UNIT 663

SAN ONOFRE STATE BEACH

GENERAL DEVELOPMENT PLAN

September 1972
SAN ONOFRE STATE BEACH

Resource Management Plan and General Development Plan for
This report was prepared under the supervision of:

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by

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EXCERPTS FROM THE MINUTES OF OCTOBER 1972
San Onofre State Beach
Resource Management Plan and General Development Plan

It was moved by Commissioner Bonnicksen, seconded by
Commissioner Starkey, and carried by roll call vote with
Commissioner McMillan voting NO that the following
resolution be adopted:

WHEREAS the Director of the Department of Parks and
Recreation has presented to this Commission for approval
the proposed Resource Management Plan and General
Development Plan for San Onofre State Beach; and

WHEREAS this reflects the long-range development plan
so as to provide for the optimum recreational use of the
shoreline and related upland areas consistent with their
protection;

NOW, THEREFORE, BE IT RESOLVED that this Commission
approves the Department of Parks and Recreation's
"Resource Management Plan and General Development Plan for
San Onofre State Beach", dated September 1972, subject to
such environmental changes as the Director shall determine
advisable and necessary to implement carrying out the
provisions and objects of said plan; and

BE IT FURTHER RESOLVED that the agricultural land
along San Mateo Creek, which was included in the area as
a provision of the lease, be reserved for agricultural
purposes.

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Re.
SAN ONOFRE STATE BEACH
RESOURCE MANAGEMENT PLAN and
GENERAL DEVELOPMENT PLAN dated September 1972

Note: This plan was made obsolete when the Park and Recreation
Commission approved a "Revised General Plan" in March 1984. The Final
was printed in June 1984. Though this revision is sometimes listed as an
"Amendment" it can be considered a new General Plan.
II Need

San Onofre State Beach lies between Los Angeles and San Diego, two of the fastest growing metropolitan areas in California. It is located within the zero-to-one-hour travel time zone of the Los Angeles metropolitan complex and within the one-to-two-hour zone of San Diego metropolitan area. It is now apparent that recreational areas close to large population centers will be critically needed to meet recreation demands in the years to come. San Clemente State Beach, just upcoast of San Onofre, contains 157 campsites which were filled to capacity 143 nights during the 1971-72 fiscal year. Nearly 50,000 prospective campers were turned away during this period.

Projected Population*

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<tr>
<td>Los Angeles-San Bernardino-Riverside metropolitan complex</td>
<td>9,549,700</td>
<td>10,980,200</td>
<td>12,899,800</td>
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<tr>
<td>San Diego metropolitan area</td>
<td>1,245,100</td>
<td>1,679,200</td>
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*Department of Finance, 9/71

Recreation Demand

The recreation demand for the residents of these metropolitan areas is increasing faster than the population growth. Between 1960 and 1980 the population of the San Diego metropolitan area is expected to increase 61 percent while the recreation demand is expected to increase 85 percent.

In this metropolitan area the recreation demand will be increasing at a rate over 1.35 times that of the population increase during this 20-year period.

The new facilities needed from all suppliers to meet the existing and future recreation demands of these metropolitan areas within their respective travel time zones from San Onofre include:

Zero-to-One Hour Travel Time Zone

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<tbody>
<tr>
<td>Los Angeles-San Bernardino-Riverside metropolitan complex</td>
<td>3,678</td>
<td>4,618</td>
<td>7,658</td>
</tr>
<tr>
<td>Camp units</td>
<td>3,678</td>
<td>4,618</td>
<td>7,658</td>
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<tr>
<td>Picnic units</td>
<td>8,888</td>
<td>14,068</td>
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One-to-Two Hour Travel Time Zone

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<tbody>
<tr>
<td>San Diego metropolitan area</td>
<td>723</td>
<td>933</td>
<td>1,583</td>
</tr>
<tr>
<td>Camp units</td>
<td>723</td>
<td>933</td>
<td>1,583</td>
</tr>
<tr>
<td>Picnic units</td>
<td>512</td>
<td>722</td>
<td>1,312</td>
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III Resources Analysis

The purpose of this chapter is to analyze and interrelate the recreational resources within the park area. It will explore the question of what we have to work with and will provide the basic rationale for the allowable use intensity plan and the "General Development Plan" set forth in Chapter 5.

