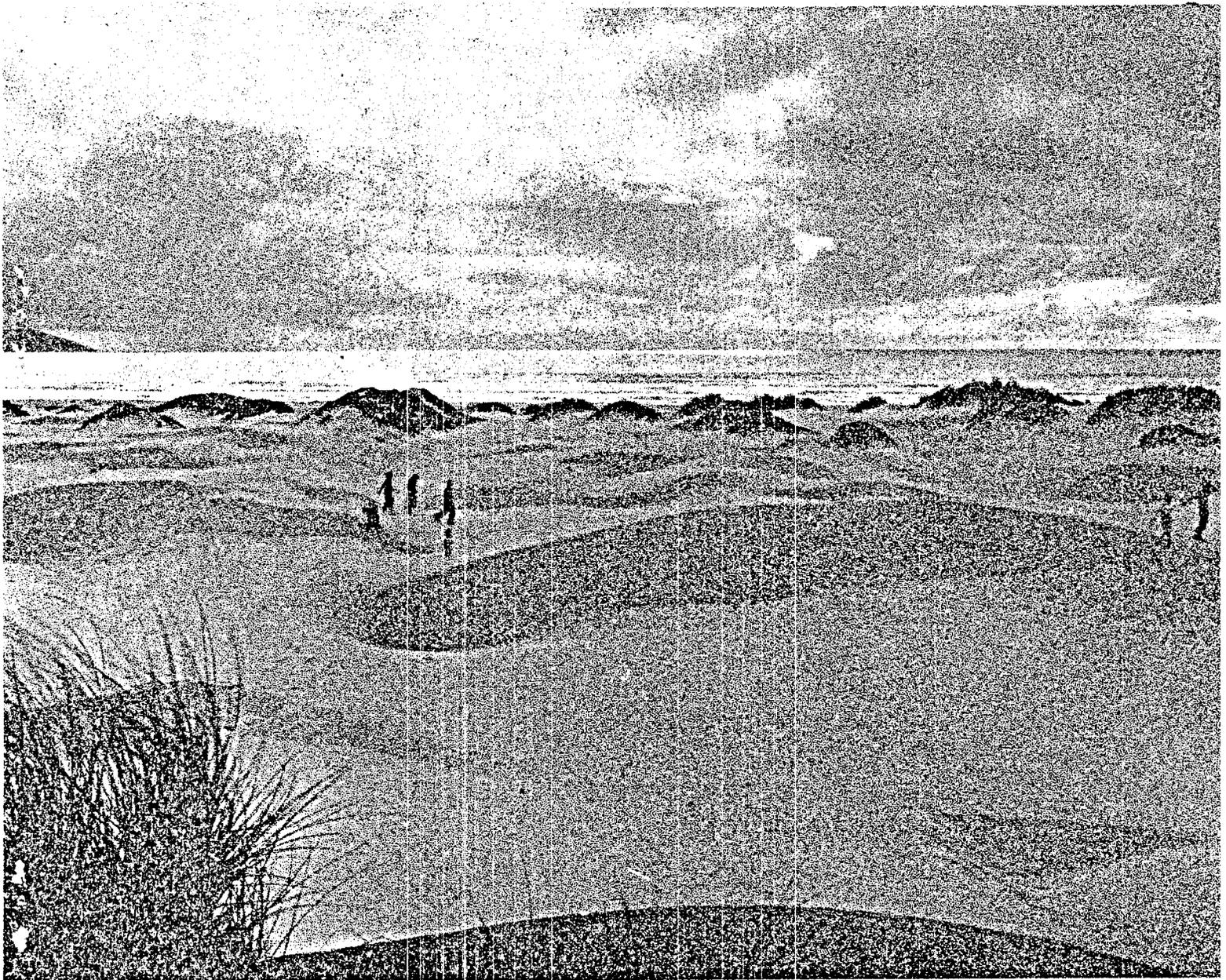


PISMO STATE BEACH and PISMO DUNES STATE VEHICULAR RECREATION AREA

GENERAL DEVELOPMENT PLAN AND RESOURCE MANAGEMENT PLAN



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

April 1975

Pismo State Beach
and
Pismo Dunes
State Vehicular Recreation Area

GENERAL DEVELOPMENT PLAN AND
RESOURCE MANAGEMENT PLAN

April 1975

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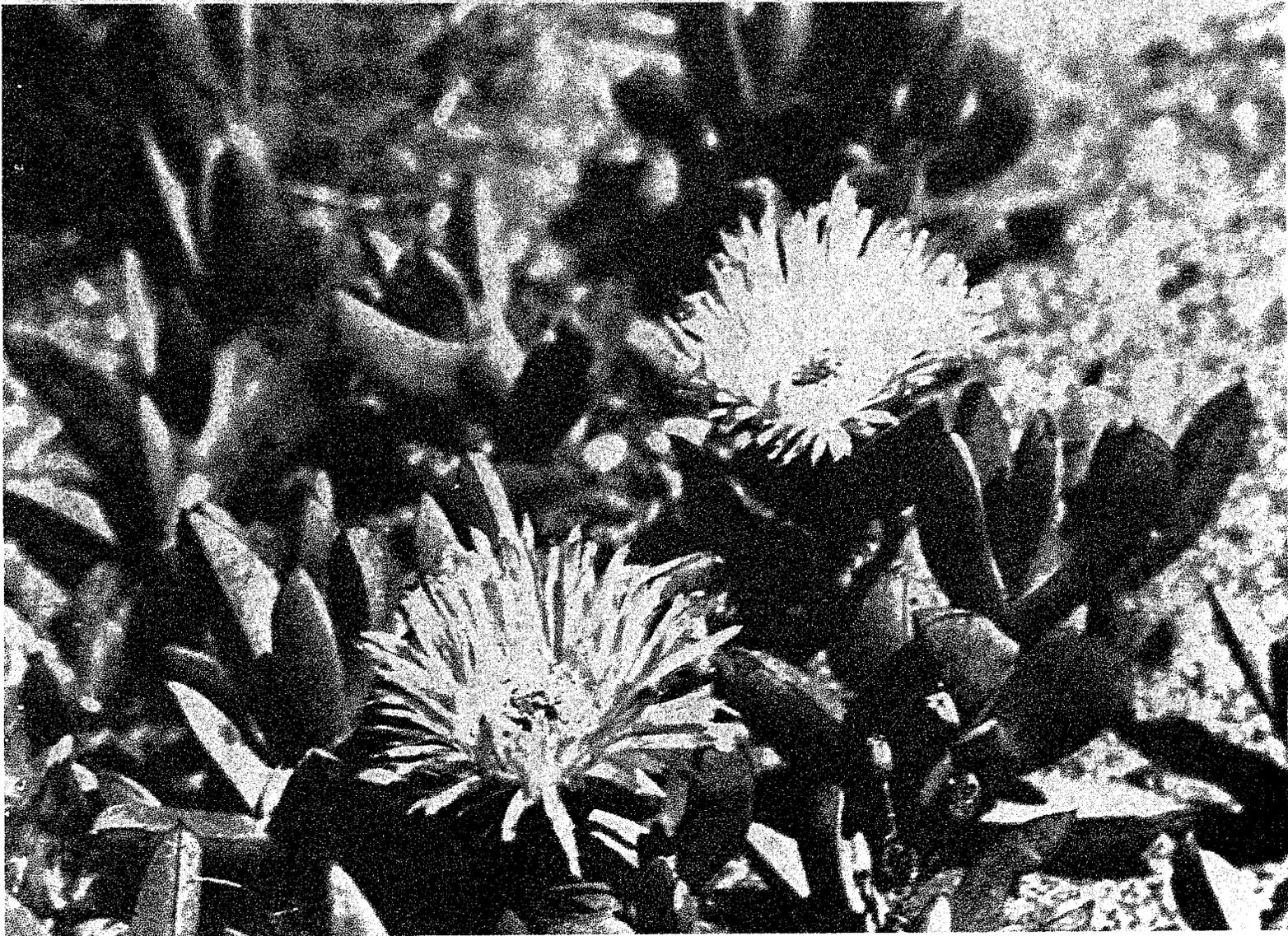
CONTENTS

	<i>Page</i>
INTRODUCTION	1
Plan Purpose	3
Plan Format	5
Summary of Recommendations	7
Area of Study	12
EXISTING SITUATION	15
Acquisition and Classification	17
Administration of Lands	18
Public Facilities	18
Fees	20
Attendance	21
Recreation Use Patterns	25
Problems and Conflicts	26
FUTURE SITUATION	29
RESOURCE ANALYSIS AND RESOURCE MANAGEMENT PLAN	33
Resource Analysis	35
Resource Management Plan	41
PLAN ANALYSIS	45
Acquisition	47
Control	48
Beach Day Use	49
Overnight Use	52
Primary Access to Pismo Dunes State Vehicular Recreation Area	54
Secondary Access to Pismo Dunes State Vehicular Recreation Area	55
Utilities	55
Carrying Capacity	57
PLAN ELEMENTS	59
Pismo State Beach	61
Pismo Dunes State Vehicular Recreation Area	63
Environmental Impact Report	73
APPENDIX	77
Selected References	79
Copy of Letter from South Central Coast Regional Commission	81

List of Figures

1.	Location Map	4
2.	Study Area	11
3.	Physical Characteristics	13
4.	Ownership and Classification Status	16
5.	Administration of Lands	19
6.	Instantaneous Count and Distribution of Vehicles	22
7.	Origin of Visitors to Pismo State Beach	23
8.	Biotic Zones	34
9.	Carrying Capacity of Individual Areas	56
10.	Pismo State Beach and Pismo Dunes State Vehicular Recreation Area General Development Plan	65
11.	Pismo State Beach and Pismo Dunes State Vehicular Recreation Area Land Use Plan	67
12.	Pismo State Beach and Pismo Dunes State Vehicular Recreation Area Recreation Elements	69
13.	Sequence of Plan Implementation	71

INTRODUCTION



Plan Purpose

Forty years have passed since the State of California first acquired lands for recreational purposes at Pismo State Beach. During this period of time, millions of visitors from all sections of California have enjoyed this magnificent beach. In 1934, when this unit was first established, the population of California was approximately 6 million; today the population of this state approaches 21 million. This population growth, plus significant changes in travel and recreation trends, has resulted in tremendous pressures on all of California's public beaches in general and on Pismo State Beach in particular.

Overcrowded conditions reach their peak at Pismo State Beach and at Pismo Dunes State Vehicular Recreation Area during the major summer holidays, when tens of thousands of people converge in pursuit of diversified recreational experiences. These overcrowded conditions have resulted in problems involving conflicts of recreational use, congestion, safety, and health. Therefore, one purpose of this plan is to recommend an immediate course of action to remedy these existing problems.

However, a second and no doubt more important purpose of this plan is to provide Pismo State Beach and Pismo Dunes State Vehicular Recreation Area with a document that will guide the growth and management of resources well into the future. In addition, the plan will serve as an informational document for the public, the Legislature, the California Coastal Zone Conservation Commission, and local planning entities. Once approved, the plan will be subject to review and updating by the State Department of Parks and Recreation.



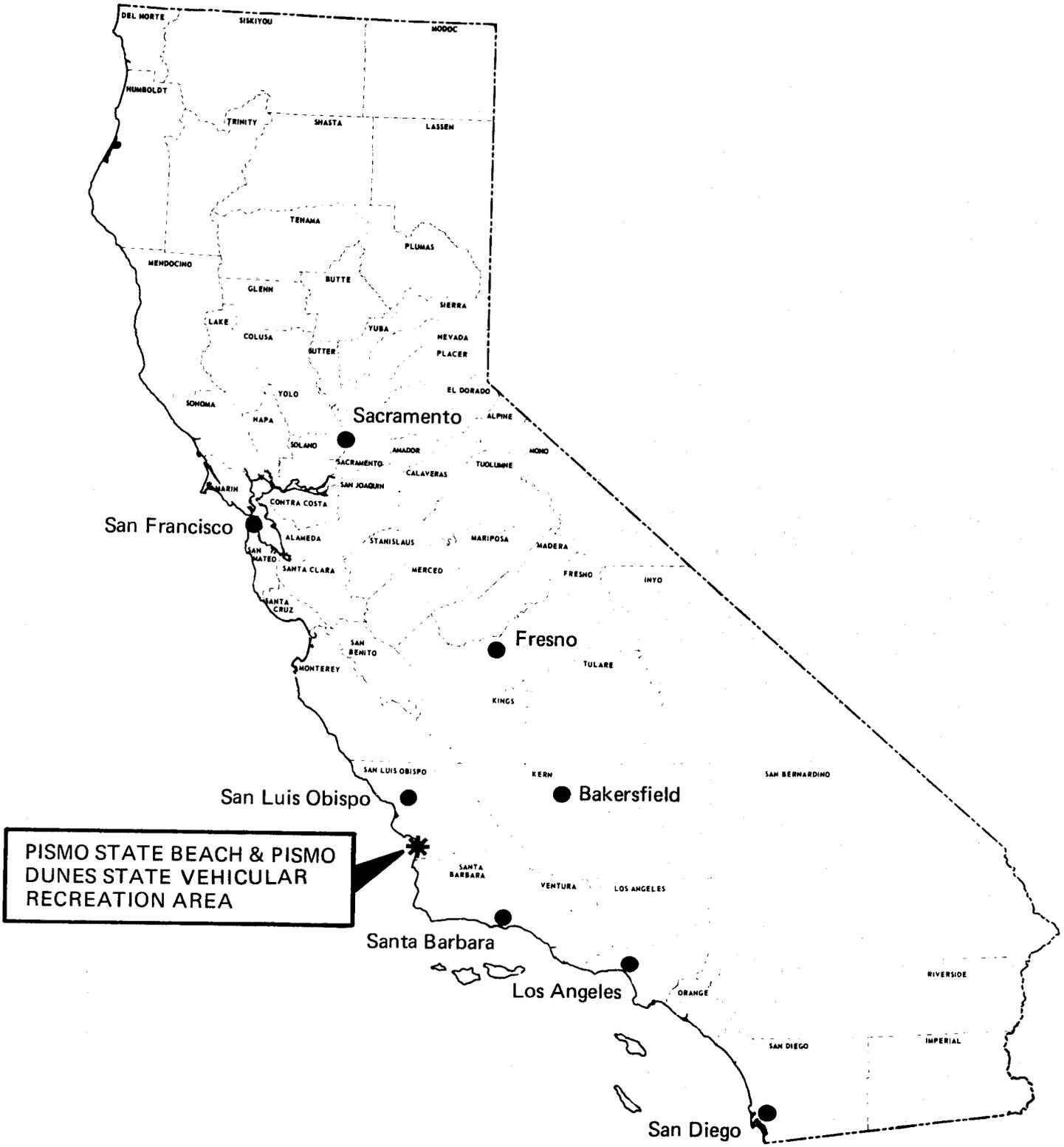


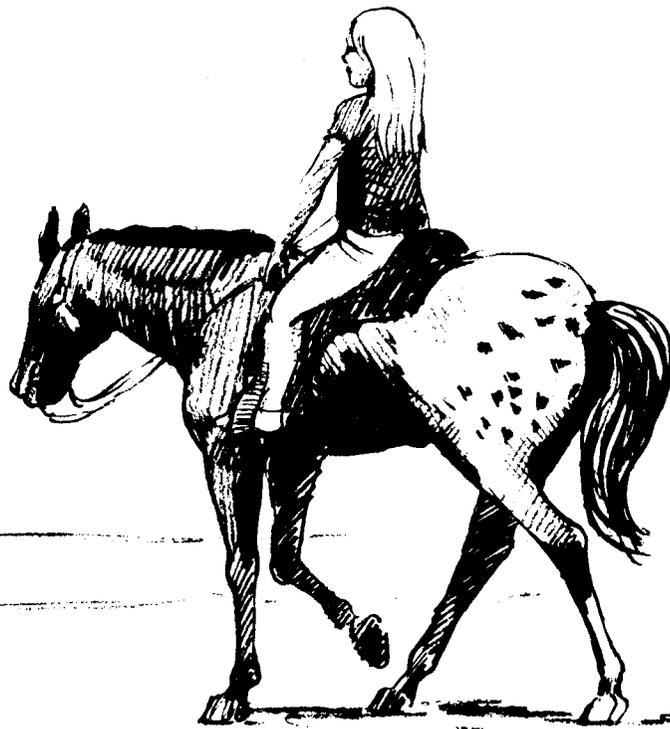
FIGURE 1
LOCATION MAP

Plan Format

The Public Resources Code provides that after each unit of the State Park System is classified, the Department of Parks and Recreation must prepare a general development plan and resource management plan for that unit. The Department must then submit the plans to the State Park and Recreation Commission for approval. It is the responsibility of the commission to schedule a public hearing to consider such approval.

In the case of Pismo Beach, there are two plans that have been reviewed by the commission and the public: one plan for Pismo State Beach and the other for Pismo Dunes State Vehicular Recreation Area. These areas are contiguous, and consideration of either plan requires an understanding of the total proposal encompassing the two individual units of the State Park System. For this reason the two plans have been included under a single cover.

On February 27, 1975, the California Coastal Zone Conservation Commission, South Central Coast Region, conducted a public hearing to consider this plan. The regional commission approved the plan at that meeting, and the terms and conditions of the approval appear in the appendix to this publication.



Summary of Recommendations

The recommendations included here provide for prompt correction of existing problems and conflicts involving land use, beach congestion, sanitation, and law enforcement.

More specifically, the recommendations provide for:

1. Controlled vehicle access
2. Reduction in vehicle traffic on the beach primarily through:
 - a. Development of new access to dunes
 - b. Development of off-beach parking
 - c. Reduction in beach camping densities
 - d. Conversion of one mile of beach to play beach with nonvehicular use
3. Continuity in administration of recreational lands

The recommendations provide the means by which long-range recreation needs can be met and by which highly diversified recreational activities, both active and passive, can coexist without negative effect on environmental qualities or visitor enjoyment.

Through the acquisition of private and public lands, it is recommended that Pismo State Beach be increased from 1,090 acres to approximately 1,270 acres and that Pismo Dunes State Vehicular Recreation Area be increased from 810 acres to approximately 2,940 acres. This would provide a total of eight and a half miles of magnificent beach frontage and approximately 4,200 acres with outstanding sand dunes, freshwater lakes, uplands, marshes, and lagoons with a variety of vegetation and wildlife.

For public enjoyment as well as educational, scientific, and interpretive purposes, the plan recommends the acquisition and preservation of sites containing archeological values and areas that contain significant natural and scenic qualities.

The plan recommends the development of specific support facilities necessary for access, sanitation, safety, administration, and visitor enjoyment of state beach and state vehicular recreation area lands.

For the protection of environmental quality and visitor enjoyment, it is recommended that recreational capacities and use patterns be carefully monitored and studied. Recreational use standards, including carrying capacities, should be modified according to the findings of such studies.

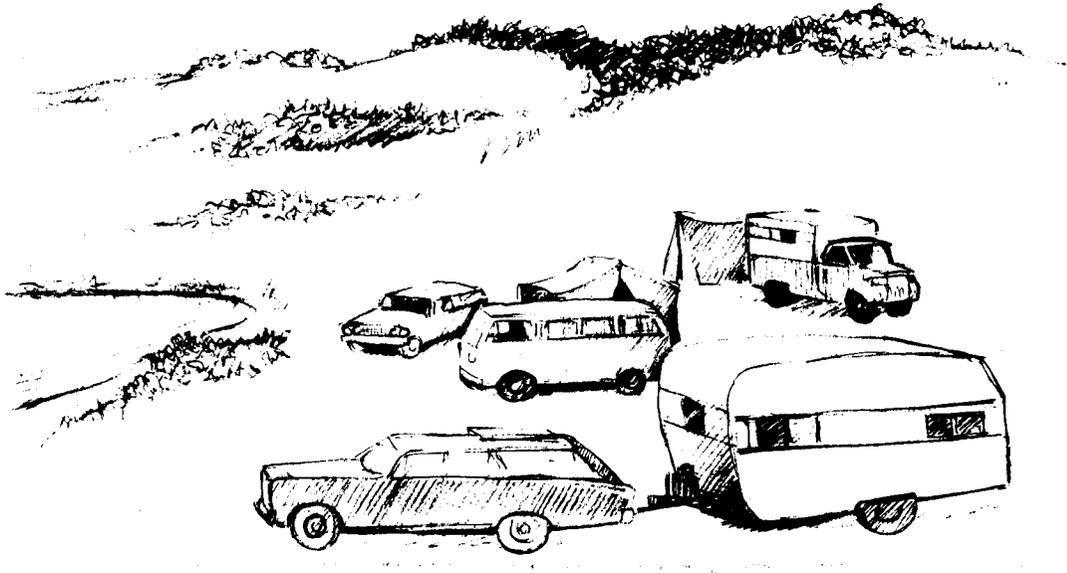
Recommendations contained within this plan provide for the following recreational use and facilities.

Bicycling and Hiking

1. Three miles of paved bicycle trails plus three miles of hard sand beach suitable for bicycle riding
2. Twelve miles of hiking trail
3. Hostel for bicyclists and hikers
4. Hike-in campground for bicyclists and hikers

Horseback Riding

1. Nine miles of equestrian trail
2. Two equestrian staging areas for parking trailers and unloading horses



Vehicular Beach Touring

Six miles of hard sand beach for automobile touring

Camping

1. Oceano and North Beach campgrounds for tent and trailer camping
2. Initially three hundred and twenty, eventually to be reduced to two hundred, primitive beach camping units on the firm sand above high tide

Beach Play (Nonvehicular)

1. Two miles of beach for day use without automobile traffic
2. Parking areas adjacent to the day-use beach

Picnicking and Other Day Use

1. Picnic areas
2. Nine-hole golf course, clubhouse, and concession-operated restaurant





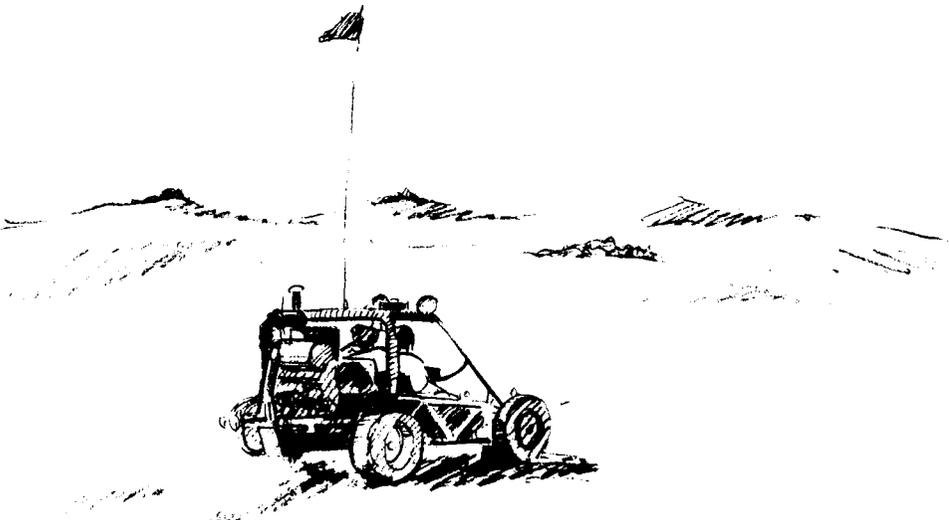
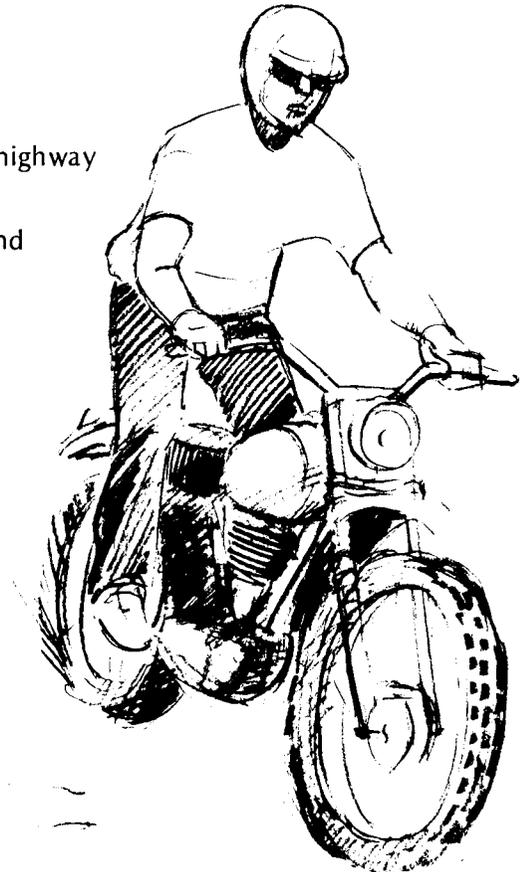
Fishing and Clamming

1. Fourteen acres of freshwater fishing
2. Eight and a half miles of clamming and fishing beach
3. Public fishing pier
4. Fishing tackle rental and bait shop (on pier)

Off-Highway Vehicle* Recreation

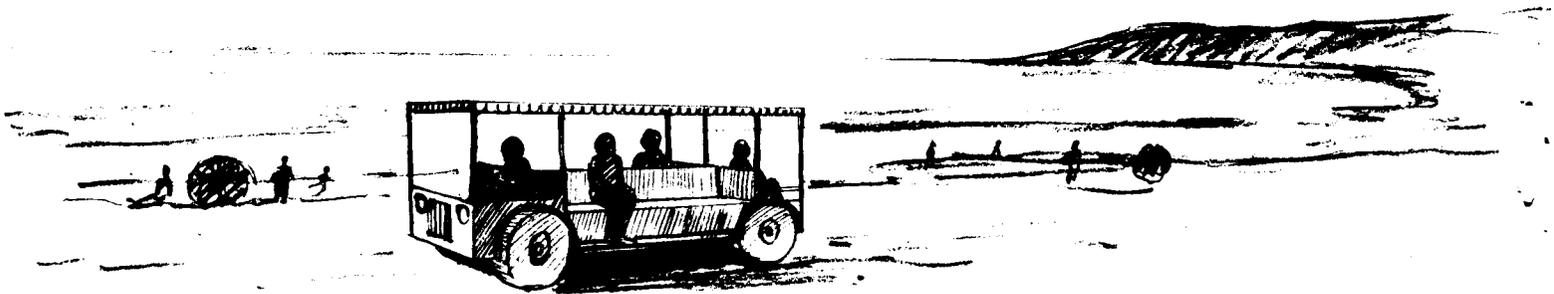
1. Two thousand acres of sand dunes for off-highway vehicle recreation
2. Primitive camping facilities for dune vehicles
3. Inland camping area for off-highway vehicle users
4. Vehicle association center with administration facilities for off-highway vehicle recreation
5. Concession-operated facilities for dune vehicle service, rental, and storage and food service
6. Operation center with information and first aid facilities

* The term "off-highway vehicles" as used in this report, refers to wheeled vehicles designed to travel in the sand dunes. This includes four-wheel-drive units, dune buggies, and motorcycles.



