach safety, and regulations. A positive "helpful" panel explaining beach-related hazards or recreational opportunities, coupled with a regulatory sign, might help alleviate the vandalism to such signs that has been common at San Diego coast units.
3. One or two panels should be located at the campfire center when it is redesigned. These should discuss topics that are frequently the subject of interpretation at campfire presentations. A well-designed structure to hold the panels will add to the appearance of the campfire center.
4. The concessions building would also be an excellent location for interpretive displays. Resource-oriented panels would be the most appropriate here. The concession should also be handling some resource-oriented published material, which can reinforce the interpretation on these panels.

The mobile exhibit trailer can ultimately be used along the entire San Diego County coastline and should be popular at San Elijo State Beach. Exhibits could cover in more detail such topics as marine terrace formation, ocean currents, sand movement, and erosion. Photographs and artifacts could be used to give an idea of what early southern California beach recreation was like.

The natural world should be interpreted for visitors through photographs or an audio-visual program to supplement programs at the campfire center. This would be an aid in identifying elusive species of birds or marine mammals, and would illustrate how human changes affect particularly vulnerable species.

The trailer will not only be a roving interpretive center at the state beaches but also in nearby communities. For example, during months of low visitation at the beaches, the trailer could be taken to schools throughout the region to stimulate interest in state beach resources and recreational opportunities.

There are no facilities or interpretive exhibits planned for San Elijo State Beach below the bluffs because this area is not adequately patrolled.

Interpretive themes not covered in exhibits or through personal contact, or those that require interpretation in more depth, should be addressed in printed materials available at the concession or unit office. These would include books, pamphlets, brochures, mimeographed leaflets, and other informational materials, such as posters, maps, and slides.

Scheduled caravans to take campers from San Elijo State Beach to Torrey Pines State Reserve should leave from the unit office. Interpretation available at 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 San Elijo State Beach. This interpretive center should also deal more fully with cultural themes than the 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 coastline.

Other off-site locations where interpretation should occur are highway reststops enroute to the San Diego coast region. These should orient motorists to the various state beaches, indicating the facilities and activities available at each.

Visitor Activities

Successful programs involving personal services should continue at San Elijo State Beach. These include talks and ranger-led walks, as well as demonstrations, campfire programs, and children's programs. Current programs should be augmented as staffing permits or, as the interpretive association becomes established at San Elijo, when qualified docents become available. Programs that could be conducted by docents, as well as by department staff, include nature walks and beach safety demonstrations. They can also demonstrate various forms of water-related recreation, i.e., board and body surfing, swimming, and effective surf fishing. Volunteers may also eventually participate in scuba diving demonstrations and instruction and in leading underwater tours.

San Elijo Lagoon

Though the Department of Fish and Game will be providing some interpretation at San Elijo Lagoon through an operating agreement with San Diego County, the Department of Parks and Recreation should augment this program. Ranger- or docent-led scheduled tours could depart from a central area at San Elijo State Beach. This might be integrated with similar programs from neighboring state beaches, particularly Cardiff. Tours could focus on different aspects of the wetland environment, including plants and animals, the interrelatedness of all species through the food chain, techniques of wetland photography, and the esthetics of wetlands in general.

San Elijo State Underwater Park

If a state underwater park becomes a reality at San Elijo,* several interpretive possibilities exist.

It is important to recognize that there will be two kinds of visitors who might come to San Elijo State Beach with an interest in its underwater resources. The first would be those experienced scuba divers who could see the underwater world firsthand. They might be a substantial number because, according to the Underwater Parks Master Plan prepared by the Department of Parks and Recreation in 1979, California has the greatest concentration of divers in the United States.

The second group (people who do not dive but are nevertheless interested in the underwater world) would no doubt be more numerous. Each group will require a separate kind of interpretation of the underwater resources at San Elijo. The first group will be able to take advantage of underwater tours, self-guiding trails, and brochures especially designed for underwater use. The second group must be introduced to this world vicariously through interpretive media, by slide shows or, preferably, motion pictures and video tapes.

Revenue-Generating Activities

San Elijo State Beach gets a great number of visitors, many of whom stay a long time. This offers an excellent potential for raising revenue. The most obvious place for such activities is at the concessions building. A wide array of quality merchandise could be offered for sale, including publications, photographs, posters, and gift articles. The concession could also offer some innovative items such as beach towels and T-shirts with appropriate interpretive messages printed on them. These items should be considered because they might have a broad appeal in the south coast region.

Unit staff should also sell publications at the unit office, as staffing and space permit.

*See Unresolved Planning Issues in Land Use and Facilities Element.

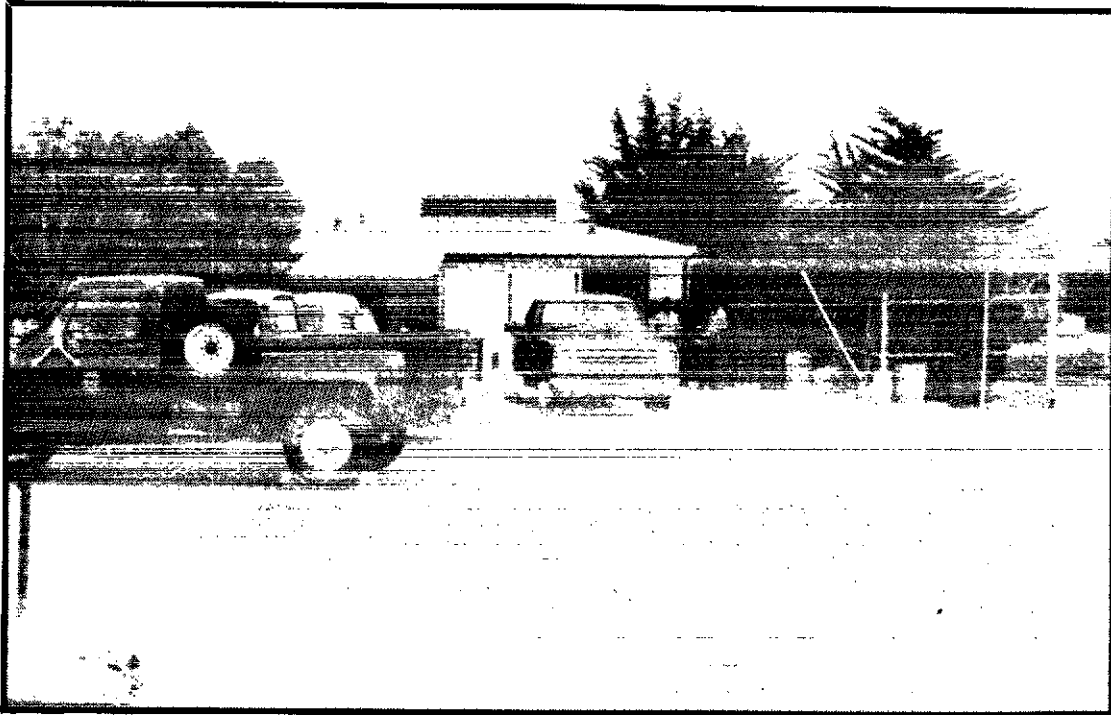
The revenue-generating implications of an underwater park at San Elijo State Beach are numerous. Potential income to the state from equipment rentals, sales of equipment or related items, tour fees, etc., could be substantial.

