

OCEANO DUNES
STATE VEHICULAR RECREATION AREA
GENERAL PLAN AMENDMENT

California State Park and Recreation Commission

Approved - February 1994



CALIFORNIA STATE PARKS.



Handwritten: DM, RK, File with EIR

NOTICE OF DETERMINATION

To: Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: California Department of
Parks and Recreation
OHMVR Division
P.O. Box 942896
1416 Ninth Street
Sacramento, CA 94296-0001

FEB 28 1994

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Project Title: California Department of Parks and Recreation,
Pismo Dunes SVRA Access Corridor Project

| State Clearinghouse Number | Contact Person | Telephone Number |
|----------------------------|----------------|------------------|
| 90011118 | Les Maddox | (916) 653-9556 |

Project Description: The project consists of identifying the least environmentally damaging access corridor into the Pismo Dunes State Vehicular Recreation Area (SVRA) in San Luis Obispo County. Five alternative corridors were considered as part of this project as potentially serving the SVRA. The General Plan and Resource Management Plan were amended to reflect the findings of the Environmental Impact Report.

This is to advise you that the California Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation Division acted as the lead agency in the preparation of the General Plan Amendment/Environmental Impact Report for Pismo State Beach and Pismo Dunes State Vehicular Recreation Area (SVRA). Because the General Plan for Pismo Dunes SVRA also covers a unit of the State Park System, an amendment of the General Plan also requires approval of the State Park and Recreation Commission. Therefore, The State Park and Recreation Commission acted as a responsible agency for the above described General Plan Amendment/Environmental Impact Report, as it pertains to their jurisdiction over Pismo State Beach. The State Park and Recreation Commission, at its meeting in San Luis Obispo California, February 16, 1994, approved the General Plan Amendment/Environmental Impact Report for Pismo State Beach and has made the following determinations regarding the above described project:

1. The project will not have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures were not made a condition of the approval of the project.
4. A statement of Overriding Considerations was not adopted for this project.

This is to certify that the final Environmental Impact Report with comments and responses and record of project approval is available to the General Public at:

Department of Parks and Recreation
Division of Off-Highway Motor Vehicle Recreation
1416 Ninth Street, Room 1404-1
Sacramento, CA 94296-0001

Date Received for Filing and Posting

FILED AND POSTED BY
FEB 25 1994
FEB 25 1994
OFFICE OF PLANNING AND RESEARCH

Signature of Donald W. Murphy
Donald W. Murphy
Director



NOTE

This document constitutes an amendment to the General Plan for Oceano Dunes State Vehicular Recreation Area (SVRA).

This document is a combination of two reports which discuss and evaluate a proposed access corridor project for the SVRA. The first is the project's draft Environmental Impact Statement (EIR). Attached to the back of this report is the final EIR for the project.

It should be noted that, previous to November 1995, Oceano Dunes SVRA had been named Pismo Dunes SVRA. Earlier documents regarding the unit will be found listed or cataloged under its former name.

For additional information on this general plan amendment, contact one of the following:

Oceano Dunes State
Vehicular Recreation Area
576 Camino Mercado
Arroyo Grande, CA 93420

California Department
of Parks and Recreation
Off-Highway Motor Vehicle
Recreation Division
1416 9th Street
Sacramento, CA 95814



DEPARTMENT OF PARKS AND RECREATION

STATE PARK AND RECREATION COMMISSION

P.O. BOX 942896, SACRAMENTO, CA 94296-0001



Resolution 12-94
adopted by the
CALIFORNIA STATE PARK AND RECREATION COMMISSION
at its regular meeting in San Luis Obispo on
February 16, 1994

WHEREAS, the Department of Parks and Recreation operates a State Beach and a State Vehicular Recreation Area (SVRA) on the San Luis Obispo County coastline, known as, Pismo State Beach and Pismo Dunes SVRA, which are contiguous with one another; and

WHEREAS, the Department of Parks and Recreation completed a General Plan in April 1975, which dealt with the needs of both units under one General Plan; and

WHEREAS, the Department of Parks and Recreation made application to the California Coastal Commission to make capital improvements to Pismo Dunes SVRA in 1982 and was issued permit 4-82-300 by the California Coastal Commission; and

WHEREAS, the said permit required the Department of Parks and Recreation to re-evaluate its entrance solution for Pismo Dunes SVRA by identifying the entrance solution with the least significant environmental impact; and

WHEREAS, the Off-Highway Motor Vehicle Recreation Commission approved an amendment to the General Plan for the SVRA, expressed in the document entitled, "Pismo Dunes State Vehicular Recreation Area Access Corridor Project;" and

WHEREAS, the State Park and Recreation Commission concurs with the conclusions of the Environmental Impact Report/General Plan Amendment entitled, "Pismo Dunes State Vehicular Recreation Area Access Corridor Project," that the Pier and Grand Avenue entrances for the Pismo Dunes State Vehicular Recreation Area do represent those alternative entrances with the least environmental impact on both the SVRA and the State Beach;

NOW, THEREFORE, BE IT RESOLVED that the State Parks and Recreation Commission hereby approves the General Plan Amendment for Pismo State Beach.



NOTICE OF DETERMINATION

To: Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: California Department of
Parks and Recreation
OHMVR Division
P.O. Box 942896
1416 Ninth Street
Sacramento, CA 94296-0001

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Project Title: California Department of Parks and Recreation,
Pismo Dunes SVRA Access Corridor Project

| State Clearinghouse Number | Contact Person | Telephone Number |
|----------------------------|----------------|------------------|
| 90011118 | Les Maddox | (916) 653-9556 |

Project Description: The project consists of identifying the least environmentally damaging access corridor into the Pismo Dunes State Vehicular Recreation Area (SVRA) in San Luis Obispo County. Five alternative corridors were considered as part of this project as potentially serving the SVRA. The General Plan and Resource Management Plan were amended to reflect the findings of the Environmental Impact Report.

This is to advise you that the California Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation Division acted as the lead agency in the preparation of the General Plan Amendment/Environmental Impact Report for Pismo State Beach and Pismo Dunes State Vehicular Recreation Area (SVRA). Because the General Plan for Pismo Dunes SVRA also covers a unit of the State Park System, an amendment of the General Plan also requires approval of the State Park and Recreation Commission. Therefore, The State Park and Recreation Commission acted as a responsible agency for the above described General Plan Amendment/Environmental Impact Report, as it pertains to their jurisdiction over Pismo State Beach. The State Park and Recreation Commission, at its meeting in San Luis Obispo California, February 16, 1994, approved the General Plan Amendment/Environmental Impact Report for Pismo State Beach and has made the following determinations regarding the above described project:

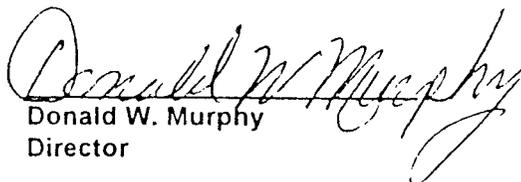
1. The project will not have a significant effect on the environment.
2. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures were not made a condition of the approval of the project.
4. A statement of Overriding Considerations was not adopted for this project.

This is to certify that the final Environmental Impact Report with comments and responses and record of project approval is available to the General Public at:

Department of Parks and Recreation
Division of Off-Highway Motor Vehicle Recreation
1416 Ninth Street, Room 1404-1
Sacramento, CA 94296-0001

Date Received for Filing and Posting

FEB 25 1994 FEB 25 1994


Donald W. Murphy
Director



**Draft
Environmental Impact Report
for the**

CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

Division of Off-Highway Motor Vehicles

on the

**PISMO DUNES STATE VEHICULAR RECREATION AREA
ACCESS CORRIDOR PROJECT**

State Clearinghouse No.90011118

by the

**California Department of General Services
Office of Project Development and Management**

August 1991

DEPARTMENT OF PARKS AND RECREATION

P.O. BOX 942998

SACRAMENTO 94298-0001



August 30, 1991

To All Interested Persons:

Enclosed is a copy of the Draft Environmental Impact Report (DEIR) for the Pismo Dunes State Vehicular Recreation Area (SVRA) Access Corridor Project. The DEIR was prepared by the California Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation Division (OHMVR), as the lead agency under the California Environmental Quality Act. The proposed entrance corridors are intended to serve the Pismo Dunes SVRA located in San Luis Obispo County near the communities of Pismo Beach, Arroyo Grande, Oceano, and Grover City. The DEIR is intended to identify the least environmentally damaging access corridor to the SVRA.

You are invited to review this DEIR and submit written comments not later than October 13, 1991 to:

Jeff Martinez, Project Manager
California Department of General Services
Office of Project Development and Management
400 R Street, Suite 5100
Sacramento, CA 95814
(916) 322-6963 or 274-3626

Public hearings on the DEIR will be held on September 25, 1991 at 7:00 p.m. at the following location:

San Luis Obispo County
County Government Center
San Luis Obispo, CA 93408

You are invited to attend and present your comments.

Sincerely,

Lester V. Maddox
fo r Henry Ortmann, Senior Landscape Architect
Department of Parks and Recreation, OHMVR Division

Enclosure



DEPARTMENT OF PARKS AND RECREATION

P.O. BOX 942896
SACRAMENTO 94296-0001

NOTICE

PUBLICATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT
FOR THE
PISMO DUNES STATE VEHICULAR RECREATION AREA
ACCESS CORRIDOR PROJECTCALIFORNIA DEPARTMENT OF PARKS AND RECREATION
OFF-HIGHWAY MOTOR VEHICLE RECREATION DIVISION

Description of the Proposed Action: The California Department of Department of Parks and Recreation, OHMVR Division, has initiated the preparation of a DEIR to identify the least environmentally damaging entrance corridor to the Pismo Dunes State Vehicle Recreation Area. The DEIR will satisfy the conditions imposed as part of the issuance of Coastal Development Permit #4-82-300 by the California Coastal Commission.

The Draft Environmental Impact Report (DEIR) has been prepared in compliance with the provisions of the California Environmental Quality Act. This document is now available for public review.

Where Document Can Be Reviewed: The subject DEIR may be reviewed at the following locations:

California Department of Parks and Recreation
Pismo Dunes SVRA
576 Camino Mercado
Arroyo Grande, CA 93420
(805)473-7230

California Department of Parks and Recreation
OHMVR Division: Attn. Lester Maddox
P.O. Box 942896, 1416 Ninth Street
Sacramento, CA 94296-0001
(916) 322-1948

San Luis Obispo County Library
San Luis Obispo Branch
995 Palm
San Luis Obispo, CA 93408

Copies of the document can also be obtained by calling the project Contact Person, Jeff Martinez at (916) 322-6963 or (916) 274-3626.





Public Review Period: The subject DEIR is available for a 45-day public review period from August 30 to October 13, 1991. Comments must be received in writing by 4:00 p.m. on October 13, 1991 at the California Department of General Services in Sacramento. Written comments should be addressed to:

Jeff Martinez, Project Manager
California Department of General Services
Office of Project Development and Management
400 R Street, Suite 5100
Sacramento, CA 95814

Public Hearing: A public hearing will be held to discuss issues related to the proposed project. Copies of the DEIR will be available to the public during the meeting. The meeting will be held at 7:00 P.M. on September 25, 1991 at the following location:

San Luis Obispo County
County Government Center
San Luis Obispo, CA 93408



Table of Contents (Continued)

| | | |
|-------|-----------------------------------------------------------------------|--------|
| VII. | Traffic and Air Quality | |
| | Introduction..... | VII-1 |
| | Existing Setting..... | VII-2 |
| | URBEMIS #3 Air Quality Model..... | VII-5 |
| | Traffic Impact Analysis..... | VII-8 |
| | Mitigation Measures and Statement of Significance..... | VII-13 |
| | Ranking of Corridor Sensitivity..... | VII-14 |
| VIII. | Archaeological Resources | |
| | Introduction..... | VIII-1 |
| | Background Information..... | VIII-1 |
| | Impact Analysis..... | VIII-4 |
| | Mitigation Measures and Statement of Significance..... | VIII-6 |
| | Ranking of Corridor Sensitivity..... | VIII-8 |
| IX. | Effects Deemed Equal for All Alternatives | |
| | Introduction..... | IX-1 |
| | Soils/Seismicity/Geology..... | IX-1 |
| | Noise..... | IX-3 |
| | Hydrology and Water Quality..... | IX-5 |
| | Utilities/Energy..... | IX-5 |
| | Hazardous Materials..... | IX-6 |
| X. | General Plan Amendments | |
| | Introduction..... | X-1 |
| | Summary of Recommendations..... | X-1 |
| | Existing Situation..... | X-3 |
| | Recreation Use Patterns..... | X-4 |
| | Problems and Conflicts..... | X-4 |
| | Resource Analysis and Resource Management Plan. Plan Analysis..... | X-5 |
| | Beach Day Use..... | X-6 |
| | Overnight Use..... | X-7 |
| | Access..... | X-8 |
| | Plan Elements..... | X-9 |
| | Off-Highway Vehicle in Sand Dunes..... | X-11 |
| | Passive Recreational Uses in Oso Flaco Lake Area..... | X-11 |
| XI. | Mandatory Findings | |
| | Unavoidable Adverse Environmental Effects..... | XI-1 |
| | Short Term VS. Long Term Productivity..... | XI-1 |
| | Significant Irreversible Changes..... | XI-2 |
| | Growth Inducement..... | XI-2 |
| | Cumulative Effects..... | XI-3 |

TABLE OF CONTENTS

PISMO DUNES STATE VEHICULAR RECREATION AREA
ACCESS CORRIDOR PROJECT

| | <u>Page</u> |
|-----------------------------------------------------------|-------------|
| I. Executive Summary | |
| Introduction..... | I-1 |
| Preferred Alternative..... | I-1 |
| Future Development..... | I-2 |
| Comparison of Alternatives..... | I-3 |
| II. Project Description | |
| Introduction..... | II-1 |
| Project Description..... | II-5 |
| Project Purpose..... | II-5 |
| III. Project Alternatives | |
| Introduction..... | III-1 |
| Grand Avenue..... | III-1 |
| Pier Avenue..... | III-2 |
| Railroad Avenue..... | III-2 |
| Silver Spur Place..... | III-3 |
| Callender Road..... | III-4 |
| IV. Land Use | |
| Introduction..... | IV-1 |
| Regional Existing Setting..... | IV-1 |
| Alternative Corridor Settings..... | IV-3 |
| Planned Land Uses and Relevant Policies..... | IV-10 |
| Impact Analysis..... | IV-18 |
| Mitigation Measures and Statement of Significance..... | IV-23 |
| Ranking of Corridor Sensitivity..... | IV-24 |
| V. Visual Resources | |
| Introduction..... | V-1 |
| Regional Existing Setting..... | V-4 |
| Visual Resource Analysis..... | V-6 |
| Existing Alternative Corridor Landscapes..... | V-8 |
| Landscape Classification..... | V-9 |
| Project Description..... | V-12 |
| Project Contrast Ratings..... | V-13 |
| Viewer Characteristics..... | V-17 |
| Impact Analysis..... | V-18 |
| VI. Biological Resources | |
| Introduction..... | VI-1 |
| Coastal Plan Policies for Biological Resources..... | VI-1 |
| Regional Existing Setting..... | VI-3 |
| Alternative Corridor Settings..... | VI-4 |
| Impact Analysis..... | VI-9 |
| Mitigation Measures and State of Significance..... | VI-17 |
| Ranking of Corridor Sensitivity..... | VI-20 |

Table of Contents (Continued)

| | |
|-------------------------------------|---------------|
| XII. Persons Contacted..... | XII-1 |
| XIII. List of Preparers..... | XIII-1 |
| XIV. References..... | XIV-1 |

Appendix 1 - Notice of Preparation

Appendix 2 - Responses to NOP

Appendix 3 - CDP #4-82-300

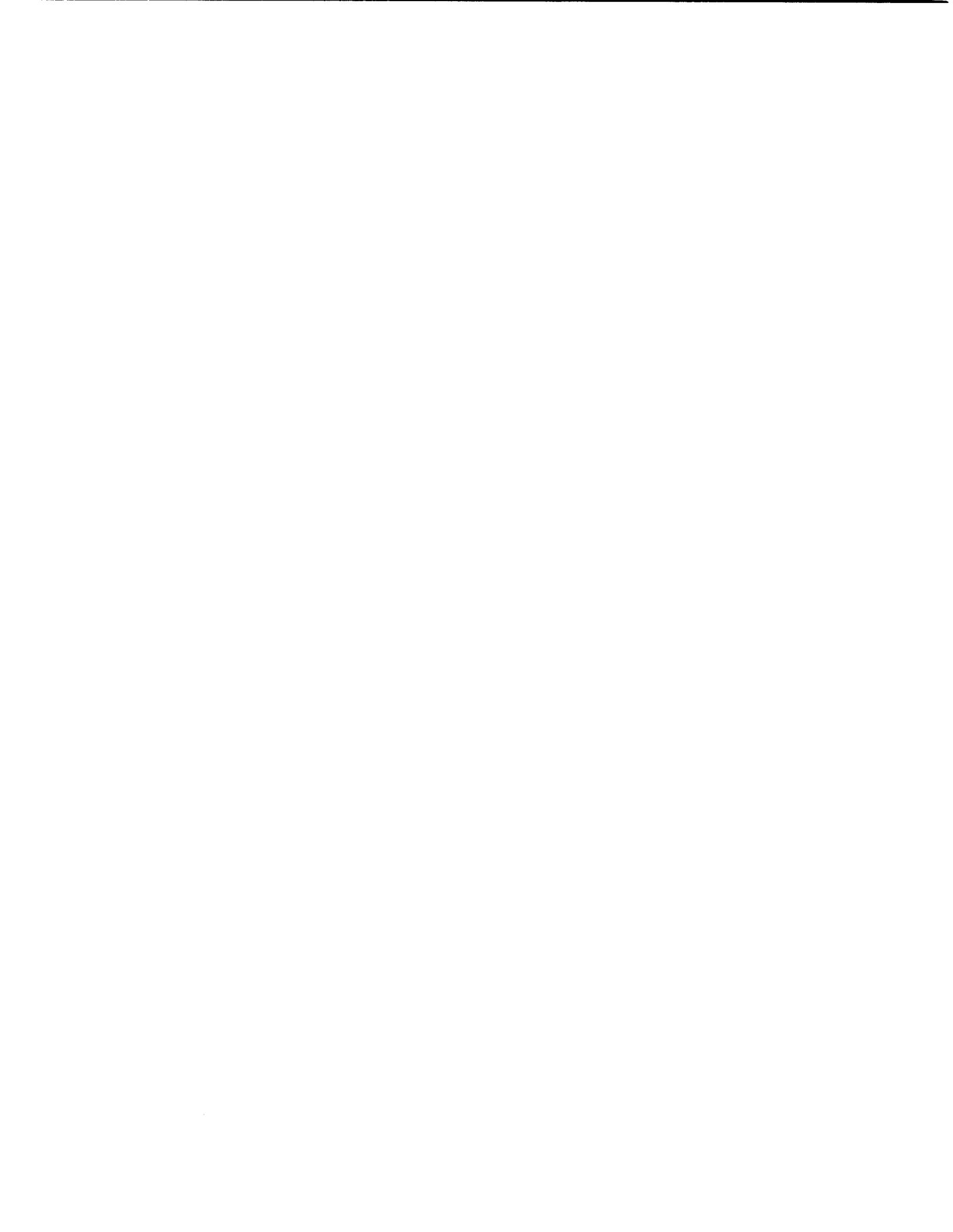
Appendix 4 - CDP #4-82-300-A

Appendix 5 - CDP #4-82-300-A2

Appendix 6 - Biological Survey Report

Appendix 7 - Traffic Survey Results

Appendix 8 - URBEMIS #3 Model Printouts



I. EXECUTIVE SUMMARY

A. INTRODUCTION.

The Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation Division, has directed that a draft environmental impact report (DEIR) be prepared to address the potential environmental effects of developing an entrance to the Pismo Dunes State Vehicle Recreation Area. The following DEIR has been prepared in compliance with the California Environmental Quality Act and is intended to satisfy the California Coastal Commission's Coastal Development Permit (CDP # 4-82-300) conditions. The conditions of CDP#4-82-300 required the Department to identify the least environmentally damaging entrance and staging area for the SVRA. For a complete description of the conditions imposed as part of CDP#4-82-300 refer to Chapter III.

The Department of Parks and Recreation, OHMVR Division, makes the following conclusions based on this DEIR regarding primary and secondary access to the Pismo Dunes State Vehicular Recreation Area and associated General Development and Resources Management Plan amendments.

B. PREFERRED ALTERNATIVE.

Five alternative entrance corridors were investigated as part of this DEIR. A conceptual design was developed for each corridor. The DEIR evaluates the effect of developing each corridor as proposed in the conceptual designs on the corridor's resources. Based on this study the least environmentally damaging corridor was identified and considered the preferred alternative.

The preferred alternative to serve as the primary entrance to the Pismo Dunes SVRA is the Grand Avenue alternative. This alternative was determined to be the least environmentally damaging entrance considered in this environmental impact report. The Grand Avenue alternative was determined to have less than significant impacts on all of the resources considered in the DEIR. No mitigation measures would be required for the continued uses or minor expansion of this entrance.

The Grand Avenue alternative should continue to be operated by the Department of Parks and Recreation as a primary entrance to the Pismo State Beach and Pismo Dunes State Vehicular Recreation Area in conjunction with a secondary entrance. The Grand Avenue entrance could be improved by constructing an additional entrance lane and kiosk immediately north of the existing entrance corridor.

C. FUTURE DEVELOPMENT.

Based on the findings of this DEIR the Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation Division, should continue to utilize both Grand and Pier Avenues as entrance points for the Pismo Dunes State Vehicular Recreation Area.

Pier Avenue. The Pier Avenue entrance could be expanded to include additional off-beach parking, a 3,000 square foot administrative building and interpretive center, and an additional entrance lane and kiosk. The Pier Avenue entrance could serve as the primary entrance to the SVRA if a new entrance is developed further south and the Grand Avenue entrance is closed.

Railroad Avenue. The development potential of the Railroad Avenue alternative may be limited since staging and administrative office space could be restricted by the Oceano Airport to the northwest. Safety issues related to flight patterns associated with the airport could pose a potential hazard to people and property utilizing this entrance. If the Federal Aviation Administration (FAA) identifies safety measures that could be incorporated into the entrance design to ensure public safety, this alternative could provide access to the SVRA and off-beach parking. It is not likely that the Railroad Avenue alternative could be developed as a staging or camping area due to the land use conflicts associated with the airport. However, it may serve a role as a secondary or intermittent access corridor to the SVRA during periods of high recreational use. In this role it could result in a lessening of traffic congestion and vehicle -- passive beach user conflicts at the Grand Avenue and Pier Avenue entrances.

Silver Spur Place. The Silver Spur Place alternative could provide a secondary entrance to the SVRA. Although the loss of prime agricultural farmland would be an unavoidable significant impact, mitigation measures

incorporated into the design and development of this corridor would decrease the effects to a level of less than significant for all other resources. The Silver Spur Place alternative could provide substantial off-beach parking, some inland camping, and possibly a secondary staging area. The development of this corridor could allow for the closure of Grand Avenue to vehicle traffic, thereby decreasing the vehicle -- passive beach user conflicts on that portion of beach between Pier Avenue and Grand Avenue.

Callender Road. The Callender Road alternative could provide a secondary entrance to the SVRA. The development of this alternative would result in unavoidable significant impacts to biological resources and surrounding land uses. Mitigation measures incorporated into the design and development of this corridor would decrease the effects to a level of less than significant for visual resources, traffic, and archaeological/cultural resources. The Callender Road alternative could be developed to include an inland campground, OHV staging area, and an administrative and interpretive center. The development of this corridor could allow for the closure of Grand Avenue to vehicle traffic, thereby decreasing the vehicle - passive beach user conflicts on that portion of beach between Pier Avenue and Grand Avenue. The development of a campground could serve as an overflow facility during periods of peak use and help reduce the pressures on the existing park campgrounds.

The Callender Road alternative could also be developed as a passive use facility. Development of an inland campground and parking area with foot trails accessing the dunes would provide an additional area for passive recreational use similar to that being developed at the Oso Flaco Lake natural area. This would provide the Department with an additional campground and off-beach parking lot. This configuration could be mitigated to lessen the effects on biological resources while providing recreational opportunities. However, the effect on biological resources would still remain significant.

D. COMPARISON OF ALTERNATIVES.

The following table outlines the ranking of each alternative based on the level of impact each alternative would have on resources identified in the project study area. The least environmentally sensitive alternative is indicated by the number 1 and the most sensitive indicated by the number 5.

The Grand Avenue alternative is the least environmentally damaging considered in the DEIR. All of the remaining alternatives will be compared to the Grand Avenue corridor.

| | Land Use | Visual | Biology | Traffic | Archaeology |
|-------------------|----------|--------|---------|---------|-------------|
| Grand Avenue | 1 | 2 | 2 | 1 | 1 |
| Pier Avenue | 2 | 1 | 1 | 2 | 2 |
| Railroad Road | 3 | 3 | 4/3 | 5 | 5/4 |
| Silver Spur Place | 4 | 4 | 4/3 | 4 | 5/4 |
| Callender Road | 5 | 5 | 5 | 3 | 3 |

The ranking of each corridor from 1-5 has been carried out for each resource being considered in this DEIR. One represents the least environmentally damaging alternative while five represents the most environmentally damaging alternative. Therefore, the lowest possible value is five and the highest possible value is twenty-five for any alternative. The following gives the total value for each alternative:

Grand Avenue - 7

Pier Avenue - 8

Railroad Avenue - 19

Silver Spur Place - 20

Callender Road - 21

From this scale it becomes clear that Grand and Pier Avenues are very close in terms of environmental sensitivity, while the Railroad Avenue, Silver Spur Place, and Callender Road alternatives are substantially more sensitive. The Railroad Avenue, Silver Spur Place, and Callender Road alternatives are relatively close to each other in terms of environmental sensitivity.

Pier Avenue. The second least damaging alternative is the Pier Avenue entrance. This corridor would not significantly impact any of the resources

considered in this DEIR. No mitigation measures are necessary for the continued operation of Pier Avenue. If future expansion takes place, a qualified archaeologist should be present to monitor grading and excavating activities. The Department should continue to utilize the Pier Avenue entrance as one of its primary entrances to the SVRA. Pier Avenue, if expanded, would be only slightly more damaging than the Grand Avenue alternative. The expansion of Pier Avenue may have greater effects on surrounding land use, local traffic conditions, and subsurface archaeological resources than the Grand Avenue alternative. However, the Pier Avenue alternative would have less effect on biological and visual resources. Overall, the Pier Avenue alternative should be maintained as an operating park entrance and considered for expansion based on the future recreational demand associated with the SVRA.

Railroad Avenue. The Railroad Avenue alternative is the third least environmentally damaging corridor. The Railroad Avenue alternative, the Silver Spur Place alternative, and Callender Road alternative are all substantially more environmentally sensitive than the two previously discussed alternatives.

This alternative would have a substantial effect on local traffic patterns. Development of the Railroad Avenue corridor would require detailed traffic engineering studies to adequately redesign the intersections of Highway 1/Railroad Avenue and Railroad Avenue/Creek Street. The increased traffic volumes associated with the park could significantly effect the local traffic patterns in the vicinity of Railroad Avenue. The Railroad Avenue alternative would have the greatest adverse effect on traffic patterns of any of the alternatives being considered.

The Railroad Road alternative would require several mitigation measures to protect the biological value of the corridor. A landscaping plan, revegetation plan, and elevated road would need to be incorporated into the design of the entrance to avoid significantly effecting the biological resources that occur in the area. For a complete description of the mitigation measures refer to the biological section of this DEIR.

The potential for encountering subsurface and surface archaeological/cultural resources requires the presence of a qualified archaeologist to monitor all grading and excavating activities within this corridor. Several known archaeological sites exist near the western portion of the corridor. To avoid disturbing these sites traffic would need to be routed in such a way as to avoid these sites. For a complete description of the mitigation measures refer to the archaeological/cultural resources section of this DEIR.

The Railroad Avenue alternative would not adversely effect surrounding land use or visual resources.

Silver Spur Place. The Silver Spur Place alternative is the fourth most environmentally damaging alternative. This alternative would require the same mitigation measures for biological resources and archaeological/cultural resources as those described for the Railroad Avenue alternative. Although traffic engineering studies would need to be carried out this alternative, all arterials in the proposed corridor have adequate capacity to serve the park.

Land use conflicts between agricultural land uses and the park entrance would be significant. For a detailed description of the potential effects of the Silver Spur Place alternative on surrounding development refer to the land use section of this DEIR. This alternative would also result in the loss of some prime agricultural land, an unavoidable significant effect associated with alternative. No mitigation measures are available to lessen the effect of the development of the Silver Spur Place alternative on surrounding land uses.

The Silver Spur Place alternative would not adversely effect the visual resources in or adjacent to the corridor.

Callender Road. The Callender Road alternative is the most environmentally damaging alternative considered in this DEIR. This alternative would have unavoidable significant impacts on biological resources, visual resources, and on land use. For a more detailed description of the impacts associated with the Callender Road alternative refer to the biological resources, visual resources, and land use sections of this DEIR.

The potential for encountering subsurface archaeological artifacts during grading and excavating activities exists. A qualified archaeologist would need to monitor these activities to insure that archaeological/cultural resources are not adversely affected.

Additional traffic engineering studies would be required to appropriately design the intersection of the new road and Highway 1. The intersection would have adequate capacity to serve the park.



II. PROJECT DESCRIPTION

A. INTRODUCTION.

The Department of Parks and Recreation (DPR) has initiated the preparation of an Environmental Impact Report (EIR) to address the environmental impacts associated with the updating of the Pismo State Beach and Pismo Dunes SVRA General Development and Resource Management Plans. The intent of the EIR is to identify the least environmentally damaging access corridor and staging area into the Pismo Dunes State Vehicular Recreation Area (SVRA). Upon identifying the subject corridor, the General Development and Resource Management Plans will be updated to reflect the findings.