The resources analysis is depicted by six maps, each of which is discussed in the following text. Five of the maps show the resources that should be preserved, and one may deals with hazardous areas. The dark areas of the maps represent the areas of highest resource value; the lighter areas are those with less resource value. In order to minimize damage to natural resources, the most intensive development should take place in the lightest areas; less intensive development should be located on slightly darker areas; and the darkest areas should receive minimum use and development.
A. Hazards

The purpose of this map is to indicate general areas of geologic hazards. A more detailed study will be necessary to determine specific building sites.

Slope Stability

In addition to the obvious hazards inherent in all precipitous terrain, many of the steep cliffs and scree on the upper portion of this map area are subject to landslide. Some factors considered in determining dangers caused by slope instability are rock type, structure, and geomorphology. A study of these factors resulted in an estimate of net stability expressed in terms of relative propensity to slide.

Sink Holes

The sink holes, all located in an area roughly 40 yards wide by 120 yards long, vary in diameter, but can be as much as 80 feet deep with nearly vertical sides. Many of these holes are undercut and concealed by brush, making them extremely dangerous to the public.

Flash Floods

Although annual precipitation is only about 13 inches, this area lies in a zone of high intensity rainfall. Average intensities are 0.7 inches per hour, and intensities many times this amount are possible. These short-period high-intensity rains, combined with relatively impervious ground surfaces and steep slopes, create a potential for flash flooding in six canyons. The relative danger of flash floods in the six drainage basins are indicated on the map numerically in decreasing order of hazard.

San Mateo Creek

The surface water flow of San Mateo Creek, which drains a watershed of 132 square miles, is subject to wide fluctuations in volume and maximum discharge from year to year. Although its average discharge is only 5.53 cubic ft/sec, its maximum discharge in 1966 was 1,760 cubic ft/sec.

B. Wildlife Habitat

The San Onofre State Beach contains eight biotic communities which attract numerous species of wildlife. On the coastal portions these biotic communities include sublittoral, littoral, coastal strand, and coastal sage scrub. Biotic communities in the inland areas include riparian, desert wash, coastal sage scrub, and California coastal chaparral.

Of special note are the extensive little neck clam beds. The most productive areas are north of the nuclear powerplant. Additional areas are located where the drainage empties into the ocean. The habitats of highest quality and state-wide significance are identified by the dark tone on the map. The areas of good habitat quality are indicated by the lighter tone, and those areas of lower quality are unshaded.

C. Vegetation Resources

Twelve vegetation communities are identified on the site. Five are upland communities subjected to occasional flooding. The remaining seven comprise the wetland communities that generally occupy the low-lying areas below the 10-foot contour level. The freshwater and brackish marshes located at the mouth of San Mateo Creek are some of the finest marshlands on the Southern California coast. The areas within the site contain good native riparian communities in a mosaic of predominantly annual grasses. The plant communities of unique quality (state-wide significance) are indicated by the darkest tone. Those areas of relatively high value are indicated by the lighter tone.

D. Scenic Resources

The coastal cliffs and beaches have great scenic appeal, but there are few interior areas that offer scenic resources of state-wide significance. The following areas are marked on the map as having scenic value.

1. The coastal bluffs and the beach area are classified as areas of prime scenic quality.

2. The Upper Cristianitos Creek, which contains a number of biotic communities with a diversified plant and animal population, has scenic value.

3. The agricultural open space provides a scenic element which is becoming increasingly rare in the coastal zone.

4. The pond area in the southeast corner of the inland portion of the freshwater lagoon (not included in the lease) exhibit high scenic qualities as viewed from the highway.

E. Archeological Resources

The Indians living in this area at the time of first contact by the Spanish were the Juaneño. Their village on the downcoast side of San Onofre Creek was Hachms, and the village on the upcoast side of San Mateo Creek was Panhe. A generalized survey resulted in the discovery of six archeological sites previously unrecorded. Three known sites were also reviewed because of their close proximity to the unit.