Those visitors using the proposed interpretive trailer could be charged a modest entry fee when it is on State Park System property. School children should be able to use the trailer for free.

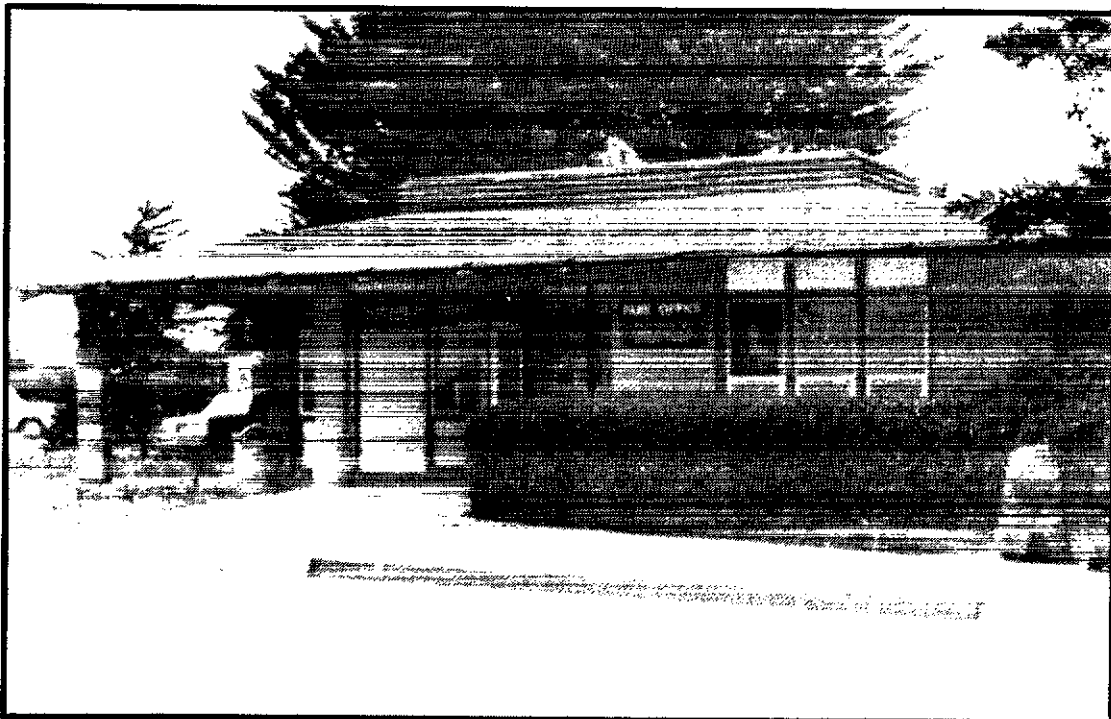
Recommendations

- When funding permits, prepare and install new interpretive exhibits at the unit office, the beach access stairways, and the campfire center. The campfire center should also be refurbished.
- Provide a mobile regional interpretive exhibit trailer at this unit.
- Prepare teachers aid packets to encourage off-season use by 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 expand the personal services programs at San Elijo State Beach.
- Foster the growth of the new interpretive association and involve it in providing personal services for visitors.
- Study the potential for putting interpretive messages on saleable items.
- Coordinate with the Department of Fish and Game and San Diego County to provide on-site interpretation at San Elijo Lagoon for state beach visitors.
- Examine nearby underwater resources in detail and, if shown to be of State Park System quality, acquire and interpret the offshore property as a state underwater park.

Operations Element



The maintenance facility will be relocated to South Carlsbad State Beach.



The San Elijo State Beach unit office will be retained.

OPERATIONS ELEMENT

Current Conditions

San Elijo State Beach is in the San Diego Coast management area of the department's Southern Region. Current operations involve essentially Areas 2 and 3. Services in Areas 2 and 3 include fee collection, building maintenance, litter pickup, policing, and lifeguard activities. Area 3 involves full-time staffing at the campground, with the exception of the winter season when the unit 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 reflect reduced demand during this season.

Staff services at the Area 3 campground include:

- Maintenance of 171 campsites, connecting roads, and parking
- Interpretation
- Law enforcement
- Staffing of entrance station
- Maintenance of seven comfort stations, six beach access stairways, and equipment
- Litter pickup and trash removal

Future Conditions

The primary results of the general plan proposals will be improved services to the public and better resource management, with some expansion of use.

Implementation of the general plan will involve a minor increase in the workload of staff at the unit by adding the following responsibilities to present demands:

- Area 2 will become a part of the existing campground. This will not require additional staffing; however, there will be added maintenance requirements. All facets of the existing operation will be adequate to meet the needs of the small number of additional visitors who will be accommodated by the development.