The initial General Plan for the Pismo State Beach and Pismo Dunes State Vehicular Recreation Area was completed in 1975. Since that time the Department of Parks and Recreation, OHMVR Division, has improved the park through construction of kiosks at Grand and Pier Avenues, and fencing projects. The fencing of the SVRA and kiosk construction required the issuance of a California Coastal Commission Coastal Development Permit. A Coastal Development Permit (CDP#4-82-300) was issued on June 17, 1982 by the California Coastal Commission for the kiosks and fencing. The CDP imposed a variety of conditions on the Department of Parks and Recreation regarding park access, control of uses within the park, protection of natural resources, control of user numbers within the park and a variety of other conditions. The Department of Parks and Recreation has met or is in the process of meeting these conditions. Since the issuance of the original Coastal Development Permit two amendments have been sought by the Department of Parks and Recreation both of which were approved by the California Coastal Commission.

This Draft Environmental Impact Report is being prepared to provide pertinent information to the Department of Parks and Recreation, other agencies with land use jurisdiction in the area and the public in an effort to make findings regarding condition B of CDP#4-82-300. Condition B is as follows:

"B. A permanent staging area site shall be selected as expeditiously as possible but in no case later than 18 months from the effective date of the County's LUP certification consistent with the following standards. Construction of this permanent staging area shall begin no later than

three (3) years from the date of the certification of the County's LUP of its LCP. If construction and operation of a permanent staging area cannot be accomplished within the above time limits, this permit shall be subject to review and modification if necessary or appropriate by the County or the Commission or either in consultation with the other. Prior to construction, the County's LUP and the State Parks General Development Plan shall be amended to include the selected site with all additional standards or conditions for its design and operation. At the present time, there are several known locations which shall be considered and evaluated for staging area use, these locations are: Callender Road area; the stables/agricultural lands area south of Arroyo Grande Creek; Agricultural lands north of Oso Flaco Creek adjacent to the Union Oil property; on the beach as per the interim staging area described herein (See Exhibit C). Other potential sites may also be evaluated. The site selection process shall include an environmental impacts analysis adequate to enable the selection of the least environmentally damaging location for the use. Accordingly, the on and off-site impacts of each alternative shall be measured against the impacts of each of the others. In selecting the site and amending the County's LUP and the State Parks General Development Plan to incorporate the selected site, the following standards must be found to have been met: 1) that the site selected is the least environmentally damaging alternative; and 2) that all feasible design and operational related mitigations have been incorporated to minimize adverse environmental impacts. Additional standards for site selection are in their order of importance: locating a site which reduces to the maximum extent feasible OHV related impacts to the residential character of the community of Oceano; locating a site which facilitates the successful separation of regulation of recreational uses within the park itself; locating a site which can be constructed and operational expeditiously."

The EIR will discuss several alternative General Plan strategies for the Pismo State Beach and Pismo Dunes State Vehicular Recreation Area. Since the proposed project is the updating of the existing plans, the no project alternative would consist of allowing the existing development and management plans to remain unchanged. The EIR will address the effects of alternative access corridors and staging areas for the park. Based on these findings, management schemes, reflected in General Development and Resource Management Plan updates, will be discussed and analyzed. Therefore, the project alternatives will stem from the identification and analysis of alternative access corridors and staging areas. The two existing access corridors and staging area will be analyzed along with three additional alternative corridors.

Issues concerning access, user and land use conflicts, and future expansion of the Off-highway Vehicle portion of the Pismo Beach State Vehicular Recreation Area (SVRA) have resulted in a history of on-going park management and public

debate. Various groups in the surrounding communities have expressed concern regarding a variety of issues including socioeconomic, noise, traffic, and degradation of the Oso Flaco Lakes area. These concerns stem from the long history of unregulated beach recreation in what is now the Pismo State Beach and SVRA. In the past, the number of users was unlimited, generating traffic and noise problems in the local communities. Peak periods for such problems were experienced on the major three-day holiday weekends. Congestion on both Pier and Grand Avenues and unregulated beach recreation from Grand Avenue to the now regulated play area, generated adverse effects on the local communities and residents living along the access corridors and those owning beach front homes. The use of the Oso Flaco Lakes Causeway for vehicle recreation and access to the beach area was taking place as well. Since acquisition by the California Department of Parks and Recreation, the community has had a number of opportunities to play a role in the development of management policies for the SVRA. For example a technical review committee was formed to discuss alternative access schemes into the park. The committee was made up of members from every aspect of the community. Additional agency meetings were conducted to address the problems associated with the unregulated use of the park lands. Of particular interest was the rapid degradation of the Oso Flaco Lakes area and unregulated recreational use along the beach from Grand and Pier Avenues south along the beach. The Department of Parks and Recreation in conjunction with the Coastal Commission Permit hearing process, discussed a number of issues related to the park recreational activities, access, conservation/preservation of dune complexes, and land use conflicts. The result of these efforts has been an increase in beach user regulation and improvements in the existing Grand and Pier Avenues access corridors. The Department of Parks and Recreation, Off-Highway Vehicle Division, developed a management scheme that looked at the issues from a "multiple land use" perspective. The Department looked at a variety of alternative management proposals and finally adopted one that incorporated greater OHV and camping regulations, restoration of degraded areas and limiting access to those areas identified as being sensitive.

Today Grand and Pier Avenues serve as the only vehicle access points into the park. Each entrance has been improved with kiosks, signage and beach ramps. In addition, DPR provided a grant to the County of San Luis Obispo to widen

and improve Pier Avenue. The number of campers is limited to 500 units and camping is only permitted in the designated "play area" beginning one mile south of the beach front homes. Play vehicles are not allowed outside of the designated play area, which is both signed and fenced. The Oso Flaco Lakes Causeway is no longer a vehicle access point into the park. The road has been gated and signs indicate that off-road vehicles are restricted. The Department has also implemented a revegetation program to stabilize the dunes surrounding the Oso Flaco Lake area. Presently, the Department, Nature Conservancy and the County of San Luis Obispo are finalizing plans to construct a kiosk and wood boardwalk that would serve to provide access for bird watchers, hikers and other passive recreational users. The boardwalk is intended to keep hikers off the dune complexes in an effort to stabilize and preserve the unique dune ecosystems found in the area. The Nature Conservancy and California Conservation Corps will be constructing the kiosk and boardwalk and the Nature Conservancy will be responsible for managing the area.

Since the Department of Parks and Recreation's acquisition of and implementation of management plans for the Pismo Dunes SVRA, the conflicts between the local communities and visitors to the area have been greatly decreased. Traffic problems on both Grand and Pier Avenues has been significantly reduced and greater regulation of the park users has maintained a effective buffer zone between OHV recreationists and local residents. The unique dune resources of the Oso Flaco Lakes area are currently being restored from previous damage caused by unrestricted use and a conservation oriented management scheme is to be implemented for the area. The cooperative effort between the Department of Parks and Recreation, County of San Luis Obispo, and community members have resolved the majority of conflicts related to recreational use that previously existed in the area. This Environmental Impact Report will provide additional information to satisfy conditions imposed by the California Coastal Commission and provide the General Development and Resource Management Plan Updates that will reflect the management goals of the Department of Parks and Recreation with regard to the Pismo Dunes SVRA.

B. PROJECT DESCRIPTION.

The proposed project consists of analyzing five potential access corridors and associated staging areas for the Pismo Dunes State Vehicular Recreation Area. Two access corridors and a staging area currently serve the park and are included for analysis. The EIR will identify the impacts associated for each alternative corridor if developed. The development of a corridor, at a minimum, is expected to consist of encroachment upon an existing paved road with a paved entrance, parking lot, and kiosk development. Once past the kiosk the paved road would end and revert back to compacted sand. The amount of new impervious surface would be unique to each alternative corridor. See Conceptual Drawings 1-5 for a complete site layout for each alternative.

Each alternative will be compared to each other to determine which corridor is the least environmentally damaging access corridor and staging area. After determining the least environmental damaging corridor the General Development and Resource Management Plans will be updated to reflect the findings.

C. PROJECT PURPOSE.

The Department of Parks and Recreation proposes to update the General Development Plan and Resource Management Plan based on the findings in the Draft Environmental Impact Report for the Pismo Dunes State Vehicular Recreation Area. The update will satisfy the conditions imposed as part of the Coastal Development Permit issued by the California Coastal Commission in 1982. The EIR will address the environmental effects associated with alternative access corridors and staging areas. The study will focus on the development standards, circulation elements and resource management sections of the existing Park plans and San Luis Obispo County's Local Coastal Program. Following the completion of the EIR the Department of Parks and Recreation will have the information necessary to guide the long-term management and development of the State Vehicular Recreation Area in San Luis Obispo County.



III. PROJECT ALTERNATIVES

A. INTRODUCTION.

This Environmental Impact Report is intended to address the environmental effects of developing an access corridor into the existing Pismo Dunes State Vehicular Recreation Area. The Department of Parks and Recreation, the California Coastal Commission and other interested parties have discussed various options for several years. The result of such discussion has been the identification of five (5) potential access corridors. Two of these corridors have already been developed at Grand Avenue and Pier Avenue and currently serve the State Beach and State Vehicular Recreation Area. Alternatives three and four would run through the community of Oceano and access the beach north of the State Park Dune Preserve. Alternative five is located off of Callender Road south of the dune preserve. This alternative is the only access point that enters the off-road vehicle play area directly. See Figure 1.

It is the intent of this EIR to analyze all the alternatives equally. The Department of Parks and Recreation has not indicated the preference of one alternative over another and will make Park Plan Updates based on the findings of this EIR.

B. GRAND AVENUE.

The Grand Avenue alternative corridor is the northern-most entrance proposed for the park. This entrance has already been developed and is currently used to access the beach area and SVRA. See Figure 1. Grand Avenue follows a straight line from Highway 101 in the City of Arroyo Grande to the beach. Highway 1 also crosses Grand Avenue in the vicinity of Grover City.

This corridor has been developed into a full service entrance by DPR and includes parking areas, a kiosk, and a beach access ramp. Visitors enter at this point and drive south along the beach for approximately two miles to the recreation area. Staging takes place in the vehicle recreation area.

The portion of the corridor that runs from Highway 101 to Highway 1 is completely developed lands. Development in this area consists of residential and commercial land uses. Service oriented development (i.e. gas stations, restaurants, mini-markets, etc.) make up the majority of the development along this portion of the corridor. From Highway 1 to the park entrance the corridor is relatively undeveloped. One restaurant and parking lot is located on the northern edge of Grand Avenue. The remainder of this portion of the corridor is in open space land uses.

C. PIER AVENUE.

The Pier Avenue alternative corridor is located north of the SVRA. This entrance has been developed and is currently used to access the beach and SVRA. See Figure 1. Pier Avenue provides a straight line from Highway 1 through the community of Oceano to the beach. Pier Avenue is a relatively short corridor in comparison to the other alternatives.

This corridor has been developed into a full-service entrance by DPR and includes parking areas, a kiosk, restrooms, and a beach access ramp. Currently this corridor is used to access the State Vehicular Recreation Area. Staging takes place approximately a mile south along the beach in the SVRA.

The entire length of Pier Avenue runs through developed lands. Surrounding land uses include residential and commercial. Service oriented development (i.e. souvenir shops, bicycle rental, mini-markets, etc) has been developed along the entire length of the Pier Avenue corridor.

D. RAILROAD AVENUE.

The Railroad Avenue alternative corridor is located north of the SVRA and immediately adjacent to the dune preserve. This alternative does not provide access to the beach at present. The corridor consists of portions of Railroad Road and Creek Avenue, an open field, and the Arroyo Grande Creek levee. See Figure 2. Railroad Avenue would be accessed from Highway 1. The development of this corridor would require that Railroad Avenue and Creek Avenue be widened and right and left turn lanes added to Highway 1. A signal may be required for the Railroad Road and Highway 1 intersection. The development adjacent to this corridor consists of agricultural (south & east),

warehouse/industrial (north), and open space (west). The corridor would follow Railroad Avenue to the west for less than a quarter of a mile, then make a 90 degree turn to the south along Creek Avenue. It would follow Creek Avenue for less than a quarter mile, then make a 90 degree turn and head southwest through a fallow agricultural field. The corridor would extend through the field to the Arroyo Grande Creek levee. The corridor follows the levee to the beach.

This corridor, if developed into a full service entrance by DPR, would require the widening of Railroad Avenue and Creek Avenue, construction of a new road, a parking lot, a kiosk, restrooms, and an administrative building. An overpass would need to be constructed over Arroyo Grande Creek at its western most extent. Visitors wishing to recreate with off-road vehicles would be required to check in at the kiosk, then trailer their OHV(s) south along the beach to the vehicle play area. Staging would continue to take place in the vehicle recreation area. No off-road vehicles would be allowed beyond the boundary of the "play area". Equestrians, hikers, and other park users could stage in the parking lot, then proceed to the beach on the same route as the OHV users.

The eastern half of the Railroad Road alternative corridor would run through developed lands while the western half would be constructed on an existing levee. Surrounding land uses in the eastern section consist of residential, agricultural, and commercial development. The western portion of the corridor is currently developed in flood control land uses. Agricultural related development and the dune preserve would be adjacent to the southern boundary of the access corridor. Warehouse and industrial development would be adjacent to the northern boundary of the corridor.

E. SILVER SPUR PLACE.

The Silver Spur Place alternative corridor is located north of the park and east of the dune preserve. This alternative does not provide access to the beach at present. The corridor includes some residential roadways, including 22nd Avenue and Silver Spur Road, however, the majority of this corridor is undeveloped. See Figure 2. The corridor would be accessed from Highway 1 at 22nd Avenue. This corridor would run directly south from Highway 1 along 22nd

Avenue, crossing Arroyo Grande Creek and the Southern Pacific Railroad (SPR) right-of-way. Once across the SPR right-of-way the corridor would head west along Silver Spur Place for approximately three quarters of a mile into an agricultural field. The road would leave the field, heading north until it crosses the Arroyo Grande Creek levee. Once on the levee the corridor would head west to the beach. The development of this corridor would require that 22nd Street, Silver Spur Place, and the dirt road that accesses the levee be widened.

This corridor, if developed into a full service entrance by DPR, would require the above described improvements in addition to the development of parking areas, a kiosk, restrooms, an administrative building, and a beach access ramp. The parking lot, kiosk, restrooms, and administrative building would be constructed in an agricultural field adjacent to the dune preserve. Currently the eastern portion of the corridor is used to access rural residential development and agricultural fields. Visitors would still be required to trailer their off-road vehicles south along the beach to the vehicle play area. Staging would continue to take place in the vehicle recreation area for OHVs. Equestrians, hikers and other park users could stage in the parking lot then proceed to the beach on the same route as the OHV users.

The eastern portion of the Silver Spur Place alternative corridor would run through lands developed in rural residential, recreational, and open space land uses (agriculture). The western half would be constructed along the Arroyo Grande Creek levee. Agricultural fields and the dune preserve would be the southern boundary of the access corridor and would remain undeveloped. Agricultural fields and Arroyo Grande Creek form the northern boundary of this corridor along Silver Spur Place. Commercial and residential development has taken place on the eastern and western boundary of 22nd Street.

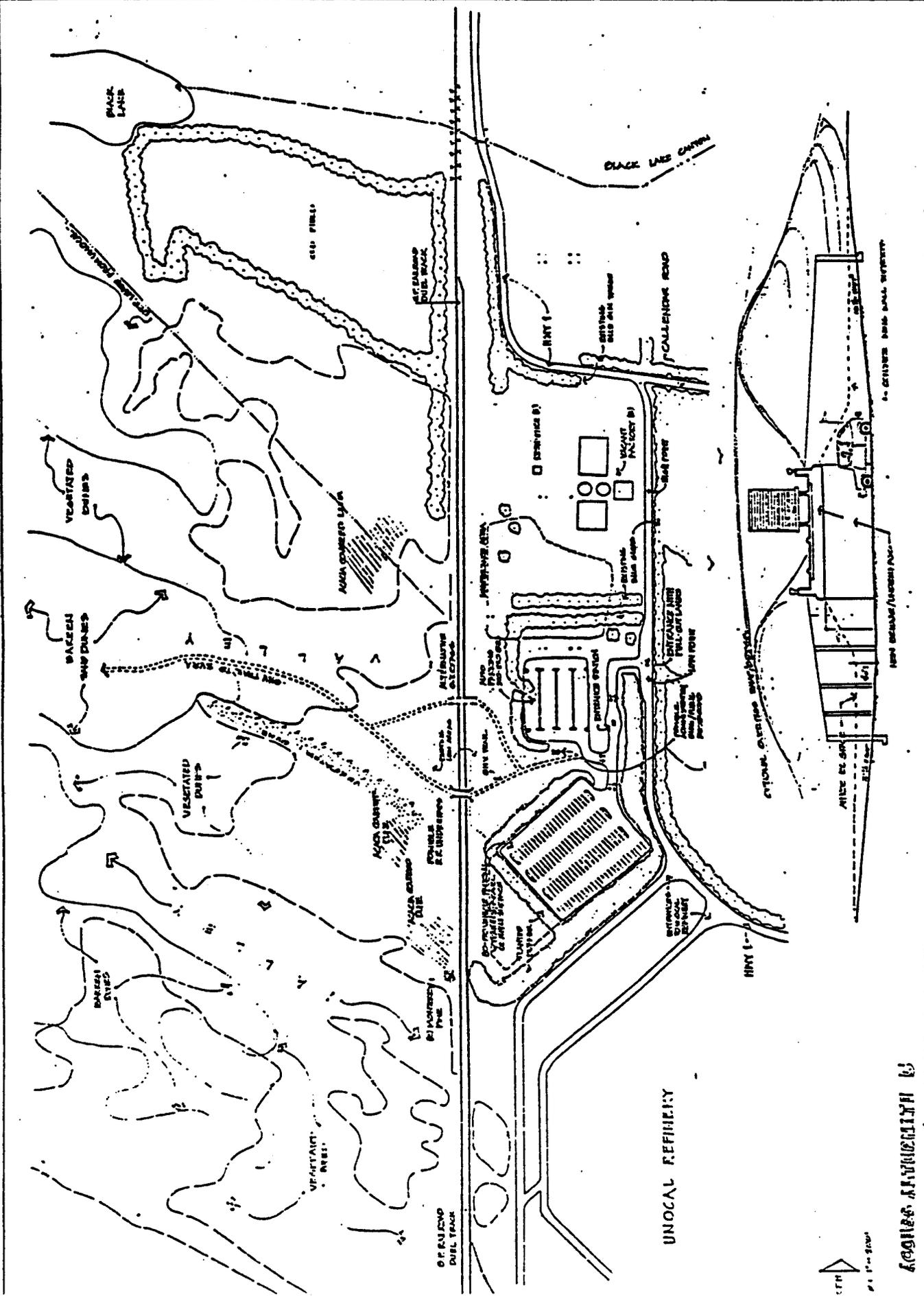
F. CALLENDER ROAD.

The Callender Road alternative corridor is the southern-most access corridor being considered as part of this EIR. This alternative does not provide access to the beach at present. The corridor runs through undeveloped lands. See Figure 3. The corridor would be accessed from Highway 1 approximately a quarter of a mile south of Callender Road. This corridor would run directly

west for approximately a mile to the SVRA boundary. The eastern portion of the corridor, from Highway 1 to the Southern Pacific Railroad (SPR) right-of-way, consists of a ruderal field. East of the SPR right-of-way the corridor would run through stabilized dune complexes. The development of this corridor would require that an entirely new road be constructed from Highway 1 to the proposed campground/staging area and that a compacted dirt road be constructed from the campground/staging area into the SVRA. The development of this corridor would provide an access corridor directly into the SVRA, eliminating the need to trailer vehicles from Oceano or Grover City south along the beach to the play area. Staging would take place in the campground/staging area. From this point the OHVs could be driven directly to the play area on a dirt road.

This corridor, if developed into a full service entrance by DPR, would require the above described improvements in addition to the development of parking/staging areas, an administrative building, and a kiosk east of the railroad tracks. The campground/staging area would require the construction of restroom facilities, water and electrical service, fire pits/barbecues, appropriate signage, and other infrastructure. The entire campground/staging area would be approximately 15-20 acres. The boundaries of the SVRA "play area" would remain the same, however, off-road vehicles could be allowed to be driven/ridden from the new staging area on the eastern side of the railroad tracks to the "play area".

The entire Callender Road alternative corridor would run through undeveloped lands other than the area immediately adjacent to the Southern Pacific Railroad right-of-way and the abandoned warehouse industrial complex north of the corridor. The lands to the north of the corridor are currently managed as a dune preserve, while the lands to the south and portions of the proposed corridor belong to the Union Oil Company and are managed as open space. Those portions of the corridor on the western side of the railroad tracks would run through undeveloped dune formations.



MISSOURI STATE WILDLIFE RECREATION AREA
 UNOCAL REFINERY
 HIGHWAY ONE/CALENDAR ROAD
 ENTRANCE AND STAGING AREA
 FIGURE 3

IV. LAND USE

A. INTRODUCTION

The following land use analysis is based on site visits, consultation with Department of Parks and Recreation staff, and information derived from San Luis Obispo County coastal planning documents and the Pismo State Beach and Pismo Dunes State Vehicular Recreation Area General Plan (1975).

Presented below are descriptions of the existing land uses for each alternative access corridor. Following the descriptions of the existing land uses for each alternative corridor, an impact analysis is presented for each corridor according to the level of development envisioned for that corridor. The Grand Avenue and Pier Avenue corridors are somewhat different than the other three corridors because Grand Avenue and Pier Avenue have already been developed as entrances. Whereas the analysis for the other, undeveloped corridors is focused on the effects of developing the corridors for access to the SVRA, the analysis of the Grand Avenue and Pier Avenue corridors is focused on the effects of maintaining them as access corridors with only minor changes. Potential mitigation measures have been developed, where feasible and necessary, to lessen the effects of development on the various land uses associated with each alternative. Finally, each access corridor is ranked according to its effect on the surrounding land uses.

B. REGIONAL EXISTING SETTING

The project study area is located in the central and southern coastal region in San Luis Obispo County. The project study area is bounded on the north by Highway 101, on the west by the Pacific Ocean, and on the south by Oso Flaco Road. The project study area extends up to three miles inland from the ocean. At the northern end of the study area is the city of Pismo Beach (approximate population 6,600). The city of Arroyo Grande (approximate population 13,100) is located at the northeastern edge of the study area, and Grover City (approximate population 10,600) is located in the western and central portion of the study area. The study area also includes the community of Oceano. Other than these areas, much of the inland project study area is rural in

nature. The project study area also contains lands used for agriculture, recreation, open space, and industry.

The coastal land within the project study area is primarily publicly owned. Major coastal landholders include the City of Pismo Beach at the northern end of the project study area; further south the land is owned by the State Department of Parks and Recreation. The State Lands Commission owns the coastal land west of the mean high tide line.

The Department of Parks and Recreation's land is divided into two areas: Pismo State Beach and the Pismo Dunes State Vehicular Recreation Area (SVRA). Recreation lands associated with Pismo State Beach are owned by the state and operated by Department of Parks and Recreation (DPR) staff. The single exception is the northernmost one mile of beach, which is operated and maintained by the City of Pismo Beach. The Pismo State Beach area encompasses such uses as a public fishing pier; a golf course; campgrounds; a restaurant; picnic areas; and equestrian and hiking trails. Street vehicles are allowed on the beach south of Grand Avenue, and beach driving is very popular. A 430-acre dune preserve south of Arroyo Grande Creek is also managed by the State Department of Parks and Recreation as part of Pismo State Beach, and State Parks also manages a 40-acre dune/wetland natural area south of Grand Avenue.

Lands associated with the Pismo Dunes SVRA are owned by the Department of Parks and Recreation or operated by agreement with the owning entity as part of the State Vehicular Recreation Area and Trail System. The Off-Highway Motor Vehicle Recreation Division of the Department of Parks and Recreation is responsible for administration of these lands with funds provided by the Off-Highway Vehicle Fund. The Pismo Dunes SVRA contains a 2000-acre dune vehicle recreation area, primitive campgrounds, a picnic area, and equestrian and hiking trails. The portion of the SVRA just south of the Pismo State Beach dune preserve is owned by the County of San Luis Obispo, although the entire SVRA is administered by the State Dept. of Parks and Recreation. South of the SVRA vehicle "play area" is the Oso Flaco Lakes natural area, which is owned by the State Parks OHMVR division. This area was previously used for OHV recreation, but efforts are underway to revegetate it, and the State Parks OHMVR division is negotiating an agreement with the Nature Conservancy that would turn management of the area over to the Nature Conservancy.

There is a large private agricultural preserve in the area that is owned and managed by Dune Lakes Properties and is located east of the County-owned SVRA land. A twenty-year agricultural preserve contract exists on this property; the property also includes a wildlife preserve. In addition, the Union Oil company maintains a large buffer area over 600 acres in size between the SVRA and its refinery at the southeastern end of the study area. Much of this area is managed by the Department of Parks and Recreation's OHMVR Division.

A Southern Pacific Railroad line runs north-south across the project study area. Major roads within the area are Highway 1 and Highway 101.

The Oceano Airport, which is administered by San Luis Obispo County, is located in the northwestern portion of the study area. Oceano Airport is a small airport that is used primarily by recreational pilots flying single-engine or twin-engine aircraft; the airport is not used for commercial flights. During the week, approximately 10 aircraft per day fly into or out of the airport. On weekends, as many as 50 aircraft per day may use the airport. There is only one runway at the airport. The landing approach to the airport is usually from the southeast; airplanes taking off usually taxi from the northwest heading towards the southeastern edge of the runway and then take off to the northwest.

Figure 4 provides a generalized illustration of the major land uses within the project study area. Figure 5 is a diagram of the major land owners in the project study area, and Figure 6 shows what entities have administration authority over lands in the project study area.

C. ALTERNATIVE CORRIDOR SETTINGS

Land use descriptions for each of the alternative access corridors are based on site visits conducted by EIR preparation staff, consultation with Department of Parks and Recreation staff, and review of San Luis Obispo County planning documents.

Grand Avenue. The Grand Avenue entrance is the northernmost entrance proposed for the State Vehicular Recreation Area (SVRA). The Grand Avenue entrance has already been developed and is currently used to access the beach area and vehicle recreation area. The access corridor starts at the Highway 101 exit

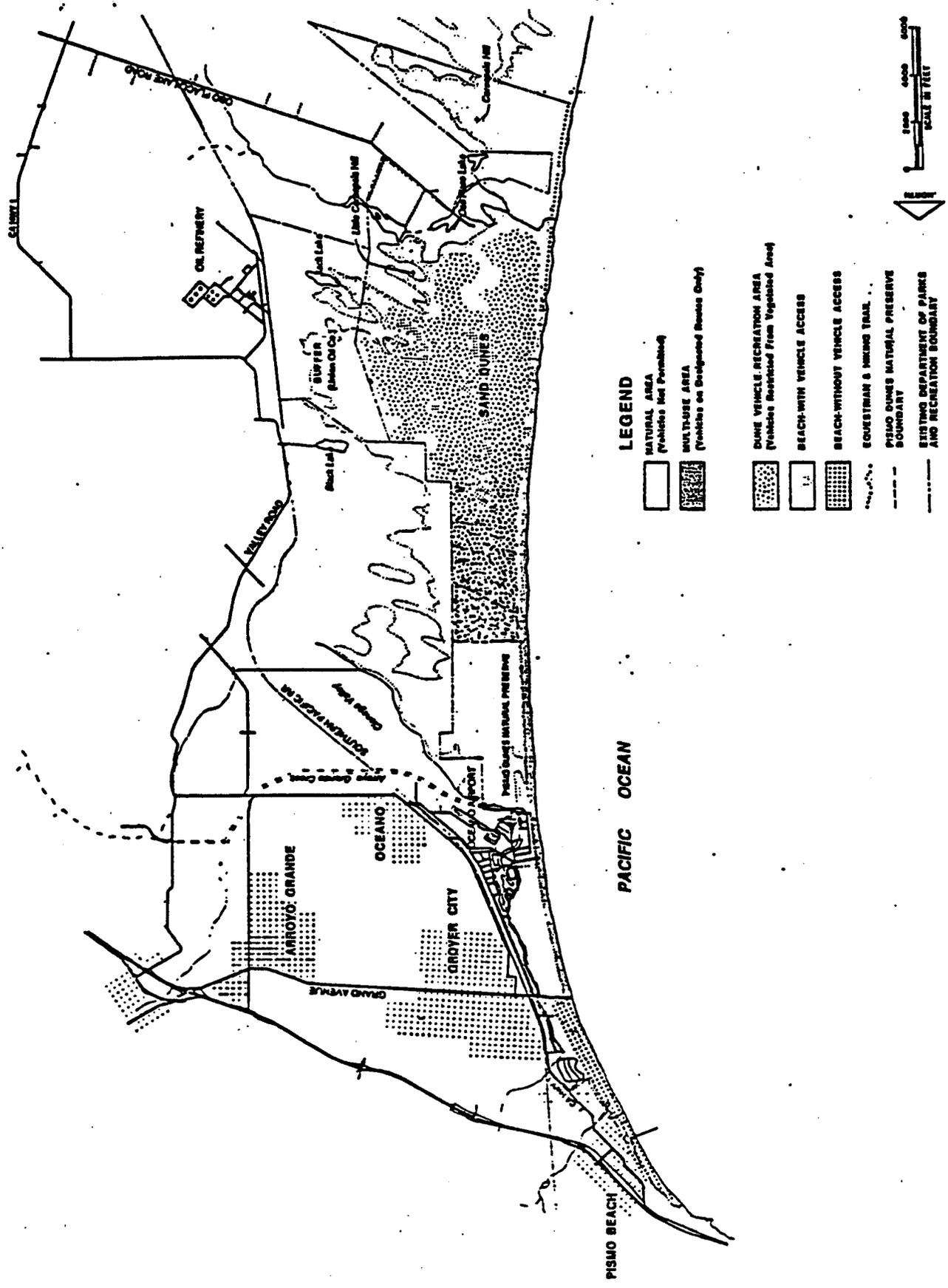


FIGURE 4

onto Grand Avenue and continues along Grand Avenue west across Highway 1 and Meadow Creek all the way to the beach. Grand Avenue is an undivided road four lanes wide from Highway 1 out to the beach.