Nature Study and Photography

1. Dune preserve of 570 acres
2. Oso Flaco and Jack Lakes natural areas, which consist of 800 acres
3. Forty-acre dune arboretum
4. Hike-in campground in the Oso Flaco Lakes natural area
5. Facilities to interpret the lakes and dune ecology
6. Interpretive dune and beach vehicle to transport park visitors along the beach



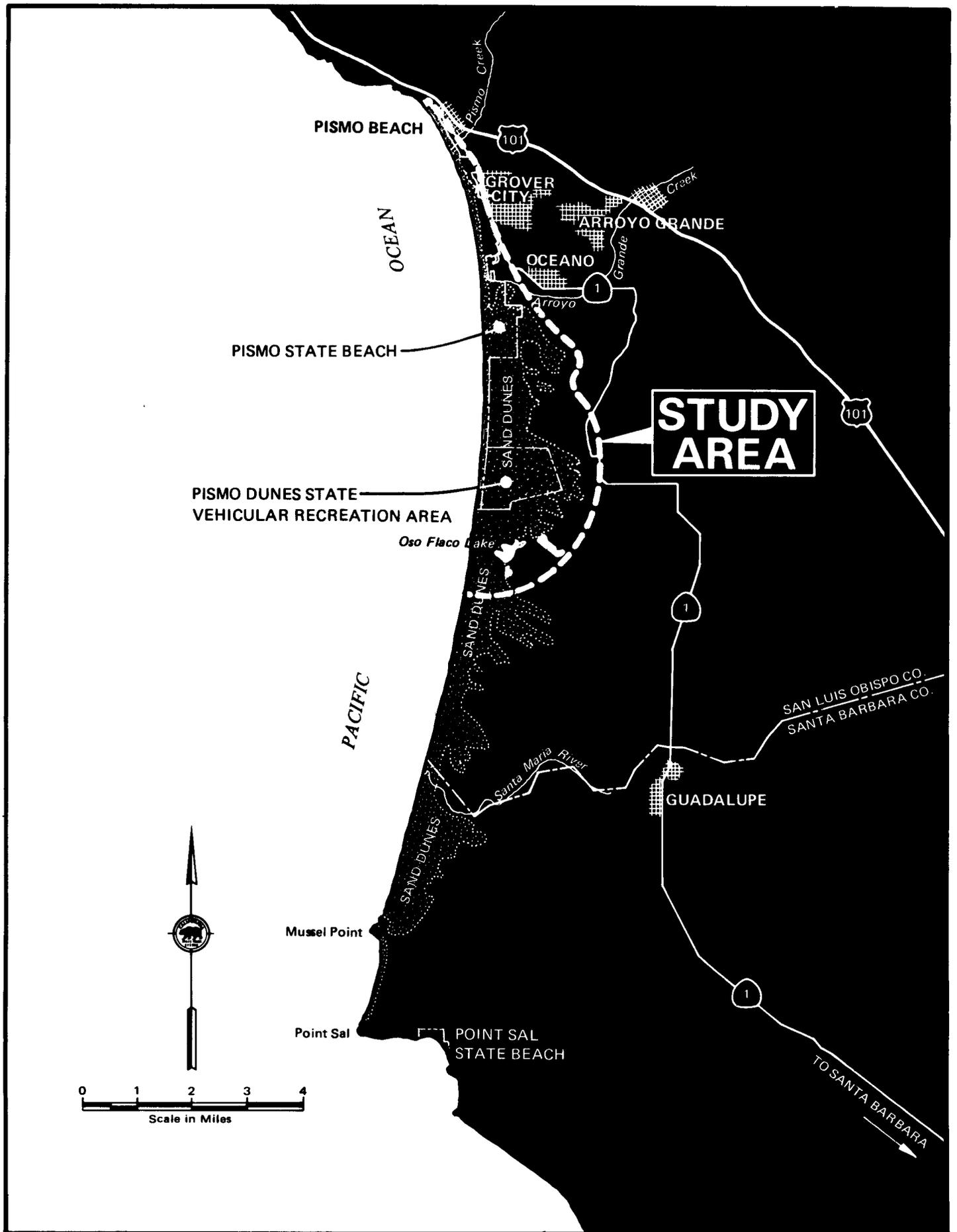


FIGURE 2
STUDY AREA

Area of Study

Pismo State Beach and Pismo Dunes State Vehicular Recreation Area are located in San Luis Obispo County on the ocean side of Pismo Beach and Grover City and extending downcoast for approximately seven miles. Access to this area is from U.S. Highway 101 and State Highway 1.

Pismo State Beach and Pismo Dunes State Vehicular Recreation Area lie within the crescent shaped coastal strip that stretches from Point Sal on the south to the City of Pismo Beach some 17 miles to the north. The State Department of Parks and Recreation has long recognized the potential of this coastal strip and accompanying upland for open space and recreation.

If the problems and conflicts at Pismo State Beach and Pismo Dunes State Vehicular Recreation Area are to be resolved by long-range planning, such planning must extend beyond the present state ownership. For the purposes of this study, a comprehensive planning unit is considered the north half of the Point Sal-Pismo Beach coast front and the reach between the City of Pismo Beach and Oso Flaco Lake eight and a half miles to the south.

This comprehensive approach provides the Department an opportunity to resolve problems in a logical, manageable planning unit. The north end of the study area consists primarily of Pismo State Beach lands, which are bounded by the shoreline of the Pacific Ocean on the west and the urbanized communities of Pismo Beach, Grover City, and Oceano on the east. Lands surrounding Pismo Dunes State Vehicular Recreation Area on the south end of the study area are primarily undeveloped or agricultural properties.

Primary natural features within the study area include:

1. The beach
2. Marsh and lagoon areas behind the beach on the north
3. The vast area of sand dunes on the south
4. Fresh water lakes within the stabilized dunes of the Dune Lake Properties
5. The Oso Flaco Lakes area surrounded by fragile dune and marsh lands

Primary land use and development either within or near the study area include:

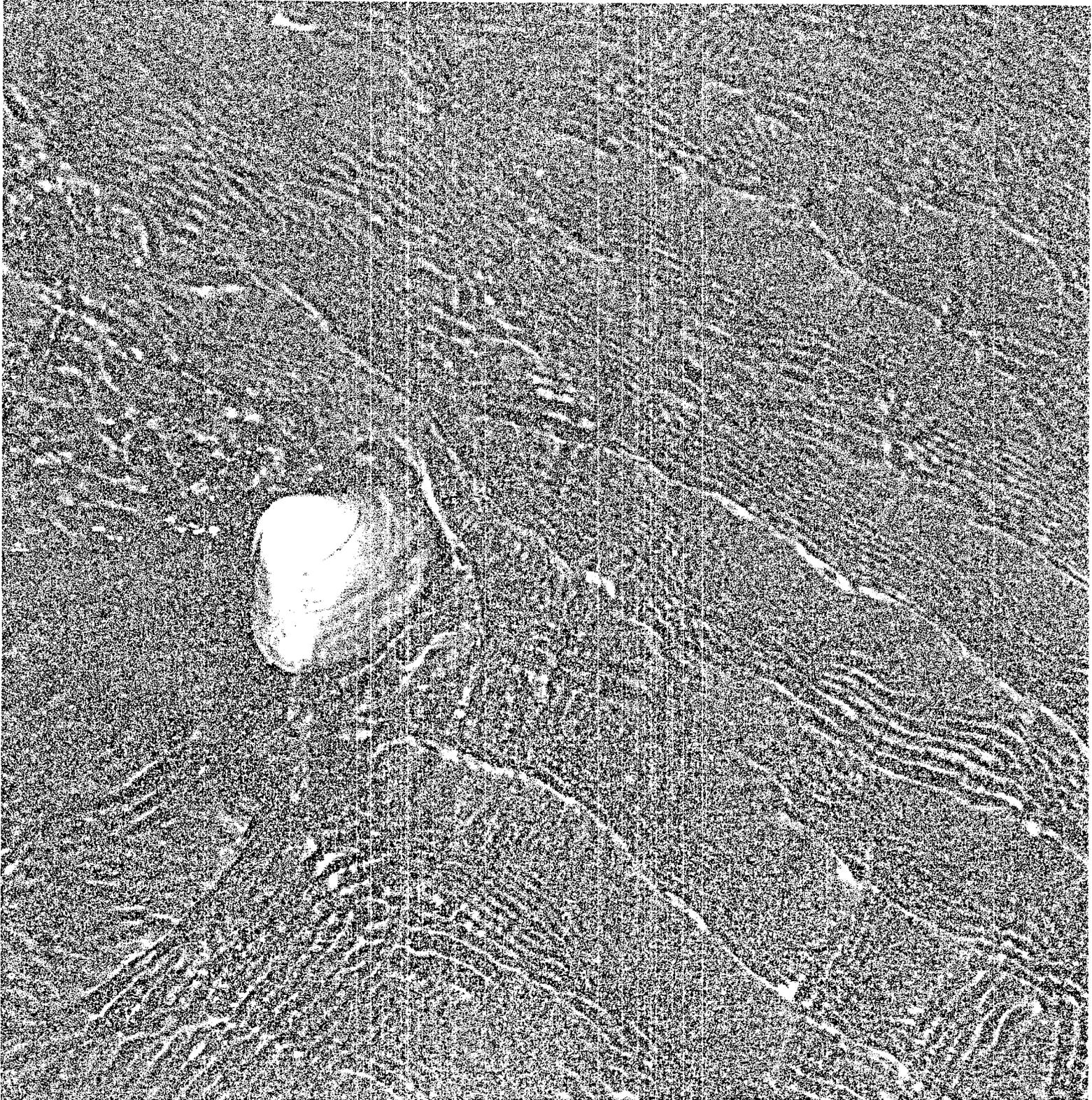
1. The urbanized communities on the north
2. The Southern Pacific Railroad
3. The Union Oil Company refinery to the south
4. State Highway 1, immediately east of the study area, and U.S. Highway 101 further inland
5. Agricultural lands in the Cienega and Santa Maria valleys
6. Undeveloped and unaltered lands

Major property owners within the study area include:

1. State of California
2. County of San Luis Obispo
3. Dune Lake Properties, Ltd.
4. Pacific Gas & Electric Company
5. Union Oil Company
6. Santa Maria Valley Associates



EXISTING SITUATION



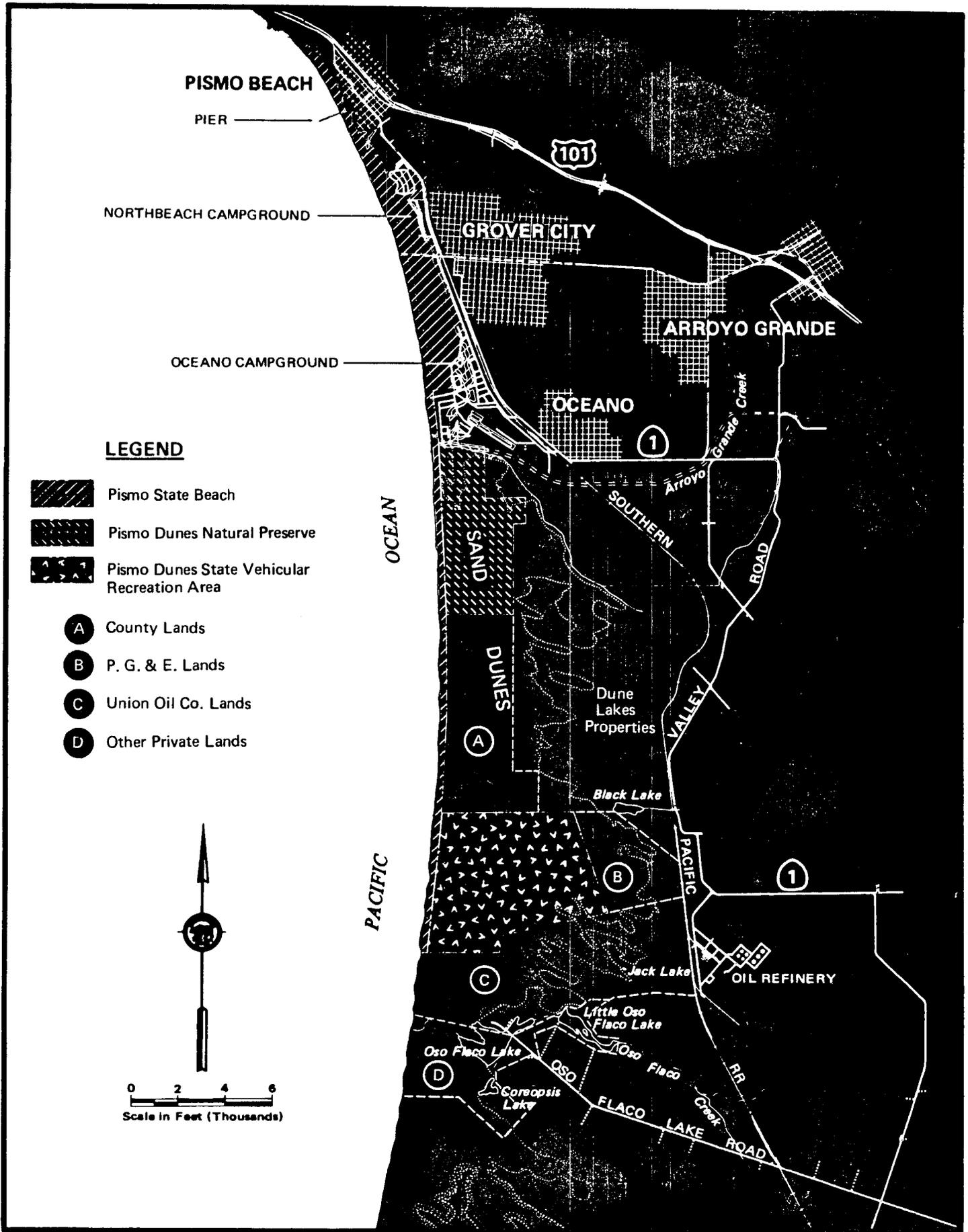


FIGURE 4
OWNERSHIP AND CLASSIFICATION STATUS

FUTURE SITUATION

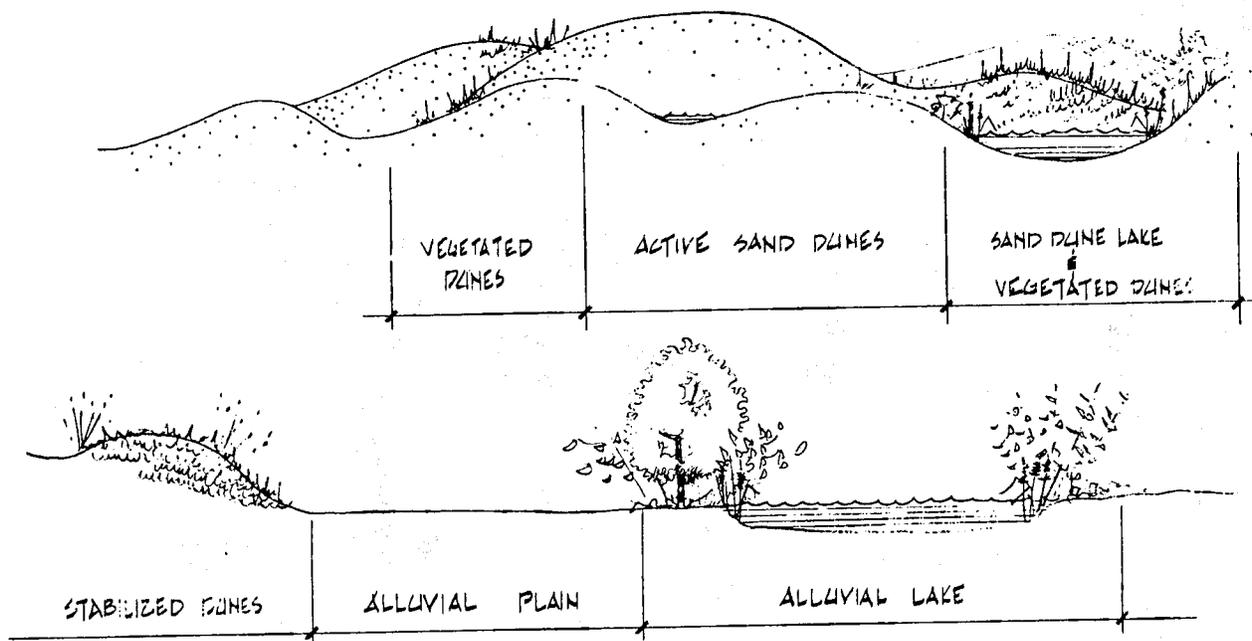




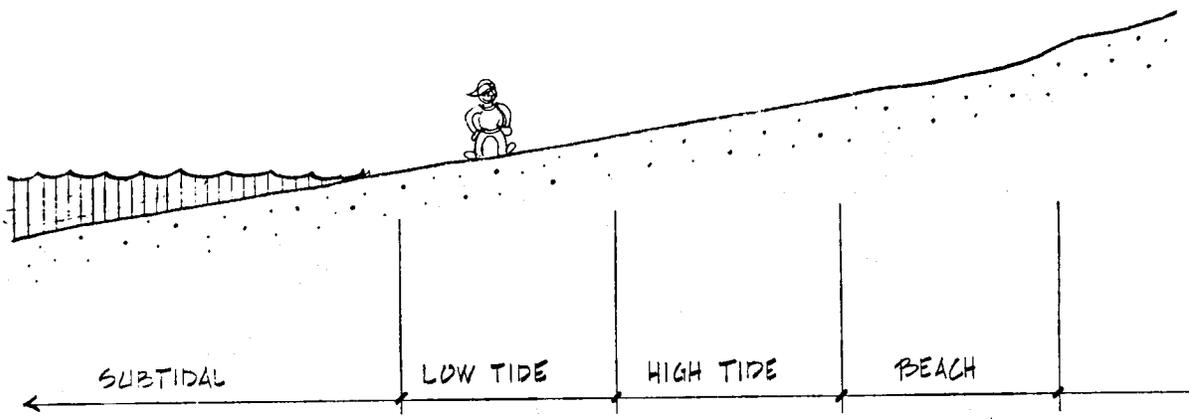
**RESOURCE ANALYSIS
AND
RESOURCE MANAGEMENT PLAN**



FIGURE 8
BIOTIC ZONES



TERRESTRIAL AND MARSH ZONES



SUBTIDAL AND INTERTIDAL ZONES

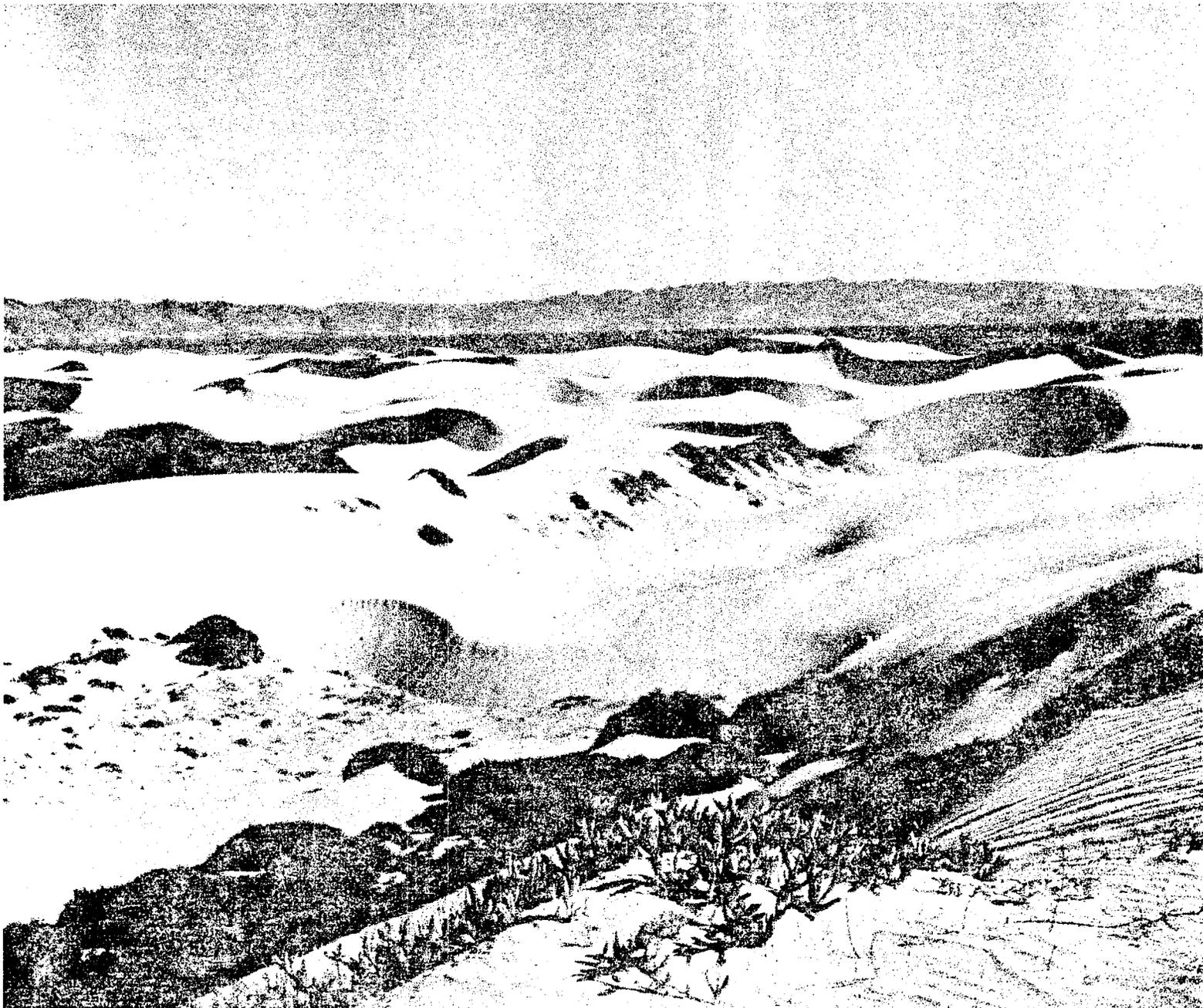
PLAN ANALYSIS



PLAN ELEMENTS



APPENDIX



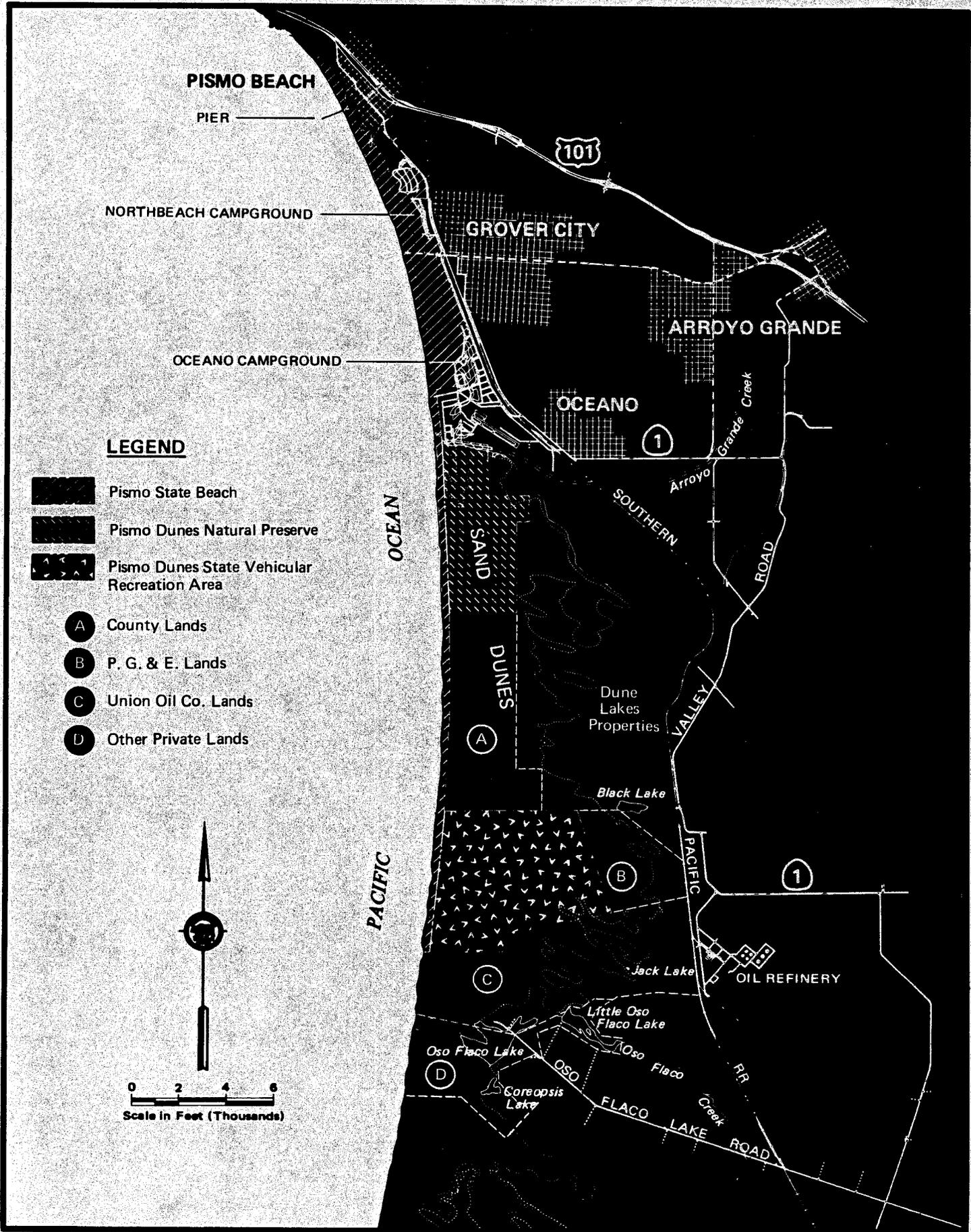


FIGURE 4
OWNERSHIP AND CLASSIFICATION STATUS

Acquisition and Classification

Acquisition

Pismo State Beach and Pismo Dunes State Vehicular Recreation Area today comprise a total of 1,902 acres. Following is a brief history of this acquisition.