Revenue Generation

Minor increases in revenue will help offset increased demands on staff and the budget.



Concessions Element



The existing concession at San Elijo State Beach will remain.

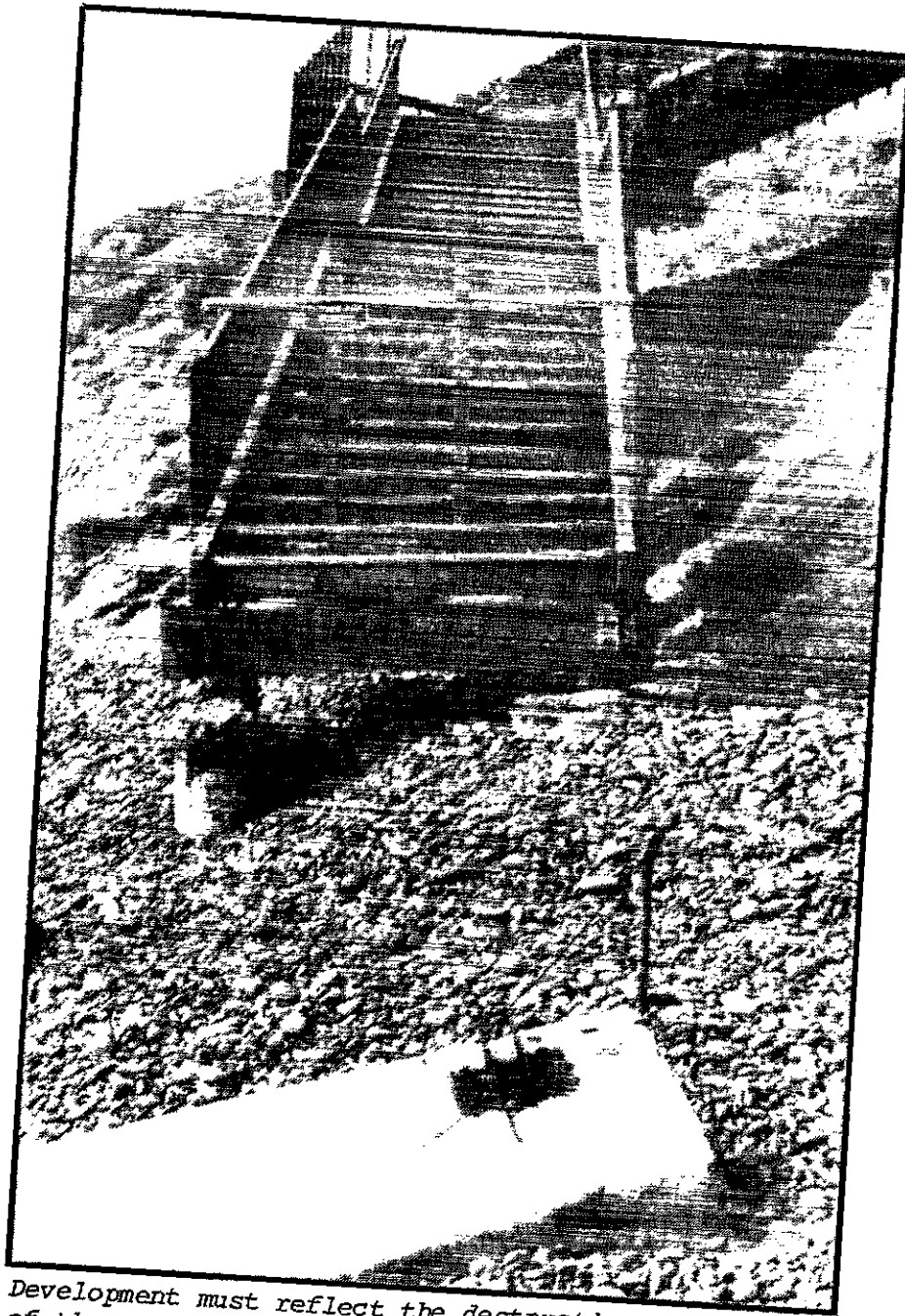
CONCESSIONS ELEMENT

A single retail concession near the campground entrance currently provides food, beverages, and sundry articles to campers. This plan proposes that this concession operation continue in its present form, with the addition of a ramada and tables adjacent to the concession building to improve visitor services.

No other concession facilities are proposed. The existing facility will be sufficient to meet the day-use needs of visitors in Areas 2 and 3.



Environmental Impact Element



*Development must reflect the destructive potential
of the ocean.*

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 for San Elijo State Beach. The Draft Environmental Impact Element (or Environmental Impact Report) analyzes and reports potential impacts of these policies and plans on the environment.

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

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

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

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

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

Description of the Project

Please refer to the Land Use and Facilities Element.

Description of the Environmental Setting

For information on topography, climate, hydrology, geology, soils, biota, and other resources, please refer to the Resource Element. 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 county's high levels of ozone is the pollutant transport from more densely populated areas to the north in Los Angeles, San Bernardino, and Orange counties. As a result, ozone levels are lower along the coast and increase as one moves eastward and inland.

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

The closest air quality monitoring station to San Elijo State Beach is in the City of Solana Beach, about 2.5 miles to the south. The air quality of Solana Beach is very good, and it is expected that the air quality of San Elijo State Beach is similar.

At the Solana Beach air quality monitoring station, only one pollutant, ozone, is monitored and recorded. During 1981, the California Air Quality Standard for ozone was equaled or exceeded 55 times (days), compared to 35 times (days) during 1979.

Noise

Noise at the beach, parking areas, and campsites is generated by automobile traffic, train traffic, and human activities.

The 171 family campsites are 30 feet from the four-lane Pacific Coast Highway and about 175 feet from the Atchison, Topeka and Santa Fe Railroad tracks to the north. The noise heard by state beach visitors is in the 69-84 dBA range, depending on how far away from the source the visitor is.