Much of the length of this corridor runs through developed lands. The stretch of Grand Avenue running from Highway 101 west to Highway 1 passes through the cities of Arroyo Grande and Grover City. The jurisdiction of the City of Arroyo Grande stretches from Highway 101 west to Oak Park Boulevard. Both sides of the avenue are heavily developed throughout the city of Arroyo Grande, primarily with commercial uses such as retail stores and service-oriented businesses such as mini-markets, gas stations, motels, and restaurants. There is only minor residential development in this area. The City of Arroyo Grande's official land use designations in this area include General Commercial and Agriculture. The only area designated for agricultural use consists of a few acres on the southern side of Grand Avenue near Highway 101.

Within the jurisdiction of the City of Grover City, from Oak Park Boulevard west to the beach, official land use designations include Service Commercial, CBD Commercial, Coastal Highway Commercial, Coastal Planned Commercial, and Coastal Open Space.

The avenue crosses a set of Southern Pacific Railroad tracks just east of Highway 1, and land uses change markedly on the western side of the railroad tracks and Highway 1. There is a small commercial development at the northwestern corner of Grand Avenue and Highway 1, and just west of the commercial development is a recreational vehicle (RV) park. The RV park is set back from the road a short distance. Still on the northern side of Grand Avenue, west of the RV park and Meadow Creek, is a several hundred-foot-long stretch of open space. This area is designated by Grover City for Planned Coastal Commercial use, and has previously been proposed for development as a lodge with conference facilities or as a driving range to complement a nearby golf course. Farther west of the open space area is a large parking lot, and west of the parking lot is a family-style restaurant. The parking lot is used by beach-goers for day use and is managed by the State Department of Parks and Recreation. The restaurant, which is at the western end of Grand Avenue, fronts on the beach.

On the southern side of Grand Avenue west of Highway 1 is a 40-acre dune/wetland natural area that is managed by the State Department of Parks and Recreation as part of Pismo State Beach. No vehicular use is permitted in this natural area. The dune/wetland area stretches from Highway 1 all the way to the beach. At the western end of the dune/wetland area are some restrooms and a small parking lot for vehicles. Just north of the parking lot, at the western end of Grand Avenue, is the entrance kiosk for the SVRA. There is a small, fenced dune restoration area west of the kiosk.

Pier Avenue. Pier Avenue is also located north of the SVRA, but south of Grand Avenue. The Pier Avenue entrance has already been developed and is used to access the beach and SVRA. The access corridor starts at the eastern end of Pier Avenue at the intersection of Pier Avenue and Highway 1, and continues along Pier Avenue west through the western edge of the community of Oceano to the beach.

Pier Avenue is a two-lane, undivided road from Highway 1 to its intersection with Lakeside Avenue just east of the State Parks campground. At that point it becomes a four-lane, undivided road for the remaining distance out to the beach. However, the County of San Luis Obispo has received a grant from the State Department of Parks and Recreation so that it can finish widening Pier Avenue to four lanes for its entire length. The County is presently conducting the environmental review process for widening the avenue from Lakeside Avenue west to Norswing. The road-widening project, which is being considered separately from the project analyzed in this EIR, will also involve rebuilding and widening the bridge across the Oceano Lagoon.

Much of the length of the Pier Avenue corridor runs through developed lands. Pier Avenue land use designations, according to the County of San Luis Obispo Local Coastal Plan for the San Luis Bay Planning Area, include Coastal Commercial Retail, Coastal Recreation, and Coastal Residential Multiple Family. At the northeastern corner of Pier Avenue and Highway 1 is a small commercial development. On the western side of the commercial development is the Oceano County Park, which contains a freshwater marsh. The Oceano County Park is available for day use only. West of the park is the Oceano Campground, an improved campground managed by the Department of Parks and Recreation. West of the campground is some commercial development, a trailer

park, and a few tourist-related businesses, including an OHV storage yard that is used by a rental establishment on the southern side of the avenue. At the northwestern end of Pier Avenue is a Parks and Recreation parking lot for beach-goers; at the northern end of the parking lot are some restrooms. There is a small dune restoration area west of the parking lot.

On the southern side of Pier Avenue, starting from Highway 1 and continuing west, is a small commercial development, several residential units, a continuation of the Oceano County Park, a vacant lot, and mixed medium-density residential and tourist-oriented commercial development. The vacant lot has recently been approved by the County of San Luis Obispo for the development of a 100-unit condominium complex. The Oceano Airport, a recreational airport, lies approximately 1,500 feet to the southeast of the access corridor.

At the western end of Pier Avenue is an entrance kiosk for the SVRA. Land uses just south of this area include residential development and the Pismo State Beach Dune Preserve.

Railroad Avenue. The Railroad Avenue alternative is also located north of the SVRA and immediately adjacent to the dune preserve, but south of Grand and Pier Avenues. This alternative does not provide access to the beach at present. The corridor would utilize portions of two existing roads, Railroad Avenue and Creek Avenue, as well as involving the development of a new road along the Arroyo Grande Creek levee. Both Railroad Avenue and Creek Avenue are two-lane, undivided roads; Creek Avenue is unpaved.

Railroad Avenue would be accessed from Highway 1. The corridor would follow Railroad Avenue for a short distance before turning onto Creek Avenue. It would follow Creek Avenue for less than a quarter mile before making a 90-degree turn and heading southwest through a fallow field until reaching the levee along Arroyo Grande Creek. The corridor would continue along the top of the levee all the way out to the beach. At the beach there would be a bridge across Arroyo Grande Creek, and the corridor would continue south along the beach until reaching the SVRA.

Land uses along Highway 1 near its intersection with Railroad Avenue are primarily commercial mixed with residential development. There are two large

warehouses on the northern and western sides of the entrance to this access corridor off Highway 1. Past the warehouses, the corridor passes through a fallow field en route to the levee. This area is designated for industrial use by the County; the area is also classified as urban and built-up land by the California Department of Conservation's Farmland Mapping Program. Once on the levee, the corridor passes within a few hundred feet of the Oceano Airport and a sewage treatment plant on the way to the beach. The airport and sewage treatment plant are both in an area designated by the County for public facilities. The corridor also passes through stretches of open space along the levee road out to the beach. At the end of the corridor on the northern side is some beachfront residential development.

On the eastern side of the corridor near its beginning at Highway 1 is a storage yard for truck trailers, and south of that is an agricultural field that is under cultivation. There are also two single-family houses just east of the corridor as it turns to the west through the fallow field; only one of the houses is occupied. The other house has been abandoned. The corridor would pass within several hundred feet of the occupied house and within one hundred feet of the abandoned one. There is also a trailer storage yard near the occupied house. As the access corridor turns up onto the levee, Arroyo Grande Creek lies to the south, and on the other side of the creek is more rural residential development, agricultural operations, a horse stabling operation, and the Pismo State Beach Dune Preserve.

Silver Spur Place. The Silver Spur Place alternative is also located north of the SVRA and dune preserve, but south of the first three alternatives. This alternative does not provide access to the beach at present. The corridor includes some residential roadways, including 22nd Avenue and Silver Spur Place; however, the majority of this corridor is undeveloped.

The corridor starts at the intersection of Highway 1 and 22nd Avenue. The corridor would continue along 22nd Avenue across Arroyo Grande Creek and the Southern Pacific Railroad (SPR) right-of-way on the southern side of the creek. Once across the SPR right-of-way the corridor would turn onto Silver Spur Place; from there the corridor would turn north and follow a dirt road to the Arroyo Grande Creek levee. The route would cross over the Arroyo Grande Creek onto the northern levee, continuing west to the beach. From that point,

the corridor would follow the same route as that delineated for the Railroad Avenue access corridor once it turns onto the levee.

Uses in the general area near the intersection of Highway 1 and 22nd Street include commercial and residential development. On 22nd Street at the northwestern end of the Silver Spur Place corridor is a mini-storage facility; there is a mobile home park running along the eastern side of 22nd Street nearly all the way to Arroyo Grande Creek and the Southern Pacific railroad tracks. On the southern side of the railroad tracks, but still on the northern side of Silver Spur Place, the land is used for agriculture.

Silver Spur Place is a two-lane dirt road that runs through an area used for rural residential development and agricultural enterprises. The land in this area is classified as prime farmland within the Department of Conservation's Farmland Mapping Program. The prime farmland designation applies to lands with the best combination of physical and chemical features able to sustain long-term production of agricultural crops. The area proposed for a parking lot and buildings associated with development of this area as an access corridor is also classified as prime farmland in the Department of Conservation's Farmland Mapping Program, however, it is designated by the County for recreational use. The area is presently used for pasture rather than cash crops, but land used for pasture is still considered to be in production according to the Department of Conservation.

At the western end of Silver Spur Place is a commercial stables operation known as The Livery Stables. A 215-space recreational vehicle park has recently been proposed for development on a portion of this property southwest of the existing stables building. West of the stables is the Pismo State Beach Dune Preserve. From the stables there are two main equestrian trails to the beach. One of the trails winds through the Pismo State Beach Dune Preserve, and the other trail follows the southern levee of Arroyo Grande Creek until the levee drops away, then continues along the northern border of the dune preserve. The Oceano Sand Company maintains a sand extraction operation west of Silver Spur Place along the southern border of Arroyo Grande Creek.

Once the access corridor crosses over Arroyo Grande Creek, it follows the same path as that of the Railroad Avenue corridor from the point that it turns onto the levee until it reaches the SVRA. This means that the Silver Spur Place access corridor will also run past the Oceano Airport and the sewage treatment facility, and will run past the Pismo State Beach Dune Preserve once it reaches the beach, crosses over Arroyo Grande Creek, and turns south.

Callender Road. The Callender Road alternative is the southernmost access corridor being considered as part of this EIR. This alternative does not presently provide access to the beach and SVRA. The corridor begins at a turnout off Highway 1 (Valley Road) approximately one-quarter mile south of Callender Road. Highway 1 is a two-lane, undivided highway at this point. The corridor would first turn south and continue far enough to accommodate a line of traffic at an entrance kiosk. After passing the kiosk, the corridor would turn to the west, go under or over a set of railroad tracks used by the Southern Pacific Railroad, and continue through stabilized and unstabilized dunes until reaching the SVRA.

The entire Callender Road corridor would run through undeveloped lands other than the area immediately adjacent to the Southern Pacific Railroad right-of-way. There is also an abandoned warehouse complex a few hundred feet to the north of the corridor, and a single-family residence just to the west of the warehouses. This area between Highway 1 and the Southern Pacific railroad tracks is designated for industrial use in the County's Local Coastal Plan. Other uses in the general area along Highway 1 primarily include rural residential development and agricultural enterprises.

On the western side of the railroad tracks, the corridor passes through a dune area that is managed by the Department of Parks and Recreation and owned by the Union Oil Company; the corridor passes through both stabilized sand dunes and active sand dunes on the way out to the SVRA "play area". The area is managed by the DPR, OHMVR Division, as part of a 600-acre buffer zone between the OHV recreation area and the Santa Maria Oil Refinery (operated by Union Oil Company of California) and the Santa Maria Chemical Plant, which is operated by the Union Oil Chemical Division, Carbon Group. The agreement between the State and Union Oil is aimed at protecting existing vegetation and assigning enforcement responsibility to ensure that OHV activity does not

occur on these lands. To the north of the corridor in this area is a fallow agricultural field and Black Lake, which is part of an area that is managed as the privately-owned Dune Lakes agricultural and wildlife preserve. The lands to the south of the corridor belong to the Union Oil Company and are managed as open space. Further south, east of the railroad tracks, is the Santa Maria Oil Refinery and the Santa Maria Chemical Plant. The refinery and chemical plant represent the primary industrial development in the southern San Luis Obispo County Coastal Zone. To the south and west of the railroad tracks is Jack Lake and the Oso Flaco Lake nature preserve.

D. PLANNED LAND USES AND RELEVANT POLICIES

The Cities of Arroyo Grande, Pismo Beach, and Grover City, as well as the County of San Luis Obispo and the California Coastal Commission, all have land use jurisdiction over different portions of the project study area. However, the City of Pismo Beach does not have jurisdiction over land use within any of the specific alternative access corridors examined in this document. In addition, the northern four access corridors are close enough to the Oceano Airport to be governed by aspects of the airport's Land Use Plan and Federal Aviation Administration Part 77 Regulations.

The Department of Parks and Recreation as a state agency is not usually subject to regulation or permitting by local agencies, although it does take into account the plans and policies of local agencies when planning its projects. However, parts of the various access corridors are within the coastal zone as determined by the California Coastal Commission. The 1976 California Coastal Act gave the Coastal Commission authority over coastal land uses, and required coastal counties to prepare local coastal plans. Much of the Commission's land use authority has been passed to each coastal county as the counties' local coastal plans have been completed and certified by the Coastal Commission. Since the mandate for the preparation of local coastal plans came from the state level of government, state agencies are not exempt from the provisions of local coastal plans. Following is a summary of the plans and policies that are relevant to this project.

Federal Plans and Policies

Federal Aviation Part 77 Regulations address hazardous interference with air traffic by the height of buildings and structures, as well as electronic emissions which could impede aircraft communications and navigation. Although there is no provision for land use regulation in the FAA Part 77 Regulations, the FAA does have the capability to make a determination of whether a specific project would constitute an aviation hazard, and local permitting authorities can use the FAA's determination in the course of their decision-making processes.

San Luis Obispo County Plans and Policies

San Luis Obispo County has jurisdiction over parts of the southern four alternative access corridors through its Local Coastal Program. The County's Local Coastal Program is the result of a mandate of the 1976 California Coastal Act that requires every county in California that has coastal land within its boundaries to develop a plan for such land that deals with issues of particular relevance to the coast. These issues include shoreline access for the public, visitor-serving facilities, coastal-dependent industrial and energy-related facilities and activities, protection of sensitive habitats, and the protection and preservation of visual and scenic resources. In addition, the Coastal Act establishes a framework for prioritizing land uses, designating as its highest priorities the preservation and protection of natural resources and prime agricultural lands.

To implement the Local Coastal Program, San Luis Obispo County has adopted a Land Use Element (LUE) and Land Use Ordinance (LUO) system that has replaced typical general plan designations and zoning districts. The Land Use Element serves as both a graphic statement of county land use policies and intentions about future growth, and as a precise guide for day-to-day land use decisions. In contrast, the Land Use Ordinance contains standards for development based more on the effects of specific land uses than on separate zoning districts. The Land Use Element also coordinates policies and programs in other county general plan elements that have land use implications, and serves as a reference point and guide for future planning studies throughout the county. It should be noted that this Land Use Element treats the Oso Flaco Lake area

as the future primary entrance to the SVRA. The Oso Flaco Lake area is being revegetated and is no longer under consideration for use as an access corridor.

According to the County's Local Coastal Program Land Use Element, one of the primary goals of the California Coastal Act is to "... maximize public recreational opportunities in the coastal zone consistent with sound resource conservation principles and the constitutionally protected rights of private property owners." The following sections of the Coastal Act address development policies related to recreation and visitor-serving facilities. This list is not all-inclusive, but emphasizes the Coastal Act sections of particular relevance to the proposed project:

30212.5 Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

30213. (Part) Lower cost visitor and recreational facilities ... shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

30240. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

30250. (c) Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction of visitors.

The Coastal Act gives priority to preservation of environmentally sensitive habitat areas over the provision of recreational opportunities; however, many highly used recreational areas within San Luis Obispo County's coastal zone, including the Pismo Dunes, are in or adjacent to sensitive habitat areas. This situation gives the state park system a dual role in providing recreational opportunities while protecting environmental resources.

The following general policies for recreation and visitor-serving facilities in the County's Local Coastal Program Land Use Element are applicable to the proposed project:

POLICY 1 RECREATION OPPORTUNITIES. Coastal recreational and visitor-serving facilities, especially lower-cost facilities, shall be protected, encouraged, and where feasible provided by both public and private means...

POLICY 2 PRIORITY FOR VISITOR-SERVING FACILITIES. Recreational development and commercial visitor-serving facilities shall have priority over non-coastal dependent use, but not over agriculture or coastal-dependent industry in accordance with PRC 30222. All uses shall be consistent with protection of significant coastal resources. The Land Use Plan shall incorporate provisions for areas appropriate for visitor-serving facilities that are adequate for foreseeable demand ... Provisions for new facilities or expansion of existing facilities within rural areas shall be confined to selected points of attraction. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

POLICY 6 COUNTY REVIEW OF STATE PARK PLANS. The State Department of Parks and Recreation shall submit a Master Plan for county approval before implementation of State Park General Development Plans. Subsequent site development plans will be reviewed and approved based on their consistency with the Master Plan and other applicable LCP regulations and sensitivity of planning for carrying capacity of the area and habitat protection.

Although reference to agricultural enterprises and lands classified as prime farmland is made in the existing setting description for the Silver Spur Place alternative, the only area within the Silver Spur Place corridor where construction other than road improvements would take place is in an area designated for recreation. The County's LCP Land Use Element (LUE) agricultural policies appear to apply only to lands specifically designated in the LUE as agricultural lands. This assertion is supported by Policy 4 within the Recreation and Visitor-Serving Facilities section of the LUE.

POLICY 4. VISITOR-SERVING USES IN AGRICULTURAL AREAS. Where visitor-serving facilities are proposed within areas designated as agriculture on the LUE, the findings specified in agriculture Policy 3 as implemented in the CZLUO in the Agriculture chapter shall be met. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 1 in the LUE's Agriculture Chapter states, in part, that:

"...All prime agricultural lands and other (non-prime) lands suitable for agriculture are designated in the land use element as Agriculture unless agricultural use is already limited by conflicts with urban uses."

Therefore, the County's LCP LUE agricultural policies do not apply with respect to the area proposed for building construction at the end of Silver Spur Place.

In addition to the LUE, the County has also compiled a document called Framework for Planning. Coastal Table O within Chapter 7 of the Framework for Planning lists uses of land that may be established in the land use categories shown by the Land Use Element area plans in the coastal zone. The land use engendered by the proposed project most closely matches the County's "Coastal Accessway" category. Unless area planning standards limit it, this use is allowable within every one of the County's land use categories.

More specific guidance in implementing the County's Local Coastal Program is presented in its Local Coastal Plans (LCPs) for each of four planning areas in the San Luis Obispo County Coastal Zone. The five alternatives fall within the jurisdiction of two different San Luis Obispo County Local Coastal Plans: the northern four alternatives, at least in part, are governed by the policies of the San Luis Bay Local Coastal Plan, and the southernmost alternative, the Callender Road corridor, is within the South County Planning area. Both the South County Planning Area and San Luis Bay Planning Area LCPs were certified by the California Coastal Commission in 1988.

San Luis Bay Planning Area

The following standard applies to lands in the Oceano County Airport Review area. Otherwise, no policies or programs strictly relevant to any of the possible access corridors were located.

1. Limitation on Uses within Airport Review Area. Allowable uses are limited to those designated as "compatible" or "conditionally approvable" by the adopted Oceano County Land Use Plan (LCP).

The Pier Avenue, Railroad Avenue, and Silver Spur Place alternatives all fall within the airport review area. More specific information on the planning standards that are applicable to the airport review area can be found in the section below on the Oceano Airport Land Use Plan.

South County Planning Area

The Land Use Chapter of this LCP contains a section entitled Rural Area Programs, part of which is applicable to the project under consideration. A "program" in this context is a non-mandatory action or policy recommended in the Land Use Element to achieve community or areawide objectives identified in the area plan. The following program pertains to coastal recreation:

Recreation

4. Dune and Beach Access. The county should work with the State to provide for improved access corridors to the dunes and beach areas.

The LCP for the South County Planning Area also sets forth certain standards with respect to the Oceano County Airport Review Area. The Callender Road alternative is the only alternative under consideration in the South County Planning Area, however, and it is outside the boundaries of the Oceano County Airport Review Area.

The following standard applies to lands within the County's Open Space land use category, which includes the land within the Callender Road alternative corridor west of the Southern Pacific railroad tracks. "Standards" in this context are mandatory requirements for development, designed to handle

identified problems in a particular rural area, or to respond to concerns in an individual community.

1. Limitation of Use. This area shall be maintained in its natural state to provide a buffer from the off-road vehicular area to the west and to afford protection to the refinery area to the east. Only authorized vehicles used for maintenance purposes are permitted, except for special off-road events which may be permitted if the lease between Union Oil and State Parks is renegotiated. (LCP)

Oceano Airport General Plan

The Oceano County Airport is a general aviation airport; there are no commercial carriers using the facility. The Oceano Airport Land Use Plan (LUP) envisions that the airport will continue being used for recreational purposes by pilots of single and double engine planes. The following information is from the Airport Land Use Plan for the Oceano County Airport. This plan was adopted in February, 1976. Although an update to this plan was drafted in November, 1989, the updated plan was never adopted, and the 1976 plan remains in effect. The airport planning area is depicted in Figure ??.

The Airport LUP sets forth Land Use Planning zones which relate the noise and safety hazards of aircraft operations to the possible uses of real property beneath various flight paths. In some areas, such as the approach and climbout extensions, noise and hazards were both considered. In other areas, only noise was considered to be a relevant factor. Of the five alternative SVRA access corridors under consideration, only the Grand Avenue alternative and the Callender Road alternative do not fall within any of the airport's Land Use Planning zones. The zones relevant to the other alternatives are as follows:

Zone 2 - Other Airport Property - land owned by the County Airport but not in use nor planned for use as building areas. Portions of the Railroad Avenue corridor fall within this zone.

Zone 3 - Approach and Climbout Extensions - that area under the approach and takeoff extensions as defined by the flight paths in use at the airport. This area is subject to both noise and safety considerations.

Portions of the Pier and Railroad Avenue corridors fall within this zone.

Zone 4 - Other Land within the Planning Area - that area with only a slight noise problem envisioned over the next 20 years. Portions of the Pier Avenue and Silver Spur Place alternatives are within this zone.

Although there are no airport planning area land use categories that specifically coincide with those planned for the proposed project, consultation with County airport planning staff led to a determination that the "Parks" category of land use would apply to the proposed project. According to the Airport Land Use Plan, the Parks category of land use is compatible with each of the airport review zones listed above.

City of Arroyo Grande

The City of Arroyo Grande's General Plan was adopted in May, 1990. The following policy from the General Plan is relevant to the proposed project, specifically to the Grand Avenue access corridor:

Land Use Section

3.1 Maintain the U.S. 101 corridor, Grand Avenue, and the Village area as the primary commercial areas of Arroyo Grande...

In the circulation element of the General Plan, Grand Avenue is acknowledged to be a major resort route.

City of Grover City

The City of Grover City's Local Coastal Program, which was adopted in January, 1981, under the provisions of the Federal Coastal Zone Management Act of 1972, recognizes the existing use of Grand Avenue as an access corridor to the Pismo Dunes SVRA. Although the city's LCP contains no specific policy with respect to the continued use of Grand Avenue as an access corridor to the Pismo Dunes SVRA, neither are there any policies within the LCP that prohibit the continued use of Grand Avenue as an access corridor to the Pismo Dunes SVRA.

An analysis of the applicability of the above policies, standards, and programs that are imposed by the various entities having jurisdiction over the project area is presented in the following section on impact analysis.

E. IMPACT ANALYSIS

Grand Avenue. Proposed modifications to the existing Grand Avenue entrance are minor and will not substantially conflict with the existing or proposed land uses along the corridor. For example, one possible entrance modification involves the removal of approximately 15 feet of unused patio on the southern side of the beachfront restaurant in order to add another lane to the SVRA/beach kiosk entrance. A concrete or masonry barrier wall would be constructed in this area to better physically separate the restaurant from the access corridor to the SVRA. Other possible modifications to this access corridor include landscaping the sides of the avenue west of Highway 1 and widening the sidewalk along the northern edge of Grand Avenue from Highway 1 to the beach. See Figure 1.

These proposed modifications are not expected to cause a change in any of the existing or proposed land uses along Grand Avenue. In addition, the administration building associated with the potential improvements would be compatible with other area development in terms of height and bulk; plans provide for a single-story structure approximately 3,000 square feet in size.

Furthermore, the continued use of Grand Avenue as an access corridor to the Pismo Dunes SVRA is compatible with the policies of the County of San Luis Obispo, the City of Grover City, and the City of Arroyo Grande, which considers Grand Avenue to be a route for resort traffic. The Grand Avenue Alternative is not within the Airport Review area of the Oceano Airport, nor is it within the area that is governed by Federal Aviation Administration Part 77 Regulations.

The continued use of the Grand Avenue corridor and the potential future improvements would have a less than significant effect on existing and proposed land uses in the corridor.

Pier Avenue. Given that Pier Avenue is also already a developed access corridor, the land use effects of maintaining it as an access corridor are

likewise relatively small. However, as stated elsewhere in this section, the Department of Parks and Recreation has granted the County funds to widen Pier Avenue to four lanes from Lakeside Avenue west to Highway 1, and the road would probably not be widened if not for its use as an access corridor to the SVRA. Approximately 1,000 feet of roadway will be affected by this change. The uses on either side of the roadway within this stretch are the Oceano Community Park, the State Park campground, and a vacant lot that was recently approved for a condominium development. Widening the road will involve rebuilding a bridge across the lagoon. With respect to the State campground, widening Pier Avenue will shorten the entrance road slightly. Although the road-widening project may have an effect on bordering land uses, the effect is not expected to be so great as to cause a change in the bordering land uses. The County of San Luis Obispo is presently conducting an environmental review on widening Pier Avenue from Lakeside Avenue to Norswing. The County's environmental review of the Pier Avenue road-widening project is separate from this EIR.

Another change related to the Pier Avenue entrance is the construction of a larger parking lot to allow space for 45 cars; the eastern side of the parking lot would abut the trailer park. Construction of this parking lot would involve the removal of a small commercial building. Other changes related to the Pier Avenue alternative involve the construction of a small, one-story park administration building north of the parking lot, another entrance lane and kiosk, and a widened sidewalk on the northern side of Pier Avenue. See Figure 1. None of these changes is expected to substantially interfere with the existing or proposed land uses along this corridor; the proposed use of the corridor is compatible with other existing and proposed land uses in the corridor.

With respect to government plans and policies, the Pier Avenue corridor is subject to the jurisdiction of San Luis Obispo County, the Federal Aviation Administration, and the Oceano County Airport. As stated above, the Oceano County Airport's Land Use Plan has been incorporated into the County's San Luis Bay Local Coastal Plan. The western portion of the corridor, from about Norswing Avenue out to the beach, is within the airport's planning Zone 3.

The airport's LUP land use classification of "Parks" most closely fits the proposed use, according to County airport planning staff. Within Zone 3, Parks are considered to be a compatible use. There are no other policies within the County's Local Coastal Plan that specifically address the use of Pier Avenue as an access corridor to the Pismo Dunes SVRA.

Taking the above points into consideration, maintenance or minor expansion of Pier Avenue as an access corridor to the Pismo Dunes SVRA will have a less than significant effect on existing land uses.

Railroad Avenue. Railroad Avenue is not already developed as an entrance corridor, so more construction is necessary for this alternative than would be involved with either Grand Avenue or Pier Avenue. Proposed improvements would include widening and paving Creek Avenue and constructing a road to the levee from Creek Avenue that would continue along the top of the levee; constructing an entrance kiosk, park administration building, maintenance yard, and restrooms; constructing a bridge across Arroyo Grande Creek near the beach; and constructing a paved parking lot large enough for 65 standard spaces or 40 oversized spaces. The buildings and other improvements associated with this corridor will be compatible with other area development in terms of height and bulk; all buildings will be one-story and no more than 3,000 square feet in size. See Figure 2 for the layout of the access corridor and possible improvements.

Despite the fact that it would involve the loss of several acres of open space, development of the Railroad Avenue access corridor is an allowable use according to the County's Local Coastal Program Framework for Planning, and would not substantially conflict with other existing land uses in the vicinity. In addition, no land designated for agriculture would be affected. Development of the Railroad Avenue access corridor is also compatible with the Oceano County Airport's Land Use Plan and the County's San Luis Bay LCP. Therefore, development of the Railroad Avenue access corridor would have a less than significant effect on existing land uses.

Silver Spur Place. Silver Spur Place would also need to be developed since it is not presently an access corridor. Proposed improvements would include paving Silver Spur Place; constructing two bridges across Arroyo Grande Creek;

constructing a levee road, entrance kiosk, park administration building, maintenance yard, and restrooms; and constructing a paved parking lot to accommodate 85-100 oversized spaces or 200-250 standard parking spaces. This parking area would be near the western end of Silver Spur Place, adjacent to a commercial stables operation. The park administration building would be a single-story structure covering approximately 3,000 square feet. The improvements associated with this alternative will also be compatible with other area development in terms of height and bulk. See Figure 2.

A potential development in the vicinity that has some bearing on the use of this access corridor is a proposed 215-space recreational vehicle park on a portion of the commercial stables property at the southwestern end of Silver Spur Place. Although the environmental review process for this project has yet to begin, this project is considered by the County to be active. The location of the proposed RV park is a few hundred yards southwest of the location proposed for access-corridor-related developments.

Development of this alternative is not expected to conflict substantially with the existing stable operations, nor would it interfere with the continued use of equestrian trails to the beach because the trails are located to the south and to the west of the proposed access corridor.

Development of the Silver Spur Place alternative would, however, result in the loss of approximately five acres of pasture land at the end of Silver Spur Place if the land was converted to a parking lot as proposed. Although this land is not designated for agriculture in the County's Land Use Element and is therefore not subject to the County's policies regarding agricultural lands, it is designated as prime farmland in the California Department of Conservation's Farmland Mapping Program. According to item (y) in Appendix G to the California Environmental Quality Act Guidelines, which this environmental review is being conducted in compliance with, a project will normally have a significant effect on the environment if it will convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land. There is no minimum acreage attached to this determination of significance.