1934 - Original park acquisition - 140 acres. Oceano Campground, completed in 1947, is located on this original plot.

1949 - Pismo Beach Pier acquired from the county and negotiation undertaken to acquire land adjacent to the pier.

1951 - Beach area immediately north and south of the pier acquired. This comprises the nonvehicular day-use area of Pismo. This area is 72 acres in extent.

Also acquired in 1951 was a 53-acre parcel known as Pismo Oaks Estates, Incorporated. This area is now occupied by North Beach Campground, which was constructed in 1963.

1958-64 - Continuing program of acquisition of the small parcels contained within the Halcyon and La Grande subdivisions. This is the present Dunes Natural Preserve Area.

1974 - Acquisition of an 847-acre parcel from PG&E. The state's intent in this acquisition is to retain its use as an area for off-highway vehicles.

Classification

Units of the State Park System are classified by the State Park and Recreation Commission in accordance with the guidelines established in the Public Resources Code and Title 14 of the California Administrative Code. The classification process was legislatively mandated to ensure that the natural resource values of the proposed park are identified and that the park classification will guarantee proper management of these resources.

State Park System lands at Pismo Beach have been classified under three different unit classifications:

1. Pismo State Beach, as classified by the California State Park and Recreation Commission in September, 1962, involving 1,050 acres, derives its classification from its natural physical qualities and from guidelines established by the State Department of Parks and Recreation.
2. Outstanding sand dunes within Pismo State Beach have recently been classified as Pismo Dunes Natural Preserve. This is a 430-acre subunit within Pismo State Beach. The Natural Preserve contains many fine examples of undisturbed sand dunes and native vegetation. Classification as a natural preserve guarantees that this area will be protected from adverse uses.
3. The Pismo Dunes State Vehicular Recreation Area, comprising 810 acres at the southern end of the state ownership, was classified by the commission on July 12, 1974. While vehicular use is restricted to designated routes of travel in the state beach and is prohibited in the natural preserve classifications, it is permitted in designated areas within the Pismo Dunes State Vehicular Recreation Area. This area has been acquired for the recreational use of dune buggies and similar off-road vehicles.

Administration of Lands

Recreation lands associated with Pismo State Beach and Vehicular Recreation Area are essentially owned or administered by five different entities. For the most part visitors pass from one property to the other without being aware of this multiple ownership. The five entities are:

1. California State Department of Parks and Recreation
2. California State Lands Commission
3. County of San Luis Obispo
4. City of Pismo Beach
5. Private property owners

(See Administration of Lands Map, page 19.)

The California State Department of Parks and Recreation is responsible for the stewardship of Pismo State Beach; the beach subunit, Pismo Dunes Natural Preserve; and Pismo Dunes State Vehicular Recreation Area.

Subtidal jurisdiction is presently vested in the California State Lands Commission. To minimize public confusion in the enforcement of rules and regulations and to carry out its own charge properly, the Department of Parks and Recreation has made formal application for the control of this zone along the beach frontage.

The County of San Luis Obispo administers lands in the sand dunes between the dunes preserve and the Vehicular Recreation Area. The county also leases some private land for recreational purposes in the Oso Flaco Area. The county lands are essentially used for off-highway vehicle recreational use.

The City of Pismo Beach, under agreement with the county and the state, operates and maintains the northern one mile of beach and accompanying support facilities.

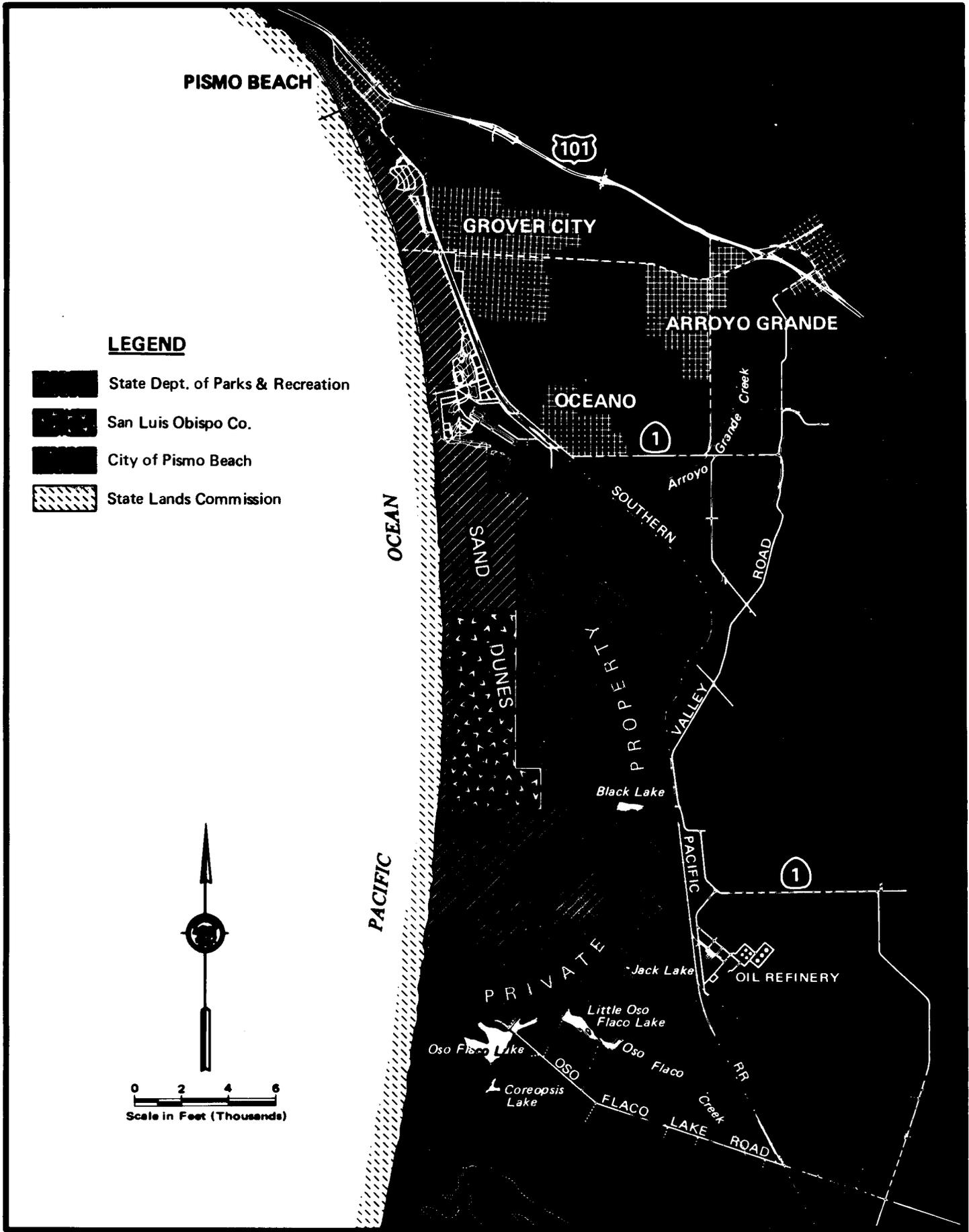
Certain major private property owners in the sand dunes have permitted off-highway vehicle recreational use on their lands. Some of this use has been agreed to under a lease or easement arrangement with off-highway vehicle groups and the county. Major owners in this area are Union Oil Company, PG&E, and the Santa Maria Valley Associates. The privately owned Dune Lakes properties in this area are primarily stabilized dunes; off-highway vehicle recreation use in this area is therefore in conflict with private land management principles. The boundaries of the Dune Lakes properties are marked, and trespassing is prohibited.

Public Facilities

Camping

There are presently two developed inland camping areas and one beach camping area.

1. Oceano Campground is located off the beach approximately two miles south of the community of Pismo Beach. It is bordered by Coast Highway 1 on the east and by the beach on the west. There are 82 developed campsites, 42 of which have water and electric hookups for trailers.
2. North Beach Campground is located about one-quarter mile south of the community of Pismo Beach. It has 103 campsites and is located about one-quarter mile inland from the beach.
3. Beach Camping is permitted on the hard sand in four designated areas south of Arroyo Grande Creek. Chemical toilets are provided at intervals along two and a half miles of beach. The beach camping area is designed to accommodate a maximum of 320 units.



During the past year there has been considerable controversy over the continuation of beach camping. This is discussed in some detail under the section dealing with existing problems (p. 27).

State-Operated Day-Use Facilities

In 1974 two large modern comfort stations were constructed at Pismo State Beach. One comfort station is located at the foot of Grand Avenue, and the other is located about one mile south at the foot of Pier Avenue. No day-use facilities are provided in the vehicular recreation area.

Concession-Operated Facilities

On the northern end of the beach, the Pismo Beach Pier connects to a public parking area in the City of Pismo Beach. Under agreement, approximately one mile of the northern end of the state beach is operated by the city. In connection with the pier and beach frontage, the city contracts to concessionaires for the operation of a snack bar, a bait and tackle shop, and a mobile home park that will accommodate trailers, motorhomes, and campers for overnight use. The city maintains restrooms and a lifeguard facility on the pier.

The operating agreement for this section of the beach is actually between the County of San Luis Obispo and the state. The county and state have jointly subleased this property to the City of Pismo Beach. The agreement expires August 7, 2000.

Immediately adjacent to Grand Avenue and the state beach, and on the north side of the avenue are a restaurant and a nine-hole golf course. These facilities are under concession contract to the Le Sage Enterprises until December 31, 1975.

Administrative Facilities

Employee housing and maintenance facilities necessary to the operation and protection of facilities and natural resources are located adjacent to Highway 1 about one-half mile north of Pier Avenue.

Fees

With the exception of free day use, the fee structure at Pismo State Beach and Pismo Dunes State Vehicular Recreation Area is the same as that found throughout the State Park System.

Camping. There is a \$3 charge for the use of overnight camping facilities without trailer hookups at both the North Beach and Oceano Campgrounds; a fee of \$4 is charged for a limited number of campsites at Oceano that are equipped with trailer hookups. A fee of \$1.50 is charged for the more primitive camping that is allowed on specified areas of the beach. An extra fee of 50 cents for dogs and \$1 per additional vehicle (excluding additional off-highway vehicles) is charged at all the camping areas.

Day use. There is no charge for day use. A great amount of pressure has been exerted on the State Department of Parks and Recreation by local citizens and the Department of Fish and Game to continue a no-fee day use policy at Pismo. Recent meetings with the Technical Planning Committee and the Citizens' Advisory Committee have indicated that these two local advisory groups are also in favor of retaining free day use at Pismo.

Attendance

While annual visitor attendance figures for Pismo State Beach reflect the patterns of attendance during the various seasons, the figures for day use and overall attendance are not completely reliable. This is because of the difficulties involved in making accurate counts during periods of high use. This is a large beach area with uncontrolled access. During periods of intensive use there is a continuous flow of traffic onto and off the beach. Vehicles flow through the state beach onto private beach and dune recreational lands to the south and vice versa.

Despite the unknowns, there are some things we do know about the attendance:

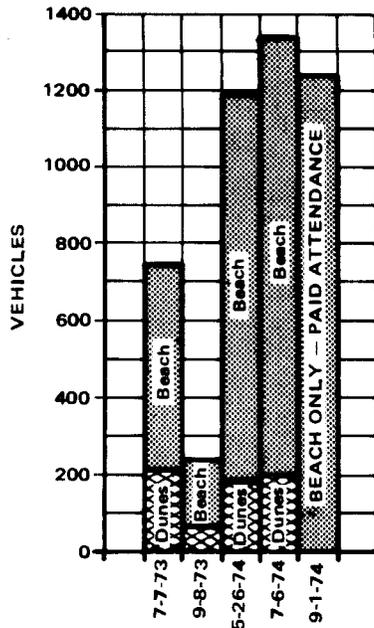
1. Pismo Beach is among the most popular units of the State Park System with an annual attendance of more than two million visitors.
2. There are relatively few days in the year when the beach becomes overcrowded. During the clamming tides the beach becomes crowded with both vehicles and people. In recent years the beach has become seriously overcrowded with vehicles and people on three holidays – Memorial Day, the Fourth of July, and Labor Day.
3. Many reported figures of attendance on the beach and in the dunes during the peak periods of use on the major holidays have been highly exaggerated.
4. Available attendance figures and observations of park personnel indicate that in recent years there has been a leveling of attendance. Use during the major holidays is not increasing and may be slightly decreasing, whereas use during other seasons of the year, normally off seasons, is increasing.
5. The greatest number of “walk-in” visitors use the beach north of Grand Avenue. This is because of the proximity of this beach to public and private campgrounds as well as to motels.



FIGURE 6

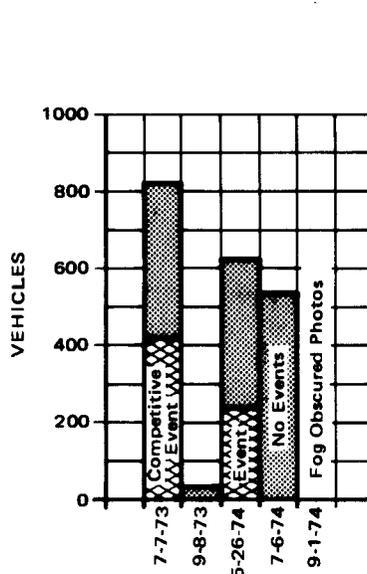
INSTANTANEOUS COUNT AND DISTRIBUTION OF VEHICLES

(Count made from aerial photographs that covered the 8.5 miles of beach and dunes between the community of Pismo Beach and Oso Flaco Lake)



CAMPING

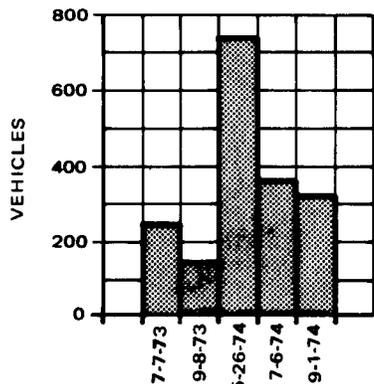
BEACH AND DUNES



DUNE RIDING

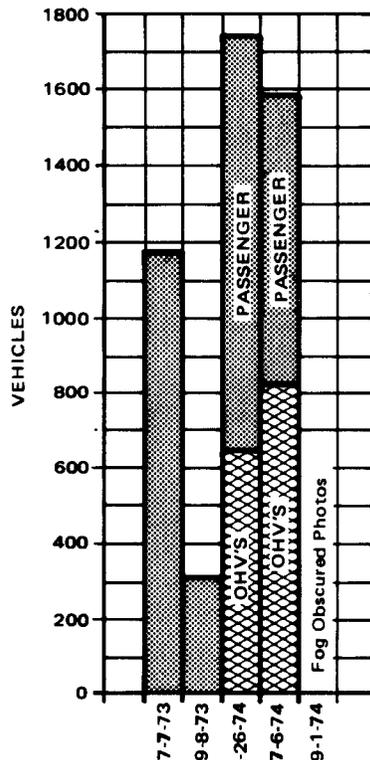
(OFF-HIGHWAY VEHICLES IN DUNES)

- 7-7-73 — 4th July Weekend
- 9-8-73 — Admission Day Weekend
- 5-26-74 — Memorial Day Weekend
- 7-6-74 — 4th July Weekend
- 9-1-74 — Labor Day Weekend



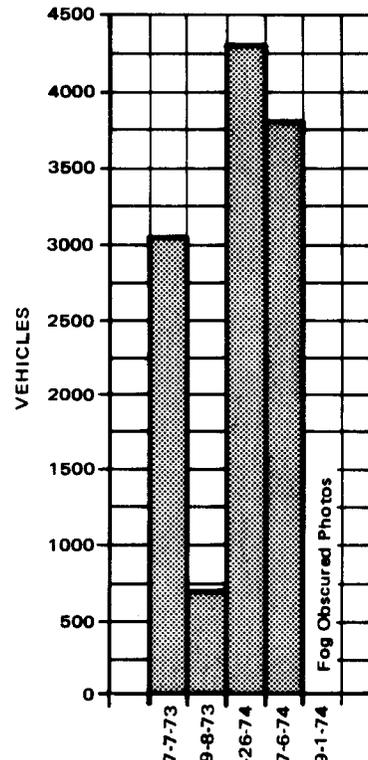
BEACH DAY USE

SOUTH OF ARROYO GRANDE CREEK (PASSENGER VEHICLES AND OFF-HIGHWAY VEHICLES)



BEACH DAY USE

NORTH OF ARROYO GRANDE CREEK (PASSENGER VEHICLES AND OFF-HIGHWAY VEHICLES)



TOTAL VEHICLES

BEACH AND DUNES (ALL TYPES)

In long-range planning for an existing unit of the State Park System, it is important to know the current numbers and distribution of persons and vehicles during times of peak use. This information is normally derived from aerial photographs taken at the peak use times. Figure 6 reveals the instantaneous count and distribution of vehicles on state, county, and private beach and dune lands within the study area. The chart was compiled from aerial photographs taken in 1973 and 1974.

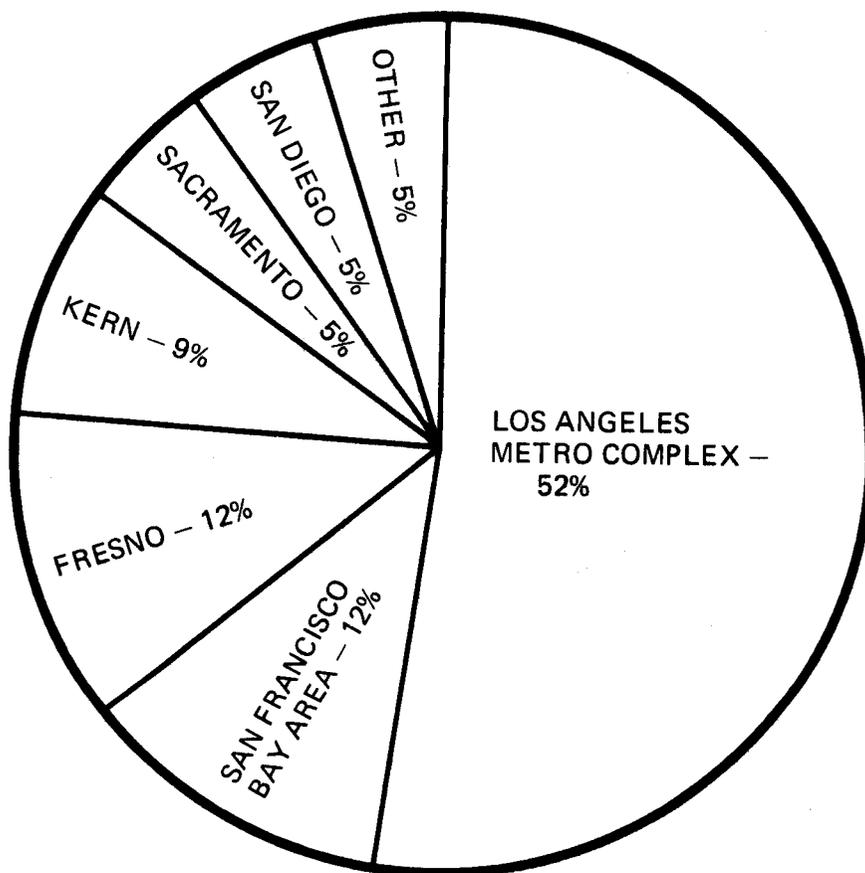
(See Area of Study Map, page 11.)

During the 1973 summer season, 76 percent of the upland campsites were filled. On summer weekends 92 percent of the sites were filled. On holidays all available campsites were filled.

The origin of these campers is shown in Figure 7. The figures are from 1973 Ticketron and 1969 RecTIP information.

Major recreation demand at Pismo is from the Los Angeles area. The south central portion of the state, including Fresno and Kern counties, is next in visitor demand with less than one-quarter the demand.

FIGURE 7
ORIGIN OF VISITORS TO PISMO STATE BEACH





Recreation Use Patterns

Beach Use

The beach at Pismo is unique because its hard surface supports vehicle travel during all seasons of the year. Beach touring is a rare and memorable outdoor recreation experience that attracts people from all parts of the country. Nowhere else in California can one enjoy the thrill of driving for miles on the natural sand beach with the surf breaking just a few yards away. This has always been among the most popular activities on the state beach. On major holidays, vehicles are stretched bumper to bumper for five or six miles along the beach.

Digging for the famous Pismo clam is also among the most popular beach activities. During the clamming tides thousands of people enjoy this popular and sometimes productive sport.

Beach camping rates among the most popular recreation activities. Vacation trailers, motor homes, campers, and a few tents line the beach south of Arroyo Grande Creek during the major holidays. This is the only place along the 1,072 miles of California shoreline where natural conditions afford the opportunity for "drive-on-beach camping." This is an informal type of overnight use without the limitations imposed by roads and parking spurs.

Other popular beach recreational activities include fishing, swimming, wading in the surf, beach combing, surfing, sunbathing, sand play, beach sports and games, strolling, sightseeing, jogging, and horseback riding.

These diverse activities attract a number of persons who converge on the beach in recognized patterns of recreational use. The northern mile of beach with adjacent parking areas is used exclusively for typical beach activities: swimming, beach play, sunbathing, and the like. Vehicles are not allowed in this area. On the remaining seven and a half miles of beach in the study area, typical beach activities are enjoyed with vehicle access and parking on the beach. Two and a half miles of beach south of Pier Avenue serve as the principal entry route into the sand dunes.