The Atchison, Topeka and Santa Fe Railroad has about 14 trips per day and generates noise levels from 70-80 dBA at 175 feet.

On the beach, the surf provides a constant background sound. Additional noise is produced by visitors engaged in recreational activities.

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

According to the 1980 census, the population of Cardiff-by-the-Sea was 10,054, including 8,549 (85%) White, 28 (.28%) Black, and 1,181 (11%) of Spanish origin. Half the population (4,997) was female.

The census also indicated a total of 2,434 families, of which 2,144 (88%) were White, 5 (.20%) Black, and 213 (9%) of Spanish origin.

Between 1970 and 1980, the population increased 75.6%, from 5,724 to 10,054. The median home value in Cardiff-by-the-Sea was \$117,200.

Public Services

Water

Water to San Elijo State Beach is provided by the San Dieguito Water District. At the time of this writing, there were no restrictions on water hook-up or use.

Sewer

San Elijo State Beach is connected to the Cardiff Sanitation District sewer. As of February 1983, the system is not at or near capacity, and there are no restrictions on new connections.

Fire/Paramedic

Fire services are provided by the Encinitas Fire Protection District. The closest fire station to San Elijo is at 415 Second Street in Encinitas. The response time for a fire unit is about three minutes.

Routine first-aid is administered to San Elijo State Beach visitors by state park lifeguards and rangers. In life-threatening situations, paramedics from the Encinitas Fire Protection District are called. The response time is three to five minutes, depending on the location of the victim and the traffic conditions encountered by the emergency vehicles. Response time to more isolated areas of the state beach is even longer.

Police

Law enforcement at San Elijo 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 lands. The San Diego County Sheriff's Department provides law enforcement services to the Cardiff-by-the-Sea area. The closest sheriff's station to San Elijo State Beach is the Encinitas Station, which is called to back up state park personnel. Response time is about five minutes, depending on the location of the sheriff unit and traffic conditions.

Cultural Resources

For information on Native American and Euroamerican cultural 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 native cliff-top vegetation has been displaced by pavement, facilities, and ornamental non-native vegetation. The project will remove paving in several areas and add paving in other areas with no significant increase in the amount of paving. The same will hold true for vegetation -- some vegetation will be removed for the placement of pavement and facilities; however, in other areas, pavement will be removed and the area will be revegetated with native plant species. There will be no significant decrease in vegetation at the state beach.

Mitigation Measures Proposed to Eliminate or Minimize Effects

As part of the project, a drainage plan will be developed, and the existing irrigation system will be eliminated. The vegetation to be used to rehabilitate previously paved areas and to provide screening within the new campground area will be native species.

Since the project will not have a significant impact on the existing environment, no specific mitigation measures are necessary.

Unavoidable Environmental Effects

1. Vegetation will be removed.
2. Additional areas will be paved.
3. Nonrenewable resources will be used.
4. Demand for water and sewer service will increase.

Alternatives to the Proposed Project

1. **NO PROJECT:** With this alternative, awkward conflicts would continue between day-use and camping traffic. Traffic would continue to pass through the maintenance area. Entrance station congestion would continue. Bluff erosion due to drainage problems would continue. This alternative was rejected because it neither solves existing natural resource and circulation problems nor helps meet recreational demand.
2. **RETAIN MAINTENANCE FACILITY:** The selection of this alternative would allow the persistence of circulation problems caused by campers and day-use visitors driving through the maintenance area. The maintenance facility would still be inadequate to meet the unit's maintenance needs. The amount of existing pavement to be removed would be less. The maintenance facility at South Carlsbad would not be used by San Elijo maintenance personnel.

This alternative was rejected because the need for an improved maintenance facility and service yard would not be met, and circulation and security problems would continue.

3. **DELETE THE EIGHT ADDITIONAL CAMPSITES AND ACCESS ROAD:** The undeveloped open-space area would remain. This alternative was rejected because it did not help the department in its effort to meet existing recreational demand.

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

The current short-term use of San Elijo State Beach is for the enjoyment of the coastal scenery, camping, and beach-oriented recreation. The general plan continues this current short-term use.

If in the future the department decides that the unit is best suited for a different use, then the existing facilities could be removed and the land would be available for that alternative use.

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

None of the changes proposed in the general plan are irreversible. There will be a commitment of nonrenewable resources in the form of fossil fuels, aggregate materials, and petrochemicals.

Growth-Inducing Impacts of the Proposed Project

The development proposed in the general plan is not growth-inducing. Proposed facilities will help the department meet existing recreational demand.

Effects Found Not to be Significant

Implementation of the general plan will not have a significant impact on geology, soils, climate, biota, air quality, traffic, noise, land use, public services, or cultural resources.

Organizations and References Consulted

California Department of Boating and Waterways
California Department of Fish and Game
Cardiff-by-the-Sea Town Council
County of San Diego Department of Planning and Land Use
County of San Diego Department of Traffic Engineering
County of San Diego Sheriff's Department
Southern California Association of Governments