Of the six sites within the park, the one at the confluence of San Mateo and Cristianitos Creeks is by far the largest and most complex. The other sites appear to have sustained limited or specialized use.

F. Agricultural Resources

Approximately 500 acres of the valley of San Mateo Creek are presently used for vegetable production. Nine fresh-market vegetable crops are being cultivated on this land, which is under lease from the Navy. California's Comprehensive Ocean Area Plan states:

The location of prime coastal agricultural land in relation to the moderating marine influences makes them a unique and limited state and national resource. There is no substitute in North America for certain of the combinations of soil and climate that exist in California's coastal zone.

These 500 acres along San Mateo Creek represent about 5 percent of the county's vegetable production in this prime coastal area. If subdivisions continue at their present rate, less than half of this coastal agricultural land will be available within the next 20 years.

Eight of the nine crops currently grown on the site have a strong dependence on this coastal agricultural land. The economic value of the crops is approximately $1.5 million annually. Nearly $370,000 are paid in wages, and additional employment benefits are indirectly generated through related jobs that depend on agriculture. Considering the high positive social and economic impacts of the existing agricultural activities, it would appear this land use activity should be retained. Preservation of this agricultural land is also enjoined by Article 25 of the California Constitution which states, "It is in the best interest of the State to maintain..."
G. Allowable Use Intensity Map

The shading on the six resources maps has identified those areas that should be preserved or that should receive restricted use because of natural hazards or because of resources that, being rare, unique, or of a fragile nature, could be destroyed by hard use.

Conclusions based on the above studies are depicted on the allowable use intensity map. Use intensity signifies the number of people per acre allowable in an area at one time without doing irreparable damage to the natural resource being used. The people-per-acre factor must also include space for service facilities -- parking, restrooms, picnic tables, and the like.

High Use Intensity - 30 or more people per acre

Approximately 205 acres distributed through all three parcels are suitable for high use intensity, which is typified by beach use. It is considered that 100 square feet per person is adequate for beach use, which develops a use intensity of 435 people per acre.

Another example of high use intensity can be found in picnic areas, though such use is just at the beginning of high intensity use. Picnic tables 30 to 35 feet apart will develop a use of about 30 people per acre. Present thinking is that family groups will not voluntarily locate closer than 30 to 35 feet from each other, which makes it inadvisable to try to achieve a higher use density in picnic areas.

Moderate Use Intensity - 8 to 30 people per acre

Moderate use intensity is appropriate to areas with average resources values, moderately stable soils and geology, moderate slopes, and the like. Approximately 240 acres in parcels 1 and 3 have been found suitable for moderate use.

A typical example of this use would be campsites located 100 feet on center. This generally accepted spacing standard of 4 camps per acre generates a use intensity of 16 to 20 people per acre.

Low Intensity Use - Less than 8 people per acre

Low intensity use areas may contain rare, unique, or fragile resources that can be destroyed by higher intensity use, or they may contain hazardous areas.

Approximately 2,000 acres in parcels 1 and 3 are considered suitable for low intensity use only. These areas can be developed for hiking, nature study, and primitive camp developments.

Agricultural Use

Approximately 500 acres devoted to coastal row crop cultivation have been reserved for agricultural use. This area was described above during discussion of the agricultural resources overlay.
IV Resource Management Plan

Declaration of Purpose

San Onofre State Beach is established to make available to the people the outstanding beach and related features along the northern coast of San Diego County, including important uplands east of the Interstate 5 Freeway in the valley of San Mateo Creek. It will also provide for the enjoyment and use of these areas in ways that take full advantage of the recreational opportunities thus afforded while at the same time protecting the natural and cultural values of the region.