Furthermore, the corridor would pass through an agricultural area, and the County's Land Use Element states that there is a conflict between agriculture and access related to trails through agricultural land. Public use of such trails often results in problems related to trash, crop theft, trespassing, and vandalism of agricultural property or equipment. Accordingly, the development of this corridor would not be compatible with the intent of the County's Land Use Element regarding agricultural lands.

Just west of the commercial stables is the Pismo State Beach Dune Preserve. Presently the stables and surrounding agricultural operations act as a buffer between the dune preserve and other development. Development of this access corridor would encroach on that buffer zone, thereby potentially generating a land use conflict.

This alternative would not generate a land use conflict with the Oceano Airport because it reflects a use, Parks, that is considered to be compatible with the airport's Land Use Plan.

Because of the associated loss of prime agricultural land and the potential conflict between park visitors and agricultural production, development of the Silver Spur Place alternative would have a significant effect on existing land uses.

Callender Road. The Callender Road alternative would also need to be developed since it is not presently an access corridor. Proposed improvements would include a turn lane from Highway 1 approximately one-quarter mile south of Callender Road, a new entrance road with kiosk, two parking lots, restrooms, an administrative building, and sand off-highway vehicle roads through the dunes to and from the SVRA play area. The parking lots would be large enough to accommodate 80-150 oversized spaces and 200-250 standard parking spaces. The buildings and other improvements associated with this alternative would be similar to nearby development in terms of height and bulk. See Figure 3 for the layout of the development associated with this alternative.

The County's Local Coastal Program Framework for Planning, which designates allowable uses in the coastal zone, considers use of the corridor as a coastal

accessway to be compatible with the other uses in the corridor. However, development of the Callender Road corridor would be in direct conflict with one of the primary objectives of the California Coastal Act, which is the preservation and protection of natural resources such as dune and wetland habitat areas. This is because the Callender Road access corridor west of the Southern Pacific railroad tracks is in a natural, undeveloped state, and is used as a buffer zone between the SVRA and other development. Development of this corridor would decrease the habitat value and scenic quality of this area. For further analysis of this issue, consult the sections on biological resources and scenic resources in this document.

Development of the Callender Road corridor would also be in direct conflict with a planning standard in the Local Coastal Plan for the South County Planning area. The applicable standard states that the area west of the Southern Pacific railroad tracks should continue to be maintained as a buffer zone with only minor vehicle traffic allowed (see the section on Planned Land Uses and Relevant Policies). Taking these conflicts into consideration, development of the Callender Road alternative must be considered to have a significant effect on existing land uses.

The corridor is not within the Oceano Airport's Airport Review area, nor is it subject to Federal Aviation Administration Part 77 Regulations.

F. MITIGATION MEASURES AND STATEMENT OF SIGNIFICANCE

Grand Avenue. Continued use or minor expansion of the Grand Avenue corridor would not have a significant effect on adjacent land uses since the proposed improvements would not intrude upon existing or planned land uses within the corridor, and continued use of the corridor is compatible with the County's Local Coastal Program Land Use Element as well as the policies of the Cities of Arroyo Grande and Grover City. Since the continued use of the Grand Avenue corridor would not have a significant effect on adjacent land uses, no mitigation measures are necessary.

Pier Avenue. Continued use and minor expansion of the Pier Avenue corridor would have a less than significant effect on adjacent land uses since the proposed improvements will intrude only marginally on existing land uses in

the corridor, and continued use of the corridor is compatible with the County's Local Coastal Plan and the Oceano County Airport Land Use Plan. Since the continued use of the Pier Avenue access corridor would not have a significant effect on adjacent land uses, no mitigation measures are necessary.

Railroad Avenue. Use of the Railroad Avenue corridor would have a less than significant effect on adjacent land uses. Although development of this alternative would result in the loss of several acres of open space, the development would not substantially conflict with existing adjacent land uses, nor would it be incompatible with the County's Local Coastal Plan or the Oceano County Airport Land Use Plan. No mitigation measures are necessary.

Silver Spur Place. Development of Silver Spur Place would have a significant effect on existing land uses because it would result in the loss of several acres of prime agricultural land. Development of this corridor would also infringe on a buffer area between agricultural operations and the Pismo State Beach Dune Preserve, and would potentially generate a conflict with existing agricultural operations in the area through trespassing, littering, etc.

No mitigation measures are available to compensate for the loss of prime agricultural land or infringement on the buffer area between agricultural operations and the Pismo State Beach Dune Preserve. Fencing along either side of Silver Spur Place could be used to lessen conflicts with agricultural operations in this area. Adoption of this mitigation measure would not reduce the effect of development of the Silver Spur Place alternative to a less-than-significant level, however.

Callender Road. Development of the Callender Road alternative would have a significant effect on adjacent land uses because of its direct conflict with policies set forth within the County's Local Coastal Plan and the California Coastal Act. No mitigation measures are available to lessen the significance of this effect.

G. RANKING OF CORRIDOR SENSITIVITY

Callender Road. The Callender Road alternative would have the highest effect on existing land uses because its development would be in direct conflict with

the primary goal of the California Coastal Act, which is the preservation and protection of natural resources. It would also be in direct conflict with one of the County's LCP planning standards.

Silver Spur Place. Development of the Silver Spur Place alternative would rank second in its effect on existing land uses because it would result in the loss of prime farmland as designated by the California Department of Conservation's Farmland Mapping Program. Preservation of prime agricultural land in production is another important goal of the California Coastal Act.

Railroad Avenue. The Railroad Avenue alternative is ranked third in its effect on adjacent land uses. Although development of the Railroad Avenue alternative, like the Pier and Grand Avenue alternatives, would have a less than significant effect on existing land uses, it is ranked higher than the Pier and Grand Avenue corridors in terms of its effect on adjacent land uses because of the loss of open space associated with its development.

Pier Avenue. Maintenance or minor expansion of the Pier Avenue corridor is ranked fourth in its effect on adjacent land uses because it involves only minor changes in the existing conditions in the corridor, including the widening of Pier Avenue.

Grand Avenue. Maintenance or minor expansion of Grand Avenue as an access corridor is ranked fifth in its effect on adjacent land uses because it involves the fewest changes in existing land use conditions. Therefore, the Grand Avenue corridor is the least environmentally sensitive alternative with regards to land use.

V. VISUAL RESOURCES

A. INTRODUCTION.

The Pismo Dunes State Vehicular Recreation Area is located along the central coast of California. The California coastline has long been a tourist destination known for its unique visual resources and recreational opportunities. However, coastal resources have been under increasing development pressures resulting from the continued population growth within California. The visual resources associated with the coast environment have been affected as part of the continuing development. Tourist-related development, off-shore oil production, and residential and commercial development have all affected the visual quality of the California coast in the Pismo Beach area.

The County of San Luis Obispo prepared a Local Coastal Program (LCP) in compliance with the California Coastal Act of 1976. The following sections of the Coastal Act address the development policies as related to scenic quality:

30251. The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

30253. ...new development shall:

(5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

Special communities are defined by the following criteria:

1. Areas characterized by a particular cultural, historical or architectural heritage that is distinctive in the coastal zone;
2. Areas presently recognized as important visitor destination centers on the coastline;
3. Areas with limited automobile traffic that provide opportunities for pedestrian and bicycle access for visitors to the coast;
4. Areas that add to the visual attractiveness of the coast.

The LCP was approved by the California Coastal Commission in 1988. The plan provides the development framework for the coastal area within the County of San Luis Obispo. Through most of the County, the area considered in the LCP lies between Highway 1 and the mean high-tide line of the Pacific Ocean. The County prepared a Visual and Scenic Resources Study in January of 1980 to provide a detailed description of the scenic qualities of the coastal areas in their jurisdiction. The San Luis Obispo County LCP emphasizes the importance of the visual resources associated with the areas in and around the park, as reflected by the visual elements of the plan. Special communities in the project vicinity, as identified in the LCP, include:

Port San Luis to Oceano Beach Subdivision. ...The area contains both high and low quality visual elements. Natural features of high scenic value include...Oceano Lagoon with its marsh-associated vegetation and the broad expanse of sand of the Pismo State Beach....

Oceano Beach Subdivision to County Line. The area south of the Oceano Beach Subdivision to the Santa Maria River contains few ocean viewing opportunities from public accessways....Highway 1 (the only public roadway in this area) extends out of the coastal zone approximately one-half mile south of the Oceano Airport. The highway reenters the coastal zone at the Dune Lakes and Calendar Dunes area. The Dune Lakes are barely visible from Highway 1....

The LCP identifies Small Scale Neighborhoods with important visual characteristics that should be recognized with regard to new development. One such neighborhood is identified in the project area. The LCP describes the area as follows:

Oceano Beach Subdivision. The Oceano Beach Subdivision is between Pismo State Beach and Highway 1, approximately two miles south of the city of Pismo Beach. The subdivision is characterized by residential parcels and the sensitive habitat of the Oceano Lagoon. The rolling sand dunes are highest along the beach side of Strand Way and slope down toward the lagoon on the inland side of the neighborhood. The older residences are generally smaller one and two-story residences resembling the cottage character. The majority of new construction is taller and bulkier, changing the community character from small-scale low density, beach residential neighborhood to a more intense urban character.

With the intent of preserving the unique and valued visual resources found in the area, the County of San Luis Obispo has developed a number of policies in their Local Coastal Program. The following policies pertain to the Department of Parks and Recreation's General Development and Resource Management Plan Updates related to park access.

- Policy 1. PROTECTION OF VISUAL AND SCENIC RESOURCES. Unique and attractive features of the landscape, including but not limited to unusual landforms, scenic vistas, and sensitive habitats are to be preserved, protected, and in visually degraded areas restored where feasible.
- Policy 2. SITE SELECTION FOR NEW DEVELOPMENT. Permitted development shall be sited so as to protect views to and along the ocean and scenic coastal areas. Wherever possible, site selection for new development is to emphasize locations not visible from major public view corridors. In particular, new development should utilize slope created "pockets" to shield development and minimize visual intrusion.
- Policy 4. NEW DEVELOPMENT IN RURAL AREAS. New development shall be sited to minimize its visibility from public view corridors. Structures shall be designed (height, bulk, style) to be subordinate to, and blend with, the rural character of the area. New development which cannot be sited outside of public view corridors is to be screened utilizing native vegetation; however, such vegetation, when mature, must also be selected and sited in such a manner as

to not obstruct major public views. New land divisions whose only building site would be on a highly visible slope or ridgetop shall be prohibited.

- Policy 5. LANDFORM ALTERATIONS. Grading, earthmoving, major vegetation removal and other landform alterations within public view corridors are to be minimized. Where feasible, contours of the finished surface are to blend with adjacent natural terrain to achieve a consistent grade and natural appearance.
- Policy 7. PRESERVATION OF TREES AND NATIVE VEGETATION. The location and design of new development shall minimize the need for tree removal. When trees must be removed to accommodate new development or because they are determined to be a safety hazard, the site is to be replanted with similar species or other species which are reflective of the community character.
- Policy 9. SIGNS. Prohibit off-premise commercial signs except for seasonal, temporary agricultural signs. Design on-premise commercial signs as an integral part of the structure they identify and which do not extend above the roofline. Information and directional signs shall be designed to be simple, easy-to-read, and to harmonize with surrounding elements.
- Policy 10. DEVELOPMENT ON BEACHES AND SAND DUNES. Prohibit new development on open sandy beaches, except facilities required for public health and safety (e.g., beach erosion control structures). Limit development on dunes to only those uses which are identified as resource dependent in the LCP. Require permitted development to minimize visibility and alterations to the natural landform and minimize removal of dune stabilizing vegetation.

B. REGIONAL EXISTING SETTING.

The project study area's visual resources consist of a mixed-use landscape. The entire western border of the park consists of the Pacific Ocean. From the Pacific Ocean approximately 75 yards inland is beach strand. Landscapes in the beach strand areas are characterized by ocean debris (i.e. kelp, driftwood, etc) and sand. Beach strand runs the entire length of the property and provides a visual transition from the ocean to inland landscapes.

The northern portion of the study area from Grand Avenue to Pier Avenue consists of dune strand within the park boundary (little or no vegetation), and commercial and residential development on the eastern edge of the property. From Pier Avenue south approximately one mile to the SVRA, the character changes substantially from commercial/residential to agricultural and dune preserve landscapes. The Oceano airport is located approximately a one half mile east of the park boundary between the Pier Avenue entrance and the dune preserve boundary. Further east, immediately adjacent to Highway 1, is a large agricultural processing facility, which creates a industrial landscape.

The dune preserve consists of natural landscapes featuring stabilized dune structures and active dunes. The area provides a unique visual landscape for park visitors. Dune complexes are rare visual landscapes and should be considered an important natural resource of the area in which they exist. Increasingly, California has experienced a loss of dune complexes, which has resulted in Monterey Bay and Pismo Beach becoming two of the few remaining areas to provide such a landscape in the State.

South of the dune preserve is the State Vehicular Recreation Area (SVRA). This area is substantially less stabilized than the dune preserve property. The SVRA landscape consists of active dune landscapes (shifting sand), generally lacking vegetation. The properties along the entire eastern boundary of the SVRA are maintained in a natural state. These properties, owned by Dune Lakes Preserve and Union Oil, include freshwater lakes and stabilized dune complexes. South of the SVRA is the Oso Flaco Lakes area. This area consists of two freshwater lakes and disturbed dune complexes owned by DPR and managed for passive recreational uses. The entire perimeter of the SVRA is defined by fencing. The SVRA is buffered completely by natural landscapes. Views from Highway 1 and surrounding residential/commercial/industrial development consist of natural dune landscapes. The SVRA cannot be viewed from surrounding properties along Highway 1 or from the City of Oceano.

C. VISUAL RESOURCE ANALYSIS

The following visual analysis is based on the principles contained in the Visual Management System developed by the U.S. Forest Service (USFS). The Visual Management System utilizes the following three concepts for developing management strategies regarding visual resources on forest lands:

1. Characteristic Landscape - the identifiable character of an area.
2. Variety - landscapes rich in variety are likely to be more appealing than ones tending toward monotony.
3. Deviations - deviations from a characteristic landscape vary in their degree of contrast and can usually be designed to achieve visually acceptable variety.

The three above concepts are intentionally general to allow the analysis of a variety of landscapes. Although the concepts were originally developed to analyze "forest type" landscapes, the principles can be used to analyze both urban and mixed use landscapes as well. For the purposes of this study, the three concepts described above will be used in the analysis of visual resources for the five alternative corridors being studied as part of this project.

The USFS has developed a comprehensive management system using a three step analysis based on the above concepts. The analysis consists of classification of an area's visual resources, identification of viewer sensitivity to visual change, and establishment of visual quality objectives (management goals). The visual analysis for this project will expand on the process by providing a six-step visual resource analysis (including those in the USFS System) and, where appropriate, mitigation measures to offset potentially adverse impacts to visual resources.

Step one consists of an inventory of the site's visual resources. The inventory will include an accurate description of the existing landscape at each alternative site. From this initial setting, changes can be accurately described and analyzed.

Step two consists of classifying the existing landscape for each alternative corridor. Landscape classification is dependent upon landforms, rockforms, vegetation, and water forms (eg. lakes, streams, etc.). Each element is classified as distinctive, common, or minimal. The classification of the landscape is determined by comparing the above elements, found in the subject landscape, to surrounding areas and areas of similar characteristics (i.e. riparian areas, dunes, etc.).

Step three includes a complete and detailed description of the proposed project from a visual perspective. The visual characteristics of the project including scale, color, building materials, and necessary site reconfigurations (tree removal, grading, etc.) will be discussed.

Step four will provide a contrast rating matrix to analyze the contrast of the proposed project with the existing landscape. Established values will be used to rate the contrast of the project to the landscape. In general, higher contrasts result in greater impacts to an area's visual resources. However, a variety of factors, including the quality of the existing landscape and surrounding viewshed, will be considered to determine the contrast rating.

Step five consists of determining the characteristics of the local viewers to visual change to the subject landscape. The USFS determines viewer sensitivity through surveys or established standards. For the purposes of this study, the basis for determining the viewer characteristics will be dependent upon viewing duration and viewing distance. It is assumed that the sensitivity of a viewer increases as viewing duration increases, while sensitivity decreases as viewing distance increases. See Table 2 - Viewer Sensitivity Matrix.

Step six provides an impact analysis based on all of the above factors. A threshold of significance regarding visual change for each alternative shall be established. Based on this threshold, a detailed description of how the project will affect both surrounding viewers and the landscape shall be discussed. A final statement of significance will be provided for each alternative.

D. . EXISTING ALTERNATIVE CORRIDOR LANDSCAPES.

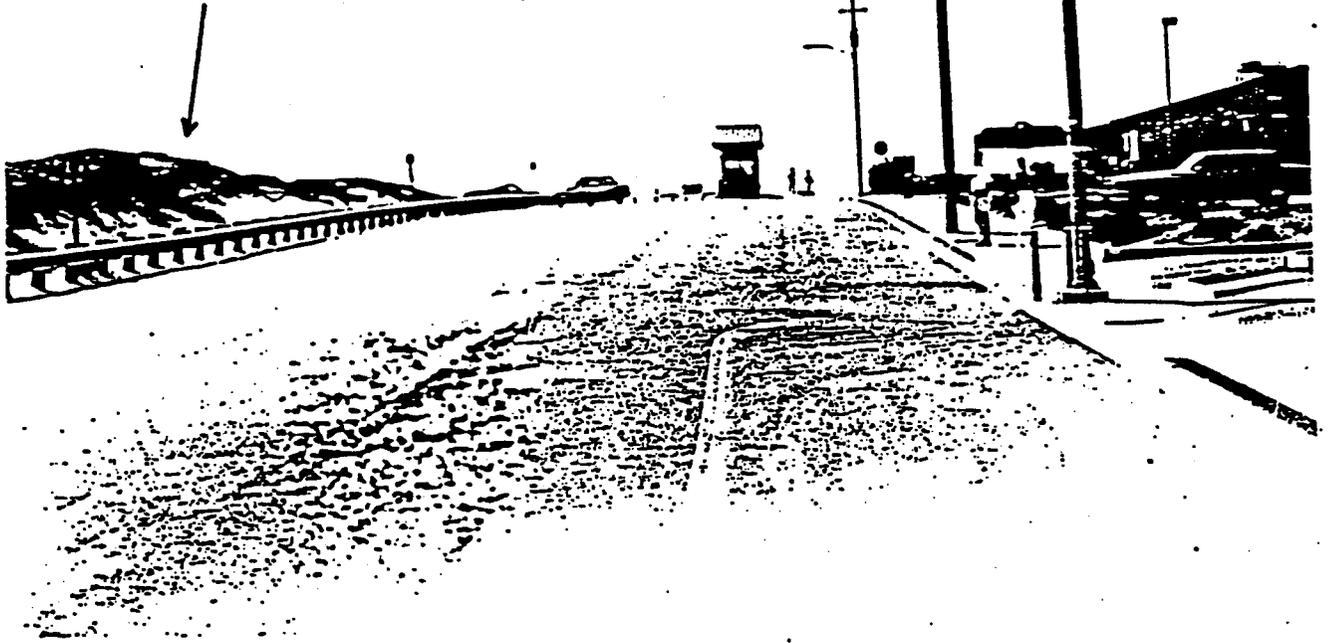
Grand Avenue. This alternative consists of the existing Grand Avenue entrance. Grand Avenue runs from Highway 101 west to the Pacific Ocean. The entire corridor has been commercially developed. The commercial development east of the railroad tracks is a typical high-density strip development. West of the railroad track crossing, the development landscape changes from strip commercial development to a less developed residential/park/campground landscape. The entrance is currently developed with a kiosk, parking area, restaurant, and a beach access ramp. See photograph 1. Minor additions are proposed as part of this alternative.

Pier Avenue. This alternative consists of the existing Pier Avenue entrance. Pier Avenue runs from Highway 1 west to the Pacific Ocean. Development along this corridor consists of a freshwater lagoon and campground in the eastern portion of the corridor. As one moves west, the landscape changes to multiple-family residential and small scale commercial development. A commercial building is located immediately northeast of the park entrance. West of the building is a paved parking lot and public restroom facility. This site is currently developed with a kiosk, paved parking area, public restrooms, and a beach access ramp. See photograph 2. This alternative may require the construction of a new one-way, two-lane road (Smith Road as described in the County approved subdivision map), a gate and an additional kiosk. The new road would turn north approximately a block east of the existing entrance and travel around the back of the building, heading west before turning south into the existing kiosk. See Figure 1.

Railroad Avenue. This alternative consists of constructing a new two lane road, restrooms, and a kiosk. The site landscape currently consists of a two-lane dirt road and a fallow agricultural field. See Figure 2. One single family residence is located adjacent to the southeast corner of the field, while industrial development borders the northern edge of the site. The Oceano Airport is located within a quarter of a mile of the westernmost edge of the field. Residential development is located within a mile of the site to the north. See photograph 3.

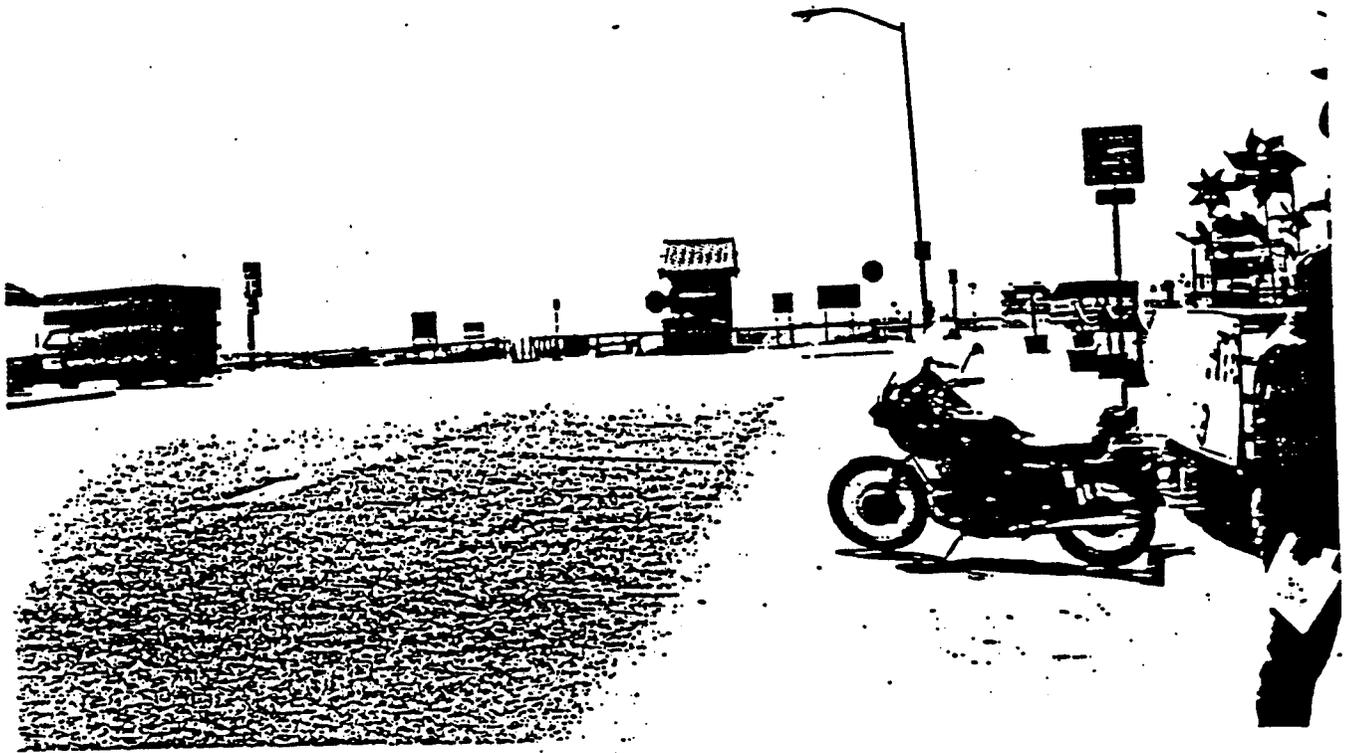
Silver Spur Place. This alternative consists of constructing a new two-lane road, an equestrian staging area, a kiosk, restrooms, and a parking lot. The

40 Acre Wetland/Dune Natural Area



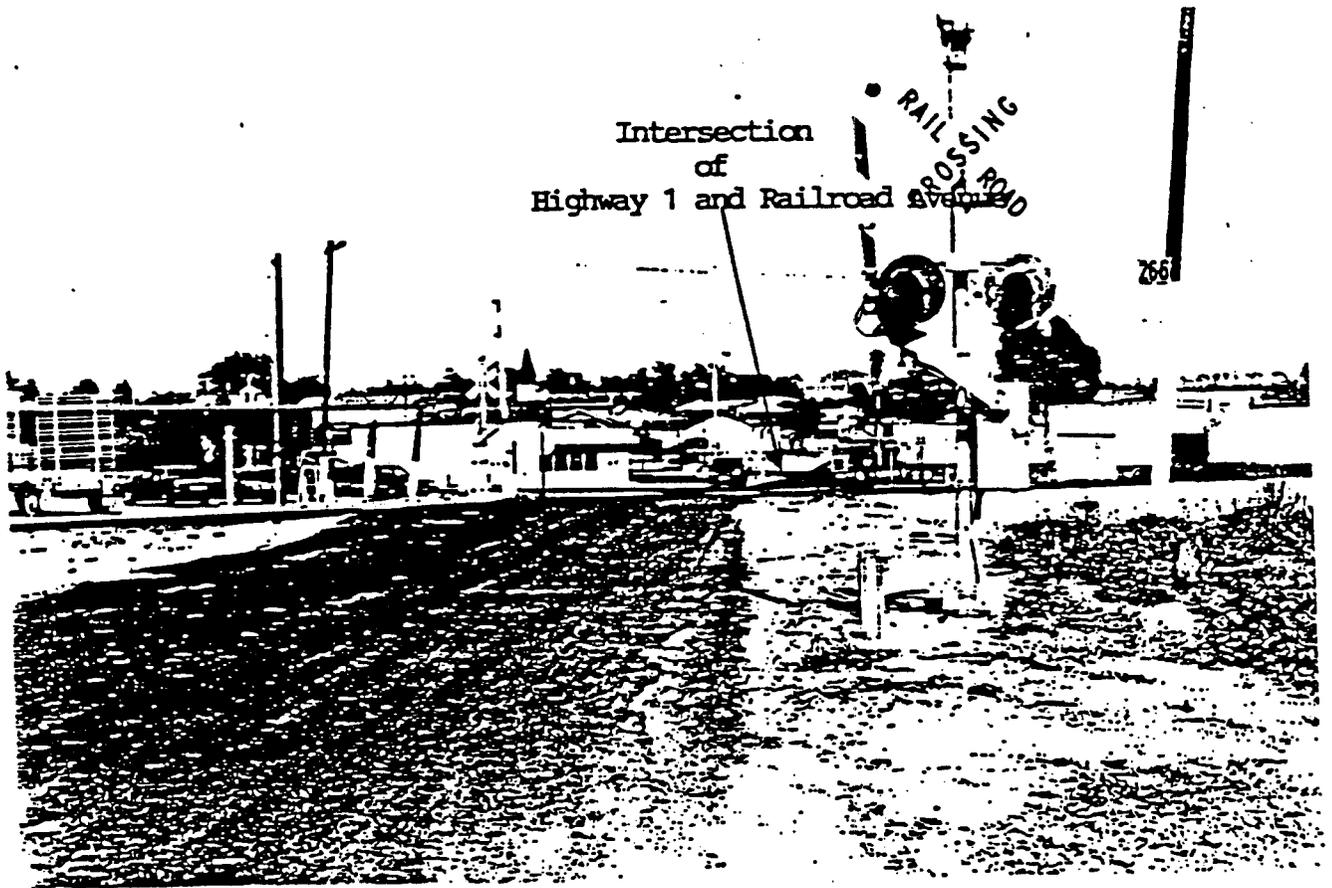
GRAND AVENUE ALTERNATIVE

PHOTOGRAPH 1



PIER AVENUE ALTERNATIVE

PHOTOGRAPH 2



Intersection
of
Highway 1 and Railroad Avenue

RAILROAD AVENUE ALTERNATIVE

site landscape currently consists of a one-lane dirt road surrounded by agricultural fields. See Figure 2 and photograph 4.