Dunes Use

The beach that extends some 17 miles south to Point Sal serves as the gateway to a vast and beautiful system of sand dunes. Off-highway vehicle enthusiasts enjoy a variety of recreation activities in this area. Dune touring; competition events, such as drag racing and hill climbing; and primitive camping in the dunes are the most popular activities. Dune touring is not confined to just daylight hours — with headlights and whip antennas marked with a warning light, skilled vehicle operators safely cruise throughout the night.

The dunes also serve other recreational pursuits. Among these are hiking, horseback riding, nature study, fishing (in freshwater lakes), hunting, and photography.

Passive enjoyment of the dunes involves pleasure derived from observation of and identification with the unspoiled natural beauty. The undisturbed active dunes within the dune preserve area supply much of this experience, although such activities are not confined exclusively to the preserve. Frequent hikes in the dunes are scheduled by the Sierra Club and other groups. Popular areas for these hikes are the Dunes Natural Preserve, Oso Flaco and Jack lakes, Coreopsis Hill, and vegetated dunes south of Oso Flaco Lake.

Inland Use

The primary recreational use of the inland state beach property is camping. There are two developed public campgrounds within one-quarter mile of the beach at Pismo State Beach. In recent years the private sector has developed many recreational vehicle campgrounds in the area, most of which are within one mile of the beach. Obviously, these public and private camping areas serve a major portion of the beach and dune day users.

Also within the state beach on the inland property is the golf course, which is used by both local citizens and park visitors.

Access and Circulation

Vehicle access to the state beach and to the vehicular recreation area is primarily via one of three streets that are ramped onto the beach. On the north, at the City of Pismo Beach, is Ocean View Avenue Ramp. One mile south is the Grand Avenue Ramp, and approximately another mile south is the Pier Avenue Ramp. Reportedly, Pier Avenue Ramp receives 80 percent of the use during peak periods. During periods of high tides the ramps become unusable.

Some off-highway vehicles enter the vehicular recreation area across private lands from the Oso Flaco Road, approximately five miles south of the Pier Avenue Ramp. Oso Flaco Road is a county road that terminates at Oso Flaco Lake, about a half mile from the beach.

Walk-in access to the beach is primarily along the northern urbanized section, where numerous motels and private and public campgrounds contribute to beach use.

Problems and Conflicts

Unit Identity

Pismo State Beach and Pismo Dunes State Vehicular Recreation Area are not readily distinguishable units. First-time visitors and even many "old timers" are not aware of when they are entering or leaving these units. The location of the "park" headquarters is not apparent, and lack of adequate control prevents distribution of information on rules and regulations and on things to see and do. As a result of this, the visitor's enjoyment is lessened, and operation and enforcement problems are increased.

Control

Access to the beach has generally been uncontrolled. There are six points of vehicle access to the state beach, two of which are controlled access points to inland campgrounds. As a means of controlling beach camping density, two control stations were recently placed in streets leading to the beach. These are temporary stations used only during the beach camping season. Beach camping conditions were improved as a result of these contact stations; however, there still remains a problem of beach control.

In the past local citizens have vehemently opposed control or information stations because they believe the stations are the first step toward the initiation of a day-use fee for beach access. Since several of the streets are the property of local communities, their cooperation is needed in the control of beach access.

The problems that result from lack of beach control are twofold. First, it is virtually impossible to control density when access cannot be controlled. Second, law enforcement problems increase as access control decreases.

Management Continuity

Four different public agencies now administer recreation lands at Pismo Beach. This is inefficient and costly to the taxpayer. It is also confusing to the public and only adds to the problems of law enforcement jurisdiction, boundary demarcation, and private property trespass.

Vehicle Circulation

In addition to the problems caused by numerous accesses to the beach, there is one serious problem involving vehicle circulation. The primary vehicle access to the Pismo Dunes State Vehicular Recreation Area is the beach; consequently, vehicles travel a distance of from two to four miles southward on the beach to the sand highway that leads into the dunes. During periods of peak use, this heavy vehicle travel conflicts with other beach uses. The problem is aggravated as vehicles from the dunes travel back and forth over the beach to the gasoline, food, and beverage supply centers to the north.

Land Use

Competition for recreation land. Because of the popularity of beach recreation, a conflict is developing over exclusive land use. Each interest group (i.e., equestrians, clambers, fishermen, dune buggy operators, and sunbathers) feels it has the right to enjoy its own special form of beach recreation as long as it does not interfere with another group's enjoyment of the beach. Today, however, this is rarely possible. The large numbers of persons visiting Pismo Beach often unknowingly spoil other beach users' enjoyment. Dog owners frequently offend sunbathers and beach walkers. Vehicle users conflict with equestrians and pedestrians. Campers use space desired by some day users. Although individuals do not intentionally attempt to interfere with other people's enjoyment of the beach, they nevertheless do, and consequently, the number of complaints registered with the park rangers increases every year. Two specific problems that relate to this subject deserve further mention here.

Beach camping has been the subject of considerable controversy during the past year. On July 10, 1974, the California Coastal Zone Conservation Commission issued an emergency permit allowing beach camping to continue until December 31, 1974. One condition of this permit provided that a long-range plan for the development and operation of camping and day-use areas at Pismo State Beach and a schedule for carrying out that plan be submitted to the commission by the State Department of Parks and Recreation before December 31, 1974.

The principal conflict is between those who believe that the portion of beach between the Pacific Ocean and the toe of the first line of dunes should not be dedicated to a single purpose use and those who believe that the dedication of a segment of the beach to camping is reasonable because nowhere else does the opportunity exist to enjoy this type of beach camping.

Camping on the beach has long been popular at Pismo Beach. This popularity has grown over the years and, when coupled with the skyrocketing use of motorhomes, campers, and vacation trailers, has developed into a serious problem. Because of the uncontrolled access to the beach, camping on the three major holiday weekends has far exceeded the capacity of the beach, and the result is vehicular congestion as well as potential health and safety hazards. There is general agreement that if beach camping is to continue, it should be allowed only in designated areas, and these areas should be limited to low densities.

The Department of Parks and Recreation has recently developed an "Interim Use Plan," which deals with immediate measures to correct the problems connected with beach camping. With the cooperation of several local communities this last summer, control stations were placed at two locations leading into the beach. Local off-highway vehicle groups have helped through an information program dealing with the necessity of curtailing camping use. A fee has been placed on beach camping, and reservations through Ticketron are required. Progress in reducing the number of beach campers during peak use periods is being made.

A problem somewhat similar to the beach camping controversy is beginning to develop on the north end of the beach. This involves approximately two miles of beach frontage. The northernmost mile of beach has been traditionally used for beach play with vehicle use prohibited. Pressure for more space for beach play during the summer months is now having an impact on the downcoast mile of beach. This pressure is generated by the increasing development of motels and recreational vehicle parks immediately inland from this section of beach. The state beach campground is also in this area. These public and private developments are within walking distance of the beach; consequently, the ratio of people to vehicles is higher here than elsewhere on the beach. This higher ratio causes increased conflict between people and vehicles on the beach. It should be noted, however, that there is still considerable vehicle use in this area, and if the zoning were changed to eliminate vehicle use along this portion of the beach without provisions for off-beach parking, other problems of equal magnitude would arise.

Variable carrying capacity of beach. The carrying capacity of a beach is not static. A given area of beach may accommodate 100 vehicles plus 500 persons during low and mean tides. The capacity of this same area will shrink to zero during periods of high tides. Adequate off-beach parking is not provided at Pismo State Beach to accommodate vehicles during high tides.

Resource protection. Resource protection is also a problem at Pismo Beach. Areas with unique flora and fauna within the dunes but outside the existing park ownership are being destroyed. Although a growing number of concerned vehicle users are attempting to avoid these areas of dune vegetation on their own initiative, a small group of uncontrolled vehicle users continues to destroy unprotected natural values.

Off-highway vehicle parking. Many off-highway vehicle owners trailer their vehicles to the area for operation in the dunes. Presently there are no adequate off-beach parking areas in the vicinity of the dunes where vehicles can be unloaded, and passenger vehicles and trailers can be parked. Consequently, most of these operators use the beach as their staging area, and as a result the vehicle congestion problem on the beach is aggravated.

The problem mentioned above is made even worse because off-highway vehicles that are not street licensed must be trailered from nearby private recreational vehicle parks to the beach or dunes.

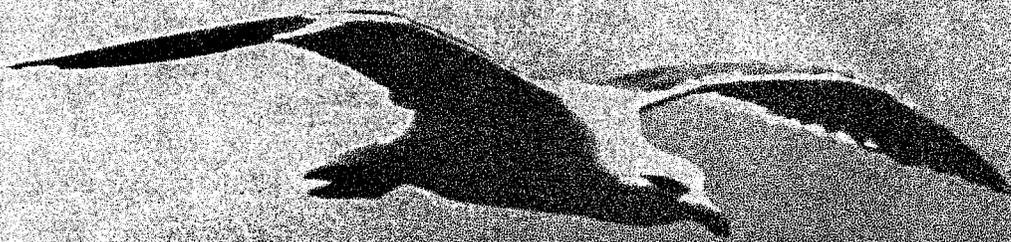
Operation and Maintenance. Several problems of lesser magnitude than those mentioned above deserve mention here because they relate directly to the overall land use pattern and the long-range recommendations included in this plan.

The present entrance to Oceano Campground is poor. The entrance station and office are located immediately off Pier Avenue, and there is neither space for parking nor space for vehicle back up. This results in congestion on Pier Avenue during periods of peak use.

Inadequate parking and turnaround space adjacent to the ramps leading onto the beach causes additional congestion.

Marshlands on the upland of the state beach have required a continuous program of storm water control and mosquito abatement.

FUTURE SITUATION





The purpose of long-range planning is to prepare for the future, and since the future holds many uncertainties, we must make some assumptions here. Based on data available from experiences in the field of outdoor recreation, social trends, surveys, demand projections, and information from the Park and Recreation Information System (PARIS), future recreation patterns can be predicted with a reasonable degree of accuracy. Using this data, assumptions can be made that relate to future recreation use at Pismo State Beach and Pismo Dunes State Vehicular Recreation Area. These are indicated under three degrees of probability: reasonably certain, likely, and possible. Certain reference data for these assumptions are included in the appendix.

It is *reasonably certain* that the demand for recreation land will increase because:

1. The population will increase 7.2 percent by 1980 and 23.5 percent by 1990.
2. The demand for recreation opportunities will increase at a faster rate than the population growth. For example, the recreation demand of the Los Angeles metropolitan complex, which should continue to exert the greatest pressure on Pismo State Beach and Pismo Dunes SVRA, is expected to increase 27 percent or 1.25 times the population growth between 1970 and 1990.
3. Leisure time will increase, and as leisure time increases, so does the demand for outdoor recreation opportunities.

It is *reasonably certain* that competition between special interest groups for public recreation land will increase because as the overall demand for recreation land increases, so does the demand for individual uses. Historically, this has been the trend. For example, even today in the Pismo area, pressures generated from specialized recreation groups is increasing. Here recreationists converge by the thousands to engage in their own specialized activity. These activities include off-highway vehicle use, swimming, surfing, clamming, fishing, sunbathing, horseback riding, picnicking, and camping. There is also much pressure from environmental groups to set aside lands for open space. All these demands are being exerted on the same area, and since many are conflicting demands, obviously some regulation of use must be exercised.

The automobile is the dominant element in beach-oriented recreation activities at Pismo State Beach, and the majority of users now favor this situation. Some beach uses are incompatible with the auto, and these uses, while increasing, still remain secondary to beach vehicle pressures. Eventually the nonvehicle groups may exert greater pressure for vehicle control and limitations.

It is *likely* that the demand for off-highway vehicle recreation use areas will stabilize. The growth of OHV recreation has reached astronomical proportions. It is estimated that approximately one person in ten now owns or has access to a vehicle that could be used off the highway. There is one registered off-highway vehicle for every 150 Californians. It is *likely* that the saturation of this market will occur in the next few years. As is true of most popular activities or products, they sell rapidly until all interested people are involved. Beyond that point new growth tends to stabilize.

The availability and cost of gasoline should affect OHV recreation. Because driving to the use area often takes more fuel than the on-site OHV use itself, there may be increasing pressure for OHV use areas closer to the major metropolitan areas.

It is *possible* that new and unknown recreation activities will influence land use patterns in the Pismo area.

In just the past 20 years, new outdoor recreation trends have evolved. There is every reason to believe that the future will bring dimensions in outdoor recreation that are unknown to us at this time.

It is *reasonably certain* that "off-season" recreation use in the Pismo area will increase and *possible* that visitation during the major summer holidays will subside.

Since 1970, Pismo State Beach attendance figures have indicated a general increase in off-season visitation for both camping and day use while overall annual attendance is leveling off. More people, particularly people without children in school, are taking their vacations in the off-season when the parks are not crowded. Also, people are taking advantage of the clear weather conditions that exist along various areas of the coast during fall and winter months. This changing pattern of use is welcomed by the Department of Parks and Recreation because park lands and facilities will serve a greater number of people under better environmental conditions when use is more evenly distributed throughout the year.

**RESOURCE ANALYSIS
AND
RESOURCE MANAGEMENT PLAN**

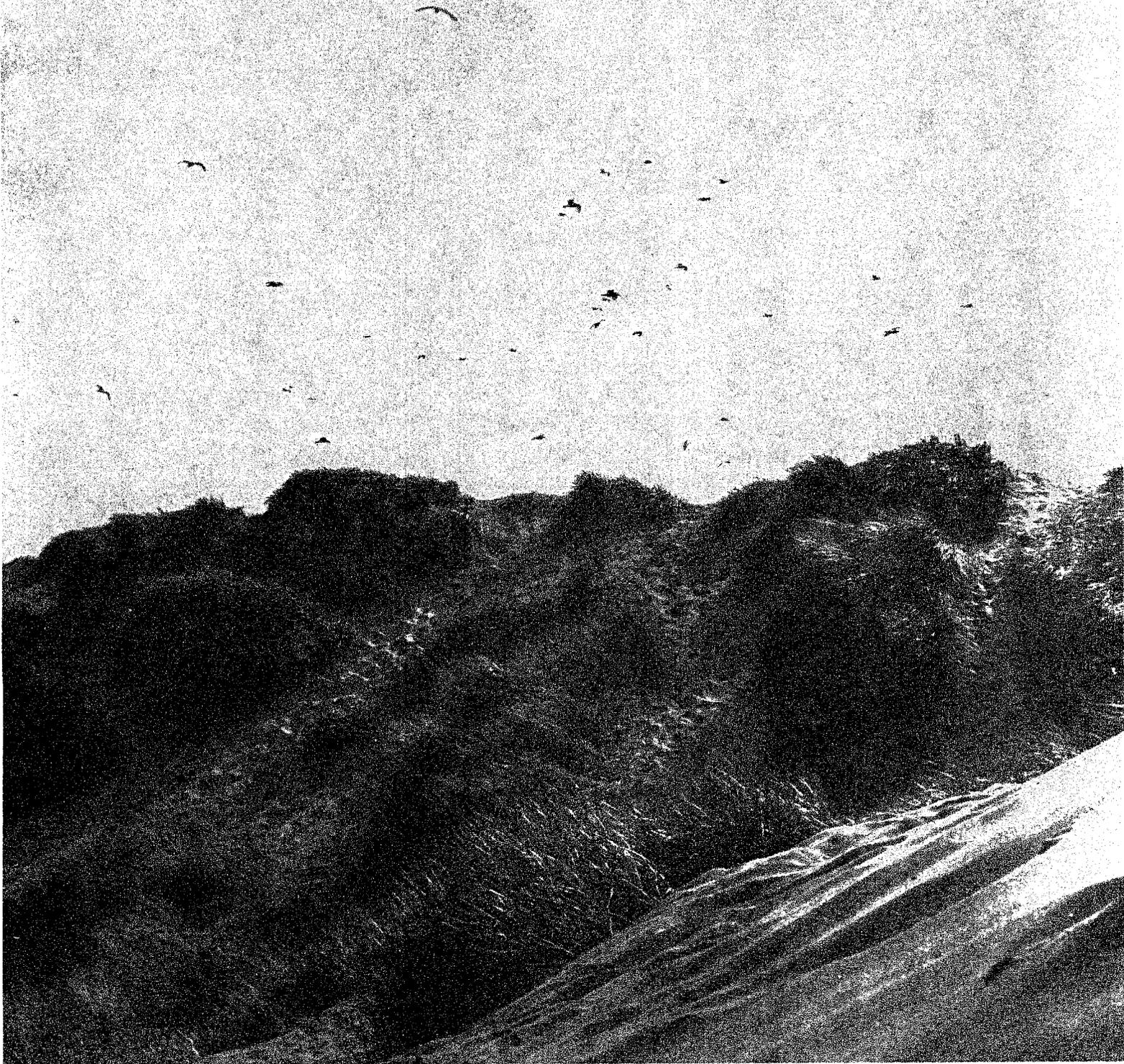
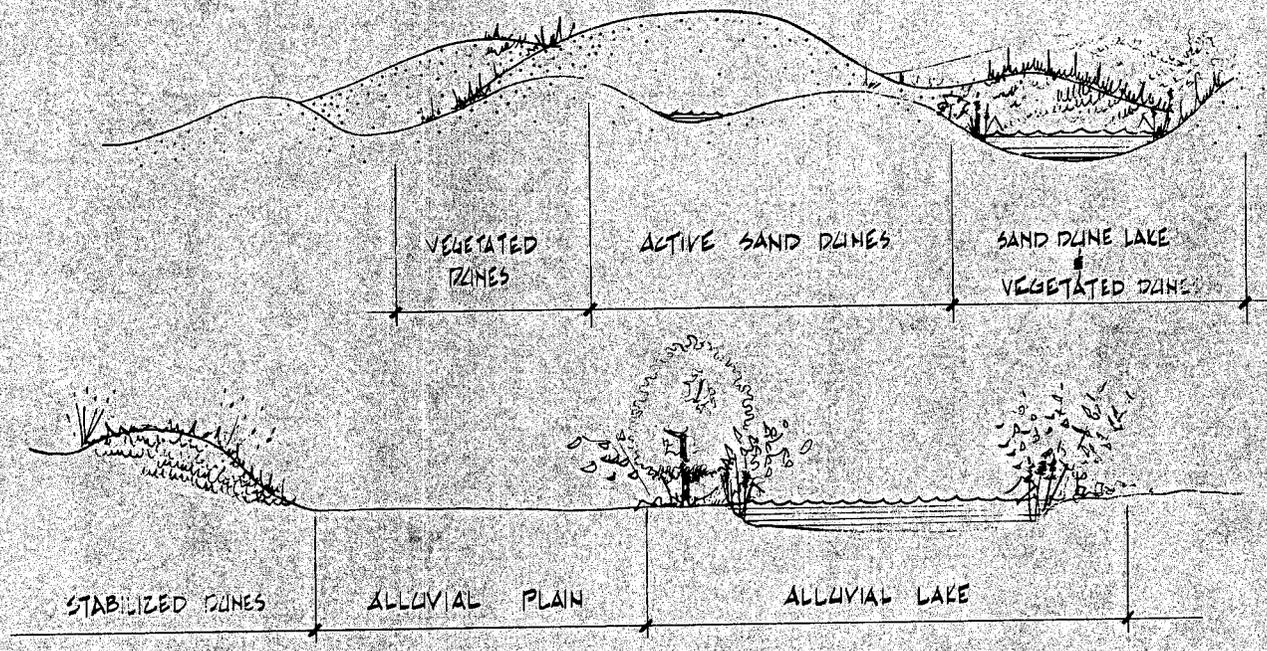
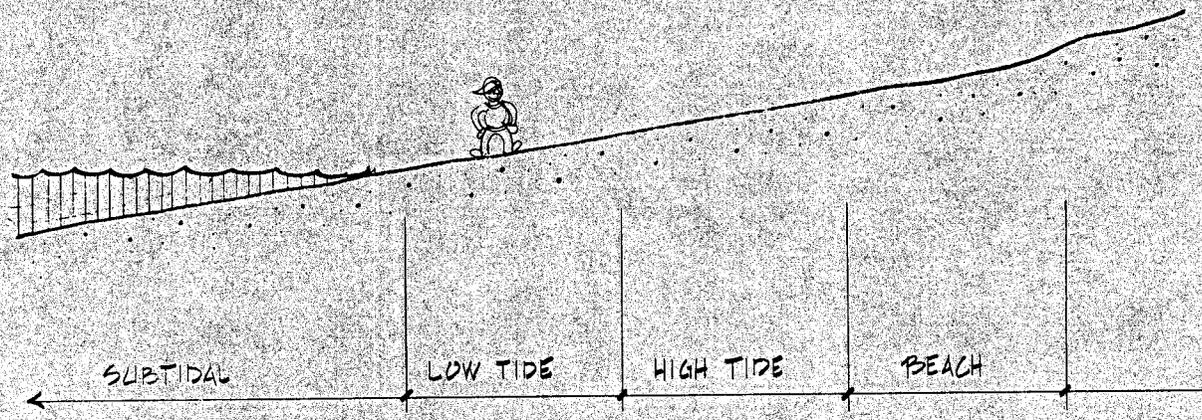


FIGURE 8
BIOTIC ZONES



TERRESTRIAL AND MARSH ZONES



SUBTIDAL AND INTERTIDAL ZONES

Resource Analysis ENVIRONMENTAL RESOURCES

Biotic Associations

It is easier to understand the physical setting of the Pismo Beach area if one visualizes four ecological zones. These form a convenient framework for classifying and understanding the natural resources of the area. Within each ecological zone are the various biotic associations that characterize the zone. The ecological zones at Pismo Beach are as follows: terrestrial, marsh, intertidal, and subtidal.

Terrestrial zone. This zone includes classifiable land forms or so-called terrestrial communities within the upland area. These forms contain various classifications of the sand dunes and some riparian woodland along the banks of Oso Flaco Creek and lakes. These classified land forms are as follows:

1. **Vegetated dunes:** Vegetation occurs on the sand dunes throughout the project site. The most densely vegetated dunes are immediately upland from the beach in sheltered locations. Coastal scrub species of plant material and European beach grass have crept into the sand dunes, especially in the foredune area. Native vegetation includes California sagebrush, coyote brush, bush lupin, sand verbena, and arroyo willow. In hollows with sufficient moisture are willows, sedges, and semi-aquatic vegetation. In addition, there are many varieties of herbaceous species that are relatively short-lived. Among the native plant materials that should be especially noted are *Cirsium phothophilum*, a rare crystalline thistle, and the giant coreopsis.

The Pismo dunes are recognized by scientists, conservationists, government agencies, and the public as being the finest, most extensive coastal dunes remaining in California. Particular areas within this zone are sensitive and will tolerate very little recreation disturbance. In these areas the greatest degree of protection should be given to aesthetic qualities.

Of particular note are the dunes immediately south of Arroyo Grande Creek and dune areas surrounding the lakes and riparian woodland areas. These are fragile and require special protection. The giant coreopsis and the thistle mentioned above also deserve special protection.

2. **Active dunes:** These areas occur between the vegetated dunes and the stabilized dunes. This active sand dune area is tolerant of recreation activities. This zone can support dune buggies and related recreation vehicles, but no permanent structures of any kind should be permitted. Reasons to support this restriction are: the relative instability of the dunes and encroachment on the visual impact of the dunes.

3. **Stabilized dunes:** These are the most inland of the dunes. This association has been almost completely destroyed by urban development in the downtown portion of Pismo outside the project area. Preservation of exemplary areas in the stabilized dunes is essential in the Pismo Beach and vehicular recreation area project to facilitate scientific research and to satisfy the need for interpretation. Plant species include buckwheat (*Eriogonum parvifolium*) and lupin (*Lupinus chamissonis*). Valley quail also inhabit the stabilized dune areas. *Vegetation should be saved at all costs.* Structures can be permitted provided they are properly located. This area is ecologically sensitive but will tolerate limited recreation activity.

4. **Alluvial plain:** The alluvial plain was created by the Santa Maria River, which came in to the Oso Flaco Lake area in the 1850s. Since this time the river has been diverted through levee systems, and the area has been altered through man-made and natural influences. At present Oso Flaco Creek, a lesser drainage course, flows in this vicinity.

This area is very tolerant of use. There are sufficient slopes from 0 to 5 percent that are well adapted to both day use and camping. As a compliment to the scarce natural cover that occurs on the alluvial plain, a supplemental discriminating planting program of suitable materials would increase the capacity of the area to support wildlife and enhance the suitability of the area for park purposes.

Marsh zone. This zone contains many valuable associations of natural resource value. Most of these associations at Pismo occur in the freshwater marsh category. The classified land forms in the marsh zone are as follows:

1. Alluvial lakes area: This area occupies a portion of the alluvial plain. The ecological entities to be preserved are permanent freshwater marsh and riparian habitat involving birds. The natural cover surrounding the lakes is valuable for wildlife habitat.

Every effort should be made to protect the Oso Flaco lakes area not only for aesthetic purposes but also for enhancement of bird life. Recreation should be limited to activities that are in harmony with the degree of protection required to preserve the ecology of the site.