* * *

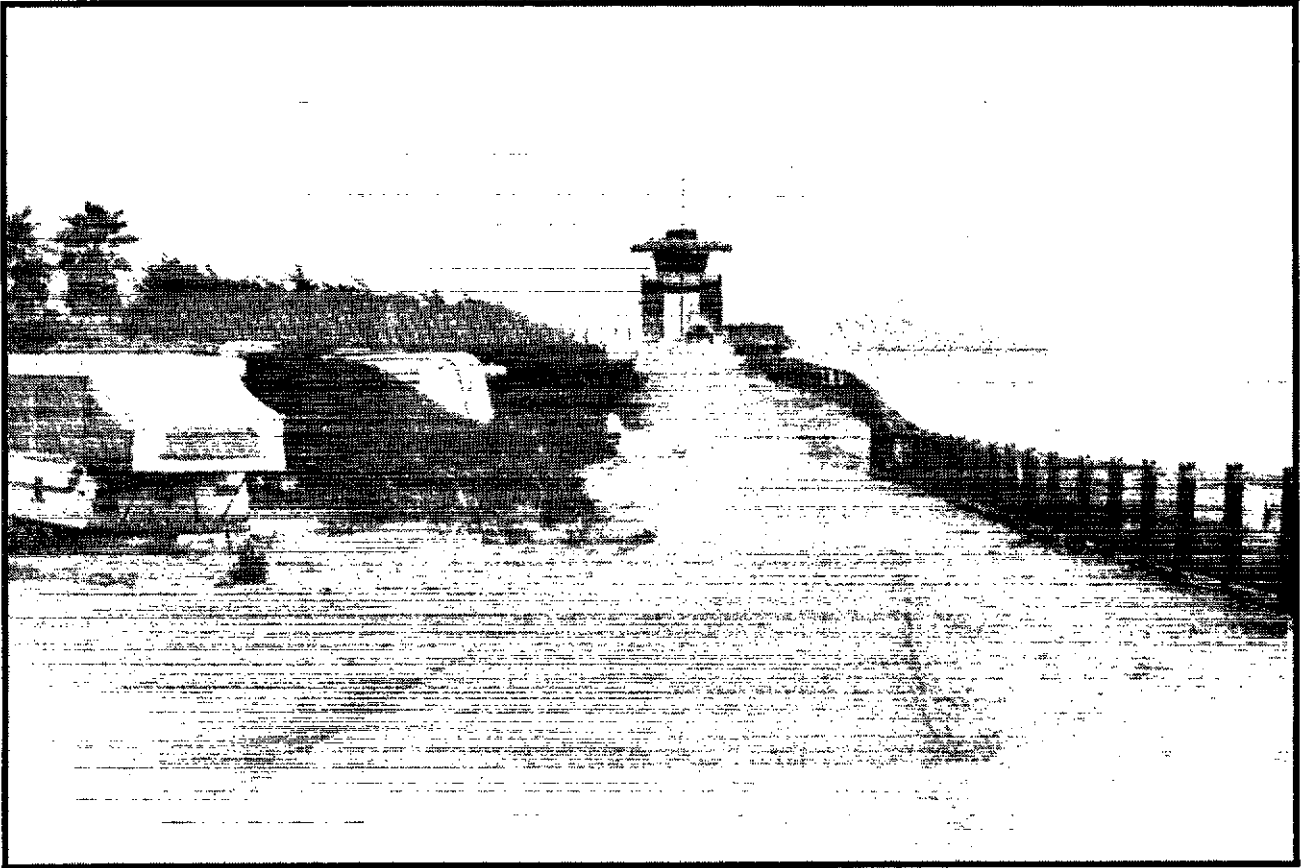
California Air Resources Board, Summary of 1979 Air Quality Data, 1980.

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

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

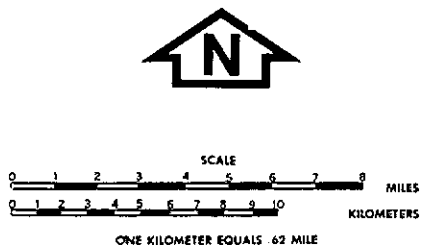
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Maps



Present land uses will be essentially maintained.