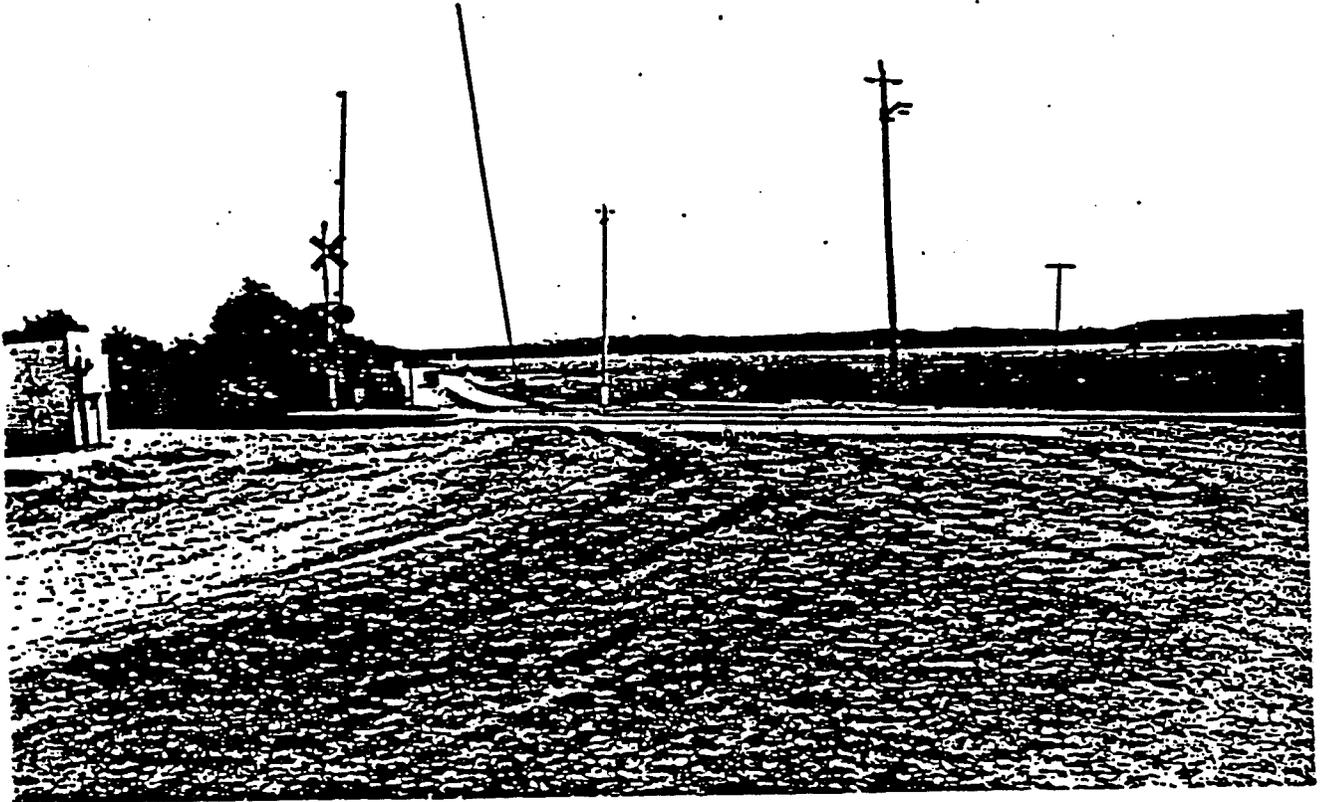
Callender Road. This alternative consists of constructing a new two-lane road, a parking lot, a chemical toilet facility, a camping area, and a kiosk. See Figure 3. The site landscape currently consists of an open meadow with scattered eucalyptus trees on the eastern edge of the Southern Pacific Railroad right-of-way. On the western side of the SPR right-of-way the two-lane road would continue through stabilized dune complexes to the SVRA "play area". An industrial building lies between the proposed camping area and Highway 1. The area west of Highway 1 for several miles in both directions is relatively undeveloped except for the Union Oil Refinery which is not visible from the road. Rural residential development is within a mile of the site. The landscape in these areas consist of the railroad right-of-way, introduced eucalyptus trees and native vegetation. See photograph 5.

E. LANDSCAPE CLASSIFICATION.

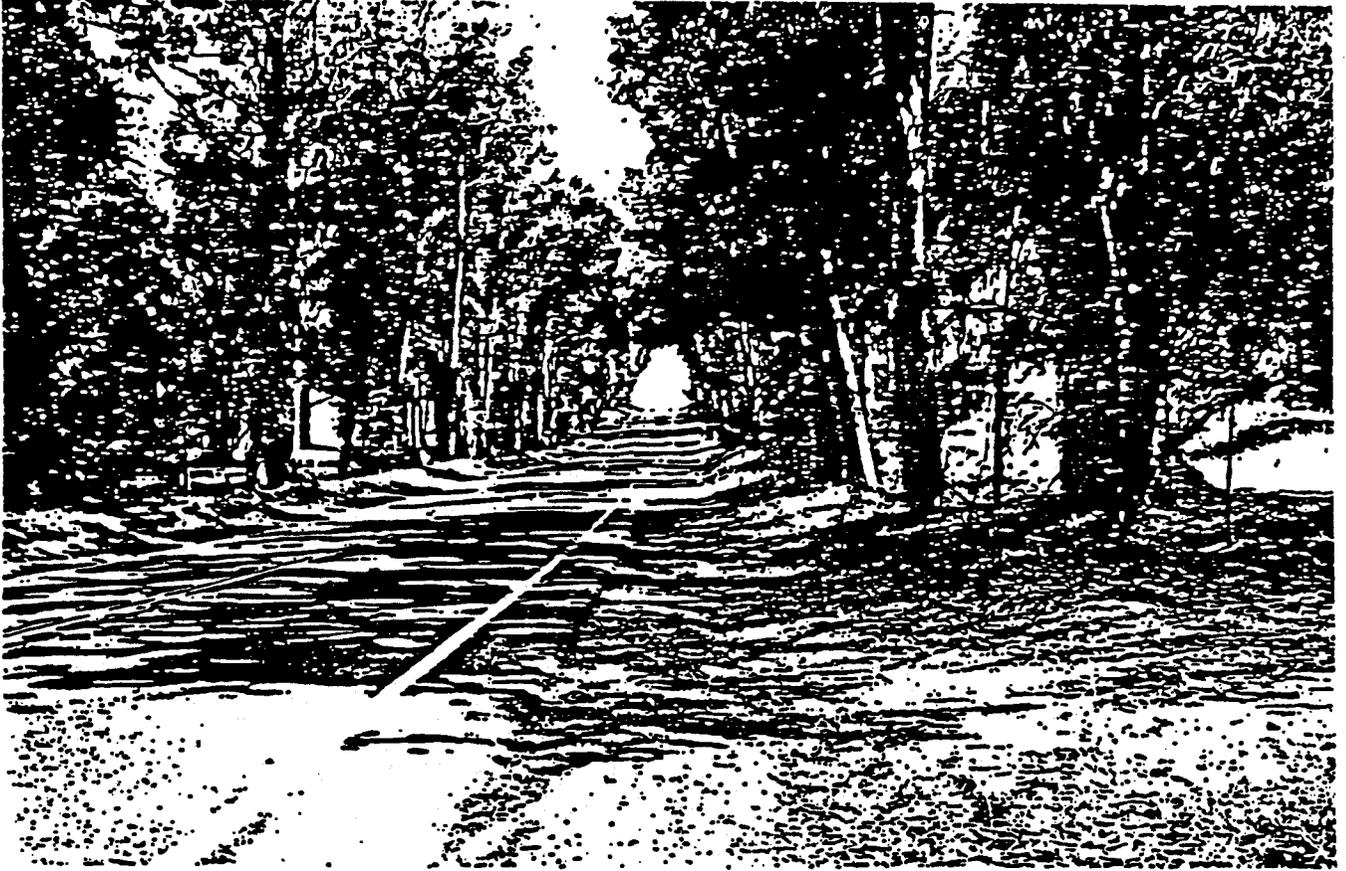
Introduction. The following landscape classification is based on each alternative's landscape characteristics as compared to surrounding landscapes. The classification takes into consideration the area's landform, rockform, vegetation, and waterform (e.g. lakes, ocean, etc.). Based on these characteristics the each alternative landscape will be classified as being of either distinctive, common, or minimal visual quality.

Grand Avenue. The Grand Avenue entrance has already been developed for park access. The majority of the natural features of the site have been altered to accommodate park-related development including a kiosk, parking lot, signs, and restrooms. Grand Avenue can be accessed directly from Highway 101. The corridor runs approximately 2.5 miles west from the freeway to the Pacific Ocean. From the freeway offramp to the Southern Pacific Railroad (SPR) right-of-way (ROW) and Highway 1, Grand Avenue is a four-lane paved street bordered on both sides by typical strip development. This portion of the corridor does not possess any unique visual elements. West of the SPR-ROW and Highway 1 the visual character of the corridor changes to a more undeveloped landscape. The northern border of the corridor in this area contains a creek and open field (future site of a hotel/lodge) and a newly constructed restaurant and parking lot. The southern border contains a substantial number of trees and dune vegetation associated with the 40 acre dune/wetland natural area.

Intersection
of
22nd Street and Silver Spur Place



SILVER SPUR PLACE ALTERNATIVE



CALLENDER ROAD ALTERNATIVE

In relation to the surrounding landscapes, the Grand Avenue alternative corridor can be classified as having two separate landscapes, those west of Highway 1 and those between Highway 1 and Highway 101. The landscape between Highway 1 and Highway 101 has been completely altered from its original character. This portion of the corridor does not contain any natural features and provides a landscape of minimal quality. The landscape west of Highway 1 still contains a number of visual elements unique to the coastal environment. The southern border of the corridor provides a natural landscape that contains dune formations, native vegetation, and a creek. This area has a distinctive visual quality. The areas north of the corridor have been altered in the past. However, the open field still provides visual relief from development to the east and the creek continues through this portion of the corridor. The properties in the northern portions of the corridor and west of Highway 1 provide a common quality visual landscape. The remainder of this visual analysis will address only those areas west of Highway 1, since no changes are proposed for lands east of Highway 1. Overall, the Grand Avenue alternative provides a landscape of distinctive quality.

Pier Avenue. The Pier Avenue corridor has been developed for park access. The majority of the site's natural features have been altered to accommodate park-related development including a kiosk, signs, a parking lot, a campground, and restrooms. The Pier Avenue entrance is accessed via Highway 1. The corridor runs west approximately one mile from Highway 1 to the Pacific Ocean. The entire corridor from Lakeside Avenue to the kiosk has been developed in residential and commercial land uses. The visual quality of this portion of the corridor is minimal. From Lakeside Avenue east to Norswing is a less developed landscape with the DPR campground on the north and Oceano Park on the south. The campground contains a large number of mature trees and shrubs. The vegetation provides visual relief from both the commercial landscape to the west and Highway 1 to the east. The park also contains trees, manicured lawn, and a freshwater lagoon. The landscape between Lakeside Avenue and Norwings is of common visual quality. The area between Highway 1 and Norwings contains a restaurant, and commercial and residential development. Some trees and ornamental shrubs have been planted in this portion of the corridor. Although this portion of the corridor is developed, the landscaping provides some visual relief. This portion of the corridor is of common visual quality. Overall, the Pier Avenue alternative provides a landscape of common quality.

Railroad Avenue. The Railroad Avenue alternative corridor is relatively undeveloped at the present time. The corridor runs one eighth of a mile west from Highway 1 along Railroad Avenue to Creek Avenue. This portion of the corridor is developed in warehouse/manufacturing land uses and is of minimal visual quality. At Creek Avenue the corridor heads south for a quarter of a mile before turning west through a ruderal field to the Arroyo Grande Creek levee. The field provides some visual relief from the warehouse developments to the north but lacks any distinctive visual elements. The field is of common visual quality. Once the corridor reaches the levee the landscape has a less developed character. Mature trees and shrubs line portions of the levee. Eventually, the levee ends on the beach near a willow grove and stabilized dune structures. These areas contain unique landscapes and are of distinctive visual quality. Overall, the Railroad Avenue alternative provides a landscape of common visual quality.

Silver Spur Place. The Silver Spur Place alternative corridor is relatively undeveloped at the present time. The corridor runs approximately a half mile from Highway 1 south along 22nd Avenue before intersecting Silver Spur Place. The 22nd Street portion of the corridor contains the highest density of development. Development along this portion of the corridor consists of a mini-storage facility (south) and a mobile home park (north). The area does not contain any distinct visual characteristics and is of minimal visual quality. At the intersection of 22nd Street and Silver Spur Place the corridor turns ninety degrees and heads west. The development along this portion of the corridor consists of one single-family residence and agricultural fields. The open fields lack any distinctive landscape elements, however, the fields provide an unobstructed view of the dunes and present a rural landscape. The area is of common visual quality. Silver Spur Place ends at an agricultural field which is immediately adjacent to a north/south trending stabilized dune. The field continues north to the levee. At this point the Silver Spur Place corridor intersects the western portion of the Railroad Road alternative. The fields bordering the stabilized dunes are of common visual quality. For a complete discussion of the remainder of the corridor refer to the Railroad Avenue alternative corridor description above. The two alternatives share a common corridor from the levee to the beach. This portion of both alternatives are of distinctive visual quality. Overall, the Silver Spur Place alternative provides a landscape of common visual quality.

Callender Road. The Callender Road alternative corridor is entirely undeveloped with the exception of the Southern Pacific Railroad tracks which run north/south through the corridor for 150 yards. The corridor runs from Highway 1, approximately a quarter of a mile south of Callender Road, directly west to the SVRA play area. The entire corridor provides a landscape that is unique to the central coast environment and of distinctive visual quality. Overall, the Callender Road corridor provides a landscape of distinctive visual quality.

F. PROJECT DESCRIPTION.

Grand Avenue. The Grand Avenue alternative consists of expanding the existing entrance to the park. The improvements would include an additional kiosk and entrance lane, widening of the northern sidewalk, and landscaping. The new kiosk would be of the same design and scale as the existing kiosk. Widening of the sidewalk and construction of the new lane would not require the removal of any trees or native vegetation.

Pier Avenue. The Pier Avenue alternative consists of expanding the existing entrance to the park. The improvements would include purchasing and removing a commercial building which would provide room to construct an administrative building, a new kiosk, and two entrance lanes. Expansion of the existing parking lot is also proposed. Landscaping would be incorporated into the new development scheme. The improvement of the Pier Avenue entrance would require the removal of a commercial building, however, no mature trees would be removed.

Railroad Avenue. The Railroad Avenue alternative consists of constructing an entirely new entrance to the park. The new entrance would consist of a paved parking lot, a kiosk, restrooms, an administrative building, and maintenance yard. The widening and paving of the access road would be required for the entire corridor. The improved road would run from Railroad Avenue through an open field to the Arroyo Grande Creek levee. Once on the levee the road would continue to the beach where a bridge would be constructed to cross the creek. The entire entrance would be constructed in an area that currently is undeveloped. Some mature trees and a substantial amount of native and introduced vegetation would be removed as part of the development. Landscaping would be included in the design of the entrance, if developed.

Silver Spur Place. The Silver Spur Place alternative consists of constructing an entirely new entrance to the park. The new entrance would consist of a paved parking lot, a kiosk, restrooms, and an administrative building. The widening and improvement of 22nd Street and Silver Spur Place would be required. In addition, the existing levee road would be widened and paved. Two bridges would be constructed as part of this alternative. The entire entrance would be constructed in an area that currently is developed in agricultural land uses. Rural residential development and agricultural fields are the majority of land uses that exist in the corridor. The entrance would be constructed in an agricultural field. The loss of some mature trees would take place due to the bridge construction and levee road improvements.

Callender Road. The Callender Road alternative consists of constructing an entirely new entrance to the park. The new entrance would consist of a paved parking lot, graveled parking lot, a kiosk, restrooms, an administrative building, and maintenance yard. Turnouts would be constructed on Highway 1 to enter the parking areas. A one-lane dirt road would be constructed from the parking areas across the SPR right-of-way to the SVRA. To cross the SPR right-of-way either an underpass or overpass would need to be constructed. The entire entrance would be constructed in an area that is currently undeveloped, with the exception of the SPR railroad tracks. The parking areas and administrative building would be constructed in a field, while the road would be developed in stabilized and unstabilized dune complexes. The development would require the removal of eucalyptus trees and a variety of native and introduced vegetative species.

G. PROJECT CONTRAST RATINGS.

Introduction. The project contrast rating is based on the type of development in relation to the existing landscape. The extent to which a development contrasts with the existing visual setting is an important factor in determining the overall effect the project may have on visual resources. The more contrasting a particular element is in relation to the existing landscape, the more likely that element is to stand out to viewers. For example, a one-story administrative building would be in stronger contrast in a desert landscape than an urban landscape. The building would of the same design and scale as other development in an urban landscape and would therefore blend in more readily.

The following table defines the degree of contrast a park entrance would have in a variety of landscape settings. General assumptions made in determining the degree of contrast for various scenarios include the following:

1. Areas where development similar in scale and design exists within a quarter of a mile of the site decreases the degree of contrast. Examples of such development include residential and commercial/industrial development, public parking areas, and recreational facilities.
2. Areas where existing or proposed land use development is considered incompatible with the proposed park entrance increases the degree of contrast. Examples of such land uses include scenic corridors, open space, and preserves or conservation zones.

TABLE V-1

VISUAL CONTRAST RATINGS
ASSOCIATED WITH RURAL AND DEVELOPED LANDSCAPES

| <u>Existing Landscape</u> | <u>Contrast Rating</u> |
|---------------------------|------------------------|
| No Development | Strong |
| Open Space/Preserve | Strong |
| Agricultural | Moderate |
| Rural Residential | Moderate |
| High Density Residential | Low |
| Commercial | Low |
| Industrial | Low |

Note: Contrast ratings can vary in degree depending upon the type and extent of visual barriers between surrounding visual receptors and the project site.

Grand Avenue. The Grand Avenue alternative would consist of a marginal expansion of an existing entrance. The expansion would take place on the northern border of the corridor. This portion of the corridor is developed in commercial land uses. Although the southern border of the corridor remains in open space uses, no development is proposed for this area. This alternative would be in low contrast with the existing landscape.

Pier Avenue. The Pier Avenue alternative would consist of a substantial expansion of an existing entrance. The expansion would take place on the northern border of the corridor. This portion of the corridor is currently developed as a parking lot and in commercial land uses. The expansion of the Pier Avenue entrance would require the removal (demolition) of a commercial building. The existing parking lot would be expanded and paved. The additional parking spaces would be added in the area where the building now exists. An administrative building would be constructed on the northern boundary of the new parking lot. The entire corridor is developed in residential and commercial land uses. This alternative would be in low contrast with the existing landscape.

Railroad Avenue. The Railroad Avenue alternative consists of developing an entirely new entrance facility. The new entrance would require a variety of improvements. See Alternative Description section. The administrative building and maintenance yard would be constructed behind an existing warehouse building. The kiosk, restrooms, and parking lot would be constructed in an open field north of Arroyo Grande Creek. The existing dirt levee road would be expanded to two lanes and paved. The corridor is relatively undeveloped at the present. A flood control levee and commercial building are both within the corridor. This alternative would be in moderate contrast with the existing landscape.

Silver Spur Place. The Silver Spur Place alternative consists of developing an entirely new entrance facility. The new entrance would require a variety of improvements. See Alternative Description section. The proposed improvements would be constructed in an agricultural field immediately adjacent to the dune preserve boundary. A two-lane paved road would be constructed from the parking area to the levee where a bridge structure would need to be constructed. Once on the north side of the levee the existing dirt levee road would be expanded to two lanes and paved. The corridor is relatively undeveloped. Agricultural fields and several rural residences are within the corridor. This alternative would be in moderate contrast with the existing landscape.

Callender Road. The Callender Road alternative consists of developing an entirely new entrance facility. The new entrance would require a variety of improvements. See Alternatives Description section. The proposed improvements would take place on Highway 1, in an open field, and in stabilized and unstabilized dune complexes. Turning lanes would be added to Highway 1 at the entrance to the parking/staging area. The parking lots, kiosk, restrooms, and administrative building would be constructed in the field east of the SPR tracks. A one-lane dirt road would be constructed through the dune structures to the SVRA. The corridor is undeveloped except for the railroad tracks. A vacant factory is within a quarter of a mile to the north, while the Dune Lakes Preserve is to the west. This alternative would be in moderate to high contrast with the existing landscape.

H. ; VIEWER CHARACTERISTICS.

Introduction. Viewer characteristics can be developed by taking into consideration the viewing distance and viewing duration of a potential viewer. Although these two factors are objective in nature, it is clear that the sensitivity of any particular viewer is the result of a multitude of subjective factors. For the purposes of this study, viewer characteristics will be based on the location of the viewer and the estimated viewing duration.

The distance from which a viewer observes a particular landscape is a key factor in determining how sensitive that individual is to changes in the existing visual resources. The closer the individual is to the subject landscape, the more likely the viewer will be adversely affected by visual changes. In general, greater distance from an object decreases the structure's visual bulk, distinctiveness, and contrast with the landscape.

The viewing duration generally varies with the type of viewer. For example, a resident living immediately adjacent to the subject landscape would be expected to have a longer viewing duration than a viewer passing by in an automobile. A longer viewing period is expected to result in an observer having a greater sensitivity to visual change.

Viewing duration can be linked to the type of viewer being considered. The following is a breakdown of the type of viewers that would be affected if any of the alternatives was carried out:

1. Residential - The residential viewer is defined as one who is within viewing distance of the proposed corridor from his or her primary residence. The residential viewer has the longest viewing durations.
2. Commercial/Industrial - The commercial/industrial viewer is defined as one who is within viewing distance of the proposed corridor from his/her place of employment. The commercial/industrial viewer has moderate viewing durations.
3. Mobile - The mobile viewer is defined as one who views the proposed corridor while traveling. Commuters, tourists, and other mobile viewers generally have low viewing durations.

TABLE V-2
VIEWER SENSITIVITY MATRIX

| Type of Viewer | Residential | Commercial/Industrial | Mobile |
|---------------------------------|-------------|-----------------------|----------|
| Distance in Miles from Corridor | | | |
| < .5 | High | High | Moderate |
| .5 - 1 | High | Moderate | Low |
| > 1 mile | Low | Low | Low |

Table adapted from USFS Visual Resource Management System

I. IMPACT ANALYSIS

Grand Avenue. The Grand Avenue alternative corridor has a distinctive landscape, which the proposed expansion would be in low contrast to. The visual receptors in this corridor consist of commercial and mobile viewers. Potential viewers east of Highway 1 would not have direct views of the entrance. The majority of viewers would be mobile viewers on their way to either visit the State Park or eat at the existing restaurant. The commercial viewers (restaurant employees) are considered highly sensitive to visual change, while mobile viewers are considered moderately sensitive. However, the improvements would be of the same design and scale as those that already exist in the corridor. Furthermore, the majority of mobile viewers would be on their way to visit the park and would expect the type of development proposed to exist at the entrance. The Grand Avenue alternative would have a less than significant effect on visual resources.

Pier Avenue. The Pier Avenue alternative corridor has a common landscape, which the proposed expansion would be in low contrast to. The visual

receptors in this corridor consist of residential, commercial, and mobile viewers. Direct views of the entrance are limited to within a half mile. The viewers would range in sensitivity from moderate to high. The majority of mobile viewers would be on their way to visit the park and would expect the type of development proposed for this entrance. The residential and commercial viewers would be highly sensitive to change. However, the proposed improvements for this alternative include the demolition of a dilapidated commercial building and construction of a new park administrative building and parking lot. The new building would be of the same scale as the existing development. The replacement of the old building with a new administrative building would have a beneficial effect on the areas visual resources. The Pier Avenue alternative would have a less than significant effect on visual resources.

Railroad Avenue. The Railroad Avenue alternative corridor has a common landscape, which the proposed entrance would be in moderate contrast to. The visual receptors in this corridor consist of residential, commercial/industrial, and mobile viewers. Direct views of the entrance can be obtained up to a mile away. The majority of viewers consist of commercial/industrial, and mobile viewers on Highway 1. The viewers would range in sensitivity from moderate to high. The viewers associated with the one residence and commercial/industrial development within a half mile would be highly sensitive. These viewers are limited in number and the development is oriented towards Highway 1 limiting the viewing potential of the project area. Visual receptors within a mile of the site consist of both residential, commercial/industrial and mobile viewers. These viewers range in sensitivity from low to high. The majority of visual receptors in this area consist of commercial and mobile viewers of low to moderate sensitivity. Since the area presents a common landscape and the majority of viewers range from low to moderate sensitivity, it is unlikely that any adverse effects would result from a project that would be in moderate contrast with the existing landscape. Although some visual receptors would be adversely affected by the construction of an entrance in this corridor, the number is quite low. The Railroad Avenue alternative would have a less than significant effect on visual resources.

Silver Spur Place. The Silver Spur Place alternative has a common landscape, which the proposed entrance would be in moderate contrast to. The visual receptors in this corridor consist of residential, commercial/industrial, and

mobile. A mobile home park is adjacent to the eastern edge of the corridor on 22nd Street. These viewers are highly sensitive to visual change, however, improvements proposed for this portion of the corridor consist entirely of street improvements. The mobile home residents would not have direct views of the entrance as a result of the Arroyo Grande Creek levee and the distance of the residences from the entrance site. The western portion of the corridor has very few visual receptors. Two rural residential homes exist in this portion of the corridor. Although highly sensitive in nature, the limited number of viewers decreases the overall effect of the development. Mobile viewers on Highway 1 would not have direct views of the site, while travelers on Silver Spur Place would most likely be associated with the agricultural activities in the area and be less sensitive to visual change. Due to the limited number of sensitive viewers and the moderate contrast of the proposed entrance with the landscape, the Silver Spur Place alternative would have a less than significant effect on visual resources.

Callender Road. The Callender Road alternative has a distinctive landscape, which the proposed entrance would be in moderate to high contrast to. The visual receptors in this corridor consist almost entirely of mobile viewers. If the vacant factory to the north were operated again, then commercial/industrial viewers would be within the viewshed of the project. Residential viewers are located within a mile to the northeast of the project site on Callender Road. The residential viewers do not have direct views of the site due to the vegetation and distance from the site. The mobile viewers on Highway 1 would have brief, direct views of the site. These viewers are of moderate sensitivity due to the short viewing duration. All mobile viewers would be travelling on Highway 1 which is considered a scenic corridor. The project would be in strong contrast to the landscape near the Highway 1 frontage and in moderate contrast through the dune complexes. The strong contrast of the project would result in a significant effect on the visual resources associated with Highway 1. Landscaping would be required to lessen the effect of the entrance on visual resources. The project would have a significant short-term impact on visual resources. Once the landscaping was completed and adequate maturation of the plants takes place the visual effect of the entrance would be less than significant. The Callender Road alternative would have a significant short-term effect and less than significant long-term effect on visual resources, with appropriate mitigation measures.

Ranking of Corridor Sensitivity.

Callender Road. The Callender Road alternative has the most distinctive landscape of the alternatives being considered. The undeveloped nature of the corridor and the high density of native vegetation, dune complexes, and a number of mature trees immediately adjacent to Highway 1, combine to make this corridor the most visually sensitive.

Silver Spur Place. The Silver Spur Place alternative has a common landscape that is relatively undeveloped at the present. Although this alternative would not require the removal of a substantial amount of native vegetation, it is located immediately adjacent to the dune preserve boundary. Development in this area could reduce the visual quality of the dune preserve. This alternative is the fourth most visually sensitive corridor being considered.

Railroad Avenue. The Railroad Avenue alternative has a common landscape that is partially developed at the present. The area in which the improvements are proposed is a disturbed field of marginal visual quality. The landscape changes as the corridor continues west. This portion of the corridor is the same as that of the Silver Spur Place alternative. Although this portion of the corridor is adjacent to the dune preserve and contains a substantial amount of native vegetation, the entire corridor is slightly less sensitive than the Silver Spur Place alternative since the majority of development would take place in the field north of the dune preserve. This alternative is the third most visually sensitive corridor being considered.

Grand Avenue. The Grand Avenue alternative has a distinctive landscape that is relatively undeveloped. The majority of the southern boundary presents a landscape unique to the Pismo Beach environment with a variety of native vegetation in dune complexes. The northern boundary is relatively undeveloped providing views of the beach and Pacific Ocean. This alternative is the second most visually sensitive corridor being considered.

Pier Avenue. The Pier Avenue alternative has a common landscape that is almost entirely developed at the present. The area in which improvements are proposed is already developed. The improvements would not require the removal of any mature trees or native vegetation and would not block the views of the beach or Pacific Ocean. The Pier Avenue alternative is the least environmentally sensitive alternative with regard to visual resources.

VI. BIOLOGICAL RESOURCES

A. INTRODUCTION.

The following biological resource analysis is based on the Inventory, Wildlife Habitat Protection Program, and Monitoring Program For Pismo Dunes State Vehicular Recreation Area, California (Kutilek, Shellhammer, and Bros, 1991) and the Biological Evaluation of Access Corridors to Pismo Dunes State Beach and State Vehicular Recreation Area (Kutilek and Shellhammer, 1991). The site-specific corridor surveys are included in Appendix ? of this draft environmental impact report. The intent of the biological surveys was to provide the necessary data to determine the biological sensitivity of each corridor. The survey results ranked the corridors for sensitivity based on the type, quantity, and quality of the resources in each study area. Potential mitigation measures were developed, where feasible and necessary, to lessen the effects of development on the biological resources associated with each alternative.

The project study area contains five native habitat types which include the coastal dune, beach, open water, freshwater marsh, and riparian vegetative communities. In addition to the native habitat types, agricultural fields surrounding the project area provide some resource value. These particular communities contain a diverse makeup of plant species. The interspersed of semiarid and wetland conditions found in the region creates a unique ecological setting resulting in the existence of a number of endemic and sensitive species in the project vicinity. The project region is the transitional location of the biotic communities of southern and northern California.

B. COASTAL PLAN POLICIES FOR BIOLOGICAL RESOURCES.

Introduction. The County of San Luis Obispo's Local Coastal Program contains policies emphasizing the protection of the natural resources associated with the coastal environment. The following policies apply to the proposed project area:

30340. (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with continuance of such habitat areas.

Environmentally sensitive habitat areas are settings in which plant or animal life (or their habitats) are rare or especially valuable due to their special role in an ecosystem. Designation of environmentally sensitive habitats include but are not limited to: 1) wetlands and marshes; 2) coastal streams and adjacent riparian areas; 3) habitats supporting rare and endangered or threatened species; 4) marine habitats containing breeding and/or nesting sites and coastal areas used by migratory and permanent birds for resting and feeding. The Coastal Act provides protection for these areas and permits only resource-dependent uses within the habitat area. Development adjacent must be sited to avoid impacts. While each of these habitat types is discussed in greater detail, general policies for protection of habitats are as follows:

POLICY 1 LAND USES WITHIN OR ADJACENT TO ENVIRONMENTALLY SENSITIVE HABITATS. New development within or adjacent to locations of environmentally sensitive habitats (within 100 feet unless sites further removed would significantly disrupt the habitat) shall not significantly disrupt the resource. Within an existing resource, only those uses dependent on such resources shall be allowed within the area.