2. Sand dune lakes: Examples of this type of lake are within that portion of the study area that lies adjacent to and south and east of the Pismo Dunes Natural Preserve. Approximately ten sand dune lakes are contained within this area. In addition, there is Jack Lake on Union Oil property, which is within the area proposed for acquisition.

These are freshwater lakes with surrounding vegetative cover. In order to preserve this fragile environment, only limited recreation will be allowed in these dune lake areas. This area is at the present time being managed in such manner as to promote the desired protection to the environment.

Trails should be the only development within these sensitive areas. Vehicles should not be permitted in these areas.

The periphery of this lake area can be used for parking and activities that support the access to this area for passive recreation.

3. Freshwater lagoons: North of Arroyo Grande Creek is a series of lagoons, supplemented by a freshwater marsh. These lagoons are surrounded by both native and introduced vegetation and have been partly modified and developed.

Plant cover consists of dense aquatic and semiaquatic vegetation. A great number of permanent and seasonal waterfowl inhabits the area.

The natural values here are not of sufficient integrity to warrant strict preservation. However, only those recreation activities will be permitted that are in keeping with the environmental character of these lagoons and the surrounding area.

Intertidal zone. The intertidal zone of the Pismo project comes under a classification recognized as high-surf, wide sandy beach. The city of Pismo Beach has a jurisdictional control that includes nearly the entire intertidal zone within the city limit. This zone can be further divided into four distinct areas or minor zones as a result of various tidal exposures. These minor zones are as follows:

1. Beach area — splash zone: This zone extends from the mean of all high tides to the high reach of spray and storm waves. This zone takes in the uppermost beach which, in its upper reaches, is wetted only by waves and spray; its lower portion is wetted only by high tides.

This zone is tolerant of recreation activity. It can support a variety of activities associated with the beach.

2. High tide and mid-tide regions: This zone contains the area from mean high water to mean lower low water (the lowest of the daily low tides). This zone is covered and uncovered twice each day. The area from mean high water to mean sea level is the home of barnacles, which tolerate a great deal of air and which require air as well as water for survival. Life in the mid-tide region requires the rhythm of the waves for maintenance of life.

This region is also tolerant of recreation, which includes beach and surf play and running and walking on the beach.

3. Low tide regions: This region or zone is uncovered only during minus tides. Its availability is limited to a few hours each month. The sea life that lives within this zone foregoes the less crowded conditions higher up because of its sensitivity to exposure beyond that which the low tides provide.

The Pismo clam (*Tivela stultorum*), inhabits this region and offers the opportunity for a unique, historic, and principal recreational activity. This is a highly regarded natural resource and is of utmost importance to the Pismo project.

Subtidal zone. This zone consists of submerged land that is constantly covered by the ocean. On the wave-swept sandy beaches at Pismo, living elements have evolved to tolerate the continual pounding of the surf. For instance, instead of the powerful attachment devices that are found on invertebrates of rocky coasts, sandy beach organisms have developed burrowing mechanisms, thick shells, sand-filtering papillae, and other biological systems to ensure survival.

Clamming, fishing, and boating are the major recreation activities of this zone. Surfing is also enjoyed in a few selected locations.

Geology and Geomorphology

*Regional geologic structure.*¹ The regional geologic structure in the Pismo Beach area is extremely complex. The area lies within or near the structural influence of the Coast and Transverse ranges.

The record before the Miocene Epoch is obscure and indefinite. In the early Miocene, nonmarine sediments were deposited. Next the sea invaded the area for the first known time during the Tertiary Period and occupied the region until the end of the Pliocene. During the early and middle Pliocene, marine sediments were again deposited. Deformation was minor but continual. The Pismo Formation was deposited during this epoch. During the upper Pliocene time, the sea advanced farther inland and the Careaga Sand was deposited.

In lower Pleistocene time the Paso Robles Formation was deposited.

In middle Pleistocene time major deformations and intense folding took place. At this time there was partial removal of the Paso Robles Formation in the Arroyo Grande and Nipomo Mesa areas.

After the intense folding and major deformation of the middle Pleistocene, conditions became more stable into the upper Pleistocene. The Orcutt Formation was deposited by ancestral streams. The extent and elevation of the marine terraces indicate that there must have been times of extended uplift in the upper Pleistocene. An example of this is the Nipomo Mesa.

Towards the end of the Pleistocene, during the Wisconsin glacial age, the sea level was considerably lowered. This caused rivers and streams to further entrench their stream beds.

More recent events are the erosion of offshore projecting headlands and the transporting of sand by wave and longshore currents. The wind transported the sand inland to establish the sand dunes. The sand dune development is discussed extensively in a separate section.

*Sand.*² The ocean is the sand resource for the dunes in the study area. The ocean receives its sand supply mainly from erosional materials inland, which are transported by rivers to the ocean. It is estimated that rivers supply more than 70 percent of the sand to California's beaches. Unconsolidated materials eroded from cliffs supply an estimated 1 to 30 percent, depending on the area, and fragmented shells contribute minor amounts on the California coastline. Onshore and offshore movement of existing dunes or ocean bottom sediments contribute in some instances.

Sand transport in the ocean is accomplished mainly by longshore currents, which are the currents parallel to shore caused by waves striking at an angle to the beach. The energy of the wave breaking and creating a surf both moves the sand on the bottom and sets some grains in suspension in the water and moves them along the coast. In the case of Pismo Beach, the waves move in a direction that is nearly perpendicular to the beach, making net longshore drift minimal. Consequently, the sand is driven onto the beach and is blown inland by the wind. This condition, along with parallel ocean bottom contours offshore, tends to create relatively straight beaches.

¹ Condensed from a report by John Meisenbach, California State Department of Parks and Recreation, September, 1974.

² *Ibid.*

The sand supply from Point Buchon to the Santa Maria River is estimated at 8,000 cubic yards per year from San Luis Obispo Creek and 13,000 cubic yards per year from Arroyo Grande Creek. The estimated deposition of sand on the beach is 79,000 cubic yards per year between Pismo Beach and Oso Flaco Creek and 46,000 cubic yards per year from Oso Flaco Creek to the Santa Maria River. It is also postulated that the ocean bottom itself supplies approximately 100,000 cubic yards of sand per year from older alluvial deposits submerged after the retreat of the last glacial period.

Dune formation. In general the whole complex of dunes is known as the Santa Maria Dunes. The study of the dunes is based on William S. Cooper's "Coastal Dunes of California," 1967. Three topographic units comprise the dunes in the Pismo area. They have been identified as the Callendar unit, the Guadalupe unit, and the Mussel Rock unit. The Callendar dune complex rests mainly on the Nipomo Mesa and partly on the alluvial strip between the Nipomo Mesa and the ocean coast. The Pismo study area falls within this alluvial strip. Along the coast the Callendar dunes extend from Arroyo Grande Creek to Oso Flaco Creek.

The Guadalupe unit extends from Oso Flaco Creek to the Santa Maria River and rests on the broad Santa Maria River alluvial plain. The Mussel Rock unit extends from the Santa Maria River to Point Sal and rests on the Orcutt Mesa and a portion of the Santa Maria River flood plain.

The dunes along the Pacific coast have been identified as pre-Flandrian and Flandrian. The pre-Flandrian dunes are very old and were formed before the Flandrian transgression. Because of their long and complex history, they are referred to only as pre-Flandrian. It is thought that their origin goes back more than one glacio-eustatic cycle.

The formation of the Flandrian dunes in the study area of the Callendar dune complex followed the formation of the ancient pre-Flandrian dunes on the Nipomo Mesa. These highly vegetated and stabilized dunes cover about 18,000 acres and extend 11 miles inland. Although the Nipomo Mesa dunes are out of the study area, their formation is significant in tracing the younger dune history.

The pre-Flandrian dunes cover most of the Nipomo Mesa, a stream-formed alluvial terrace.

The Flandrian dunes show evidence of two major episodes of advance. Episode I is the older and consists of the highly stabilized dunes inland. Episode II involves mainly active, moving dunes reaching shore.

The present highly stabilized dunes of Episode I lie mainly on Nipomo Mesa and are roughly in the form of a triangle south of Black Lake Canyon. They have penetrated inland about four miles and extend two and a half miles south of Black Lake Canyon, generally inland from the main mass of active dunes at Pismo State Beach. They are composed of many overlapping parabolas with the open end seaward.

In the northern part of Black Lake Canyon, the Episode I stabilized dunes appear in the form of four wide parabolas and several narrow ones resting on the ancient alluvial plain of Arroyo Grande Creek just south of Cienega Valley. Each of the four major parabolas has one or two shallow lakes or marshes within its troughs. The parabolas basically have common lateral ridges that have been penetrated by active sand on the ocean end.

Generally parallel to and 500 to 1,500 feet inland from the shoreline, discontinuous fragments of stabilized Episode I dunes penetrate the active dune surface. Traces of the older ridges at the coast foredune area can be matched with these Episode I dunes in the typical west-northwest direction.

Various dune patterns are the result of (1) wind, sand, and water; and (2) the previous elements and the addition of vegetation. One pattern of each of the above is found in the study area.

The addition of vegetation introduces irregularity and diversity to dune forms.

Soils. The dominant soil in the study area is coastal dune sand. The majority of the area is covered by actively drifting sand supplied by the ocean and blown inland by the wind. Substantial portions have been stabilized with vegetation.

Portions of the area surrounding Oso Flaco Lake and Creek consist of swampland and stream-deposited agricultural land.

The Soil Conservation Service is currently conducting a soil survey of southern San Luis Obispo County and has provided the following interim soil classification information.

The dune sand is classified as VIe-1, which generally makes it unsuited to cultivation, in this case due to wind erosion. Under irrigation and with slopes less than 15 percent a class IVs-4 is possible. This class soil requires very careful soil management and plant selection.

The immediate area of Oso Flaco Lake and Creek is swampland classed VIIIw-1, which precludes any commercial crop uses due to wetness or flooding.

Generally, the soils southeast of Oso Flaco Lake and Creek are agricultural. The dominant types are Camarillo silty clay loam (IIw-2) and Camarillo sandy loam (IVw-2). Both soils are limited due to wetness caused by poor drainage or flooding.

SCENIC RESOURCES

The unique scenic impact of the Pismo project area is comprised of two major elements: the ocean and the terrestrial zone. The terrestrial zone includes all the land from the top of the Pismo hills to the water's edge.

The ocean, which contains fishing and clamming resources, is in itself a marvel of nature and is the visual focal point at Pismo. The gamut of colors to be experienced ranges from the gray-green surf to the reflection of brilliant sunsets on the water.

The prominences composing the Pismo hills serve as a backdrop to the ocean scene. The full impact of the various scenic elements of the Pismo Beach project can be experienced when one climbs to the highest level of the dunes. Here the gently curving coastline, the Pismo hills, the patchwork of agricultural lands, and the cities to the north all blend into an impressionistic panorama – a picture of magic elements cast in an ever-changing background.

Visual quality is enhanced by the vegetated dunes, the sand dune lakes, and the freshwater lagoons with their wealth of plants and birdlife.

CULTURAL RESOURCES

History

The Pismo Beach region has an interesting history going back in time to 1769, when Don Gaspar de Portola and parties camped in the area.

According to the diary of Costanso, a member of the Portola party, "the party continued over the sand dunes (from Oso Flaco Lake) and then descended to the beach, along which they walked for several miles before camping for the night. Near their camping place was an Indian village of some forty people." Undoubtedly the beach walked upon by the Portola party was that known today as Pismo State Beach.

Pismo Beach takes its name from Rancho Pismo – a name of Indian origin. The city advertises itself as "the home of the Pismo Clam." In early days the sands at Pismo Beach are said to have been "paved with huge clams." At that time there was no restriction in clamming. Farmers plowed the sand, turned up the bivalves and used them for hog and chicken feed.

In 1911 a limit of 200 per day, with a minimum size, was prescribed by law – an early effort at protective legislation.

Before 1920 clams were in great abundance, but the continual impact of hordes of clammers, often taking thousands each day, depleted the supply. There are still many clams at Pismo, but it is unlikely they will ever again reach their former number.

The communities of Shell Beach (northwest) and Oceano (southeast) adjoin Pismo Beach; the former is now within the corporate limits of the City of Pismo Beach. During prohibition Shell Beach was a favorite of smugglers and bootleggers. The Oceano area, largely comprised of sand dunes, was frequently used by the motion picture industry; many scenes representing the Sahara Desert originated here only a few yards from the Pacific Ocean.

Both Pismo Beach and Oceano are within the former boundaries of Rancho El Pismo, granted on November 18, 1849 by Governor pro-tem Manuel Jimeno Casarin to Jose Ortega. In 1866 it was patented to Isaac Sparks. Sparks was a famous sea otter hunter, who subsequently turned rancher.

John M. Price, an employee of William Goodwin Dana at Rancho Nipomo, was the next owner of the property. On the south side of a canyon located near Pismo Beach, Price built a large adobe. This canyon was named Price Canyon in honor of its owner.

A wharf was built at Pismo as early as 1881, but it never became the popular landfall for those entering San Luis Obispo County; Port Harford, several miles north and closer to San Luis Obispo, enjoyed that distinction. The town of Pismo Beach was founded in 1891, when the Southern Pacific Railroad was built from San Luis Obispo to Ellwood in Santa Barbara County.

Today the popularity of Pismo Beach is attested to by its many permanent residents, and by State Beach attendance, which exceeded 2,100,000 persons in 1972.

Archeology³

The Pismo Beach area is within the territory of the Indians of the northern Chumash, especially the group known as the Obispeno. The native name for the Obispeno appears to have been Stishini. Place names in the general area include Tishini, the native name of San Luis Obispo. Pismo and Huasna appear to be derived from Chumash village or area names.

Archeological data for the San Luis Obispo region indicate that the area was occupied by at least 7000 B.C. The terminal archeological period, Canalino, began about 2,000 to 3,000 years ago and ended with the Spanish Conquest. There seems little doubt that the archeological sites at Pismo SB may be assigned to the Canalino period.

The specific archeological resources within Pismo State Beach consist of 14 sites. Of the 14 archeological sites within the unit, several cover less than 1,500 square feet, five are between 3,500 and 15,000 square feet, and the two remaining sites are 54,400 and 67,500 square feet in area, respectively.

None of the small sites, less than 1,500 square feet, have a depth greater than six inches, suggesting that all these sites represent shellfish processing areas used for a short period of time.

The somewhat larger sites, 3,500 to 15,000 square feet, mostly range in depth from 12 to 18 inches, suggesting that they represent temporary Indian camp locations, probably used during the period of time devoted to shellfish collection.

The two largest sites, 54,000 square feet and up, may represent village sites, though their recorded depth suggests that these may simply represent favored camping locations.

The greatest site density is in that portion of the unit just southwest of Oceano. Within an area of one-half by one mile are located 10 of the 14 sites within the state beach.

Within the present vehicular recreation area is one major archeological site, No. SLO-199, extending over nearly 25,000 square feet. It is not within one of the major vehicular use patterns, but it is being studied for necessary protective measures. Two additional known sites are within the proposed expansion area. The discovery of additional archeological values in the future is a distinct possibility.

Those archeological sites that do not enjoy a preserve status must be protected in other ways. First, they should be posted and fenced, and an active and intensive excavation program should then be undertaken to provide data that will validate their loss should it occur through human and natural erosion. The signs should not highlight the cultural values but should draw attention to the importance of protecting these zones or areas of high environmental value.

An excavation program for these sites is being prepared as an accommodation to this Department by professional members of the California Polytechnic State University at San Luis Obispo.

³Condensed from a report by the Resource Management and Protection Division, May 3, 1974.

Resource Management Plan PISMO STATE BEACH

Pismo State Beach, established in 1934 and expanded through various later acquisitions, lies on the coast of San Luis Obispo County. It extends southward from the City of Pismo Beach for approximately seven and a half miles and embraces a land area of approximately 1,100 acres, plus an additional 1,000 acres below the mean high tide line for which application has been made to the State Lands Division.

In addition to the beach itself, which is broad and gently sloping and is the habitat of the famous Pismo clam, the unit includes lagoon areas along the lower course of Meadow Creek and north of the mouth of Arroyo Grande Creek; stabilized dune areas between Meadow Creek and the ocean; and higher and wilder dunes south of Arroyo Grande Creek, largely unstabilized and included within Pismo Dunes Natural Preserve. The southernmost four miles of the unit consist of the beach itself, oceanward from the toe of the foredune. The adjacent inland areas are contained within Pismo Dunes State Vehicular Recreation Area.

The low dunes north of Arroyo Grande Creek are not in their natural condition. They are occupied in many places by introduced plants and by developments of various types. It appears to be in the public interest to maintain these dunes in a condition controlled by vegetation.

The lagoons along Meadow Creek are likewise in a heavily modified condition, and while they have reverted to a quasi-natural condition in some places, investigation has proved that it is not possible to maintain them in that condition. The lagoons should either be preserved in seminatural condition, or they should be landscaped, whichever is the more practical approach in view of the factors bearing on their maintenance, their freedom from breeding of nuisance insects, and other related considerations.

The natural dunes south of Arroyo Grande Creek are included within Pismo Dunes Natural Preserve. A resource management plan has been prepared specifically for that unit.

The beach itself affords recreational opportunities unlike those anywhere else in California. Apart from the availability of the Pismo clam, this beach has traditionally been the only one in the state on which the use of vehicles is permitted. Vehicular use of the beach not only makes possible much easier clamming; it also permits camping with either recreational vehicles or portable equipment on the inner edge of the beach and closer to the ocean than may be enjoyed anywhere else. The perpetuation of these activities is highly valued by many.

There is some responsible opinion in the scientific community that the driving of vehicles on the beach seriously endangers not only the Pismo clam but other species of littoral animal life as well. It is claimed that this is particularly true when vehicles are driven close to the ocean at low stages of tide. Further investigation and evaluation of this opinion is an important need, and may call for modification or closer regulation of certain recreational activities.

Declaration of Purpose

The purpose of Pismo State Beach is to make available to the people an outstanding coastal area of beach and sand dunes located in and southward from the City of Pismo Beach in San Luis Obispo County. Specific recreational activities to be perpetuated and provided for include the aesthetic enjoyment of dunes and shore; beach vehicular travel, when consistent with the perpetuation of the natural values; camping, both in established inland facilities and on the beach in appropriate zones; fishing and clamming under appropriate applicable regulations; and walking or riding horseback in the sand dune areas.

Declaration of Management Policy

Pismo State Beach will be managed by the Department to perpetuate and enhance the recreational opportunities afforded by this outstanding coastline, together with the scenic and natural features upon which such recreational opportunities depend; to regulate the various uses in the interest of the safety and enjoyment of visitors; and to coordinate the various activities and uses

in such a way that the resources of the area are protected and perpetuated to ensure their continuous availability to the people. All activities within Pismo State Beach shall be carried out under the guidelines established by the *Resource Management Directives* of the Department of Parks and Recreation.

PISMO DUNES STATE VEHICULAR RECREATION AREA

Pismo Dunes State Vehicular Recreation Area is a unit of the State Park System that presently embraces about 810 acres, with an additional 2,130 acres now contemplated for acquisition. It lies southward and inland from Pismo State Beach and includes the highest portion of the sand dune areas in southwestern San Luis Obispo County. In total it is approximately three and a half miles in extent from north to south, beginning at the south boundary of Pismo Dunes Natural Preserve, and a little more than two miles in extent from east to west, extending inland in places as far as the main line of the Southern Pacific Railroad. Its west boundary is the western toe of the foredune at the inland edge of the beach.

Roughly half the area within this unit consists of unstabilized dunes that are ideal for off-road vehicle operation and other related recreational pursuits. Also included within the unit, however, are stabilized dunes of considerable ecological significance, valley margins adapted for development of facilities, and freshwater lakes trapped by the shifting sand, some of them having considerable ecological interest and importance. There are three known archeological sites, but two of these are large and of great interest and significance; they are not within the zone that is to be used for active vehicular recreation.

Declaration of Purpose

Pismo Dunes State Vehicular Recreation Area is established to make available to the people opportunities for recreational use of off-road vehicles in a large area of unstabilized sand dunes exceptionally adapted to this recreational activity; to regulate such uses in the interest of visitor safety and environmental protection; and to provide appropriate related facilities to serve the users of the area. At the same time, the area is established to afford protection to surrounding stabilized sand dunes that embrace some areas of great ecological interest and significance, including freshwater lakes. These areas are important not only in their own right, but also as key elements in the environment within which the vehicular activities will take place and in the quality of the visitor experience arising from those activities. This protection is to be afforded by exclusion of vehicular activities, by establishment of natural preserves in appropriate locations, and by other measures as required.

Declaration of Management Policy

The Department will manage Pismo Dunes State Vehicular Recreation Area in ways that perpetuate and enhance the uses and values enumerated in the declaration of purpose, that reduce or eliminate conflicts between patterns of use arising from the kinds of resources present in the area, and that forward mutual understanding between the diverse groups of visitors and interested persons who use this area for various recreational and scientific pursuits. Operating and management procedures will provide for the protection and perpetuation of the several islands of vegetation existing within the designated vehicular use areas. All departmental activities at Pismo Dunes State Vehicular Recreation Area will be carried out within the guidelines established by the *Resource Management Directives* of the Department of Parks and Recreation.

PISMO DUNES NATURAL PRESERVE

Pismo Dunes Natural Preserve is an area of approximately 430 acres, with expansion to 570 acres now contemplated, within the sand dune area of Pismo State Beach. Established in July, 1974, the natural preserve begins at the left bank of Arroyo Grande Creek, its northern boundary common to Pismo Dunes State Vehicular Recreation Area. Laterally, it is bounded on the west by the seaward toe of the foredune, this being the inland limit of the beach, and extends inland from there to the eastern boundary of Pismo State Beach, approximately at the crest of the highest dunes. The foredune is well stabilized with woody and seasonally herbaceous vegetation; the higher dunes farther inland are active and bare of vegetation. Within the natural preserve are a large number of the known recorded archeological sites within the entire Pismo dunes complex.

Declaration of Purpose

Pismo Dunes Natural Preserve is established to perpetuate in essentially natural condition a substantial tract of sand dunes in an area where they attain outstanding development and where they may easily be visited and enjoyed by interested persons. Full protection is also afforded to all archeological sites located within the unit and to all natural vegetation and wildlife occurring within it.

Declaration of Management Policy

The Department will manage Pismo Dunes Natural Preserve in accordance with Section 5001.5(f), Public Resources Code, and with the *Resource Management Directives* of the Department of Parks and Recreation. It will be kept free not only of roads, structures, and other facilities, but also of dune stabilization projects of all kinds. Motorized vehicles of any type, except in cases of extreme emergency, are prohibited.

PLAN ANALYSIS





Acquisition

The acquisition of key private land will:

1. Ensure continued public use and enjoyment of beach and dune recreation lands.
2. Be necessary to accommodate the ever-increasing pressures for recreation lands in the Pismo Beach area.
3. Provide the means for state action to protect now privately owned natural and cultural values that are currently being damaged.
4. Be a necessary step toward the development of a new access to the dunes which, when provided, will relieve vehicular congestion on the beach.
5. Provide lands on which base facilities can be developed for both active and passive recreational uses in the dunes.

The most urgent land acquisition need involves approximately 1,400 acres of land south of the Pismo Dunes State Vehicular Recreation Area. This property includes Union Oil Company lands west of the railroad and properties in the vicinity of Oso Flaco Lake. This would include the acquisition of large parabolic sand dunes, freshwater lakes and marshlands, and outstanding examples of native plants in the Coreopsis Hill area.

Problems relative to access and land use in the Pismo Dunes State Vehicular Recreation Area can be satisfactorily solved only if *both* the Union Oil Company property and the Oso Flaco properties are acquired. Funds from the 1974 Park Bond Act are earmarked for the acquisition of lands in the Oso Flaco Lake area; however, there is no source for funding the acquisition of the Union Oil Company properties. Funds for the purchase of Union Oil Company lands are urgently needed. The state cannot develop leased lands; therefore, a lease is not the solution.

Acquisition of 280 acres of Pacific Gas and Electric lands is important though less urgent than the two properties previously mentioned. The PG&E lands are an integral part of the total dune complex and must eventually be acquired for public use. This land is not vital to the solution of some of the more pressing problems. To provide for public use of this land in the interim, the state should renegotiate its lease of the property.

The Dune Lake properties are currently being managed as a private preserve, and the natural values are well protected. This management policy is totally compatible with the state's policy for management of the neighboring public recreational lands. In the event the natural values on the Dune Lake properties were jeopardized through development, it would be desirable to acquire this property for preservation and recreation purposes. The State of California, in its management of off-highway vehicle use, has an obligation to the Dune Lake properties, as well as other neighbors, to provide an adequate buffer from vehicle use.

It would be desirable eventually to acquire the private ownership within the sand dunes between the Pismo Dunes Natural Preserve and the agricultural lands in the Cienega Valley. This would ensure the environmental integrity of the dune preserve.