SAN ELIJO STATE BEACH

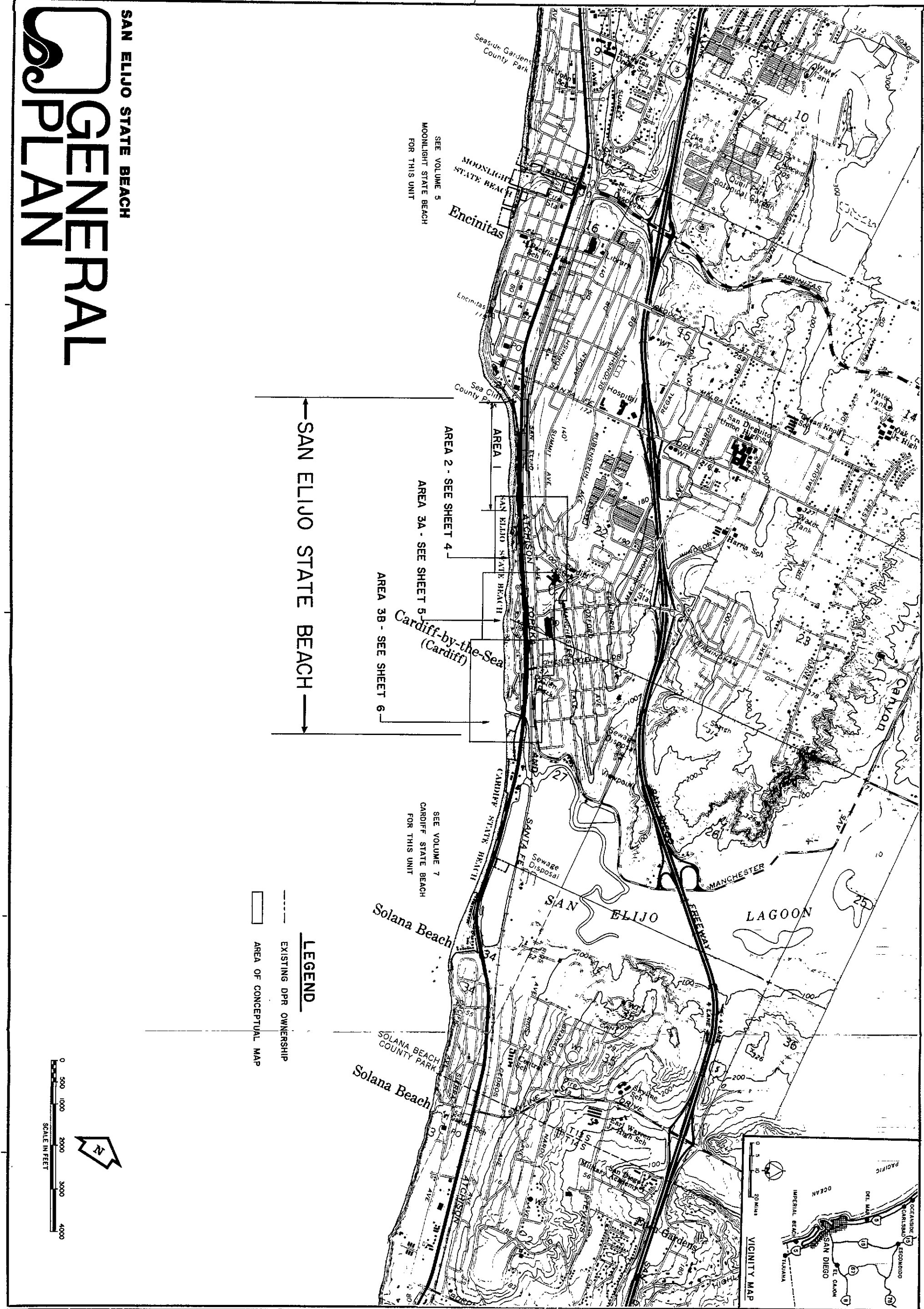


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SHEET NO. 1 OF 6	DRAWING NO. 19151	SAN ELIJO STATE BEACH SAN DIEGO COAST GENERAL PLAN VICINITY MAP	RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION	REVISIONS	DATE	DESIGNED
			APPROVED _____ DATE _____			DRAWN

GENERAL PLAN

SAN ELIJO STATE BEACH



← SAN ELIJO STATE BEACH →

SEE VOLUME 5
MOONLIGHT STATE BEACH
FOR THIS UNIT

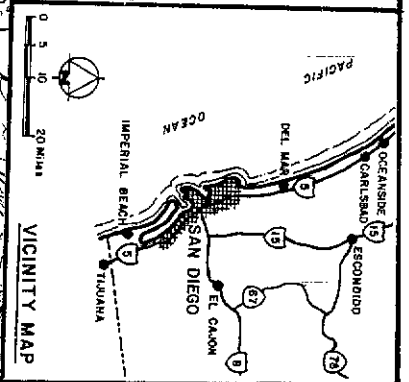
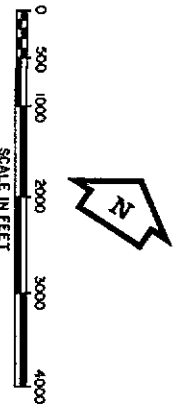
AREA 2 - SEE SHEET 4

AREA 3A - SEE SHEET 5

AREA 3B - SEE SHEET 6

SEE VOLUME 7
CARDIFF STATE BEACH
FOR THIS UNIT

LEGEND
 - - - - - EXISTING DPR OWNERSHIP
 [] AREA OF CONCEPTUAL MAP



SAN ELIJO STATE BEACH
SAN DIEGO COAST GENERAL PLAN
 INDEX MAP

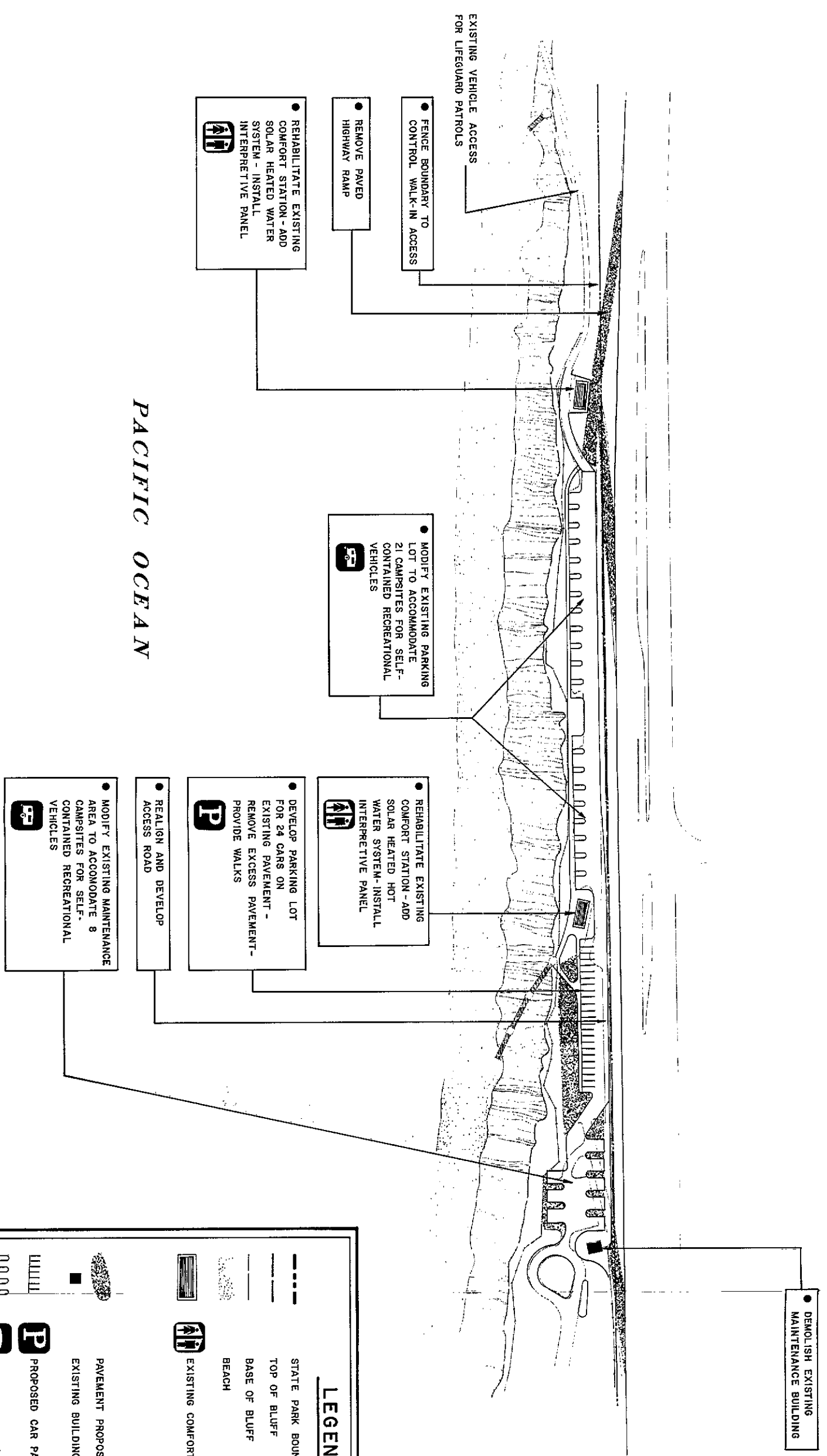
RESOURCES AGENCY OF CALIFORNIA
 DEPARTMENT OF PARKS AND RECREATION
 APPROVED _____ DATE _____