Declaration of Management Policy

The Department of Parks and Recreation will manage the lands and their resources at San Onofre State Beach so as to provide for optimum recreational use of the shoreline and related upland areas consistent with their protection. The Department will also protect from damage or deterioration those natural and cultural features that lend distinction to this coastal region, including, but not limited to, the beaches, the spectacular coastal bluffs, the best examples of natural vegetation, the wetlands near San Mateo Creek, notable geological phenomena, fossilized plants and animal life, the remains of Indian civilization, and sites associated with historical events.
V  The Plan for Development

Each parcel has distinctly different physical characteristics which determine the uses to which it can best be adapted. The proposed development of each parcel is based on the attached map entitled "General Development Plan," and each parcel will be discussed separately in the narrative which follows.

Circulation

Since these parcels are separated by intervening pieces of land, every possible means of transportation must be developed to link them together for use as a single park unit.

The abandoned Highway 101 helps provide access from Interstate 5 at Buellton Interchange to a link between parcels 1 and 3. Access to parcel 1 is by foot and by the off-ramp for northbound traffic leads to a San Clemente frontage road which provides access to Parcel 1. A Citraella off-ramp and crossing I-5 on an overpass to reach the frontage road leading to Parcel 1. A new interchange is proposed by the Division of Highways at this location.

This interchange will provide direct access to parcel 1 to both northbound and southbound vehicles. It is estimated that this interchange will be completed in 1979.

Access from parcel 1 to the other two parcels is possible but not convenient. It is required referring to the freeway and traveling on it for about 4,200 feet to access parcel 2, and approximately 7,000 feet to access parcel 3.

A bicycle trail provided by the Camp Pendleton Marine Base system into the park would solve this problem for the north-oriented, cold-skinned beach route which has been and still is being used as a military road. It provides bicycle access from parcel 1 to Citraella Road across San Mateo and San Clemente creeks to a man-made trail of parcel 2 and 3. In addition, there are culverts accessible from the bicycle trail which run under I-5, the railroad, and the abandoned Highway 101. Some of the culverts, because of extreme strength, provide excellent opportunities for, pedestrian access to the beach (from parcel 1). One of the bicycle trail should be extended to include35 miles of on-road and on-ramp facilities between parcel 1 and culverts, leading to the beach.

The railroad which parallels parcels 2 and 3 is also potential for increasing the accessibility of the beach parcels. In fact, AMTRAK has already brought underprivileged youth from Los Angeles into parcel 3 on an experimental basis.

General Use

Parcel 3

This parcel is comprised of three land forms: the coastal plain, the dunes, and the beach.

The coastal plain is a valuable resource, being one of the few such areas along the southern California coast. It is still in its natural state. The plain does not indicate intensive development on the coastal plain except for construction of camp areas, and daytime parking facilities on the abandoned right of way of old Highway 101 and trails across the coastal plain to provide access.

The cliffs have magnificently scenic quality and will not be developed except for hiking trails to provide beach access.

The beach is sandy, and the area is good for swimming. The usable shoreline of the beach varies with the season and the tides. At the highest of high tides the beach is completely inundated and at the lowest of low tides the beach is well over 100 feet wide. For planning purposes, an average beach width of 70 feet was used, which, over the three east-west miles of beach frontage, gives a total of 27 acres of sandy beach. As an average distribution of 100 square feet per person, the beach will support approximately 1,700 people at any one time.

When parcel 3 is fully developed, its campgrounds and day use parking facilities will support about 350 people at any one time. However, that figure will be greatly increased by beach users from parcel 1 and from outside the park.

Parcel 2

The total length of the beach in parcel 2 is about 8,000 feet, with the lower 6,000 feet being used by members of the Marine Base for use at the Marine Base Club. However, the base does permit development of this area as a state park, and it is thought that the development of the Eastern Beach Club could provide access to a new beach area.

It is of the utmost importance that development concerning the acquisition of the Eastern Beach Club be pursued. The Eastern Beach Club has many attributes desirable for public recreation; for example, it is 300 feet wide, sandy, and is a very good location for boating. The land between the beach and inland areas is simple and direct. In addition, acquisition of this area will allow a great improvement in the present beach-motor vehicle access to parcel 2. This 8,000 foot beach is the only stretch of beach in the San Clemente area which is truly adaptable to intensive public use. Ocean-oriented recreation could be provided for 4,200 people in this comparison on a small (85 acre) portion of parcel 3.