It would be in the best interests of the public if the state were to assume ownership of the La Grande Beach Tract, containing 630 acres and primarily owned by the County of San Luis Obispo. It is logical that this inholding be administered by the state in conjunction with the state beach and vehicular recreation area. The administration of this area by the state would provide continuity to the state beach and relieve the county of administration and maintenance costs.

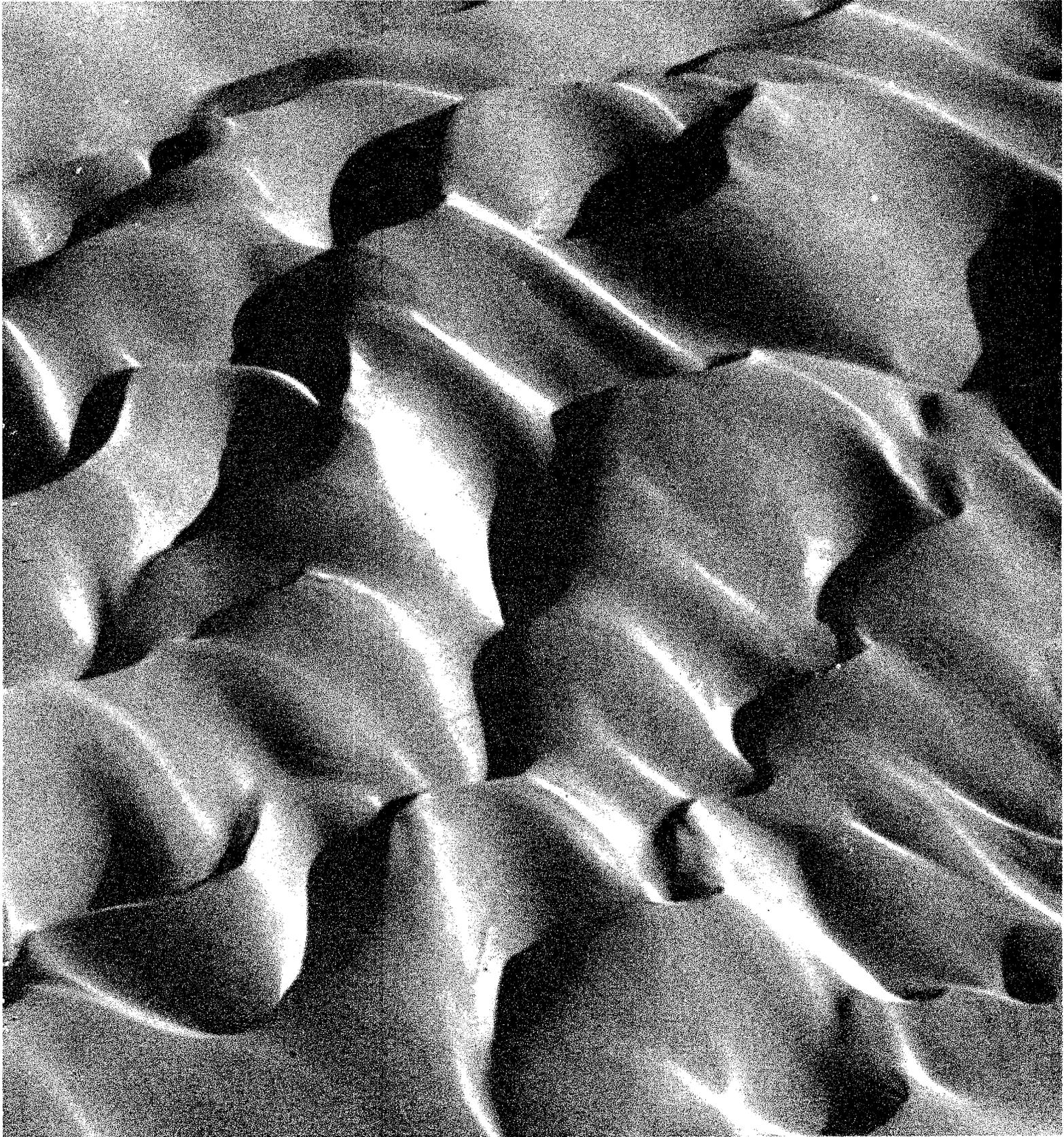
The primary need for additional public land is for large parcels of land south of Arroyo Grande Creek in the vicinity of the state vehicular recreation area. It would, however, be desirable to acquire some specific smaller parcels of land north of the creek within the vicinity of the state beach. The implementation of a part of this plan involves the cooperation of local agencies in the abandonment and transfer of interest in portions of streets near the foot of Grand and Pier avenues.

Control

If the beach and the dunes are to continue to serve highly diversified recreational activities and great numbers of people, and if the public is to enjoy a quality recreational experience with maximum environmental integrity, then the most effective means to accomplish this is through the implementation of controls at all access points to the beach.

Controlled access does not imply that a fee be charged for day use, nor does controlled access mean that each access will be manned 365 days a year. Controlled access does mean that during periods of moderate and heavy visitation, each visitor will have ready access to recreation area information as well as rules and regulations. It means that beach camping as well as any other recreational use that might threaten environmental integrity can be controlled to specific numbers. It means that law enforcement problems will be eased and that in general visitors to the area will enjoy their visit more and yet be more inclined to obey regulations, such as speed limits on the beach.

PLAN ELEMENTS



Beach Day Use

Beach touring (driving an automobile on the hard sand beach) is a favorite recreational activity among many. For some, particularly out-of-state visitors, this is a rare, long-remembered experience. Indeed, there are few areas where natural conditions provide such an opportunity. For other visitors, the hard sand beach serves a utilitarian role: it allows them to drive to their favorite location, where they can pursue a recreation activity, such as fishing, camping, clamming, or dune bugging.

Provided there are ample areas zoned for other beach activities and provided the 15 MPH speed limit is enforced, there is no known reason why beach touring should not continue. The day-use vehicle activity has not yet reached proportions that justify regulation of numbers. Possibly this will be necessary some time in the future. It is important that studies of the ecological impact of vehicle use on the intertidal zone at low tide be continued and that findings from such studies regulate vehicle use.

It seems logical to conclude that the more that can be done to reduce vehicle traffic on the beach and to reduce conflicts between beach vehicle interests and other beach user groups, the better will be the opportunity for this rare beach touring activity to continue. Steps that will reduce beach vehicle traffic include:

1. Provision of new access to dunes for off-highway vehicle use
2. Significant reduction in beach camping
3. Provision of parking areas adjacent to beach
4. Provision of a beach-dunes interpretive tour vehicle that could also serve as a people mover and operate the full distance of the beach with regular stops
5. Provision of a local transportation system that would connect inland motels and recreational vehicle parks with the beach
6. The development of a functional system of bicycle trails to connect the state beach use areas with the local communities

Use patterns on the beach between Grand and Ocean View avenues indicate that it will not be too many years before this area should be converted to nonvehicular day use. This segment of beach is about one mile in length and is receiving increasing numbers of walk-in visitors from nearby campgrounds and motels. The beach will serve a greater number of people in a safer and better environment without automobile traffic. Certainly automobile traffic is not compatible on a beach where large numbers of people converge for beach play. Local businessmen in the city of Pismo Beach oppose this conversion of beach use because it will isolate beach vehicle traffic from the city and consequently, they believe, will adversely affect their economy. It is very likely, however, that by the time the state could implement this conversion — perhaps five years from now at the earliest — the businessman in Pismo Beach will welcome this recommended conversion of use. The conversion should not take place before adjacent off-beach parking is provided.

The Department has been instructed by the State Park and Recreation Commission to work with the city of Pismo Beach regarding the closing of the Ocean View Avenue ramp.

Day Use Within Inland Areas of the State Beach

Excluding the concession-operated golf course, at the present time there are no facilities or areas provided for day-use recreation activities in the interior of the state beach. There is adequate space for the introduction of several uses in this area, and the primary need is for picnic use. Picnic sites in this area would be protected from the wind and could be located in the highly scenic

vegetated area adjacent to Meadow Creek south of Grand Avenue. Flooding and mosquito abatement problems could be solved with dredging, grading, and landscaping, which would allow this area to be developed and managed for picnic and related uses. By varying the width of the lagoon, providing waterfowl islands, and developing trails and picnic sites around the lagoon, an interesting and valuable recreation opportunity will be offered to kayakers, birdwatchers, bicyclists, hikers, and fishermen. This section of the creek has been previously modified by man; consequently, it is not regarded as an area with significant natural values. The area does harbor wildlife; however, the nature of the modifications and use proposed for this area would not adversely affect the wildlife habitat.

The east slope of the sand dunes that protect the Meadow Creek area from the ocean winds have been planted with beach grasses and stabilized. Today there is a variety of both natural and exotic coastal plants occurring in this area. Here there is an excellent opportunity to manage a botanical area for scientific and educational purposes. With some additional plantings this area will help to interpret the native flora and fauna in the dunes natural preserve. The area would serve best as a dune arboretum with minimum developments, including a parking area, boardwalk trails, and interpretive facilities.

The existing concession-operated restaurant and golf course at Grand Avenue have been well received by the public and well patronized. The golf course provides an excellent open space element at the proposed major entrance to the park. These uses should be continued.

There is a distinct need for identifying lands of state ownership. This can be best accomplished through signs, elimination of unrestricted access, and development of a road system emanating from a main entrance and serving each of the use areas, including overnight areas and the beach.

There is a considerable amount of equestrian use on the beach and in the dunes. Presently there is less than adequate regulation of the use of horses on the beach, and there are few areas developed for equestrian use. There is a need for the designation of riding trails in the dunes and on a specific segment of the beach. There is also a need for the development of two staging areas on the trail system where visitors can park and unload their trailered horses. The best location and opportunity for the development of one such area is on county land adjacent to the Arroyo Grande Creek levee. There is an opportunity to develop a similar type of staging area some five miles south within the proposed Pismo Dunes State Vehicular Recreation Area expansion at Oso Flaco Lake. The trail system connecting these two areas would be best located within the buffer zone on the exterior of the off-highway vehicle area.

The provision of bicycle trails is important to the interior circulation system.

Day Use Within State Vehicular Recreation Area

The basic day-use elements within the proposed vehicular recreation area include:

1. Touring and competition areas on the interior of the dunes
2. Peripheral buffer lands separating the touring and competition areas from neighboring private lands.
3. Peripheral natural areas serving passive nonvehicular uses
4. Day-use staging area providing the operational base for the off-highway vehicle activities
5. Support facilities for the peripheral natural areas
6. Administrative facilities necessary to the operation and maintenance of the state vehicular recreation area

Touring and competition areas. The non-vegetated area on the interior of the dunes is to be designated for vehicular activities. There are some vegetated areas within this area that have been criss-crossed with roads in recent years by off-road vehicle use. Some of these roads should remain open to provide better circulation and diversified terrain for vehicle operators. To prevent sand blow-outs and further loss of vegetation, other roads should be closed, planted, and stabilized. The determination of which roads should remain open must be carefully carried out on the site with vehicle operators and resource management personnel.

A simple system of zone delineation could be implemented within the dunes. Reflectorized panel markers using symbols indicating various messages could be adopted. This might be similar to the system of markers adopted by boaters.

Competitive events, including drag races and hill climbs, have been conducted at specific locations within the dunes for a number of years. Such events have been well controlled and conducted in an orderly fashion. There is no reason why the off-road vehicle groups should not continue these events.

Several vegetated areas within the dunes provide an excellent environment for off-highway vehicle family picnic use. This use should continue.

Peripheral buffer lands. This is an area of varying width on the perimeter of the touring area. The actual interior boundary of this buffer zone must be determined in the field to suit topographical conditions. The width of this zone should be a minimum of 500 feet. The zone will serve to protect private lands bordering the vehicular recreation area, and off-highway vehicle use will not be permitted within the buffer zone. This zone will accommodate a riding and hiking trail as well as a route for the interpretive tour vehicle. Within this zone are several archeological sites that must be protected. The margin of this zone would be increased when justified by neighboring values, such as the ecologically sensitive Black Lake area.

Peripheral natural areas. These are the areas that support significant natural values worthy of management for passive recreational uses and protection from off-highway vehicle use. This includes Jack Lake, Oso Flaco Lake, Coreopsis Lake and related marsh, as well as dune and vegetated areas, including Coreopsis Hill and Little Coreopsis Hill.

Day use staging area. This is the area that will serve as the base for off-highway vehicle recreation activities. This area must serve the following functions:

1. Parking and a trailered vehicle unloading area should be provided for off-highway vehicle operators. This will require a vast area for parking during peak use, which occurs on relatively few days of the year. Consequently, it is reasonable that the paved parking area serve only the basic needs and that less costly turf areas be provided for expansion of parking during peak use periods.
2. The basic needs of the off-highway vehicle operator should be met in this area. This would include concession facilities, such as fuel and service. Eventually a concession-operated storage and rental service may prove economically feasible. Food and beverage supplies in the early stages of the project might best be offered through a mobile facility during heavy use periods.
3. Off-highway vehicle organizations should have the opportunity to develop administrative facilities for their activities in this staging area. This could be a center developed for information and competition event registration. These groups could possibly implement a patrol and safety program similar to that undertaken by ski patrols.
4. It is essential that vehicular recreation area operational facilities be located in this area. This would include a state-operated control center with first aid facilities and an information and education program.

Support facilities for passive recreational uses. This includes the access roads, parking areas, trails, picnic areas, and equestrian and interpretive facilities necessary to visitor enjoyment of the Oso Flaco and related nonvehicular use areas.

Administrative facilities. This element relates to overnight use and day use equally. The most efficient way to administer the Pismo Dunes Vehicular Recreation Area will be to develop administrative facilities directly in relationship to the area. This will include the operational center mentioned above as well as a maintenance center, employee housing (mobile home), and an entrance contact station.

Overnight Use

Beach Camping

During periods of peak use the beach becomes congested with vehicles, and in recent years this congestion has resulted in adverse environmental conditions and has reached proportions that jeopardize public health and safety. A major contributor to this congestion has been the beach camper.

On the major holidays most of the beach campers are off-highway vehicle enthusiasts who find the beach the most convenient base for access into the dunes. Many of these campers would prefer camping in areas behind the dunes protected from the winds; however, only 25 percent of the vehicles (campers, motorhomes) are capable of operating in the sand. Many campers with this capability drive to primitive camping areas in the interior of the dunes.

If a hard surface road were provided to a camping area with basic facilities in the stabilized area at the rear of the dunes, a great deal of the pressure would be taken off the beach.

Most off-highway vehicle operators do not seek the conventional type of campsite provided by the California State Park System. They prefer a less formal area with flexibility, where small numbers of vehicles can converge in groups. They do not require conveniences, such as showers, electric and water hookups, and individual parking spurs.

There are a number of private recreational vehicle parks in the Pismo area, for those who seek utility hookups and other conveniences.

The basic problem with beach camping is the number of campers. Environmental conditions can be maintained at a quality level only when use is restricted to designated areas in low densities. With controlled access it is possible to maintain a given level of density during peak use periods.

The present problem involving too many campers on the beach during the three major holidays is not likely to be solved through the abrupt discontinuance of camping during these peak periods of use. This action will not immediately stop the influx of campers to the general Pismo area. If camping on the beach is banned, these campers will overflow into the streets of the local communities or into other areas that may be provided for emergency camping areas. The adverse environmental conditions that would result would likely create equal if not greater problems than beach camping. It should be noted that during these periods of heavy camper influx all private and public campgrounds are filled to capacity.

The most logical solution to the beach camping problem will be through the following actions:

1. Educate the beach camper as to the problem and the need for correction.
2. Immediately acquire lands in the rear of the dunes and develop camping areas accessible to passenger vehicles.
3. Provide and enforce stringent environmental controls on beach camping.

Note: The Department of Parks and Recreation's "Interim Use Plan," published in the summer of 1974, was the first step toward implementation of these actions.

Some visitors camp on the beach for the rare beach camping experience rather than because of the convenient access to the dunes. Indeed, this opportunity is unique to Pismo Beach for nowhere else on the California coast does this type of outdoor recreation opportunity exist.

A basic responsibility of the State Department of Parks and Recreation is the provision of outdoor recreation opportunities of statewide significance. At this time there is no known reason why low-density camping should not continue on the beach. Within the foreseeable future, beach camping, if maintained in designated areas at low densities, will not compete with day-use activities nor will it create adverse environmental conditions on the beach.

Primitive Camping in Dunes (4-WD Access)

This type of camping has long been enjoyed by the off-highway vehicle owners. Camping areas in the dunes have been policed and maintained in a sanitary condition by off-highway vehicle groups.

There are no land use conflicts with primitive dune camping, providing:

1. Camp areas are maintained in designated locations clear of active touring areas.
2. The number of campers is maintained in balance with area size and sanitary facilities.
3. The use remains of a primitive nature. So called "improvements" and modifications to the landscape should be kept to a minimum.

Back-Dune Camping (Passenger Car Access)

The use of carefully selected areas in the stabilized backdunes for camping would alleviate pressures for beach camping.

Vehicle travel within back-dune camping areas must be confined to designated routes of travel to protect vegetated dune areas.

Back-Dune Overflow Camping (Passenger Car Access)

Approximately 20 days a year all available private and public camping areas are filled, and there is a need for an overflow camping area. Areas in the backdune are suitable for overflow camping provided:

1. The use is contained in designated areas
2. The use remains at a level that will permit natural rehabilitation and recovery of the site.

Inland Camping (Conventional Campgrounds)

The present land use at Oceano and North Beach campgrounds provides low-density family camping. The site densities within these areas are generally good. With some rehabilitation these areas should continue to serve the public as they have in the past.

Adjacent to the state beach the private sector is providing high-density campsites with electric, water, and sewer hookups for recreational vehicles. State beach lands would best not be used for this type of facility, which is readily available nearby.

Hike-in Camping

Hike-in camp areas are not now available. With the acquisition of lands in the Oso Flaco Lake area, there would be an excellent opportunity to provide such an area with primitive facilities.

The area should be separated from the sight and sound of off-highway vehicle use. Trailhead parking and trail facilities should be provided in conjunction with hike-in camping. The area should be designed to accommodate both individuals and small groups.

Hostel

An increasing number of long-distance bicyclists and hikers uses units of the California State Park System. The Department will soon begin to provide hostels to accommodate these visitors. The Pismo State Beach area is beginning to receive an influx of this type of use, and there is an excellent location for such a facility adjacent to the existing Highway 1 bicycle trail adjacent to the North Beach Campground.

Primary Access to Pismo Dunes State Vehicular Recreation Area

Once the key lands related to the SVRA have been acquired, a new access and support facilities for off-highway vehicle activities should be provided. This acquisition and development are urgently needed for the relief of vehicle and camping pressures on the beach.

The access to be provided will serve not only OHV interests; there are also scenic natural areas in this region that will be acquired for passive recreational activities. Certain support facilities, such as access, parking, trails, and picnic facilities should be developed adjacent to these non-off-highway vehicle use areas.

After a number of alternatives were studied, two possibilities were considered for access to the Pismo Dunes State Vehicular Recreation Area. The first, Alternative A, would provide access from Highway 1, immediately north of the oil refinery; the second, Alternative B, would provide access from Oso Flaco Road near Oso Flaco Lake.

There has been a division of opinion on these two access routes. The County of San Luis Obispo has recommended the Oso Flaco access; the Pismo State Beach Technical Planning Committee also recommends the Oso Flaco access. The Citizens' Advisory Committee and a coalition of user groups, including conservationists and off-highway vehicle users, favor the Highway 1 access. The State Park and Recreation Commission also recommends the Highway 1 access.

The general acquisition program for this area will not be materially altered by the selection of access. If the Highway 1 access is selected, it will be necessary to acquire an additional narrow connecting corridor of land about 1,500 feet long between the highway and the proposed SVRA.

Access to the area proposed for off-highway vehicle support facilities would be most direct over Highway 1. This access would save nine miles for southbound traffic and a half mile for northbound traffic. However, if the destination were the Oso Flaco Lake area, where passive recreation use facilities are proposed, the Highway 1 access would not offer a mileage saving.

From its intersection with Highway 1, the Oso Flaco Road is three miles long to Oso Flaco Lake, where the road ends. This is a paved county road that presently serves only the agricultural fields and recreation use. On this section of road there is a crossing of the Southern Pacific Railroad with signals and crossarms. If the major access to the Pismo Dunes State Vehicular Recreation Area is located at Oso Flaco, the standard of this three-mile section of road will eventually have to be improved.

The Highway 1 access would necessitate the construction of approximately 1,500 feet of new road plus a costly railroad overpass.

Proponents of both means of access have offered valid arguments favoring the access that best serves their interest. Those favoring the Oso Flaco access fear that the Highway 1 access would bring off-highway vehicle recreation activities too close to the privately owned Dune Lakes properties — environmentally sensitive lands that are now managed as a preserve. Conversely, those favoring the Highway 1 access fear that the Oso Flaco access would bring these same types of activities too close to Oso Flaco Lake's fragile environment. Also, the Highway 1 access certainly provides a much closer access for southbound visitors to the off-highway vehicle area.

After careful consideration of the various alternatives, the California State Park and Recreation Commission, at its December 5, 1974, hearing in Los Angeles, determined that the Highway 1 access provided the best solution for primary access to the Pismo Dunes State Vehicular Recreation Area.

Secondary Access to Pismo Dunes State Vehicular Recreation Area

There will be two points of secondary access to the vehicular recreation area. One will be via the beach, and the other will be via the existing causeway over Oso Flaco Lake to the Maidenform Flats area. Both routes have long been used by dune riders. The need for additional access routes outweighs the conflicts caused by these routes.

The primary access to the dunes now is via the beach from Pier or Grand Avenue to the sand highway several miles south. Some visitors drive slightly farther down the beach and enter the dunes at other points. As mentioned earlier, the more traffic that can be redirected from the beach to the proposed primary inland dune access, the more the congestion problem will be eased on the beach. The proposed inland access will primarily serve visitors that originate from distant locations. Many local off-highway vehicle operators will continue to drive down the beach and enter the dunes as they have in the past. Trailered vehicles, however, will be directed to the main vehicular area access; thus, the overall result will be a significant reduction in beach traffic to the dunes.

The other secondary access will be across the existing Oso Flaco Lake causeway to Maidenform Flats. Drag race competition events are conducted several times a year in this area, and these events attract large crowds. Approximately half the spectators, plus any special equipment necessary to conduct the events, come into the dunes via the Oso Flaco causeway. The Maidenform Flats area is also a popular camping area, and vacation trailers are sometimes towed over the sand to the camp area. It is proposed that this camp area remain for primitive camping in the dunes.

The corridor that will be used as a thoroughfare to Maidenform Flats has already been modified by man and is not considered significant in natural values. The conflict with this secondary access is that it bisects the Oso Flaco natural area, and the sight and sound of vehicles in this area will not be compatible with the adjacent passive recreational uses. The problem will be insignificant if this access is used on a special use basis only. During the large competition events and for camping access with special equipment, the road could be used for through traffic only.

Neither of the secondary access routes requires the addition of an entrance station. Both routes will be controlled by stations previously discussed.

Utilities

No major utility problems are anticipated for this general development plan. Water, sewerage, electricity, telephone service, and solid waste disposal are all feasible.

The Pismo State Beach water supply is currently furnished by the County of San Luis Obispo, County Service Area 13. Future supply for new development will be through the same agency.

Water supply for the proposed overnight and day-use facilities in the vehicular recreation area will be from deep wells constructed by the Department of Parks and Recreation or through possible purchase by agreement with a private industrial source.

Pismo State Beach sewage disposal is through the trunk sewer lines of various cities in the area to the treatment plant of the South San Luis Obispo Sanitary District. Future development sewage disposal will be through the same facilities.

South of Arroyo Grande Creek sanitary facilities for beach camping and day use consist of chemical toilets. The effluent is currently pumped into a Department of Parks and Recreation pumper-trailer and disposed of in sewer lines leading to the South San Luis Obispo Sanitary District Treatment Plant. Future sewage disposal will be by the same method with an alternative disposal on a county-approved land disposal area east of the study area.

Sewage disposal for the camping and day-use areas for the proposed vehicular recreation area will be either by septic tank and leach field, on-site treatment and spray field disposal, or off-site transport if possible in the future.

Electricity and telephone service will continue to be furnished by local utility suppliers at Pismo State Beach. The state vehicular recreation area will be serviced by electricity and telephone facilities available east of the Southern Pacific Railroad tracks.

Solid waste disposal will continue by means of pick-up by local agencies or contractors.