REVISIONS	DATE	DESIGNED
		DRAWN
		CHECKED

DRAWING NO. 19151
 SHEET NO. 3 OF 6

AREA 2

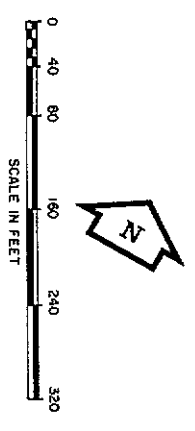
PACIFIC OCEAN



LEGEND

- STATE PARK BOUNDARY
- TOP OF BLUFF
- BASE OF BLUFF
- BEACH
- EXISTING COMFORT STATION
- PAVEMENT PROPOSED FOR REMOVAL
- EXISTING BUILDING TO BE DEMOLISHED
- P PROPOSED CAR PARKING
- P PROPOSED CAMPSITES
- RECOMMENDED ACTIONS

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. 19151	SAN ELIJO STATE BEACH SAN DIEGO COAST GENERAL PLAN		RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION		DESIGNED
	CONCEPTUAL DETAIL - AREA 2		APPROVED _____ DATE _____	DRAWN	CHECKED
	SHEET NO. 4 OF 6			REVISIONS	DATE

SAN ELIJO STATE BEACH GENERAL PLAN

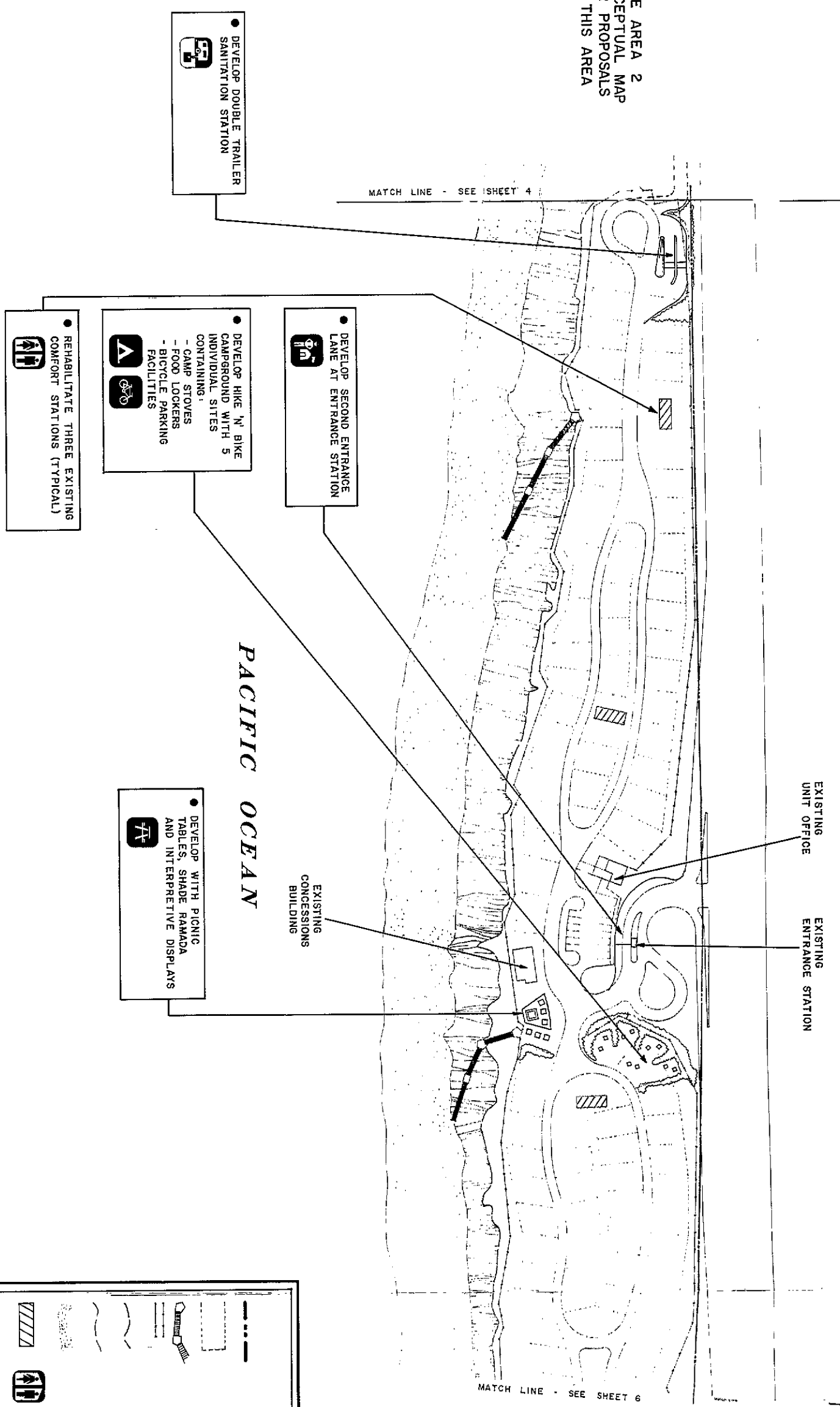
SAN ELIJO STATE BEACH

SEE AREA 2
CONCEPTUAL MAP
FOR PROPOSALS
IN THIS AREA

AREA 3.A

MATCH LINE - SEE SHEET 4

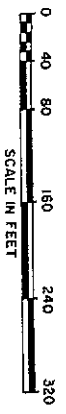
MATCH LINE - SEE SHEET 6



LEGEND

- STATE PARK OWNERSHIP BOUNDARY
- EXISTING UNIT CAMPSITES
- EXISTING BEACH ACCESS
- EXISTING FENCE LINES
- TOP OF BLUFF
- BASE OF BLUFF
- BEACH AREA
- EXISTING COMFORT STATION PROPOSED FOR REHABILITATION
- PROPOSED VEGETATION BUFFER
- RECOMMENDED ACTIONS

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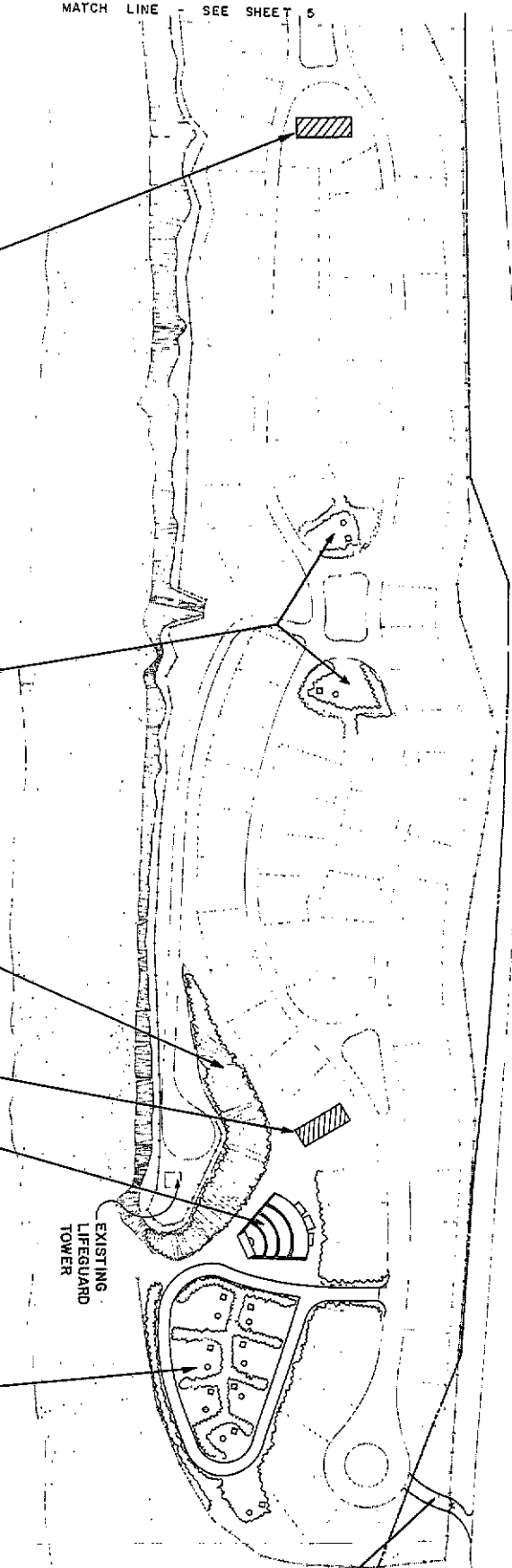
SHEET NO. 5 OF 6	DRAWING NO. 19151	SAN ELIJO STATE BEACH SAN DIEGO COAST GENERAL PLAN CONCEPTUAL DETAIL - AREA 3.A		RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION APPROVED _____ DATE _____		REVISIONS	DATE	DESIGNED