The immediately usable portions of parcel 3 are comprised of the same three land forms as parcel 3: the coastal plain, the dunes, and the beach.

The coastal plain has been filled with earthworks excavated from the marine power plant site. The natural vegetation has been destroyed, leaving the area bare. Overnight camping in this area is not indicated on the plan. However, the area should be utilized for camping and for creating a more hilly environment. camping on this area should be ideally suited for the future.

The cliffs have inherent scenic quality and will not be developed except for hiking trails to provide beach access.

The 3,400 foot long beach frontage within parcel 3 that can be developed immediately is nearly throughout its length and averages nearly 350 feet in width. Surfing is excellent, and the sandy portions can be developed for day use beach activities.

Part of this beach is comprised of sand large enough to build a large of imaginative structures standing in the surf, which make the area available for the casual day use beach activities. However, these rocks come from a natural offshore reef which makes some of the best surfing in the world. In the plans concept, this development of this area as a surfing beach.

Parking for this beach is located on a narrow stretch of road at the base of the cliffs, Little, if any, of the sandy beach will be within the parking area.

It is not appropriate to provide transportation to this parcel from parcel 1 because this beach will be filled with密度 by the people using the facilities developed within the parcel.

Parcel 1

This parcel is comprised of four land forms quite different from those of parcel 2 and 3. Beachfront forms include the cliffs, the flats adjacent to the beach plain, gently sloping lands, and steep hillocks. The flood plain includes the flood area of the San Mateo and Clementine creeks. Although dry during the summer season, these creeks often put their backs under the water during the winter season and flood an easily accessible area adjacent to their channels. No developments are indicated in this flood area.

The flats adjacent to the flood plains could potentially flood, but they are high enough above the flood plains to be safe for recreational development. A large portion of this land is included on the plan as reserved for agricultural use. The campground located at the northern extreme of parcel 1 is on a flats adjacent to the flood plain. Scattered native evergreen trees in this area contribute to an excellent camping environment. The gently sloping lands also provide opportunities for recreational development, and as such lands have been indicated on the plan as areas that can potentially be used as part of the camping area on gently sloping lands. The beauty of the pinelands is enhanced for camps, and the park in general through the creation of an environment for picnicking and related activities. There are some natural oceonward trails along the upper bank which will provide shaded areas for immediate public use. The large camping area on the plan is apparently being used for agricultural purpose, and planting to create a better environment for campers will be no problem in this rich deep soil.

The steep unstable hillocks have fragile soils and geology and are not suitable for development. Hiking trails already exist through these hillocks, and such trails will be included. The plan indicates a network of hiking and nature trails, some leading to hike-in camp areas located in the flatter portions. These trail hikes will provide many scenic vistas and miles of enjoyable hiking.

The plan for parcel 3 includes a total of 550 campers, group camping for 100 people, 100 primitive tent campers, and a 200-car parking area for day use facilities, which include picnicking facilities, bicycle rentals, and interpretive facilities.

Utilities

Water

The only available water source is the water system operated by the City of San Clemente. The park may be able to tap into the system main 1,000 feet east of 10th Street. The City is planning to tap into the system main 1,000 feet east of 10th Street.

The alternative sources considered were the Camp Pendleton Marine Base water supply, however, the plan states that the Corps of Engineers will provide water for the park.

Electricty

The Southern California Edison Company has power available to all three parcels, and this supply is the only practical source.

Sewage

The following alternatives for sewage disposal have been considered:

1. A collection system exporting sewage to the City of San Clemente with lift stations.
2. A collection system exporting sewage to the Camp Pendleton Marine Base treatment plant with lift stations.
3. A collection system, treatment plant, and spray fields or spreading basins on park lands.
4. A collection system and on-site treatment plant with export to effluent to the Camp Pendleton Marine Base treatment plant.