CARRYING CAPACITY OF INDIVIDUAL AREAS

TYPE OF USE AND AREA	LINEAR FEET OF BEACH FRONTAGE	LIN. FT. BEACH PER PERSON	NUMBER OF SITES	EST. NO. OF PEOPLE PER CAR*	NUMBER OF VEHICLES	INSTANTANEOUS CAPACITY (PEOPLE) X	TURNOVER FACTOR	DAILY CAPACITY (PEOPLE)
OVERNIGHT USE								
SB BEACH	8,000	8	200	5	200+	1,000 X	1.0	1,000
SB INLAND	----	--	185	5	185+	920 X	1.0	920
SVRA HIKE-IN	----	--	---	--	---	80 X	1.0	80
SVRA DUNE-PRIMITIVE	----	--	120	5	120+	600 X	1.0	600
SVRA BACK DUNES	----	--	300	5	300+	1,500 X	1.0	1,500
SVRA BACK DUNES OVERFLOW	----	--	380	5	380+	1,900 X	1.0	1,900
TOTAL					1,185+	6,000		6,000
DAY USE								
SB BEACH-NON VEHICLE	10,000	1	---	4	** 1,280	10,000 X	1.5	15,000
SB BEACH VEHICLE	28,000	5	---	4	1,400	5,600 X	2.0	11,200
SB INLAND PICNIC AND OTHER	----	--	80 Picnic	4	*** 200	800 X	1.5	1,200
SVRA OHV STAGING AND DUNES	----	--	50 Picnic	2	1,200	2,400 X	1.25	3,000
SVRA NATURAL AREAS AND OTHER Non-OHV AREAS	----	--	30 Picnic	4	100	700 X	1.5	1,050
TOTAL					4,280	26,800		31,450

LEGEND: SB = State Beach
 SVRA = State Vehicular Recreation Area

* Maximum of 8 persons per unit for overnight use
 ** 50 percent off-beach parking provided
 *** Not including off-beach parking

Carrying Capacity

The recreational carrying capacity is the amount of recreation use that an area can support without causing excessive damage to the physical environment and without lessening the recreational experience of the visitor. The design of sanitary facilities, parking, and other support facilities is based on the carrying capacity.

The determination of the recreational carrying capacity is a very complex process. This is particularly true in areas that are involved in the plan. Consider some of the variables at Pismo Beach, such as the changing space available on the flat beach at different tide levels. Or consider some of the variables involved in determining carrying capacity of off-highway vehicles in the Pismo Dunes State Vehicular Recreation Area, such as:

1. Number of vehicles operating at any given time (Some operators estimate that only 25 percent of sand vehicles are operating at one time.)
2. Range of vehicles (Some vehicles are confined to the harder sand because of tires, motor, and the like.)
3. Condition of dunes (soft or hard sand)
4. Relief of dunes (Some areas are rarely used while others are heavily used.)
5. Type of activity (hill climbing, touring, and so on)

Each of these elements must be considered in determining how many vehicles a given area of dunes can support at any given time.

The carrying capacities for Pismo State Beach and Pismo Dunes State Vehicular Recreation Area are recommended in Figure 9. These are based on regulated capacities used within other units of the California State Park System, together with currently known use patterns, densities, and problems at Pismo State Beach. The figures are not infallible. This is particularly true as relates to off-highway vehicle use, which is a relatively new activity and one with which most agencies have had little experience.

It is imperative that these recommended carrying capacities be carefully monitored, studied, and adjusted as determined necessary to maintain environmental integrity of the resources and a quality experience for the visitor.

Pismo State Beach

Access

1. Provide controlled vehicle access to the state beach using temporary control stations in the initial phase with conversion to permanent facilities in the future. The main entrance station is to be located at Grand Avenue, and an auxiliary entrance station is to be located at Pier Avenue.
2. Reduce the number of vehicle access points to the state beach and provide an inner road circulation system connecting overnight use areas, day use areas, and the beach.

Acquisition

1. Through the State Lands Commission, acquire administrative control of tidal lands adjacent to Pismo State Beach.
2. Work with the County of San Luis Obispo toward the consolidation of ownership and continuity in administration of county and state recreation lands located between Arroyo Grande Creek and Pier Avenue.
3. Work with the County of San Luis Obispo toward the consolidation of ownership and continuity in administration of 140 acres at the northern end of the La Grande Beach tract adjacent to the Pismo Dunes Natural Preserve.
4. Acquire lands between Oceano Campground and the beach on the north side of Pier Avenue whenever such lands qualify for purchase under the Department's opportunity purchase program.

Day Use

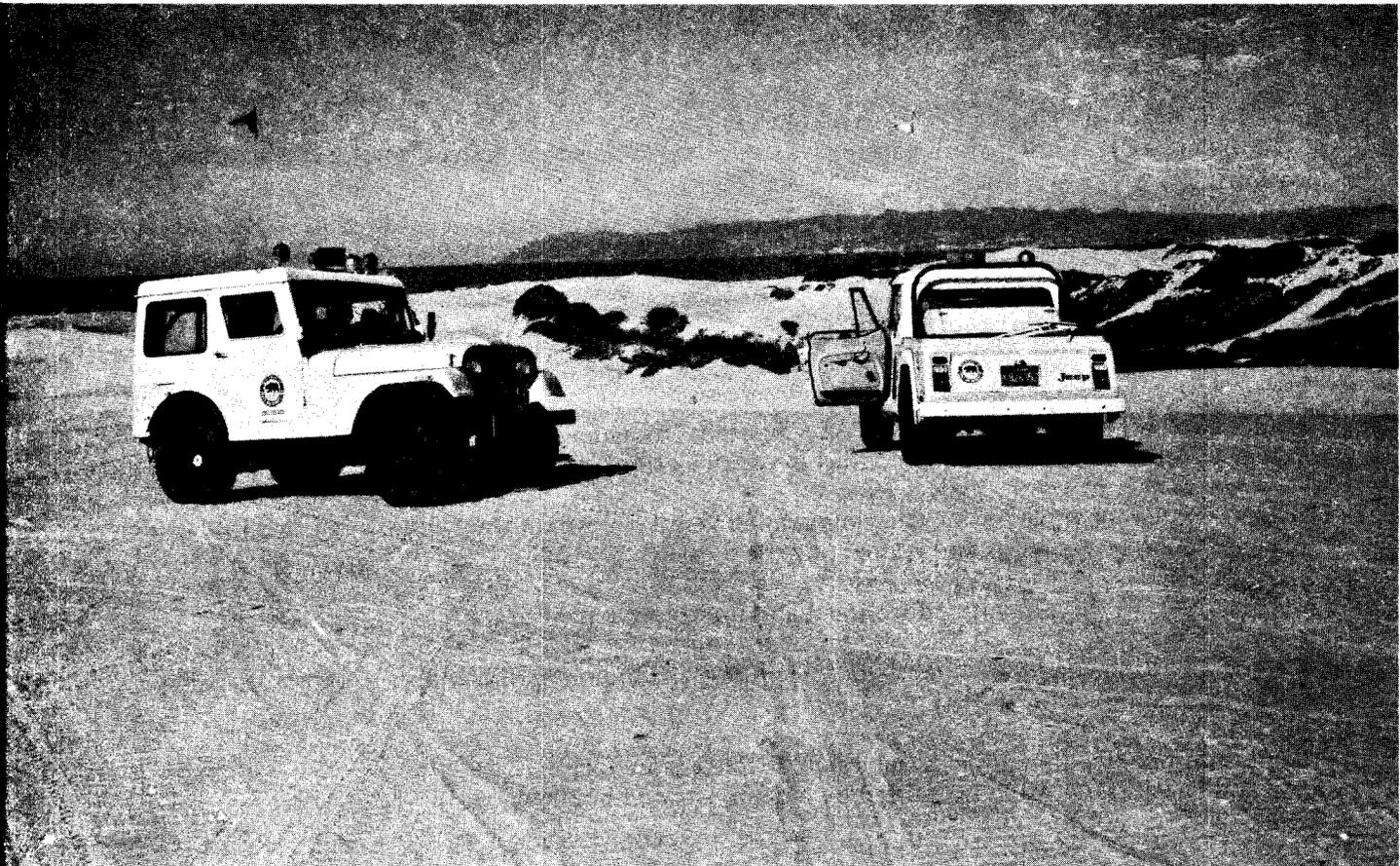
1. Provide off-beach parking at Pismo Creek and Pier Avenue with a major facility near the foot of Grand Avenue (520 paved parking spaces plus 400 turfed spaces total for the three locations).
2. Work with the City of Pismo Beach in converting beach use between Ocean View Avenue and Grand Avenue to pedestrian use only.
3. Enhance Meadow Creek for fishing and other recreational uses through dredging, landscaping, and wildlife enhancement measures.
4. Provide two off-beach picnic areas, one adjacent to Grand Avenue parking and another adjacent to Meadow Creek (40 picnic sites at each location).
5. Provide a system of trails for bicycle riding, hiking, and equestrian use, with bicycle and hiking trails paralleling access roads and connecting use areas.
6. Provide a dune arboretum with educational and interpretive facilities.
7. Continue existing day-use concession facilities, including golf course, restaurant, and pier-related facilities.
8. Provide additional compatible beach-related concession facilities, such as beach equipment rental and beach tram, when warranted by a demonstrated public need.

Overnight Facilities

1. North Beach Campground (100 camp units): Continue present use with development of campfire center, realignment of existing entrance road, removal of existing entrance station, and landscaping for visual screening, wind protection, and aesthetic purposes.
2. Oceano Campground (80 camp units): Continue present use with rehabilitation of vegetative screening in specific areas. With the consolidation of park entrance stations at Grand Avenue, the Oceano Campground entrance station would be removed.
3. Hostel: Provide hostel adjacent to North Beach Campground.
4. Beach camping: Provide 320 camping units in designated areas on the beach south of Arroyo Grande Creek. Reduce the beach camping units to 200 upon development of inland camping in the dunes. Provide portable sanitation facilities on the beach for overnight use, and develop a sanitation station for recreation vehicle waste disposal at the Grand Avenue entrance.

Administrative Areas

1. Maintain existing service yard and employee housing area at present location.
2. Provide state beach headquarters office in conjunction with entrance stations at Grand Avenue.



Pismo Dunes State Vehicular Recreation Area

Access

1. Initially provide temporary access to Pismo Dunes State Vehicular Recreation Area from Oso Flaco Road. When feasible, provide an access from Highway 1 in the vicinity of the Union Oil Company refinery.
2. For special purpose recreational use in connection with competition events and camping, provide access to dunes via Oso Flaco Lake causeway.

Acquisition

1. For addition to the vehicular recreation area, acquire from the County of San Luis Obispo approximately 490 acres at the southern end of the La Grande Beach Tract.
2. Acquire 1,400 acres of private land, including Union Oil Company properties west of the Southern Pacific Railroad and lands in the vicinity of Oso Flaco Lake, for purposes of developing access and recreational facilities and for protection of scenic, archeological, and natural areas.
3. Based on engineering studies for location of a railroad overpass, acquire a corridor of land between the present alignment of Highway 1 and the railroad for future access purposes.
4. Acquire 280 acres of Pacific Gas & Electric Company properties west of the Southern Pacific Railroad. Until such time as these lands can be acquired in fee, they should be leased for both active and passive recreational uses.

Off-Highway Vehicle Use in Sand Dunes

Provide the following support facilities in connection with off-highway vehicle use in the sand dunes:

Day Use

1. Parking area for parking and unloading of trailered vehicles with turfed area for expansion during peak use periods (150 paved spaces plus overflow turfed parking areas for 500 vehicles)
2. Picnic facilities immediately adjacent to parking area and at specific vegetated areas within the dunes (50 sites plus 2 group areas)
3. Concession-operated vehicle service and storage area with related food and beverage services.
4. Provisions for off-highway vehicle organizations to develop facilities necessary for dissemination of information and registration for and administration of vehicle events.

Overnight Use

1. One back-dune camping area with passenger vehicle access to accommodate 300 camping units
2. Four primitive camping areas in the dunes with four-wheel drive access and capable of accommodating 120 camping units
3. One back-dune overflow camping area designed to accommodate 380 units during the relatively few days each year on which large numbers of campers congregate in the Pismo area
4. One trailer sanitation station

Passive Recreational Uses in Oso Flaco Lake Area

Provide the following support facilities in connection with passive recreational uses in natural areas in the Oso Flaco Lake area (includes Jack Lake, Coreopsis Lake, Coreopsis Hill, and Little Oso Flaco Lake areas):

Day Use

1. Parking area near Jack Lake to accommodate 30 vehicles
2. Equestrian parking area to accommodate 20 vehicles with trailers plus a turfed overflow parking area to accommodate 20 vehicles
3. Hiking and equestrian trails
4. Picnic areas (30 sites)
5. Educational and interpretive facilities
6. Parking area to accommodate 30 vehicles near Oso Flaco Lake

Overnight Use

Hike-in campground suitable for family and (small) group use to accommodate 50 persons

Administrative Facilities

1. Provide initial-phase entrance station at Oso Flaco Lake. A future-phase entrance station will be located at Highway 1 access.
2. Provide initial-phase maintenance and residence area at Oso Flaco entrance. A future-phase maintenance and residence area will be located at northeastern corner of vehicular recreation area.
3. Provide operations center for vehicular recreation area, including control and information center and first aid station

Fees

The Policies, Rules, Regulations, and Orders of the California State Park and Recreation Commission and the Department of Parks and Recreation states, "The department whenever in its judgment it is practicable to do so, shall collect fees, rentals, and other return for the use of any state park area, the amount to be determined by the department . . .". At Pismo fees are charged for camping at both North Beach Campground and Oceano Campground. A fee is also charged for camping in the designated beach camping area. There are no day use fees at present. The Commission has approved the resource management and general development plans with the conditions that no charge be made for day use of the beach. Another condition is that no charge be made for off-road vehicles being towed or conveyed to the vehicle recreation area. Both of these conditions were agreed to by the department and are in effect today.

APPENDIX



- Marine Resources Problems: The California Citizen's Viewpoint*. Published for the California Marine Advisory Program by the University of Southern California, Los Angeles, January, 1974.
- Pismo-Oceano Dunes Study*. Citizens' Advisory Committee to State Department of Parks and Recreation, May, 1973.
- Ricketts, Edward F., and Jack Calvin. *Between the Pacific Tides* (Third Edition, revised by Joel Hedgpeth). Stanford University Press, n.d.
- Rodin, Robert J. *Evaluation of the Nipomo Dunes and Point Sal Areas*. Biological Sciences Division, California Polytechnic State University, August, 1972.
Update of an Evaluation of the Nipomo Dunes and Point Sal Areas, Biological Sciences Division, California Polytechnic State University, February, 1974.
- San Luis Obispo County Assessor's Office, Assessor's Map and Parcel Book.
- Smith, H.T.U. *Physiography and Photointerpretation of Coastal Sand Dunes*. Office of Naval Research, Geography Branch, n.d.
- U.S. Army Corps of Engineers, Coastal Engineering Research Center.
Experimental Dunes of the Texas Coast (Misc. Paper No. 1-70), 1970.
Calculation Procedure for Sand Transport by Wind on Natural Beaches (Misc. Paper 2-64), April, 1964.
A General Reconnaissance of Coastal Dunes in California (Misc. Paper 5-11), June, 1962.
- U.S. Department of Agriculture, Soil Conservation Service, Letter from Clark L. Moore, District Conservationist, concerning ongoing soil survey in southern San Luis Obispo County, June 23, 1974.
Soil Survey of the Santa Maria Area, 1919.
- U.S. Department of the Interior, National Park Service. *Pacific Coast Recreation Area Survey*, 1959.
- U.S. Geological Survey, Department of the Interior. *Water Supply Paper 1000, Santa Maria Valley Area*.
Professional Paper 222, Geology and Paleontology of Santa Maria Valley.

Selected References

- Bowen, A.J., and D.L. Inman. "Budget of Littoral Sands in the Vicinity of Point Arguello, California" (Technical Memo No. 19). U.S. Army Coastal Engineering Research Center, December, 1966.
- California Coastal Zone Conservation Commission, South Central Coast Region.
"Recreation," August 15, 1974.
"Geology," April 18, 1974.
"Marine Resources Policies," n.d.
"Recreation Policies," August 16, 1974.
"Marine Element," February 23, 1974.
- California State Department of Fish and Game.
California's Living Marine Resources and Their Utilization, 1971.
- Fitch, John E. "The Pismo Clam," May, 1961.
- California State Department of Parks and Recreation. *California Outdoor Recreation Resources Plan*, February, 1974.
A Study of Visitor Use in Coastal Units of the California State Park System, RecTIP No. 3, May, 1972.
Off-Highway Vehicle Registrants – A Survey of Their Activities, Winter, 1972, RecTIP No. 7, April, 1974.
California Coastline Recreation, RecTIP No. 2, September, 1970.
South Central Coastal Study, February, 1966.
California State Park System Plan, June 28, 1968.
Santa Maria Dunes Re-study, 1966.
Parks and Recreation Information System (Planning Monographs, various dates).
Which Parks and Why? January, 1966.
Pismo Dunes Natural Preserve, Resource Inventory Report, May 3, 1974.
Pismo State Beach, Resource Inventory Report, May 3, 1974.
Pismo Vehicular Recreation Area, Resource Inventory Report, May 3, 1974.
Policies, Rules, Regulations, and Orders of the California State Park and Recreation Commission and the Department of Parks and Recreation, 1974.
Immediate Use Plan for a Portion of Pismo State Beach, December, 1973.
California Coastline Preservation and Recreation Plan, June, 1971.
- California State Department of Water Resources. *Sea Water Intrusion: Pismo-Guadalupe Area* (Bull. 63-3), February, 1970.
- California State Division of Highways. Project Plans for Construction on State Highway in San Luis Obispo County from 1.6 Miles North of Santa Barbara County Line to 0.5 Miles South of Arroyo Grande Creek. To be supplemented by Standard Plans dated January, 1973.
- California State Office of Planning. *California and Use of the Ocean*, by U.C. Institute of Marine Resources, October 1965.
- Cooper, William S. *Coastal Dunes of California*, 1967.
- Lewis, Rance L., and Jack P. Forrest. *Pismo/Oceano Dunes Vehicle Access Study*, 1974.

**Copy of a Letter from the
SOUTH CENTRAL COAST REGIONAL COMMISSION
dated March 12, 1975**

William Penn Mott, Jr., Director
State Department of Parks & Recreation
P. O. Box 2390
Sacramento, CA 95811

Dear Mr. Mott:

On February 27, 1975, this Regional Commission approved The General Development Plan for Pismo State Beach, with the following terms and conditions:

1. This approval represents conceptual approval of the plan as presented, but does not extend to any of the actual development contemplated pursuant to the plan. Such development shall be the subject of separate permit applications at such time as it is actually undertaken.
2. On-beach camping shall be restricted to no more than the proposed 320 (to become 200) campsites at all times. Each campsite shall be limited to no more than 8 persons. Overflow camping on the beach (between the water's edge and the first dune) shall not exceed 500 sites in 1975, and the number of sites shall be reduced 100 each year until no temporary or overflow campsites are provided on the beach in 1980.
3. At such time as a competent public agency has empirical data showing a clear and present health threat either to human beings or to the Pismo Clam resource, which threat is attributable to on-beach camping, this Commission reserves the right to withdraw its permit approval of the physical facilities necessary to accommodate on-beach camping.
4. The closure of the Ocean View Avenue access ramp shall be effected only after a State-funded study of the economic impact of such closure on the local merchants has been completed and subjected to full public hearing.

William Penn Mott, Jr.
Application 36-17 — Pismo State Beach

5. Access "A" shall continue to be the preferred dune access route. The proposed peripheral road connecting Access "A" with Access "B" shall not be built; all as delineated on Figure 9, page 55, of The General Development Plan.
6. As the Department of Parks and Recreation acquires ownership of or control over property abutting that of the Dune Lakes Associates, a buffer zone shall be created in conformance with the natural topography. The buffer zone shall be no less than 500 feet in width at any point, unless the Director of Parks and Recreation, the Executive Director of this Regional Commission, and the adjoining landowner mutually agree on a lesser distance. No motorized vehicles or horses shall be allowed in this buffer zone. The buffer zone shall be posted and patrolled by the California Department of Parks and Recreation.
7. The day-use parking lot north of Grand Avenue is not approved as submitted. Instead, nearby alternate locations should be studied.
8. The interior road connecting Oceano Campground and the Northbeach Campground is not approved.
9. Day-use fees shall not be collected at Pismo State Beach.
10. The Department of Parks and Recreation as part of its Resource Management Program and in cooperation with the County of San Luis Obispo, shall survey the dune structure along the coastline under its jurisdiction to determine the extent of vegetation damage on these dunes.

The Department with the approval of the County as to areas owned by it, shall limit points of access to the dunes south of the Sand Highway by posting or other suitable means to allow vegetative recovery in that area. All persons entering the State Beach shall be informed of the access limitation and reasonable patrols maintained to enforce such access limitation.

Pismo State Beach

- PUBLIC FISHING PIER
160 Parking Spaces
Concessions
- PARKING AREA
130 Spaces
- PARKING AREA - 240 Paved, 400 Turf
- GOLF COURSE
- PICNIC AREA
40 Units
- GRAND AVENUE - PISMO
STATE BEACH ENTRANCE
- DUNE ARBORETUM
20 Auto & 2 bus parking, Interpretive Facilities, Trails
- PICNIC AREA
40 Units 50 Parking Spaces
- LAGOON-MARSH COMPLEX
Dredging to Improve Storm Water
Runoff & Improve Wildlife Habitat
- BICYCLE TRAIL
- PARKING AREA
150 Spaces
- PIER AVENUE
ENTRANCE
- EQUESTRIAN TRAILHEAD & STAGING AREA
Suggested location on County Property

**Pismo Dunes State
Vehicular Recreation Area**

PRIMITIVE CAMPING AREAS

BEACH CAMPING AREA
200 Units

SERVICE AREA
2 Trailer Pads & Maintenance Yard

OVERFLOW CAMPING AREA
380 Units

DUNE VEHICLE CENTER
Dune access, parking, picnic
area, concessions, vehicle
events center.