POLICY 2 PERMIT REQUIREMENT. As a condition of permit approval, the applicant is required to demonstrate that there will be no significant impact on sensitive habitats and that proposed development or activities will be consistent with the biological continuance of the habitat. This shall include an evaluation of the site prepared by a qualified professional which provides; a)

the maximum feasible mitigation measures (where appropriate), and b) a program for monitoring and evaluating the effectiveness of mitigation measures where appropriate.

C. REGIONAL EXISTING SETTING.

Vegetation. Due to the merging of northern and southern biotic communities, the project region represents the southern and northernmost range limits of various vegetative species. Two plant species, giant coreopsis (Coreopsis gigantea) and yellow pond lily (Nuphar polysepalum), reach the extreme limit of their range in the project vicinity (Doyle, 1978). The following is a brief vegetative description of the six habitat communities found in the Pismo Beach area:

1. Coastal Dunes Habitat. There are four plant communities in the Coastal Dunes habitat. The coastal strand community consists of a narrow zone of vegetation covering the foredunes near the beach. Plants found here are low-growing or prostrate and often succulent since they are pioneers in the dune stabilization process. The coastal sage shrub community is found on the more stabilized dunes inland from the strand. Vegetation here is somewhat larger and woodier. The dune scrub community is found in the Nipomo dunes and is dominated by mock heather and dune lupine. Just north of Oso Flaco Lake, "Maidenform Flat" is a willow/wax myrtle community. The flora in this community is similar to that found in the riparian community and includes rush, monkey flower, blackberry, wild rose, California wax myrtle, and Arroyo willow.
2. Beach Vegetation Habitat. Plants on the beach are rare due to the constantly changing environmental conditions and the lack of sufficient substrate for plants to anchor themselves. Only the sea-rocket (Cakile maritima) can be occasionally found in the beach habitat.
3. Open Water Habitat. Open water habitat is found in freshwater marshes, lakes, and lagoons. Common vegetative species include algae, stonewort, duckweed, pondweed, and water-milfoil. This habitat is found in the southern portion of the study area in a number of lakes including Oso Flaco Lake, Lettuce Lake, Black Lake, and in the lagoon near the Pier Avenue entrance.

The lakes in the southern portion of the study area are experiencing an increase in eutrophication due to an increased nutrient discharge from runoff associated with the surrounding agricultural activities.

4. **Freshwater Marsh Habitat.** Freshwater marsh areas are found along borders of the lakes. The most significant area is a 90-acre marsh associated with Oso Flaco Lake. This wetland complex is a part of the most extensive system of coastal freshwater marshes and lakes remaining in California (Rodin, 1972). Common vegetative species include the California bullrush, cattail, rush, and bur-reed.

5. **Riparian Habitat.** Riparian habitat generally borders marsh areas and consists of dense thickets of shrubs and small trees with an understory of herbs and smaller shrubs. Common vegetative species include Arroyo willow, California wax-myrtle, wild rose, blackberry, and giant horsetail.

6. **Agricultural Lands.** Agricultural fields in the project study area are predominantly row crops consisting of lettuce, broccoli, celery, and other vegetables. The irrigation ditches associated with the fields support some grass species. Overall the agricultural fields do not support any substantial populations of native vegetative species.

Figure 6 provides a generalized mapping of the physical characteristics in the project study area.

D. ALTERNATIVE CORRIDOR SETTINGS.

Vegetative descriptions for each alternative are based on the findings of the Biological Evaluation of Access Corridors to Pismo Dunes State Beach and State Vehicular Recreation Area (Kutilek and Shellhammer, 1991).

Grand Avenue. The Grand Avenue corridor west of Highway 1 is a paved, three-lane road that is one of two established entrances into the SVRA and State Park. The south side of the road borders a thick growth of arroyo willow (Salix lasiolepis) in a portion of the 40 acre dune/wetland natural area. The north side of Grand Avenue has a gutter and sidewalk which borders a large ruderal field and a paved parking lot. The willow marsh on the south side of the avenue has standing water during or immediately following periods of

rainfall. The dune/wetland natural area is characterized by willow, wax myrtle (Myrica californica), bush lupine (Lupinus chamissonis), Happlopappus ericoides, and exotic dune grass (Ammophila arenaria).

The Grand Avenue corridor does not contain any substantial vegetative resources east of Highway 1. The entire corridor is developed in commercial/industrial land uses.

Pier Avenue. The Pier Avenue corridor is a paved road that is two lanes wide from Highway 1 to Lakeside Avenue and four lanes wide from Lakeside Avenue to the entrance kiosk. The first block west of Highway 1 is a residential and business block. West of the first block, between Norswing Street and Lakeside Avenue, is an area of willows, open water and the State Park campground on the north side; and grass, a pond, and a vacant lot on the south side. West of Lakeside, Pier Avenue is a four lane business district street with gutters and sidewalks. North of the existing entrance kiosk, parking lot and restrooms is the boundary of the 40 acre dune/wetland natural area. This area presently is covered with exotic dune grass and approximately 2,000 square feet of native willows.

Railroad Avenue. The Railroad Avenue corridor consists of a dirt road, field, and a flood control levee along Arroyo Grande Creek. The field and levee are ruderal (weedy) in nature. The vegetative community in these areas is composed of introduced plant species including Avena, Bromus, Brassica, Erodium spp. and Malva parvaflora. A willow thicket is established on the southern side of Arroyo Grande Creek near the open dunes bordering the beach. At the western edge of the corridor, the levee road crosses a floodplain and passes through a wet willow grove. The interior of the willow grove was composed primarily of arroyo willows. Along the edge of the road there is a narrow band of poison oak (Toxicodendron diversilobum), coyote bush (Baccharis pilularis), and blackberry (Rubus vitifolius).

Silver Spur Place. The Silver Spur Place corridor consists of a dirt road and agricultural fields. The agricultural fields are planted with various row crops throughout the year. Ruderal vegetation is established along the edges of the fields and road. The corridor crosses the Arroyo Grande Creek and continues along the top of the northern levee. Where the corridor crosses the

levee a row of pines and cypresses have been established. From this point to the beach, both the Railroad Avenue alternative and the Silver Spur Place alternative share the same corridor.

Callender Road. The Callender Road corridor consists of a vacant field, stabilized dune complexes, and the Southern Pacific Railroad right-of-way. The eastern end of the corridor begins approximately a quarter of a mile south of Callender Road fronting Highway 1, travels west into a field, crosses the railroad tracks, and continues through stabilized dunes westward into unstabilized dunes. The field is an open mixture of herbaceous and woody plants dominated by bush lupine, wax myrtle, eucalyptus, and introduced ruderal plants. The corridor through the stabilized dunes west of the railroad tracks has a similar vegetative makeup with a greater density of native shrubs. The unstabilized dunes immediately west of the stabilized dune area has bands of crisp monardella (Monardella crispera), a federal designated Candidate 2 species. The swales between the larger dunes are inhabited by stands of bush lupine. In the more protected or larger swales, the lupine is dense and tall enough to allow for the buildup of a layer of litter.

Wildlife. The unique nature of dune, freshwater marsh, lagoon and ocean habitats plays an important role in sustaining the diverse wildlife populations in the project region. Wildlife species can be divided into two distinct groups: residents and those that migrate to the area at various times of the year. The study area provides habitat to a highly diverse wildlife population. The unique habitat types in the project study area are becoming increasingly rare. Therefore, species that are found only in these habitat types are becoming more limited in range, and in some instances species populations are decreasing. The following table identifies these species and their respective listing:

SENSITIVE WILDLIFE SPECIES

| Common Name | Scientific Name | Status | |
|----------------------------------|--------------------------------------------|------------|------------|
| | | State | Federal |
| 1. California black rail | <u>Laterallus jamaicensis coturniculus</u> | Threatened | Candidate |
| 2. Southwestern pond turtle | <u>Clemmys marmorata pallida</u> | | |
| 3. Snowy plover | <u>Charadrius alexandrinus nivosus</u> | | |
| 4. California least tern | <u>Sterna antillarum browni</u> | Endangered | Endangered |
| 5. California clapper rail | <u>Rallus longirostris obsoletus</u> | Endangered | Endangered |
| 6. California brown pelican | <u>Pelecanus occidentalis californicus</u> | Endangered | Endangered |
| 7. Monarch butterfly | <u>Danaus plexippus</u> | | |
| 8. White sand bear scarab beetle | <u>Lichmanthe albipilosa</u> | | |
| 9. Two-striped garter snake | <u>Thamnophis hammondi</u> | SSC* | N/A |
| 10. Red-legged frog | <u>Rana aurora draytoni</u> | N/A | Candidate |
| 11. Silvery legless lizard | <u>Anniella pulchra</u> | SSC | N/A |
| 12. Black legless lizard | <u>A. p. nigra</u> | SSC | Candidate |

*Species of Special Concern - California Department of Fish and Game.

Each alternative corridor was walked and surveyed by a team consisting of two biologists, a botanist, and a ornithologist. The surveys were intended to identify the wildlife species that may occur in any of the particular

corridors with special focus on rare or threatened species, or species of special concern.

Wildlife species that are known to occur in the project region include:

1. Water-Associated Birds. More than 90 species of water-associated birds are present in the project study area at various times of the year. These include three endangered species: California least tern, brown pelican, and clapper rail. The black rail and clapper rail have been seen in the dune lakes area immediately north of the Callender Road corridor. The least tern has been recorded to occur in the Oso Flaco Lake and Dune Lakes area. Least tern nesting activities may occur near the Santa Maria River south of the project study area. In addition to the sensitive species described above, twenty-four species of ducks, thirty-six species of loons, and a variety of shorebirds are found in the project area. A high number of migrant species are found in the local freshwater lakes and wetlands which are part of the Pacific Coast Flyway.

2. Terrestrial Birds. Over one hundred species of land birds have been identified in the project region. In recent studies forty-six species of terrestrial birds were sampled within the Pismo Beach State Park and State Vehicular Recreation Area. See Appendix ?? for a complete species list associated with park inventories.

Twenty-four species of raptors have been recorded to occur in the dunes and wetlands in the region. Two endangered raptors, bald eagle (Haliaeetus leucocephalus) and American peregrine falcon (Falco peregrinus anatum), have been observed foraging in wetland habitat in the region. Several species of hawks and owls have been observed foraging in the dune habitats for small rodents, reptiles, and birds.

In addition to the raptor species, a large variety of songbirds, upland game birds, and other terrestrial bird species is found in the project study region. See Appendix ??. In general, the highest density of terrestrial bird species is found in the vegetated areas within the study area.

3. Mammals. Mammals commonly occurring in the dunes and wetlands found in the project region include the Audubon cottontail rabbit (Sylvilagus

auduboni), black-tailed jackrabbit (Lepus californicus), opossum (Didelphis marsupialis), raccoon (Procyon lotor), black-tailed deer (Odocoileus hemionus columbianus), long-tailed weasel (Mustela frenata), striped skunk (Mephitis mephitis), gray fox (Urocyon cinereoargenteus), coyote (Canis latrans), Heerman's kangaroo rat (Dipodomys heermanni), deer mouse (Peromyscus maniculatus), and other common species.

Mammal species utilize the dune and wetland habitats for foraging and nesting activities in the project area. The area is not known to have occurrences of any threatened or endangered mammal species.

4. Reptiles and Amphibians (Herptiles). Reptiles found in the project region include the gopher snake (Pituophis melanoleucus), common kingsnake (Lampropeltis getulus), southern alligator lizard (Gerrhonotus multicarinatus), and the California legless lizard (Anniella pulchra). Two snakes, the western terrestrial garter snake (Thamnophis elegans) and the Santa Cruz garter snake (Pituophis melanoleucus pumilis), approach the southern extent of their ranges near the project area. Three sensitive reptile species, the two-striped garter snake (Thamnophis ammondi), silvery legless lizard (Anniella pulchra), and black legless lizard (A. p. nigra), may occur in the project region. Common amphibians in the project region include the Pacific treefrog (Hyla regilla), bullfrog (Rana catesbeiana), and western toad (Bufo boreas). One sensitive amphibian species, the red legged frog (Rana aurora draytoni), a federal Candidate 2 species, may occur in the project area.

E. IMPACT ANALYSIS.

Grand Avenue. The southern boundary of Grand Avenue is the most biologically diverse in the corridor. This area is immediately adjacent to the existing 40 acre dune/wetland natural area. The southern boundary contains a variety of native vegetative species and some wetland habitat. The northern border of the corridor consists of a parking lot, restaurant, and ruderal field.

Improvements proposed for this corridor consist of widening the sidewalk along the northern edge of Grand Avenue from Highway 1 to the beach. In addition, the roadway would be widened adjacent to the existing restaurant to allow for

the placement of another entrance kiosk. See Figure 1. The road widening would encroach upon a paved area of minimal biological value. The planting of trees along the proposed widened sidewalk on the northern edge of Grand Avenue would provide an additional buffer between the restaurant, parking lot, and future lodge and the Dune Preserve. This would be a beneficial effect of the proposed Grand Avenue improvements on biological resources.

Field surveys conducted in the corridor did not result in the detection any sensitive plant or animal species. Vegetative and wildlife species observed in this corridor were common to the project study area. The continued use of this corridor and the proposed improvements would not result in the removal of any native vegetation or limit the foraging and nesting opportunities available to wildlife species in or adjacent to the corridor.

The continued use of the Grand Avenue corridor and the potential future improvements would have a less than significant effect on biological resources. This alternative would have a de minimis effect on native vegetative and wildlife species in the project area.

Pier Avenue. The majority of the Pier Avenue corridor has been developed for residential and commercial use. The County of San Luis Obispo is presently preparing to widen Pier Avenue to four lanes from Norswing to Lakeside Avenue. This section of the corridor is surrounded by the DPR campground (north) and the Oceano Park (south). The Oceano Park contains a lagoon and several mature trees, however, the area was determined to have very little biological diversity. It is assumed that the manicured nature of the park combined with the high level of human activity decreases the nesting and foraging opportunities for native wildlife species. No changes are proposed for this section of the corridor. Lakeside Avenue west to the existing park entrance has been developed in residential and commercial land uses. The 40 acre dune/wetland natural area is a block north of Pier Avenue. The boundary of the natural area contains introduced dune grasses, wax myrtle, lupine, and willow.

Improvements proposed for this corridor would all take place west of Lakeside Avenue. Improvements consist of removing a commercial building to provide room for a 45-car, paved parking lot, park administration building, and an

additional kiosk. See Figure 1. The new entrance would consist of three entrance lanes with two kiosks and two exit lanes. The sidewalk would be widened on the north side to allow for the planting of trees along the entrance corridor. The placement of the administrative building would be immediately north of the proposed parking lot. Construction of the building would require the removal of introduced dune grasses. The building would not intrude upon the dune/wetland natural area.

Field surveys conducted in the Pier Avenue corridor did not result in the detection of any sensitive plant or animal species. Vegetative and wildlife species observed in this corridor were common to the project study area. The continued use of this corridor and the proposed improvements would not result in the removal of any native vegetation or limit the foraging and nesting opportunities available to wildlife species in or adjacent to the corridor.

The continued use of the Pier Avenue corridor and the potential future improvements would have a less than significant effect on biological resources. This alternative would have a de minimis effect on native vegetative and wildlife species in the project area.

Railroad Avenue. The Railroad Avenue alternative corridor is not currently being utilized by the Department of Parks and Recreation for access to the SVRA. The corridor consists of a paved two lane road from Highway 1 to Creek Avenue. Creek Avenue is a dirt road serving one residence, a warehouse facility and a storage yard. The corridor follows Creek Avenue south approximately a quarter of a mile before turning west and continuing through a ruderal field. The field contains a variety of introduced grasses and weed species. The corridor runs through the field to the existing Arroyo Grande Creek levee. The eastern portion of the levee contains ruderal vegetation. As one moves west along the levee the vegetation changes from ruderal to a group of pine and cypress trees. Further west the levee passes through a floodplain containing a wet willow grove. Other species found on the western portion of the levee include poison oak, coyote bush, and blackberry. The wet willow grove typically supports a diverse population of migratory and resident birds, both seasonally and throughout the year. The willow grove provides nesting and foraging opportunities for a wide variety of bird species. Reptiles, amphibians, and small to medium-sized mammals utilize this habitat

as well. The wet willow grove is ideal habitat for the two-striped garter snake and red-legged frog, both sensitive species. The ruderal field and levee provide habitat for a variety of rodent species and foraging area for raptor species.

Improvements proposed for this corridor include widening and paving Creek Avenue and the levee road to provide two lanes for traffic. At the end of the levee a two-lane bridge would be constructed to cross Arroyo Grande Creek. The field area would be developed with a kiosk, a restroom facility, 65 standard parking spaces and 40 oversized vehicle spaces on a paved lot, a park administrative building, and a maintenance yard. The entire parking area, administrative building, and maintenance yard area would be landscaped. See Figure 2. The proposed improvements would result in the loss of ruderal plant species in the field, dissection of the willow grove by the bridge, and loss of some conifer, arroyo willow, and cypress trees.

Field surveys conducted in the corridor did not result in the detection of any sensitive plant or animal species, however, the wet willow habitat is considered ideal habitat for two sensitive species, red-legged frog and two-striped garter snake. Vegetative and wildlife species observed in this corridor were common to the project study area, with the exception of the wet willow grove. The willow habitat is a valuable biological resource since a variety of native wildlife species utilize the area for foraging and nesting activities. The development of this corridor would result in the loss of a substantial amount of native habitat. The bridge would require the removal of a number of arroyo willows and other native vegetation. The result would be the dissection of the wet willow grove habitat. The dissection of this area would result in two separate and smaller units. Migration of species may be impeded by the road and bridge structure. Vehicle movement and noise may result in incidental kills of wildlife species, adversely affect nesting success, and inhibit use of the habitat by certain wildlife species. The development of the parking area, administrative building, and maintenance yard would require the removal of the ruderal vegetation in the field. No mature

trees would be removed from this area. The loss of the field habitat may reduce the rodent population and potential foraging opportunities for predator species.

The development of the Railroad Road alternative would have a significant effect on biological resources where the corridor passes through the wet willow grove habitat. The loss of the ruderal field would also reduce the biological value of the area, however, loss of the field would not have a significant effect on biological resources. The field primarily provides habitat for rodent species and foraging opportunities for predator species. The field provides marginal habitat since it is within the flight pattern of planes landing and taking off at the Oceano Airport, development borders the field, and human activities associated with the development are on-going.

Silver Spur Place. The Silver Spur Place alternative corridor is not currently being utilized by the Department of Parks and Recreation for access to the SVRA. The corridor consists of a two-lane paved road from Highway 1 to Arroyo Grande Creek. From Arroyo Grande Creek to Silver Spur Place the corridor turns into a two-lane dirt road. The corridor then turns west and heads towards the dune preserve. At the end of Silver Spur Place an agricultural field would be developed with a parking lot, kiosk, and other improvements related to the SVRA entrance. The road would continue across the Arroyo Grande Creek levee and follow the same route as the Railroad Road alternative. The corridor enters the levee road at the pine and cypress grove. Further west the levee road passes through a floodplain containing a wet willow grove. Other species found on the western portion of the levee included poison oak, coyote bush, and blackberry. The wet willow grove typically supports a diverse population of migratory and resident birds, both seasonally and throughout the year. The willow grove provides nesting and foraging opportunities for a wide variety of bird species. Reptiles, amphibians, and small to medium-sized mammals utilize this habitat as well. The wet willow grove is ideal habitat for the two-striped garter snake and red-legged frog, both sensitive species. The agricultural field and levee provide habitat for a variety of rodent species and foraging area for raptor species.

Improvements proposed for this corridor include widening 22nd Street, and widening and paving Silver Spur Place and the levee road to accommodate two lanes of traffic. A two-lane bridge would be constructed across the levee to gain access to the northern levee road. At the end of the levee road another two-lane bridge would be constructed to cross to the southern bank of Arroyo Grande Creek. The agricultural field area would be developed with a kiosk, restroom facility, 200-250 standard parking spaces or 85-100 oversized vehicle spaces on a paved lot, a park administrative building, and a maintenance yard. The entire parking area, administrative building area, and maintenance yard would be landscaped. See Figure 2. The proposed improvements would result in the loss of commercial row crop plant species in the field, dissection of the willow grove by the bridge, and loss of some conifer, arroyo willow, and cypress trees.

Field surveys conducted in the corridor did not result in the detection of any sensitive plant or animal species, however, the wet willow habitat is considered ideal habitat for two sensitive species, the red-legged frog and two-striped garter snake. Vegetative and wildlife species observed in this corridor were common to the project study area, with the exception of the wet willow grove. The willow habitat is a valuable biological resource since a variety of native wildlife species utilize the area for foraging and nesting activities. The development of this corridor would result in the loss of a substantial amount of native habitat. The westernmost bridge would require the removal of a number of arroyo willows and other native vegetation. The result would be the dissection of the wet willow grove habitat. The dissection of this area would result in two separate and smaller units. Migration of species may be impeded by the road and bridge structure. Vehicle movement and noise may result in incidental kills of wildlife species, adversely affect nesting success, and inhibit use of the habitat by certain wildlife species. The eastern-most bridge would require the removal of some pine and cypress trees. The loss of these trees may reduce the nesting opportunities for native bird species. The development of the parking area, administrative building, and maintenance yard would require the removal of the agricultural field from production. No mature trees would be removed from this area. The loss of the agricultural field may reduce the potential foraging opportunities for rodent species. However, the landscaping

associated with the proposed improvements would offset any negative effects to rodent populations in the agricultural field.

The development of the Silver Spur Place alternative would have a significant effect on biological resources where the corridor passes through the wet willow grove habitat. The loss of the agricultural field would not have any adverse effects on biological resources, since the area is routinely disturbed by farming activities. The field primarily provides foraging opportunities for rodent species. The field provides little if any nesting opportunities due to the on-going farming activities.

Callender Road. The Callender Road alternative corridor currently is not being used by the Department of Parks and Recreation to access the SVRA. This corridor does not contain any development at the present time. The corridor exits Highway 1 approximately a quarter of a mile south of Callender Road. The corridor enters a disturbed field with a variety of introduced ruderal plant species, bush lupine, wax myrtle, and eucalyptus trees. From this field the corridor heads directly west across the Southern Pacific Railroad right-of-way into stabilized dune structures. The vegetation found in the stabilized dune structures is less disturbed than that found in the field, therefore, a greater density of native shrubs exists. The corridor continues west into an area of unstabilized dunes. This area has populations of crisp monardella, a federal category 2 species, along the sides of most depressions. Bands ranging in width from 10 to 25 feet and lengths of 100 to 200 feet are present in the unstabilized dune structures.

Improvements proposed as part of this alternative include the construction of an entrance with a kiosk and pull-out lanes fronting Highway 1. The field east of the SPR right-of-way would be developed with a 200-250 space paved parking lot, 80-150 vehicle and trailer space gravel parking lot, administrative building, restrooms, and one-way off-highway vehicle roads entering and exiting the SVRA. Overpasses or underpasses must be constructed to cross the railroad tracks. West of the SPR right-of-way the two one-way dirt roads would continue through the stabilized and unstabilized dunes into the SVRA. Fencing would be placed so as to prevent OHV use in unauthorized areas. See Figure 3. The development of the field area would require the removal of both introduced and native herbaceous and woody plant species and

mature eucalyptus trees. The roads running through the dunes would require the removal of native vegetation the entire width and length of the proposed entrance and exit roads. The bands of crisp monardella would be dissected and the dunes would be recontoured to provide access to the SVRA.

Field surveys conducted in the corridor resulted in the detection of one sensitive plant, crisp monardella, and one sensitive animal species, monarch butterfly. Aside from these two species, vegetation and wildlife observed in this corridor were common to the project study area. Other sensitive wildlife species that may occur in the corridor include the silvery legless lizard and black legless lizard, both of which may utilize the unstabilized dunes where bush lupine has been established. However, dune habitat due to its limited distribution, is considered a valuable biological resource and may support a variety of sensitive wildlife species. The dune habitat provides foraging and nesting opportunities for native wildlife which are only found in several locations in California. The development of this corridor would result in the loss of a substantial amount of native habitat where the road passes through the dune areas. The result would be the dissection of both the stabilized and unstabilized dune habitats. The dissection of this area would result in two separate and smaller units that are presently part of the largest contiguous block of native vegetation along this part of the central coast. Migration of species may be impeded by the road and fence. Vehicle movement and noise may result in incidental kills of wildlife species, adversely affect nesting success, and inhibit use of the habitat by certain wildlife species. This in turn could lead to a reduction in plant and animal diversity in the dunes. The development of the parking areas, administrative building, restrooms, roads, and kiosk would require the removal of both ruderal and native vegetation in the field. Mature eucalyptus trees would be removed as part of the development. Monarch butterflies utilize eucalyptus trees for resting. The observation of monarch butterflies on the site indicates that the butterflies may cluster on the trees found in the field. Additional studies would be required to determine the extent to which the butterflies utilize vegetation in this corridor. The loss of the field habitat may reduce the rodent population and potential foraging opportunities for predator species as well.

The development of the Callender Road alternative would have a significant effect on biological resources where the corridor passes through the stabilized and unstabilized dune habitat. The removal of vegetation and eucalyptus trees in the field could have significant effects on wildlife since a sensitive wildlife species was observed on-site, and adequate habitat to support this species is found on-site. The field, aside from potentially providing resting areas for monarch butterflies, primarily provides habitat for rodent species and foraging opportunities predator species.

F. MITIGATION MEASURES AND STATEMENT OF SIGNIFICANCE.

Grand Avenue. Use of this alternative corridor would not have a significant effect on biological resources. The proposed improvements do not intrude upon nor result in the removal of any native vegetation in the corridor. The planting of trees within the corridor would have a beneficial effect on wildlife species in the area. No mitigation measures are necessary for the proposed improvements.

The Grand Avenue alternative would have a less than significant effect on biological resources.

Pier Avenue. This alternative corridor would not have a significant effect on biological resources. The proposed improvement do not intrude upon nor result in the removal of any native vegetation in the corridor. The planting of trees within the corridor would have a beneficial effect on wildlife species in the area. No mitigation measures are necessary for the proposed improvements.

The Pier Avenue alternative would have a less than significant effect on biological resources.

Railroad Avenue. The development of this alternative corridor would have a significant impact on biological resources. The loss of the ruderal field, increased human activity, and the dissection of the wet willow grove all have negative effects on both vegetative and wildlife resources. Several measures are available to decrease the adverse effects of the project. To mitigate for the loss of the field habitat, a landscaping plan utilizing native plant species should be developed to revegetate those areas disturbed during

construction but not paved or otherwise developed. The planting should be concentrated on the north side of the levee, in and around the parking areas and administrative office, and along the perimeter of the entire facility. The landscaping plan should include the planting of native tree species. Additional mitigation is required to lessen the impacts to the wet willow grove in the western portion of the corridor. A new elevated road would need to be constructed south of Arroyo Grande Creek where the existing road leaves the levee. At this point the new road would be on the northern edge of the willow thicket. The existing unimproved road, which currently passes through the grove would be gated and allowed to revert back to willow grove. The new road would need to be elevated to allow flooding of the grove during wet periods of the year. The road could be elevated either through pier construction or through the use of culverts. Although the new road to the north would prevent the dissection of the grove and provide for restoration of the habitat, the increased human activity in the area could still adversely affect the biological value of the area. Additional mitigation could include the purchase ratio of additional lands near the Oso Flaco Lakes region for preservation. The purchase of additional lands should be four acres for each acre disturbed. The purchase and preservation of lands would offset the loss of habitat resulting from developing the corridor.

The Railroad Avenue alternative would have a less than significant effect on biological resources if appropriate mitigation measures, as described above, are implemented as part of the proposed project.

Silver Spur Place. The development of this alternative corridor would have a significant impact on biological resources. The loss of the agricultural field, increased human activity, and the dissection of the wet willow grove all have negative effects on both vegetative and wildlife resources. Several measures are available to decrease the adverse effects of the project. To mitigate for the loss of the agricultural field, a landscaping plan utilizing native plant species should be developed to revegetate those areas disturbed during construction but not paved or otherwise developed. The planting should be concentrated on the south side of the levee, in and around the parking areas and administrative office, and along the perimeter of the entire facility. The landscaping plan should include the planting of native tree

species. Additional mitigation is required to lessen the impacts to the wet willow grove in the western portion of the corridor. A new elevated road would need to be constructed south of Arroyo Grande Creek where the existing road leaves the levee. At this point the new road would be on the northern edge of the willow thicket. The existing unimproved road which currently passes through the grove would be gated and allowed to revert back to willow grove. The new road would need to be elevated to allow flooding of the grove during wet periods of the year. The road could be elevated either through pier construction or through the use of culverts. Although the new road to the north would prevent the dissection of the grove and provide for restoration of the habitat, the increased human activity in the area could still adversely affect the biological value of the area. Additional mitigation could include the purchase of additional lands near the Oso Flaco Lakes region for preservation. The purchase ratio of additional lands should be four acres for each acre disturbed. The purchase and preservation of lands would offset the loss of habitat resulting from developing the corridor.

The Silver Spur Place alternative would have a less than significant effect on biological resources if appropriate mitigation measures, as described above, are implemented as part of the proposed project.

Callender Road. The development of this alternative corridor would have a significant effect on biological resources. The intrusion and subsequent dissection of the stabilized and unstabilized dune habitat could reduce the population of a sensitive vegetative species. Furthermore, loss of habitat and increased human activity would likely reduce the utilization of this area by native wildlife species. Development of the field may result in a direct adverse effect on the monarch butterfly, a sensitive species, by disturbing the eucalyptus trees on-site. In addition to removing a substantial amount of native vegetation, the development of this corridor would significantly increase the human activity in the area. No mitigation measures are available to adequately offset the negative effects on biological resources found in this corridor.

The Callender Road alternative would have a significant adverse effect on biological resources.