		DESIGNED	DRAWN	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED
		CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED	CHECKED

SAN ELIJO STATE BEACH GENERAL PLAN

SAN ELIJO STATE BEACH

AREA 3-B

MATCH LINE - SEE SHEET 5



● MODIFY EXISTING CAMPGROUND AREA TO ADD 2 CAMPSITES

● REHABILITATE EXISTING COMFORT STATION

● ESTABLISH NATIVE VEGETATION FOR EROSION CONTROL ON EXPOSED SLOPES

● DEVELOP INTERPRETIVE PROGRAM CENTER FOR DISPLAYS, SHOWS, AND CAMPFIRE PROGRAMS

● DEVELOP 8 ADDITIONAL CAMPSITES WITH PAVED ACCESS ROAD

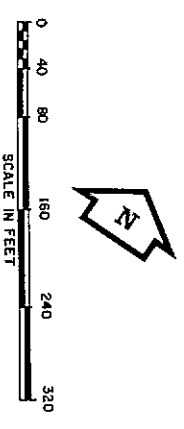
● REHABILITATE EXISTING COMFORT STATION

● INSTALL PAVED RAMP TO HIGHWAY WITH GATE FOR EMERGENCY VEHICLE ACCESS

LEGEND

- STATE PARK BOUNDARY
- TOP OF BLUFF
- BASE OF BLUFF
- BEACH AREA
- EXISTING CAMPSITE
- EXISTING COMFORT STATION
- PROPOSED VEGETATION BUFFER
- PROPOSED INTERPRETIVE PROGRAM CENTER
- RECOMMENDED ACTIONS

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DRAWING NO. 19151	SAN ELIJO STATE BEACH		REVISIONS	DATE	DESIGNED
	SAN DIEGO COAST GENERAL PLAN				DRAWN
	CONCEPTUAL DETAIL - AREA 3-B				CHECKED
SHEET NO. 6	RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION		APPROVED _____ DATE _____		

THE SAN DIEGO COASTAL STATE PARK SYSTEM GENERAL PLAN

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