DUNE RIDERS CAMPGROUND
300 Units, dune access

PICNIC AREA

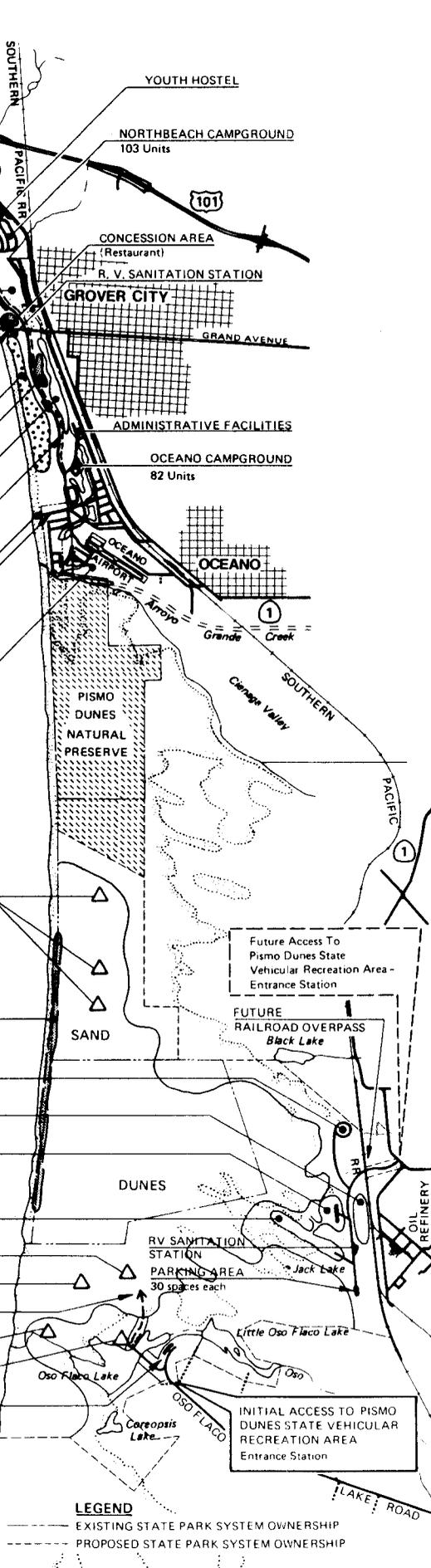
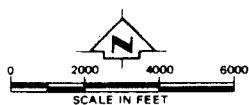
PRIMITIVE CAMPING AREA

SECONDARY DUNE ACCESS

HIKE-IN CAMPGROUND

PICNIC AREA
30 Units

PARKING AREA
Equestrian and Natural Area



LEGEND
 - - - - - EXISTING STATE PARK SYSTEM OWNERSHIP
 - - - - - PROPOSED STATE PARK SYSTEM OWNERSHIP

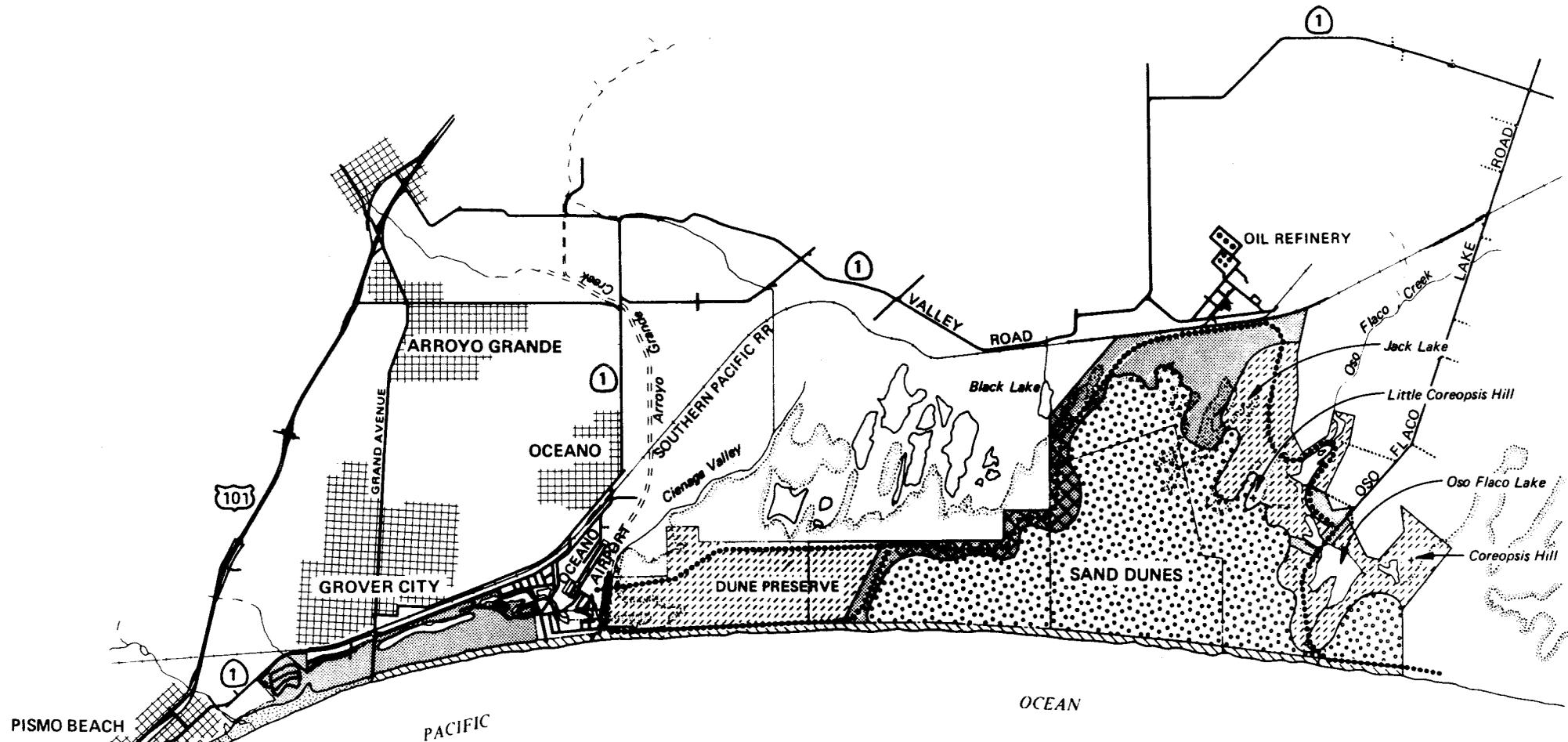
PISMO STATE BEACH AND PISMO
 DUNES STATE VEHICULAR RECREATION AREA
 FIGURE 10
GENERAL DEVELOPMENT PLAN

RESOURCES AGENCY OF CALIFORNIA
 DEPARTMENT OF PARKS AND RECREATION
 APPROVED *David R. ...* DATE

REVISIONS	DATE	DESIGNED

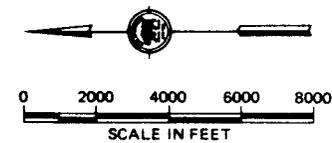
DRAWING NO.
14717
 SHEET NO.
 1 / 1

DRAWN
 4-18-75
 CHECKED



LEGEND

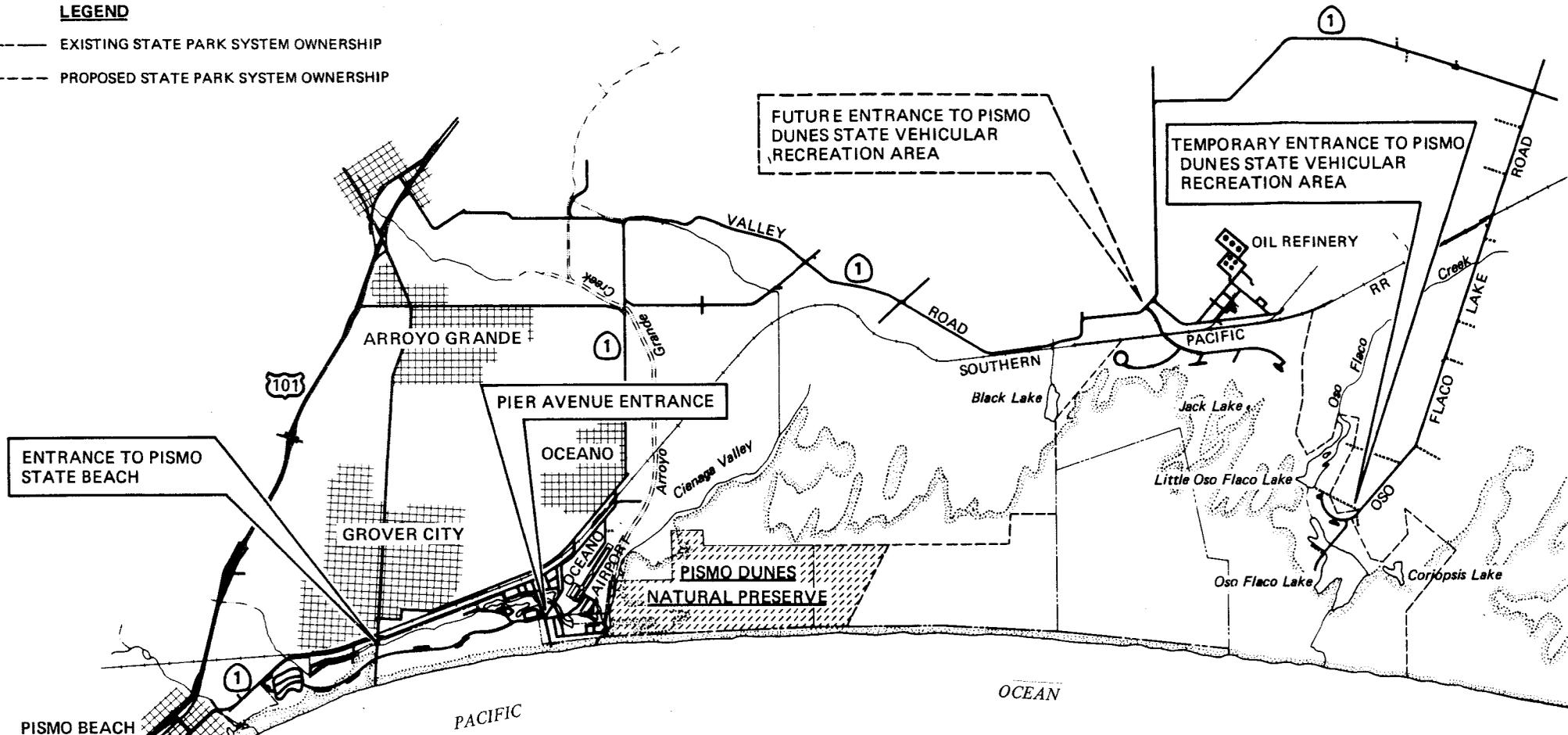
-  NATURAL AREA
(Vehicles Not Permitted)
-  MULTI-USE AREA
(Vehicles on Designated Routes Only)
-  MULTI-USE AREA
(Interpretive Tour Vehicle Only)
-  DUNE VEHICLE RECREATION AREA
(Vehicles Restricted From Vegetated Areas)
-  BEACH-WITH VEHICLE ACCESS
-  BEACH-WITHOUT VEHICLE ACCESS
-  EQUESTRIAN & HIKING TRAIL



DESIGNED		REVISIONS		RESOURCES AGENCY OF CALIFORNIA	
DRAWN 4-18-75		DATE		DEPARTMENT OF PARKS AND RECREATION	
CHECKED		DATE		APPROVED: <i>Harold Charles</i>	DATE
PISMO STATE BEACH AND PISMO DUNES STATE VEHICULAR RECREATION AREA					
FIGURE 11					
LAND USE PLAN					
DRAWING NO 14718					
SHEET NO 1 OF 1					

LEGEND

- EXISTING STATE PARK SYSTEM OWNERSHIP
- PROPOSED STATE PARK SYSTEM OWNERSHIP

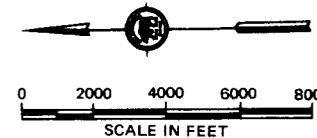


PISMO STATE BEACH

- PUBLIC FISHING PIER
- GOLF COURSE
- BEACH
- CAMPGROUNDS
- RESTAURANT
- PICNIC AREAS
- ARBORETUM
- BICYCLE, EQUESTRIAN & HIKING TRAILS

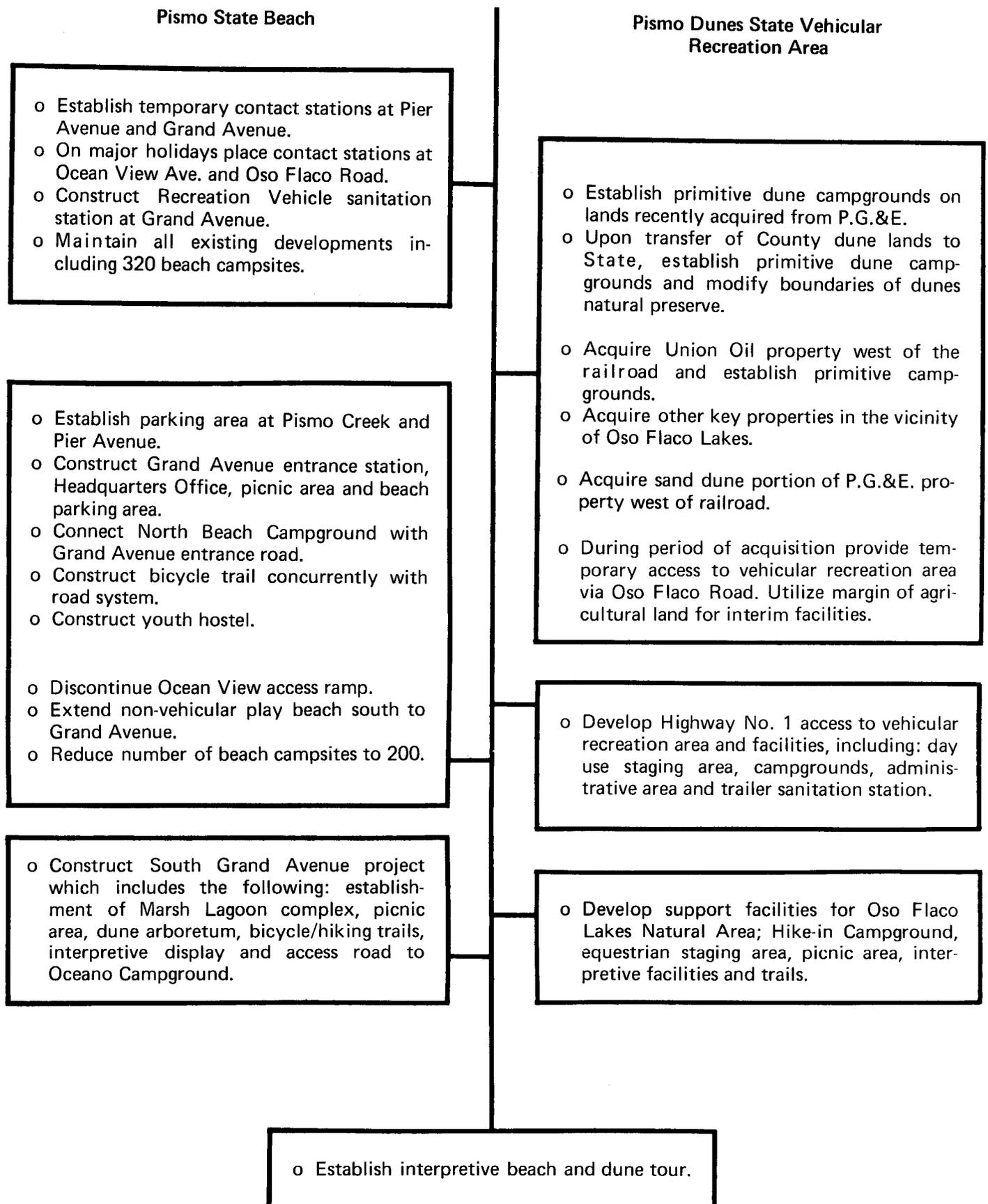
PISMO DUNES STATE VEHICULAR RECREATION AREA

- DUNE VEHICLE CENTER
- DUNE VEHICLE RECREATION AREA
- CAMPGROUNDS
- PICNIC AREA
- EQUESTRIAN & HIKING TRAILS



DESIGNED	DATE	REVISIONS	
DRAWN K.F. 10/74			
			APPROVED
RESOURCE AGENCY OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION			
PISMO STATE BEACH AND PISMO DUNES STATE VEHICULAR RECREATION AREA FIGURE 12 RECREATION ELEMENTS			
DRAWING No. 14355			
SHEET No. 1			

FIGURE 13
SEQUENCE OF PLAN IMPLEMENTATION



Environmental Impact Report

The description of the project is contained in the preceding chapters of this report. This chapter will discuss the environmental impact of the proposed project.

Environmental Impact of the Proposed Action

The environmental impact of the proposed project would be caused primarily by construction activity, physical development of the land, and the concentration of people and activities within certain areas of the project.

The construction of facilities such as roads, trails, restrooms, campsites and administrative facilities, would cause short-term environmental impacts, including dust, noise, and increased vehicular traffic.

After completion of the construction phase, long-term impacts would be realized. These would be largely in the form of physical features, such as walks, roads, parking areas, and miscellaneous single-story structures. Long-term impacts would also result from the concentration of people, vehicles, and activities within certain areas of the project. Possible long-range impacts on the existing natural environment, private and public services, and community health and safety are discussed in the following sections.

Effects on Soils

The accelerated rate of dune movement caused by vehicular use on active dunes is unknown but should be minor compared to overall natural dune movement.

Some changes in dune shapes will occur with heavy vehicle use; however, these changes will be temporary and minor compared to the overall natural changes constantly taking place in the dunes.

Effects on Vegetation

Within certain areas of the active sand dunes, some acceleration of dune vegetation loss will occur. In others the control of off-highway vehicles will allow vegetation to reestablish itself. Some of the native and introduced vegetation will be removed from the site to accommodate roads, trails, structures, campsites, and picnic areas. Within the preserve areas, native vegetation will be protected.

Effects on Wildlife

Off-highway vehicle use has already had an impact on the wildlife. In three areas in which off-highway vehicle use has been regulated or reduced, wildlife populations should increase.

Clamming and fishing activities are under the jurisdiction of the Department of Fish and Game and will be regulated by that Department. This proposal will not have an effect on clamming or on the clamming resources. Dredging will increase the freshwater fish habitat in the Meadow Creek lagoon area. In addition, access to the Oso Flaco lakes will be improved, and the number of fish taken by anglers should therefore increase in the project area.

Effects on Scenic or Visual Quality

The project area is essentially open space and will remain so. Visual impacts will be realized by the continued intrusion of man and his vehicles in the solitary dunes and on the broad open beach. A visual impact will also be realized in camping areas and other areas in which facilities are constructed.

Effects on Private and Public Services Demanded

Several public and private service demands are expected to result from the project. These demands include the following:

1. Travel on county roads will require additional improvements and widening.
2. Maintenance of campgrounds, concessions, and day-use areas will demand the resources of local individuals.
3. On-site construction will demand local labor supplies and will temporarily increase local employment.
4. Restaurants in the local area are expected to receive additional clientele from the state beach and vehicular recreation area visitors.
5. Although many visitors will bring the majority of food staples with them, the sale of incidentals and beverages at local grocery stores will increase.
6. Dune buggy repair, auto repair, service, and fishing supply outlets will receive additional income.
7. Additional park personnel will require the full range of public and private services.

Effects on Demands for Law Enforcement and Fire Fighting Services

Law enforcement. Criminal activity within the project is expected to decrease with the placement of entry stations. The Department has found manned entry stations at vehicle access points to be the single most effective deterrent to criminal activities within parks.

The few popular holiday weekends now create extensive enforcement problems. These problems should decrease when the number of visitors to the project is more stable and when the entry stations are developed.

Fire control. The project is not expected to present fire hazards. Some fire control assistance will be available; however, public assistance would be required if a major fire were to occur.

Effects on Community Health and Safety

If beach day use and beach camping were to result in the depositing of raw sewage on the beach, possible health problems would exist. Visitors might be directly affected by exposure to the waste material, and they might be indirectly affected by eating contaminated Pismo clams that had fed on raw sewage. Realizing these potential health problems, the Department will provide adequate sanitary facilities and will strictly enforce sanitary regulations to ensure that solid and liquid wastes will not be deposited on the beach.

ANY ADVERSE ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED

A loss of some open space and low-quality agricultural land will occur if the project is implemented. Some vegetation and wildlife within the developed areas will be displaced.

A minor local increase in air pollution, noise levels, and traffic will occur as a result of this project. In addition, some visual intrusion on the landscape and surface change in sand dune shapes will also occur.

MITIGATING MEASURES PROPOSED TO MINIMIZE THIS IMPACT

Measures proposed to minimize the impact are as follows:

1. The Department will proceed with a study of off-highway vehicle use on the coastal sand dunes. The following items will be studied.
 - a. The types of changes occurring in the dunes and the rate of change
 - b. The short-term and long-term effects of various management techniques
 - c. Possible management techniques to reduce the impacts of off-highway vehicle use; i.e., noise reduction
2. Landscaping will be used to minimize soil erosion, screen proposed buildings, offer wind protection, and improve the aesthetic qualities of the site. Plants will be chosen to harmonize with the surrounding landscape and tolerate special environmental conditions.
3. Parking areas and hiking and bicycle trails will be designed to encourage motor vehicle users to park their automobiles and walk or ride bicycles to their destinations.
4. The proposed beach tram will provide access to the beach and to points along the beach from various locations. This transportation system will provide the option of access by means of a motorized vehicle without the use of individual motor vehicles.

ALTERNATIVES TO THE PROPOSED PROJECT

Alternatives to the project include first, no action; second, state beach development only; and third, vehicular recreation area development only.

1. No action: If this project or a similar one is not implemented, the project area will continue to develop as it has in the past, with very little regulation of off-highway vehicle use.
2. State beach development only: Most of the beach-related activities would be well controlled, and the majority of existing conflicts would be eliminated. However, the vehicle-related problems would not be solved.
3. Vehicular recreation development only: A statewide vehicular area would be designated and controlled, but the state beach would continue basically as it is now, with related congestion and use problems.

The state beach and vehicular recreation area are interrelated, and there is a great deal of overlap of activity between the two units. Any planning or development proposal must consider both units.

Recommendations

The following recommendations are included in this report as alternative design measures to further minimize any significant environmental impacts:

1. Maintain native plants wherever feasible.
2. Limit vehicular use wherever practical or feasible.
3. Reduce congestion problems on the beach by providing alternatives to vehicle access.
4. Provide direct access and proper signs from the freeway system to the project entrances.
5. Develop in cooperation with local communities and the county a flood control and drainage district.

RELATIONSHIP BETWEEN SHORT-TERM USES AND LONG-TERM PRODUCTIVITY

The project site is essentially open space under public ownership. The intent of this plan is to preserve this open space for future generations while providing minimal facilities so that the site can be better used for recreational purposes.

Some marginal agricultural land will be used for recreation base facilities. Other areas suitable for residential or industrial development will be acquired by the Department and preserved as open spaces.

ANY IRREVERSIBLE ENVIRONMENTAL CHANGES AS A RESULT OF THE PROPOSED PROJECT

1. Conversion of open space to campground roads, picnic areas, and other facilities
2. Conversion of some lower-quality agricultural land to recreational use
3. Changes in land form as a result of grading for roads, parking areas, building sites, picnic areas, and lagoons
4. Commitment of resources, such as lumber, cement, oil, gravel, and gasoline to paving of roads, parking areas, and bicycle trails and the construction of campsites and buildings

GROWTH-INDUCING IMPACTS

There would be an increase in visitors to the project area for vacations. This would slightly stimulate the local economy. There would also be a slight increase in local traffic and some pollution as a result of the project.

Page Three

William Penn Mott, Jr.
Application 36-17 – Pismo State Beach

When the Department wishes to undertake specific developments pursuant to the General Development Plan, applications therefore will be processed as Administrative or Consent Calendar Permits pursuant to the Commission policy above described.

Sincerely yours,

/s/

F. C. Buchter
Executive Director

FCB/eaw

cc: Robert Uhte
M. Frinke
C. Lyden

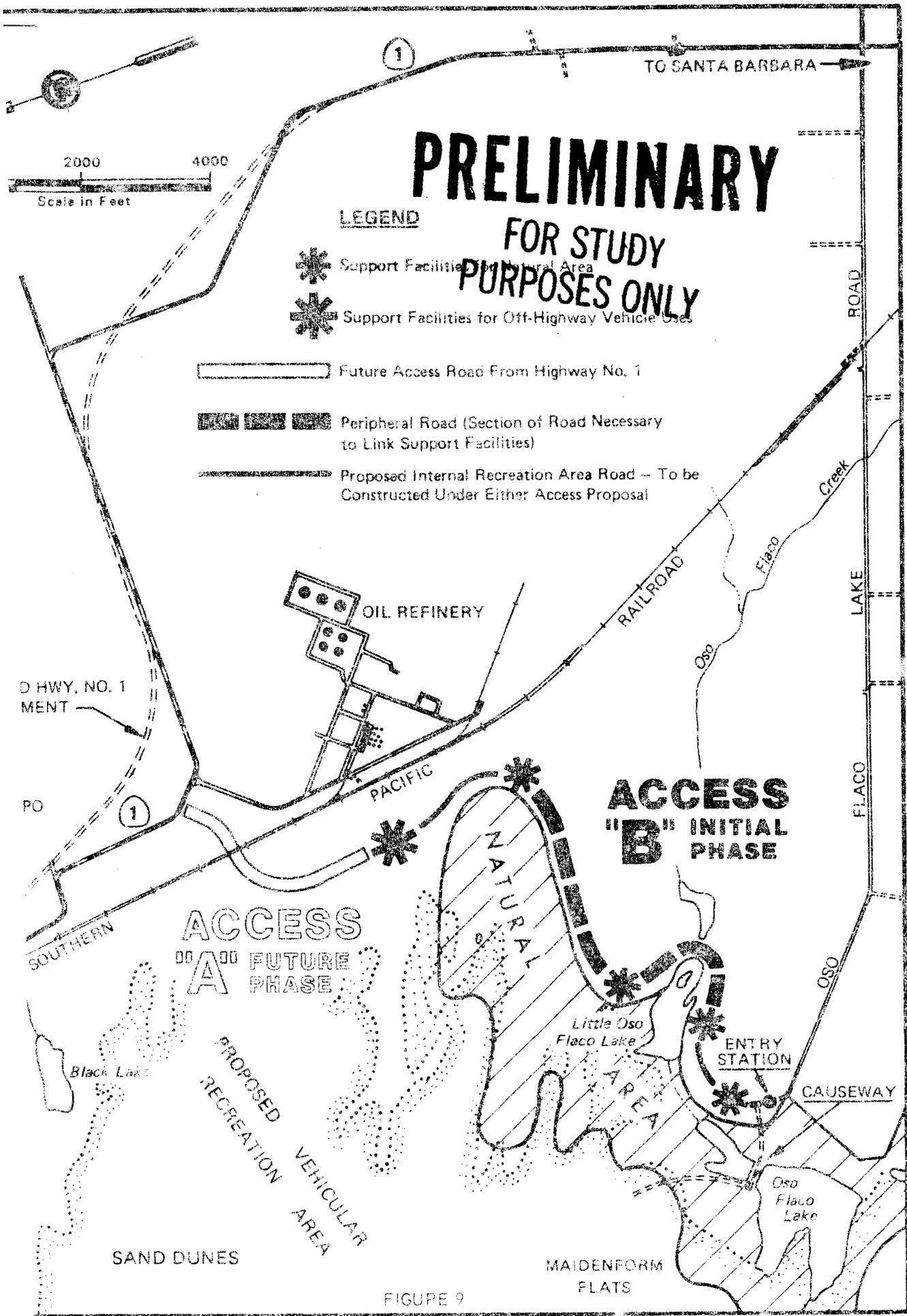


FIGURE 9

PRIMARY ACCESS TO PISMO DUNES STATE VEHICULAR RECREATION AREA

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Santa Maria Soil Conservation Service