Consideration of these alternatives provided the following information:

1. The City of San Clemente is asking a $200,000 connection fee plus a fee for treatment of all such sewage. The city would also expect the State to participate in the cost of a large interceptor line. The minimum cost to the State for this participation would be $600,000.
2. The Corps of Engineers Marine Base treatment facility is now operating at maximum capacity and is not capable of handling the additional sewage generated by our development.
3. An on-site sewage treatment facility and on-site disposal is possible, but the City of San Clemente is opposed to the discharge or effluent around the San Clemente Grade. Basic is subject to the control of the Corps of Engineers as a water recreation and recycling basin.
4. An on-site sewage treatment facility with export of effluent to the Camp Pendleton Marine Base treatment plant seems feasible. While the Marine Base facility is operated by the Corps of Engineers as a water recreation and recycling basin.
INTRODUCTORY ANALYSIS

Two major interpretive themes can be developed immediately at San Onofre State Beach: ocean-oriented activities and geology. Additional information from future studies may allow significant development of other themes, such as the Juaneño and earlier Indian cultures, local plant and animal life, and perhaps the rapidly disappearing coastal row crop agriculture. These major themes will be discussed later in more detail.

At the outset, it should be understood that further land acquisition is necessary in order to realize fully the long-range interpretive goals being discussed and to present adequately the primary interpretive themes of the San Onofre area. The outstanding and historically significant beaches at the mouths of San Mateo and San Onofre Creeks and the valuable marshlands just inland from the mouth of San Mateo Creek should be added to the park at the earliest possible date.

Ocean-Oriented Recreation

Surfing

The San Onofre area is historically noted for its excellent surfing beaches, which provide an interpretive analysis of surfing from its Hawaiian origins to modern times. The advance in surfing techniques and surfboard construction should be an integral part of the interpretive program. In surfing a wide range of waves can be explored, from small to fast breaks, and the resulting effects can be seen on the beach and in the water. The original equipment used by the surfers and the techniques they used to ride the waves can be shown to visitors.

Beach Activities

Interpretation of ocean-oriented activities could include presentations on swimming, sunbathing, and scuba diving, among others. These activities can be shown to visitors and the various forms of equipment used.

Safety

Instruction in water safety and courtesy could be part of all presentations on ocean-oriented activities.

Relationship of Sea and Land

Tied in with interpretation of ocean-oriented activities and dependent to other interpretive themes, such as geology and land forms, would be the description of the interactions of the land and the sea, which have shaped the area's recreational features. Ocean waves, currents, the origin and movement of beach sand, and sea and stream erosion all contribute to development of the major interpretive themes.

Geology and Land Forms

The long sandy beach and vegetation of clumps or clumps of grass and beach grasses are phenomena of both the major and minor interpretive themes. The long sandy beach and vegetation of clumps or clumps of grass and beach grasses are phenomena of both the major and minor interpretive themes.

Archaeological Features

Evidence of the Juaneño and earlier Indian cultures may be of major importance in future interpretive themes. Additional information on this theme is needed.

Biologic Communities

The many biotic communities in the area should be included in general interpretive programs. Emphasis could be placed on the exceptionally fine stands of large trees, especially the coast live oak (Quercus agrifolia) and the coast redwood (Sequoia sempervirens). The presence of these unique communities, along with the associated fauna, should be emphasized.
Environmental Impact Statement
Unavoidable adverse environmental effects are almost nonexistent. The abandoned right of way of Highway 101 is already in full use for camping and day use parking, and there are three developed trails to the beach. Actually, the project will do little more than upgrade the existing facilities.

Mitigation measures will include safety fencing, which will serve the dual purpose of protecting the public and the environment. Trails will be so well designed that visitors will be discouraged from causing erosion by choosing their own way to the beach. Adequate signs and interpretive facilities will inform the public of the value of the resources and the need to preserve them.

Since the area is already in use, the only alternative to the development would be to close the area to the public and terminate the use of the facilities there. The result of this would be a public outcry followed by a demand for increased use at nearby parks, all of which are heavily used at the present time.
References

1. Agricultural Extension Service

2. California Cooperative Extension Area Plan

3. California Department of Mines and Geology, 1971

4. San Diego County, California Department of Mines and Geology, 1971

5. University of California