6. RANKING OF CORRIDOR SENSITIVITY.

Callender Road. The Callender Road corridor contained the most diverse biological makeup of any of the corridors being considered. This corridor has the highest density of native vegetative species and is known to contain a substantial population of a sensitive species. The lack of development within and surrounding the corridor combined with the unique biological resources make this the most biologically sensitive corridor.

Railroad Avenue and Silver Spur Place. The Railroad Avenue and Silver Spur Place corridors are very similar in their biological makeup. These two alternatives share the same corridor from where they intersect the Arroyo Grande Creek levee west to the SVRA. The most substantial difference is that the Silver Spur Place alternative is adjacent to the dune/wetland natural area and lacks the surrounding development that the Railroad Avenue alternative is exposed to. The majority of both corridor's biological value is found in the wet willow habitat. Therefore, the Silver Spur Place alternative is slightly more sensitive due to the lack of surrounding development. The Railroad Avenue alternative is the third most biologically sensitive alternative.

Grand Avenue. The Grand Avenue alternative utilizes an existing entrance to the beach and SVRA. This corridor is extensively developed east of Highway 1. West of Highway 1 the corridor is less developed with a substantial amount of native vegetation existing adjacent to the southern boundary of the corridor. Although some biological resources exist in this corridor, the improvements proposed as part of this alternative would not result in the removal of any native vegetation, nor would it increase intensity of use at the entrance. The Grand Avenue alternative is the fourth most biologically sensitive alternative.

Pier Avenue. The Pier Avenue alternative utilizes an existing entrance to the beach and SVRA. This corridor is the most developed of all the alternatives being considered as part of this DEIR. The entire corridor is bordered by commercial and residential development. Improvements to this corridor are proposed for areas that have already been disturbed and lack any biological value. The Pier Avenue alternative is the least environmentally sensitive entrance with regards to biological resources.

VII. TRAFFIC & AIR QUALITY

A. INTRODUCTION.

The lands currently managed by the Department of Parks and Recreation (DPR) have been historically used by the public for driving motorized vehicles on the beach strand. Following the acquisition of the lands within the current park boundary, DPR management continued to emphasize vehicle recreation in the 2000 acres that currently make up the State Vehicular Recreation Area (SVRA). Therefore, two distinct visitor groups, off-highway vehicle enthusiasts and passive users, generate traffic travelling to the Pismo State Beach and Pismo Dunes State Vehicular Recreation Area.

The General Development and Resource Management Plans, completed in 1975, found that the park experienced an annual visitation of three to four million people making it one of the most popular in the park system. Peak periods included Memorial Day, the Fourth of July, and Labor Day. Traffic related problems occurred during these high use holiday weekends. Visitor traffic occasionally resulted in congestion at the existing Pier and Grand Avenue entrances with traffic backing up onto Highway 1. The congestion has resulted in delays for local residents in and around the communities of Oceano and Pismo Beach. In response to the traffic problems associated with various holiday weekends, DPR management assigned a greater number of employees to assist in registering visitors, collecting user fees, and other formalities. The increased staff has relieved the traffic congestion substantially and no longer does traffic backup onto Highway 1 during holiday weekends (Pat Beck, SLO, pers. comm.).

This EIR is intended to analyze the potential development of five access corridor alternatives. Based on this analysis the least environmentally sensitive corridor will be identified and the general plan amended to reflect the findings. The environmental impact report will not consider an increase in the number of users that the park now serves. Therefore, traffic data collected by park staff will be used for this traffic and air analysis. It can be assumed that the annual number visitors will remain relatively stable. The air pollution modelling program that will be used for this analysis is

URBEMIS #3 developed by the Air Resources Board. Regardless of the entrance corridor(s) chosen for the park, air quality will remain the same. This is based on the fact that user numbers would remain constant and the alternative corridors are all in the same Air Pollution Control District. Therefore, the air quality modelling will establish a baseline emissions factor on which to consider future management and development schemes for the park.

B. EXISTING SETTING

Air Quality.

The project site lies within the San Luis Obispo County Air Pollution Control District (APCD). The APCD is characterized by a mediterranean type climate with warm summers with little precipitation and mild winters with intermittent periods of rain. Westerly winds prevail in the study area. However, nighttime offshore breezes are common resulting in the transportation of pollutants offshore only to be carried back over land the following morning. Temperature inversions at levels of 500 to 1,000 feet are common in the area. Inversion heights are lowest during the winter, but they are more frequent and persistent during the summer. Therefore, air quality is at its lowest during summer inversion periods when the recirculation of the local air body is at a minimum. (SLO County LCP).

State and federal governments have established air quality standards for local air pollution control districts in an effort to protect public health (State standards & national primary standards), and to avoid adverse impacts related to materials soiling, vegetation damage and impairment of visibility (national secondary standards). The APCD is in attainment for all pollutants except ozone and particulate matter (PM₁₀). The California Clean Air Act requires nonattainment districts to develop an Air Quality Management Plan (AQMP) that provides for emission reduction strategies. The strategies are to demonstrate that the air quality standards will be attained by the "earliest practicable date". Nonattainment pollutants must be reduced by at least 5% per year from 1987 levels until standards are reached. The San Luis Obispo County Air Pollution Control District is currently in the process of preparing the AQMP for the project study area.

Ozone is a reactant pollutant that forms in the atmosphere through chemical reactions between nitrogen oxides (NOx) and reactive organic gases. Emission sources in the study area for reactive gases and NOx were identified in 1985 by San Luis Obispo County. Table VII-1 provides a breakdown in Tons/Year for all emission sources that effect the study area. Petroleum based industry accounts for the majority of reactive gas emissions in the study area, while combustion of fuels associated with other industries account for the majority of NOx. On-road and off-road vehicles, contribute substantially to the emission of reactive gases and NOx in the study area. However, in 1985 stationary sources accounted for 74% and 62% of reactive organic gases and NOx, respectively. Mobile sources accounted for 26% and 38%, respectively.

PM10 is particulate matter (dust and other suspended particles) less than 10 microns in diameter. PM10 is generated by farming activities, construction, use of unpaved roads, wildfires, and chemical and mineral processing. Recreation in the SVRA produces PM10 emissions by disturbing surface sands in the dune "play area". PM10 is monitored at the Nipomo monitoring station.

Traffic Patterns.

The major arterials in the project study area consists of Highway 101 and Highway 1. In general these two highways run parallel to each other in a north/south direction. Highway 1 is west of Highway 101, however, the two highways merge into one periodically. Other roads that are or may be affected by the park include Grand Avenue, Pier Avenue, Railroad Road, Creek, Halcyon Road, 22nd Street, and Silver Spur Place.

Highway 101 is the principle north/south corridor in San Luis Obispo County. This four lane undivided highway serves as the major thoroughfare and truck route for the county. The vast majority of visitors to San Luis Obispo County enter along the Highway 101 corridor. Highway 101 can experience high volumes of traffic during AM and PM peak hours and holiday weekends.

Highway 1 is a two lane undivided road running parallel and westward of Highway 101. Highway 1 and 101 merge immediately north of the project study area where it becomes a four lane undivided road. In general, this corridor is more rural in character and provides occasional views of the coastline.

The Highway 1 corridor due to its more rural character is not utilized as extensively as Highway 101 by park visitors. In the southern portion of the study area the highway is used primarily by local residents and those associated with the agricultural activities in the area. Immediately east of the existing Grand Avenue park entrance the highway serves a variety of camping, RV, and other visitor serving facilities. This portion of Highway 101, generally between Pier and Grand Avenues, receives a higher volume of traffic than the southern portion.

Grand Avenue is a four lane undivided road from Highway 1 to the Pacific Ocean. Although Grand Avenue is directly accessible from Highway 101, for the purposes of this study only that portion of the corridor from the intersection Highway 1 and Grand Avenue to the ocean will be analyzed. The Grand Avenue corridor does not experience AM and PM peak periods but rather experience greater traffic volumes on the weekends when visitors arrive at the park. The greatest volumes of traffic on Grand Avenue occur on major holiday weekends.

Pier Avenue is a two lane undivided road from Highway 1 to the DPR campground at which point it turns into a four lane undivided road. Pier Avenue experiences a marginal AM and PM peak hour traffic volume due to the residential and commercial development along this corridor. The majority of the daily traffic on Pier Avenue is generated by local residents and commercial vendors. The highest volumes of traffic associated with the park take place during off-peak periods, such as weekends and in particular on holiday weekends.

Railroad Avenue is a two lane undivided road that intersects with Highway 1. The road serves a variety of warehouse operations just east of the Oceano Airport. This portion of Highway 1 is used primarily by local residents, since tourist attractions do not exist nearby. AM and PM peak period occurs along this segment of Railroad Avenue and Highway 1. The traffic volumes are rather low, with peak hours producing 880 trips near Halcyon Road (CalTrans, 1990).

Silver Spur Place is accessed via 22nd Street, a two lane undivided road, that intersects Highway 1 just west of Halcyon Road. Silver Spur Place is a two lane dirt road that provides access to the Livery Stables and several

residences. The majority of traffic on this unimproved road consist of visitors to the stables, agricultural workers, and the several residents. Again traffic volumes are low as evident from traffic counts near Halcyon Road just east of 22nd Street.

The Callender Road alternative currently does not have a developed road within the proposed boundaries of the corridor. The corridor, if developed, would be directly accessed from Highway 1 approximately a quarter of a mile south of Callender Road. The majority of traffic along this portion of Highway 1 is generated by local residents and employees of Union Oil. Peak period traffic volumes consist of 510 at the entrance to the Union Oil Coking Plant and 480 at Milepost 10.21 (CalTrans, 1991).

All of the roads within the project study area identified above are operating at a level of service (LOS) ranging from A to B. None of the proposed corridors are presently signalized.

C. URBEMIS #3 AIR QUALITY MODEL

Introduction.

The URBEMIS #3 model will be used to estimate carbon monoxide, total hydrocarbon, and nitrogen oxide emissions from the motor vehicle traffic associated with the Pismo Beach State Park and State Vehicular Recreation Area. The model provides the percentage of exhaust and tire wear particulate matter which makeup PM10 and sulfur content of fuel expressed as oxides of sulfur. The model allows for the comparison of motor vehicle emissions as a function of the number of trips associated with a given land use and the vehicle miles traveled. URBEMIS #3 provides results based on year, air basin, trip speed, and temperature. The URBEMIS #3 program has set defaults based on the land use being considered. The California Air Resources Board (CARB), in conjunction with the Institute of Traffic Engineering (ITE), have established the "average" trip generation rates related to various types of land uses based on studies carried out across the United States.

A unique situation exists at the Pismo State Beach and State Vehicle Recreation Area with regards to the URBEMIS #3 program. There are no defaults that provide an adequate estimation of vehicle trip generation rates (i.e. how

many times a vehicle enters and leaves the area on average) Beach recreation studies have been carried out in relation to trip generation rates, however, the areas studied consisted entirely of day use and did not allow for actual driving on the sand or the use of OHVs. The existing park characteristics require a substantial alteration of the defaults in the URBEMIS program. The manipulation of the program will give a more realistic portrayal of the air emissions generated by vehicles associated with the park.

Impact Analysis.

OPDM staff has consulted with the San Luis Obispo County Air Pollution Control District, CARB, and ITE regarding the air modelling for the park. The APCD indicated that two separate URBEMIS #3 runs needed to be carried out for the park. One run would address only street legal vehicles, while the second run would address the OHVs. The ACPD recommended that we should assume that two OHVs are trailered into the SVRA for each street legal vehicle entering the recreation area. The realistic ratio of OHVs to street legal vehicles is .35:1. This is based on surveys performed at the park entrances. Assumptions made regarding fleet mix characteristics include the following:

1. It is assumed that all visitors to the park are from outside the County, a worst case scenerio. Therefore, average trip length is 31 miles;
2. The trip generation rate for the park is .5 trips per acre for street legal vehicles;
3. The trip length established for the off-highway vehicles is 40 miles per day. This is based on each OHV being driving an average of four hours a day at an average speed of 10 miles per hour. Since the OHV are not allowed to be ridden to the play area or out of the park, the trip generation rate for OHVs is .2 per acre.

The vehicle fleet mix was established through surveys performed at the park entrances (Pier and Grand Avenues) from April 22 to April 28, 1991. The survey forms and results are contained in Appendix 7. As evident from the surveys, the majority of park visitors drive street legal vehicles on the beach on a day use basis. The following is the vehicle fleet mix characteristics for the park:

| | | | |
|----|--------------------|---|------|
| 1. | Light duty cars | - | 30% |
| 2. | Light duty trucks | - | 46% |
| 3. | Medium duty trucks | - | 20% |
| 4. | Heavy duty trucks | - | 4% |
| | | | 100% |

| | | | |
|----|---------------|---|------|
| 1. | Unleaded fuel | - | 75% |
| 2. | Leaded fuel | - | 23% |
| 3. | Diesel fuel | - | 2% |
| | | | 100% |

2,601 vehicles entered the park between April 22 and April 28, 1991. A total of 924 OHVs were trailered into the park during the same period. In addition to the motor vehicles entering the park, a substantial number of walk-in day use visitors utilized the park. These walk-in users are comprised of both local residents and out of area visitors staying in the vicinity of the park.

Appendix 8 provides the model printouts of the URBEMIS #3 program developed for this project. The modeling activities provide, at best, a rough estimate of the emissions generated by park visitors recreating on and along the beach. To fully determine the affect of park recreation on local air basins, a detailed air emissions study would need to be implemented. Such a study would require air monitoring within the SVRA "play area" to determine actual amounts of pollutants generated by OHV use.

The air emissions associated with the park will remain constant for all the alternatives being considered as part of this DEIR, since the number visitors is not proposed to be changed. Regardless of the entrance chosen the air quality of the project region would remain the same as at the present time.

Mitigation Measures and Statement of Significance.

No mitigation measures are necessary regardless of the alternative entrance corridor chosen as part of this project. The air emissions associated with the park will not change as a result of identifying and developing the least environmentally sensitive corridor. The proposed project would have a less than significant effect on air quality in the project region.

It is recognized that the air quality impact analysis for this project is limited by the parameters of the URBEMIS #3 program and can be used only as an approximation of the amount of air emissions generated by park recreation. To fully develop baseline air quality information related to the park, a comprehensive, on-site, air sampling program would need to be developed. If the Department of Parks and Recreation proposes or anticipates an increase in the number of visitors coming to the park in the future, consultation with both the California Air Resources Board and San Luis Obispo County Air Pollution Control District should take place to in an effort to develop appropriate transportation management strategies.

It should be noted that as a State agency, the Department of Parks and Recreation is mandated to develop a Transportation Management Plan (TMP) for park staff. The plan is intended to decrease the number of single occupied vehicles (SOV) driven to and from the workplace. Although the number of employees is relatively small as compared to the visitors to the park, the TMP will result in a minor decrease of air emissions over the next several years.

Ranking of Corridor Sensitivity.

The alternatives are equal in terms of sensitivity related to air emissions. The operation of an entrance in itself does not result in substantial air emissions. The administrative building would result in an incremental increase in emissions from heating and cooling equipment. The effect on the regional air basin would not change since the number of vehicles would remain relatively constant regardless of the entrance developed. The "play area" would continue to receive the highest concentration of vehicles since this is the destination point for the OHV users.

D. TRAFFIC IMPACT ANALYSIS.

Introduction.

The following traffic analysis is based on the existing conditions of the arterials addressed above and the potential traffic that would be generated by visitors to the park. Specific traffic counts and engineering studies will not be included in the analysis due to the general planning characteristics of the project. It is realized that additional traffic studies would need to be

carried out to fully identify the potential impacts of developing a new access into the SVRA. The intent of this DEIR is to identify the least environmentally sensitive access corridor into the park. In light of this goal, a general level of analysis has been developed.

Consultation with the California Department of Transportation (District 5) and the County of San Luis Obispo has taken place. Background information including the South County Element of the SLO Local Coastal Program and Arroyo Grande Circulation Element have been researched.

Impact Analysis.

Grand Avenue and Pier Avenue Alternatives. The Grand Avenue and Pier Avenue alternatives have already been developed and are operating at the present time, no change in circulation is expected to occur if these alternatives are chosen to continue to serve the park. The potential expansion of either entrance would ease traffic congestion on the respective corridors because a change in user numbers is not proposed; an additional kiosk would decrease time spent registering visitors; and therefore, congestion resulting from admissions activities would also decrease. The continued use of Grand and Pier Avenues would have a less than significant effect on circulation in the project study area.

Railroad Avenue. The Railroad Avenue alternative would utilize two existing roads, Railroad Avenue and Creek Street. All visitors would be required to access Railroad Avenue from Highway 1. The most direct route to this corridor would be exiting Highway 101 on Grand Avenue and preceding west to Halcyon Road where one would turn left and head south to Highway 1. From Highway 1 the visitor would again head west till they reached the intersection of Highway 1/Railroad Avenue. The total distance from Highway 101 to Railroad Avenue is approximately three and a half miles.

The majority of traffic would proceed to the Railroad Avenue corridor in the above manner. The Grand Avenue portion of this route would be unaffected, since park related traffic currently utilizes this arterial. The Halcyon Road portion of this alternative changes from a four lane undivided road to a two lane undivided road as it leaves Grand Avenue and heads south. The four lane

portion of this road receives the highest traffic volumes since it serves typical urban housing development. As the road proceeds south development changes to a more rural character including agricultural production. Traffic volumes on this portion of Halcyon are less. The traffic volumes would increase substantially on Halcyon Road, if the Railroad Avenue alternative was developed. Although peak period volumes would not be affected, weekend periods would experience a greater number of vehicle trips resulting from park visitation. The Level of Service (LOS) for Halcyon Road is B at its intersection with Grand and A for the remainder of the road. See Table 1 for a complete description of level of service for urban and suburban arterial streets. During holiday weekends the LOS along Halcyon Road could be expected to decrease to a LOS B along the majority of the road and LOS C at its intersection with Grand Avenue and Highway 1. The decreased LOS would be short-term in nature. For example the LOS may drop to C during the peak inflow of visitors to the park after which it would return to LOS A/B where it would remain until the end of the weekend when the peak outflow of visitors takes place.

Highway 1 to Railroad Avenue is a two lane undivided road. This section of highway is not interrupted by a signalized intersection and operates at LOS A. At the intersection of Railroad Avenue and Highway 1 left turn lanes and turnouts have been developed. Although this intersection operates at LOS A/B it has the potential to decrease to LOS E due to the Southern Pacific Railroad tracks which cross Railroad Avenue immediately west of Highway 1. During periods when a train is passing through the area, traffic turning into Railroad Avenue is delayed. Such delays taking place today do not present much of a concern due to the low traffic volumes in the area. However, if this corridor was developed to access the SVRA, at certain periods, particular weekends, a backup on Highway 1 would take place. Although the occurrence of such an event would be extremely low, it would create an unfavorable traffic condition for limited periods of time.

Creek Avenue intersects Railroad Avenue immediately west of the SPR railroad tracks. From this point it heads south towards the Arroyo Grande Creek watershed. Currently this roadway is unpaved and serves two single family residences. Creek Avenue operates at LOS A. Registration and parking

activities associated with the park would take place in a fallow field immediately west of Creek Avenue. Therefore, the LOS of Creek Avenue would not be affected by the development of this entrance since traffic delays would not occur. The development of parking areas and registration facilities (ie. kiosks) would provide adequate capacity to allow traffic to move off of Creek Avenue without delays maintaining the LOS A. The intersection of Creek Avenue and Railroad Avenue currently operates at a LOS A. However, a very low number of vehicles currently turn left off of Railroad Avenue onto Creek Avenue. This intersection has not been developed to appropriate standards due to the limited number of vehicles that utilize Creek Avenue. Furthermore, the proximity of the Creek Avenue/Railroad Avenue intersection to the railroad tracks makes the queuing of vehicles extremely difficult. The reconfiguration of the intersections of Highway 1/Railroad Avenue and Creek Avenue/Railroad Avenue would be necessary for providing adequate traffic movement.

Silver Spur Place. The Silver Spur Place alternative would utilize two existing roads, Silver Spur Place and 22nd Street. All visitors would be required to access 22nd Street from Highway 1. The most direct route to this corridor would be exiting Highway 101 on Grand Avenue and preceding west to Halcyon Road where one would turn left and head south to Highway 1. From Highway 1 the visitor would again head west till they reached the intersection of Highway 1/22nd Street. The total distance from Highway 101 to 22nd Street is approximately three miles. Once on 22nd Street one would head south across the Southern Pacific Railroad tracks and intersect Silver Spur Place. Once on Silver Spur Place one would be heading west on this undivided two lane dirt road.

The majority of traffic would proceed to the Silver Spur Place corridor in the above manner. The Grand Avenue portion of this route would be unaffected, since park related traffic currently utilizes this arterial. The Halcyon Road portion of this alternative changes from a four lane undivided road to a two lane undivided road as it leaves Grand Avenue and heads south. The four lane portion of this road receives the highest traffic volumes since it serves typical urban housing development. As the road proceeds south development changes to a more rural character including agricultural production. Traffic volumes on this portion of Halcyon are less. The traffic volumes would

increase substantially on Halcyon Road, if the Railroad Avenue alternative was developed. Although peak period volumes would not be affected, weekend periods would experience a greater number of vehicle trips resulting from park visitation. The Level of Service (LOS) for Halcyon Road is B at its intersection with Grand and A for the remainder of the road. During holiday weekends the LOS along Halcyon Road could be expected to decrease to a LOS B along the majority of the road and LOS C at its intersection with Grand Avenue and Highway 1. The decreased LOS would be short-term in nature. For example the LOS may drop to C during the peak inflow of visitors to the park after which it would return to LOS A/B where it would remain until the end of the weekend when the peak outflow of visitors takes place.

Highway 1 to 22nd Street is a two lane undivided road. This section of highway is not interrupted by a signalized intersection and operates at LOS A. At the intersection of 22nd Street and Highway 1 a center turn lane would need to be developed. This intersection operates at LOS A. Since the SPR tracks are approximately three quarters of a mile from the intersection of Highway 1/22nd Street the queuing problems associated with the Railroad Avenue alternative would be avoided.

The 22nd Street portion of this alternative currently operates at LOS A. 22nd Street is a two lane undivided road that serves mobile home park, a warehouse facility, agricultural land uses, and rural residential. The street is paved from Highway 1 to the railroad tracks where it reverts to a dirt road. The remainder of the corridor is unpaved to the beach. The 22nd Street portion of this alternative would be paved and widened to Silver Spur Place. The improvement of 22nd Street could accommodate the traffic associated with the park. The 22nd Street portion of this corridor would continue to operate at a LOS A if this alternative were developed.

The Silver Spur Place portion of this alternative currently operates at LOS A. Silver Spur Place is a two lane undivided dirt road that serves a stables operation, agricultural land uses, and rural residential development. Silver Spur Place would be widened and paved to the proposed parking area. The improvement of Silver Spur Place could accommodate the traffic associated with the park. The Silver Spur Place portion of the corridor would continue to operate at a LOS A if this alternative were developed.

The Silver Spur Place alternative has adequate capacity, with the proposed improvements, to provide the same level of service as that which now exists. The Silver Spur Place alternative would have a less than significant effect on traffic patterns in project area.

Callender Road. The Callender Road alternative does not currently contain any developed roads within its boundary. The entire corridor would need to be developed to provide vehicle access. The newly constructed road would be accessed from Highway 1. Therefore, a new intersection with turnout lanes would need to be developed. Currently Highway 1 operates at LOS A in this area. Since this corridor is not developed at the present time, constraints posed by existing circulation patterns would not affect this alternative to the same extent as those previously discussed. Appropriate engineering and traffic designs would be carried out if this alternative were chosen. The proposed intersection of Highway 1 and the new access road could be designed to accommodate the traffic volumes associated with the park. The Southern Pacific Railroad tracks do cross this corridor, however, the parking and staging areas would be developed on the eastern side of the tracks eliminating queuing problems associated with the SPR operations. The development of this corridor would not result in a change to the existing circulation patterns. The development of the Callender Road alternative would have a less than significant effect on traffic patterns in the project area.

E. MITIGATION MEASURES AND STATEMENT OF SIGNIFICANCE.

Grand Avenue. The Grand Avenue alternative would not require any mitigation measures. The continued use or minor expansion of Grand Avenue would have a less than significant effect on existing traffic patterns.

Pier Avenue. The Pier Avenue alternative would not require any mitigation measures. The continued use or minor expansion of Pier Avenue would have a less than significant effect on existing traffic patterns.

Railroad Avenue. The development of the Railroad Avenue alternative would require a detailed traffic study to determine an intersection design that would provide adequate traffic flows off of Highway 1 and into the proposed park entrance and parking area. Although detailed traffic engineering studies

have not been performed for this corridor, its development could significantly impact the existing traffic patterns in the area.

Silver Spur Place. The Silver Spur Place alternative would require additional traffic engineering studies to determine the best road design for 22nd Street and Silver Spur Place. Improvements such as curb and sidewalks and paving would need to be carried out. Although detailed traffic studies have not been performed for this corridor, its development would have a less than significant impact on the existing traffic patterns in the area. Both 22nd Street and Silver Spur Place would have adequate capacity to serve the park.

Callender Road. The Callender Road alternative would require additional traffic engineering studies to determine the intersection design for the entrance. Improvements such as turnouts, curb and sidewalks, and paving would need to be carried out. Although detailed traffic studies have not been performed for this corridor, its development would have a less than significant impact on the existing traffic patterns in the area since Highway 1 has adequate capacity to serve park related vehicle trips.

F. RANKING OF CORRIDOR SENSITIVITY.

Railroad Avenue. The Railroad Avenue alternative would require the greatest reconfiguration of the existing circulation patterns. Assuming that the intersection was improved the level of service could still be inadequate creating traffic congestion on Highway 1. This alternative has the greatest potential effect on existing traffic patterns.

Silver Spur Place. The Silver Spur Place alternative would require substantial improvements to the existing roads in the proposed corridor. Although traffic patterns would not be adversely affected, levels of service would drop slightly on both Halcyon Road and Highway 1. The decrease in LOS would not be significant on these arterials, but would be greater than other alternatives being considered as part of this project.

Callender Road. The Callender Road alternative would require the construction of an entirely new road and improvements to Highway 1. Traffic patterns would be affected if this alternative was developed, since park visitors would have a number of options in reaching the new entrance. Grand Avenue would not

necessarily be the preferred route from Highway 101 to the park. The traffic volumes would be distributed among a variety of arterials. Although traffic patterns would be altered, it is not expected that levels of service would decrease on the major arterials accessing the Callender Road corridor.

Pier Avenue. The continued use or minor expansion of Pier Avenue would not result in alterations to existing traffic patterns or levels of service in the project study area. Improvements to Pier Avenue would improve the LOS of the corridor resulting in a beneficial effect on traffic patterns.

Grand Avenue. The Grand Avenue alternative provides the most direct and unrestricted route to the beach and subsequent access to the park. The continued use or minor expansion of this corridor would not result in alterations to existing traffic patterns or levels of service in the project study area. Improvements to the Grand Avenue corridor would improve the LOS of the corridor resulting in a beneficial effect on the existing traffic patterns. The Grand Avenue alternative is the least environmentally sensitive corridor with regard to traffic patterns.



VIII. ARCHAEOLOGY/CULTURAL RESOURCES

A. INTRODUCTION.

This section was developed in conjunction with the Department of Parks and Recreation's archaeological/cultural resources professional staff. The information in the following section is the result of a background records search, literature review, and actual field reconnaissance by a qualified resource specialist. The following background information section is taken completely from An Archaeological Inventory of a Portion of Pismo Dunes SVRA Access Alternative 5 by Daniel Bell, staff archaeologist, Cultural Programs Unit, Resource Protection Division, Department of Parks and Recreation.

B. BACKGROUND INFORMATION.

Previous Investigations.

The Pismo State Beach area was investigated by DPR archaeologists in 1974. This study identified 14 sites. Of the 14 Archaeological 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.

A search of the files at the DPR Cultural Heritage Section reveals that there are three major known sites within Pismo SVRA. One site, SLO-199 extends over nearly 25,000 square feet. It is not within one of the major vehicular use patterns, but is being studied for necessary protective measures.

Prehistory.

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 Tishlini, the native name of San Luis Obispo. Pismo and Huasna appear to be derived from Chumash village or area names.

Archaeological data for the San Luis Obispo region indicate that the area was occupied by at least 7000 B.C. The terminal archaeological period, Canalino, began about 2,000 to 3,000 years ago and ended with the Spanish Conquest. There seems little doubt that the Archaeological sites at Pismo SVRA may be assigned to the Canalino period (California Department of Parks and Recreation, 1975).

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 SVRA and 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 the 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 maximum 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.

It is interesting to note that during the Depression years of the 1930's and extending into the 1940's that a colony of artists, writers and others, known as the "Dune-ites" lived just east of the dunes. It is believed that they occupied areas north of the project area east and north of Black Lake. DPR has yet to confirm the actual location of their colony. Further research would undoubtedly be fruitful in establishing the location and history of this colorful group of individuals.

The communities of Shell Beach (northwest) and Oceano (southwest) 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 Hanford, 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 (California Department of Parks and Recreation, 1975).

C. IMPACT ANALYSIS.

Introduction.

The following impact analysis is based on field surveys and a literature search of the project study area. The findings are based on the data developed by staff archaeologist Daniel Bell, of the Department of Parks and Recreation.

Grand Avenue. The Grand Avenue alternative has been developed for park access. The corridor has been graded and paved and currently serves as the northern-most entrance to the park. No known archaeological/cultural resources existed in the corridor prior to its development. No known archaeological/cultural resources exist within the traffic impact zone (ie. beach ramp to hard pack sand) of this corridor.

Minor expansion of this site, as described in Chapter III, would take place in areas already graded and paved. Therefore, no previously undisturbed areas would be affected. The continued use and potential minor expansion of this corridor would not have an adverse effect on archaeological/cultural resources.

Pier Avenue. The Pier Avenue alternative has been developed for park access. The corridor has been graded and paved. This entrance receives the highest number of visitors per year. No known archaeological/cultural resources existed in the corridor prior to its development. No known archaeological/cultural resources exist within the traffic impact zone of this corridor.

Minor expansion of this site, as described in Chapter III, would take place in previously disturbed areas. The area proposed for future expansion now

serves, as a dirt parking lot, commercial building, and paved parking lot. The potential for surface artifacts to exist in the proposed expansion area is low due to the past disturbances associated with development. The continued use and potential minor expansion of this corridor would not have an adverse effect on archaeological/cultural resources.

Railroad Avenue. The Railroad Avenue alternative is only partially developed at the present time. The eastern portion of the corridor is graded and paved, while the western section has been disturbed, but is not developed. The fallow field, proposed for the parking area, has been farmed in the past making the potential for surface artifacts to exist very low. The potential for subsurface artifacts in the field does exist. The portion of the corridor that follows the levee road is considered to have a low potential for archaeological resources, since all of the material used in constructing the levee was imported and substantially disturbed. The area proposed for the western-most bridge could potentially have both surface and subsurface artifacts, although none were detected during this study. Several known archaeological sites could be within the traffic impact zone of this corridor dependent upon final design configurations.

The western portion of this corridor has the potential to contain substantial archaeological/cultural resources. The eastern portion of the corridor is not considered archaeologically sensitive since past farming activities and development have taken place where the entrance is proposed.

Silver Spur Place. The Silver Spur Place alternative is only partially developed at the present time. The eastern portion of the corridor has been in agricultural production for many years and several dirt roads bisect the area. The entire eastern portion of the corridor has a low potential for archaeological/cultural resources due to the on-going and long-term farming activities in the area. Once on the levee the corridor follows the same route as the Railroad Avenue alternative to the beach.

Like the Railroad Avenue alternative the western portion of this corridor has the potential to contain substantial archaeological/cultural resources. The eastern portion of the corridor is not considered archaeologically sensitive

since agricultural production is on-going and some development has taken place in the project area.

Callender Road. The Callender Road alternative is undeveloped, with the exception of the Southern Pacific Railroad tracks which pass through the corridor in a north/south direction. No known archaeological sites are identified as existing within the corridor. In an effort to detect the absence or presence of surface artifacts, the entire corridor was investigated by Daniel Bell of the Department of Parks and Recreation. No archaeological/cultural artifacts were detected during the survey. The potential for subsurface artifacts in the corridor does exist.

The Callender Road alternative is not considered archaeologically sensitive since no known sites occur in the corridor and no surface artifacts were discovered during field investigations associated with the DEIR.

D. MITIGATION MEASURES AND STATEMENT OF SIGNIFICANCE.

Grand Avenue. No mitigation measures are necessary for the Grand Avenue alternative. This alternative would have a less than significant effect on archaeological/cultural resources.

Pier Avenue. No mitigation measures are necessary for the Pier Avenue alternative as it now operates. If the Department expands the entrance in the future, a qualified cultural resource specialist should be present to monitor for subsurface artifacts during the initial grading of new roads and excavation of the footings for the administrative building. If subsurface artifacts were encountered, all construction activities would halt pending recommendations from the project cultural resource specialist. This alternative would have a less than significant effect on archaeological/cultural resources with implementation of measures providing for the monitoring of future development.

Railroad Avenue. Although no surface artifacts were detected in the Railroad Avenue corridor, the potential for subsurface artifacts exists in the open field and in the proposed siting of the western-most bridge. Development of this alternative would require a cultural resource specialist to monitor grading and excavation activities in the field and at the western end of the

corridor. If subsurface artifacts were encountered, all construction activities would halt pending recommendations from the project cultural resource specialist.

To ensure that known archaeological sites in and adjacent to the corridor, in the dune complexes, are not adversely impacted by vehicle movement from the proposed entrance road to the beach strand, the sites shall be protected in the following manner:

1. Signs clearing indicating the entrance route shall be installed;
2. If necessary, protective barriers, such as fencing, vegetation, etc. shall be install between the proposed vehicle route and the sites, and;
3. Beach patrols shall be regulate traffic movement between the entrance road and the beach strand.

This alternative would have a less than significant effect on archaeological/cultural resources with implementation of measures providing for the monitoring of future development and protection of known sites in the dune complexes.

Silver Spur Place. The Silver Spur Place alternative would be subject to the same mitigation measures as those proposed for the Railroad Avenue alternative.

This alternative would have a less than significant effect on archaeological/cultural resources with implementation of measures providing for the monitoring of future development and protection of known sites in the dune complexes.

Callender Road. The Callender Road alternative does not contain any surface artifacts in the proposed development area and no known archaeological since occur within the corridor. However, the potential for subsurface artifacts to occur in the proposed project area does exist. If the Department develops this site in the future, a qualified cultural resource specialist should be present to monitor for subsurface artifacts during the initial grading of new

roads and excavation of the footings for the administrative building. If subsurface artifacts were encountered, all construction activities would halt pending recommendations from the project cultural resource specialist. This alternative would have a less than significant effect on archaeological/cultural resources with implementation of measures providing for the monitoring of future development.

E. RANKING OF CORRIDOR SENSITIVITY.

Railroad Road and Silver Spur Place. The Railroad and Silver Spur Place alternatives are the most sensitive with regards to archaeological/cultural resources. The close proximity of several known archaeological sites to the corridor make the development of these alternatives the most potentially damaging.

Callender Road. The Callender Road alternative corridor does not appear to contain any archaeological/cultural resources. However, since the site is presently undeveloped the potential for undisturbed, subsurface artifacts to occur in the corridor exists. Therefore, development of this alternative may damage resources not detected during field surveys.

Pier Avenue. The Pier Avenue alternative corridor does not appear to contain any archaeological/cultural resources. However, if expansion of the site took place some excavation would be required for the administrative building and grading for the new entrance road. Such activities could disturb subsurface artifacts not detected during this study. Do to the very limited area that would be disturbed, the Pier Avenue alternative is less likely to result in damage to resources than the Callender Road alternative.

Grand Avenue. The Grand Avenue alternative is the least environmentally sensitive corridor with regards to archaeological/cultural resources. This based on the fact that the entire area proposed for expansion has already been graded and paved.

IX. EFFECTS DEEMED EQUAL FOR ALL ALTERNATIVES

A. INTRODUCTION.

This section is intended to describe those resources that will either be equally affected or will remain unchanged regardless of which alternative is developed. The analysis for the following resources is concise due to the limited effect the proposed alternatives are expected to have on such resources. Although these resources have already been dismissed as part of the Notice of Preparation process, a brief narrative is provided to allow a better understanding of the various alternatives in relation to the project study area.

B. SOILS/SEISMICITY/GEOLOGY.

The project study area's geologic structure is complex. The area lies within the structural influence of both the Coast and Transverse ranges. This area had nonmarine sediments deposited in the early Miocene Epoch which were then invaded and covered by the sea during the Tertiary Period and until the end of the Pliocene Epoch. Marine sediments were deposited during the early and middle Pliocene Epoch, and deformation was minor but continual. The Pismo Formation was deposited during this epoch as well. The sea moved inland, resulting in the deposition of the Careaga Sand during the late Pliocene period. During lower Pleistocene time the Paso Robles Formation was deposited. Major deformation and folding took place in the middle Pleistocene, resulting in the partial removal of the Paso Robles Formation in the Arroyo Grande and Nipomo Mesa areas. Geologic conditions became more stable following the middle Pleistocene. The upper Pleistocene time saw extended uplift as evident from the extent and elevation of the areas marine terraces. The sea level lowered during the Wisconsin glacial age, allowing the further entrenchment of coastal river and stream beds. Recent geologic events include the erosion of offshore projecting headlands and sand transport cycles created by wave action and longshore currents. The existing dune complex in the project study area is a result of wind transported sand.

The entire study area is composed of either active or stabilized dune structures. The sand source for the dunes comes from the ocean and is transported either by wind or current. Erosional processes inland provide the material that is transported via river and streambeds to be deposited in the ocean and eventually redeposited on beaches as sand. It is estimated that rivers supply more than 70 percent of the sand to California's beaches. In addition to river transported sand, materials eroded from cliffs supply 1 to 30 percent of beach sand depending on the physical characteristics of the area, and fragmented shell contribute a slight amount of material (Pitcher, 1978).

Dam development on the regional river systems has resulted in a decrease in sand replenishment on beaches in the study area. The overall region from Cape San Martin to the Ventura River now receives less than 50 percent of historic sediment production levels (CA State Department of Water Resources, 1969). This has resulted in decreased sand supply for onshore transport and a possible long-term reduction in relief of the dunes. Studies have shown that many portions of historically active dunes have been stabilized through increased vegetative cover. Those areas where ORV use has been taking place continue to be lacking in vegetative cover.

The formation of dunes and movement of sand along the coast is accomplished by the longshore currents which move sediment in a southeasterly direction parallel to the shoreline. Wave energy moves the sand on the ocean bottom and moves the suspended particles along the coast. The sand is deposited on the beach by wave action and moved inland by wind. The estimated deposition of sand on the beach is 79,000 cubic yards per year between Pismo Beach and Oso Flaco Creek (Pitcher, 1978). The entire dune complex, in which the project study area lies, is known as the Nipomo Dunes. Three specific topographic units have been identified in the study area. They include the Callender, Guadalupe, and Mussel Rock units. Dune movement in the study area ranges from 2 to 16 feet per year depending on the amount of vegetation and disturbance. The more vegetative cover, the less dune movement.

The study area's dominant soil type consist of coastal sand. The study area does not contain any prime agricultural soils and is generally considered marginal for agricultural production.

The study area is located in an area of the California coast that is relatively inactive seismically. However, several active faults capable of producing large magnitude earthquakes exist near the study area. These faults include the San Andreas Fault, Nacimiento Fault, and the Hosgri Fault, which is located offshore. The San Andreas Fault is located approximately 45 miles east of the study area and is capable of producing earthquakes of a magnitude 8.25 on the Richter scale. The Hosgri Fault is capable of producing earthquakes of a magnitude 7.5 on the Richter scale. The Nacimiento Fault has produced an earthquake of magnitude six on the Richter scale in historic times. Portions of this fault are capable of producing earthquakes as large as 7.5 on the Richter scale (Pitcher, 1978).

All of the alternatives being considered in this EIR are subject to the same geologic and seismic conditions. The development of any the alternative access corridors would not require the construction of any large buildings or other structures that would be subject to extensive damage resulting from either the geologic conditions in the study area or from potential seismic activity. No prime agricultural soils are in the project study area and the development of any corridor would not result in a loss or decrease in agricultural production. None of the corridors, except the Callender Road alternative, would intrude upon active dunes or result in the destruction of stabilized dunes. The effects on the geologic resources in the project study area would be less than significant for all the identified alternative corridors.

C. NOISE.

The Pismo State Beach and State Vehicular Recreation Area generates noise as a result of the vehicle related recreation activities that take place on the beach strand and dune play area. The traffic currently travels along the Pier and Grand Avenue corridors to reach the park. Noise generated by this traffic will remain constant or decrease depending upon the final configuration of the entrances to the park. Traffic levels will remain the same regardless of the alternatives chosen as part of this project. An increase in user levels is not proposed as part of this project, therefore, noise levels will remain relatively constant. OHV generated noise is the most substantial in the park. OHVs produce a higher level of noise than standard vehicles. The Grand, Pier,

Railroad Road, and Silver Spur Place alternatives would require that staging of OHVs continue to take place in the dune play area. The Callender Road alternative would provide staging opportunities outside the play area, however, playing would be limited to the SVRA.

The effects of noise generated by park related activities are dependent upon the number and type of receptors in the area and the level, timing, and duration of noise generating activities. The receptors near the Grand Avenue, Pier Avenue, and Railroad Road alternative corridors have similar characteristics. The development of any of these corridors would not substantially increase the noise levels of their respective corridors or adversely affect any of the surrounding receptors. This is based on the assumption that the staging of OHVs will continue to take place in the SVRA and that the development of any of these corridors would not provide camping opportunities near existing development. The Callender Road and Silver Spur Place alternative corridors run through areas that are relatively undeveloped and contain very few potential receptors. The Silver Spur Place alternative would increase traffic noise, however, OHV staging would continue to take place in the SVRA and camping opportunities would not be developed in the corridor. The Callender Road alternative is located in an area that is relatively undeveloped and very few receptors exist near the corridor. Camping and OHV staging opportunities would be developed as part of this alternative. The noise generated by staging OHVs and camping in this corridor would result in an increase in ambient noise levels. However, the lack of receptors in, and the limited number of receptors near the corridor, would result in the effects of noise being equal to those that would be experienced if any of the other alternatives was chosen and developed.

The revving of OHVs generates the highest level of noise that can be attributed to the park, however, ambient noise levels associated with wind and breaking waves decrease the effect of the OHVs. The revving of engines, associated with OHVs, would continue to be restricted to the dune "play area". The majority of noise generated by the park users would be restricted to the play area for all the alternatives being considered as part of this project.

D. HYDROLOGY AND WATER QUALITY.

The project study area has a variety of water resources including freshwater marshes, lagoons, ocean, streams, and lakes. The development associated with any of the alternatives is not water intensive. A typical park entrance would require water for public restrooms and the administrative building. The water usage would be the same for all the alternatives being considered as part of this project. The water usage would be incremental and would not result in the depletion or contamination of public or groundwater supplies regardless of the alternative(s) chosen.

None of the alternative corridors would result in the infill or disturbance of any water body. Beach use would remain the same regardless of the alternative(s) chosen since beach use would continue to take place in the existing patterns. Although the increase in impervious surfaces may increase surface runoff, the increase would be incremental and not directly discharged into any water body. The alternative corridors being considered for this project would not encroach upon any seasonal drainage or water body. Therefore, none of the alternative corridors would have an adverse effect on the existing water resources found in the project study area.

E. UTILITIES/ENERGY.

The development of the Railroad Road, Silver Spur Place, and Callender Road alternatives would require the extension of utilities to the administrative building and other entrance development. The energy demand required to serve the park entrance would be incremental in nature. The community of Oceano, the City of Grover, and the County of San Luis Obispo are capable of providing the additional service that would be required to develop any of the alternative entrances. The development of any of the alternatives would not adversely affect the infrastructure of any local public utility.

The intended use of the park is energy consumptive in nature. OHV and other vehicle operation associated with the park results in the consumption of petroleum products. The alternative corridors being considered as part of this project would not result in a change in energy consumption associated with the park. The number of vehicles associated with the park would remain

the same regardless of which alternative access corridor is chosen for long-term use. All of the alternatives would require the same amount of energy for operation and are therefore equal in terms of energy consumption. The amount of energy necessary to serve a park entrance is comparable to that of a single-family residence. All of the alternatives would have a less than significant effect on energy resources.

F. HAZARDOUS MATERIALS.

The use or storage of hazardous materials would be limited to cleaning solvents for park restroom maintenance. The alternatives would not contain fuel/oil storage facilities or other products that are considered hazardous to public health.

X. GENERAL PLAN AMENDMENTS

A. INTRODUCTION.

The Department of Parks and Recreation, in conjunction with the Off-Highway Vehicle Recreation Division, prepared a joint planning document for the Pismo State Beach and State Vehicular Recreation Area. The plan was completed in 1975. Since that time a number of changes have taken place with regards to park acquisitions, policy, and long-range planning. This chapter is intended to update the Resource Management and General Development Plan for the SVRA. The following changes are based on the activities of park management since 1975 and this DEIR, and are incorporated by reference into the existing plan. The highlighted areas indicated specific changes to the plan. Items in the 1975 General Development and Resource Management Plan that are not mentioned in this chapter will remain as stated.

B. SUMMARY OF RECOMMENDATIONS.

Introduction.

Pages 7 through 12 of the Pismo State Beach and Pismo Dunes State Vehicular Recreation Area General Development Plan and Resource Management Plan outline the predicted long-range development and management of the two park units from a 1975 perspective. Since that time some minor changes in management direction have occurred. The following changes to the plan are incorporated by reference and will be submitted for approval by the State Park Commission and the OHMVR Commission.

1. Controlled vehicle access - Vehicle access shall be controlled through the continued use of both the Grand Avenue and Pier Avenue entrances. Entrance kiosks shall be manned by park personnel during peak hours of operation and admission of vehicles shall be restricted to street legal automobiles. Off-highway vehicles shall be trailered into and out of the SVRA. DPR park staff will continue to patrol the park during hours of park operation.
2. Reduction of vehicle traffic on the beach primarily through:

- a. Development of new access to dunes - Potentially new access corridor(s) into the SVRA shall be considered if park visitation warrants the development. New corridors to be considered are the Railroad Avenue corridor, Silver Spur Place corridor, and/or the Callender Road corridor. No access corridors shall be considered south of the Callender Road corridor.
 - b. Development of off-beach parking - Off-beach parking shall be developed, where feasible, to accommodate walk-in visitors. Areas to be considered shall be the vacant field on the north side of Grand Avenue and adjacent to the existing restaurant, expansion of the existing parking lot at the Pier Avenue entrance, and incorporated into any future entrance design scheme associated with the Callender Road corridor, Railroad Avenue corridor, or Silver Spur Place corridor.
 - c. Reduction in beach camping densities - This is no longer considered an option for reducing vehicle traffic on the beach and shall be deleted from the plan.
 - d. Conversion of one mile of beach to play beach with nonvehicular use - No change.
3. Continuity in administration of recreational lands - This will continue to be a priority of the Department. In an effort to better define passive and recreational uses in the park the Department has agreed to provide the Nature Conservancy a concessions contract to manage the Oso Flaco Lakes area for passive recreational uses. To provide greater continuity, the Department will continue to manage the Union Oil property as a buffer zone for the SVRA.

Camping

1. Oceano and North Beach campgrounds for tent and trailer camping - If future development takes place in the Silver Spur Place or Callender Road corridors, camping facilities would be developed for both tents and trailers.
2. Initially three hundred and twenty, eventually to be reduced to two hundred, primitive beach camping units on the firm sand above high tide

- The current level of beach camping units allowed in the park is five hundred. Changes in the number of camping units in the future will be determined by the Coastal Commission and the San Luis Obispo County Board of Supervisors.

Off-Highway Vehicle Recreation

3. Inland camping area for off-highway vehicle users - Inland camping for off-highway vehicle users shall only take place if the Callender Road or Silver Spur Place corridors are developed in the future. Camping in vegetated back dune areas will be restricted.

Nature Study and Photography

4. Hike-in campground in the Oso Flaco Lakes natural area - The Oso Flaco Lakes natural area shall be managed under a concession contract by the Nature Conservancy. The area shall be managed for day-use only.

Figure 3 - Physical Characteristics - The Physical Characteristics map is updated in this DEIR as Figure 8 in Chapter VI. Biological Resources.

B. EXISTING SITUATION.

Introduction.

The Existing Situation section of the General Development and Resource Management Plan was intended to describe, in detail, the existing conditions of the park in 1975. A number of situations have changed since that time and are reflected in the following updates:

Figure 4 - Ownership and Classification Status - This map has been updated in the DEIR as Figure 5 in Chapter IV. Land Use.

Administration of Lands.

The Nature Conservancy shall be added to the list of entities with regard to administration. The Nature Conservancy, under agreement with the State, shall manage the Oso Flaco Lakes natural area for passive recreational uses.

Subtidal jurisdiction...frontage. - The application by the Department of Parks

and Recreation for control of the subtidal zone fronting the park has been accepted by the State Lands Commission. Therefore, the DPR is now authorized to manage the subtidal area fronting the park.

Public Facilities

3. Beach camping is permitted...to accommodate a maximum of 320 units. - The beach camping area is presently authorized to accommodate a maximum of 500 units. Additional camping would be provided if the Callender Road and/or Silver Spur Place corridors were developed in the future. Camping limits are controlled by terms of Coastal Development Permit #4-82-300. Changes camping levels is subject to approval by the California Coastal Commission and San Luis Obispo County Board of Supervisors.

C. RECREATION USE PATTERNS.

Access and Circulation

Some access...terminates at Oso Flaco Lake, about a half mile from the beach. - The Oso Flaco Lake corridor is gated approximately one mile from the beach. No vehicle access is allowed through the Oso Flaco Lake natural area. This corridor is developed strictly for passive recreational uses.

D. PROBLEMS AND CONFLICTS.

Unit Identity

Pismo State Beach...enforcement problems area increased. - Although various agencies continue to have jurisdiction within the park, signing of areas has helped dramatically in delineating park subunits. For example, signs clearly mark where vehicles are allowed, and the boundary of the SVRA is both fenced and signed.

Control

The Department of Parks and Recreation has made and continues to make every effort to maintain control over the activities within the park unit. Beach patrols, kiosks, and signs indicating allowable uses have all played a role in maintaining a clean, safe, and healthy dune environment for all park users.

To ensure that user conflicts do not arise in the future, the Department will continue its public education programs through leaflets and bulletins, as well as by adequately patrolling the park. The successful control of the park will be of highest priority as park popularity and user numbers increase. Control of park access is important in maintaining good relations with the surrounding local community: in preventing trespassing on private property; not allowing degradation of the area's natural ecosystems; and in providing a safe recreational environment.

E. RESOURCE ANALYSIS AND RESOURCE MANAGEMENT PLAN.

Introduction.

The resource analysis contained in this DEIR shall be incorporated, in whole, into the General Development and Resource Management Plan. The information contained in the DEIR substantially expands upon the resource analysis contained in the 1975 plan. Therefore, the DEIR will serve as the Environmental Resources section of the plan.

Biotic Associations - Chapter VI. Biological Resources, shall be incorporated into the plan.

Geology and Geomorphology - Chapter IX. Effects Deemed Equal For All Alternatives, shall be incorporated into the plan.

Scenic Resources - Chapter V. Visual Resources, shall be incorporated into the plan.

Cultural Resources - Chapter VIII. Cultural Resources, shall be incorporated into the plan.

In addition, Chapter VII. Traffic and Air Quality, shall be incorporated into the plan.

F. PLAN ANALYSIS.

Introduction.

The Plan Analysis portion of the General Development and Resource Management Plan is intended to outline the process by which the entire plan can be

carried out. To date the strategies outlined in the Plan Analysis have been generally followed. Some changes have taken place in terms of access and camping, however, the majority of this chapter has been relatively unaffected by developments taking place since its writing.

Control

In an effort to exercise adequate control over the activities within the park, the Department has implemented a three-step strategy that includes appropriate signing and delineation of park subunits, utilizing beach patrols, and controlling access through manned kiosks at each entrance.

Beach Day Use

Use patterns between Grand Avenue and Ocean View Avenue are presently limited to non-vehicular day use. The area along the beach between these two entrances was at one time open to vehicular beach touring, however, the increased number of walk-in day users resulted in user conflicts and a number of public safety issues. Therefore, the Ocean View beach ramp has been closed and vehicles are now restricted from driving north of Grand Avenue.

G. BEACH DAY USE.

Day Use Staging Areas

The issue of day use staging for OHVs has been an on-going issue since the Department of Parks and Recreation became responsible for the SVRA. In 1982 the California Coastal Commission required the Department to identify the least environmentally damaging staging area. Such a staging area has been established in the SVRA and is currently being utilized. However, staging areas that could be developed in the future include the Callender Road corridor and Silver Spur Place corridor. Both of these areas would be more environmentally damaging than the existing staging area, but should not be eliminated from consideration due to a potential increase in OHV users visiting the park and/or changes in the environmental conditions associated with the corridors.

Administrative Facilities

Administrative facilities should be constructed at the Pier Avenue entrance as indicated in Conceptual Drawing 1. The 3,000 square foot building would provide office space for administrative staff and an interpretive center for the park. Development in the Railroad Avenue, Silver Spur Place, and Callender Road corridors should include the construction of an administrative center if undertaken in the future.

H. OVERNIGHT USE.

Back-Dune Camping (Passenger Car Access)

Stabilized (vegetated) back-dune camping for passenger cars should not be implemented as part of the long-range park plan. Back-dune camping would result in the dissection of sensitive biological communities and potentially result in decreased and/or incidental take of sensitive vegetative or wildlife species.

Back-Dune Overflow Camping (Passenger Car Access)

Stabilized (vegetated) back-dune overflow camping should not be implemented as part of the long-range park plan. The overflow camping would result in both logistical and environmental problems as described above. The Department should continue to utilize the Ticketron reservation system. Use of this system will inform potential visitors when the park campgrounds are full and in most instances relieve the park and surrounding communities from overflow situations.

Inland Camping (Conventional Campgrounds)

The Silver Spur Place and Callender Road corridors could provide opportunities for development of inland camping facilities in the future.

Hike-in Camping

Hike-in camping could be developed south of the SVRA. Since this area is soon to be managed by the Nature Conservancy, the camping areas would not be developed in the near future. However, potential hike-in camping could take

place on the beach strand north of the Santa Maria River and south of the SVRA with few improvements (ie. chemical toilets).

I. ACCESS.

Primary access to the Pismo Dunes State Vehicular Recreation Area

The primary access to the SVRA should continue to be through the existing Grand Avenue and Pier Avenue entrances. Each entrance could be expanded to include two kiosks and entrance lanes to allow a better flow of traffic onto the beach and off of each respective road. In addition, the Pier Avenue entrance should be developed with a 3,000 square foot administrative building that also contains an interpretive center for the park. Additional parking should be developed on the northern edge of this corridor.

Oso Flaco Lake Road shall no longer be considered a potential entrance to the SVRA. Long-range management goals have been developed to rehabilitate and preserve the unique freshwater lake system and surrounding dune complex for passive recreational uses. The area has been dedicated to uses such as nature study, photography, hiking, and other passive activities.

Secondary Access to Pismo Dunes State Vehicular Recreation Area

Secondary access to the SVRA has been a concern of the Department and community for several years. Secondary access should be in an area south of Arroyo Grande Creek so that access to the SVRA can still occur even when the creek is restricting passage on the beach. The DPR has expressed concern regarding the problems of access to the SVRA following rains and during unusually high tides. Although restricted access to the SVRA occurs only occasionally, the need for an alternative entrance south of Arroyo Grande Creek is desirable. Three such corridors could provide access to the SVRA while avoiding the constraints posed by Arroyo Grande Creek. These include the Railroad Avenue corridor, the Silver Spur Place corridor, and the Callender Road corridor. Although the Silver Spur Place and Railroad Avenue corridors run along the northern edge of the creek for a portion of their length, both would cross over Arroyo Grande Creek via a bridge structure before reaching the beach.

A secondary entrance south of Arroyo Grande Creek would help dramatically in reducing beach vehicle traffic on the beach strand to the north. This area has historically been congested from activities such as beach touring and transporting of OHV(s) south to the SVRA. Conflicts arising between walk-in beach users and vehicles are a continuing management concern for the Department. Developing an entrance to the south would reduce the number of conflicts arising from traffic congestion on the beach.

The Department of Parks and Recreation, OHMVR Division, should consider the Silver Spur Place corridor, the Callender Road corridor, and/or the Railroad Avenue corridor, as described in this DEIR, for future development as a secondary access to the Pismo Dunes SVRA.

J. PLAN ELEMENTS.

Introduction.

The Plan Elements section of the General Development and Resource Management Plan outlines the long-range development and management schemes for the Pismo State Beach and Pismo Dunes State Vehicular Recreation Area. This section shall consider only those elements related to the SVRA. The following amendments, deletions, and additions shall be incorporated into the plan by reference. Plan amendments shall be highlighted.

Access

1. Initially provide temporary access to Pismo Dunes SVRA from Oso Flaco Road. When feasible, provide an access from Highway 1 in the vicinity of the Union Oil Company refinery. - Primary entrance to both the Pismo State Beach and Pismo Dunes SVRA shall be via the Grand Avenue and Pier Avenue entrances. The Grand Avenue corridor has been identified as the least environmentally damaging access to the park as a result of the analysis carried out in this DEIR, which was required by the California Coastal Commission pursuant to Coastal Development Permits #4-82-300, 4-82-300A, and 4-82-300A2. Access from Highway 1 in the vicinity of the Union Oil Company refinery could be developed in the Callender Road

corridor, which is the most environmentally damaging access corridor considered in the DEIR. Additional access points may be considered in the Silver Spur Place and Railroad Avenue corridors.

2. For special purpose recreational use in connection with competition events and camping, provide access to dunes via Oso Flaco Lake Causeway.
- No vehicle access shall be permitted via the Oso Flaco Lake Causeway. The causeway shall be gated, allowing only walk-in day use.

Acquisition

2. Acquire 1,400 acres of private land, including Union Oil Company properties...for protection of scenic, archaeological, and natural areas. - The Department has purchased 1,524 acres in the Oso Flaco Lakes region. An additional 637 acres are managed through an agreement with the Union Oil Company as a buffer area. Of the 1,524 acres purchased approximately 1,000 acres are dedicated to passive recreational uses and serve to protect the scenic, archaeological, and natural resources found in the Oso Flaco Lakes area.
5. Acquire 637 acres of Union Oil Company properties currently managed. This parcel of land could serve as a future entrance corridor as described by the Callender Road alternative in this DEIR. Alternative uses could consist of an inland campground, hiking trails, an equestrian staging area, and other passive recreational uses.
6. Acquire properties adjacent to the Dune Preserve at the terminus of Silver Spur Place. This parcel of land could serve as a future entrance corridor as described by the Silver Spur Place alternative in this DEIR. Alternative uses could consist of an inland campground, hiking trails, an equestrian staging area, a buffer zone for the Dune Preserve, and other passive recreational uses.

K. OFF-HIGHWAY VEHICLE USE IN SAND DUNES.

Overnight Use

1. One back-dune camping area with passenger vehicle access to accommodate 300 camping units. - Stabilized (vegetated) back-dune camping shall be restricted.
3. One back-dune camping area designed to accommodate 380 units during relatively few days each year on which large numbers of campers congregate in the Pismo area. - Stabilized (vegetated) back-dune camping shall be restricted. The Department should seek to develop inland camping facilities with hiking trail access to the beach. Such facilities could be developed in the Callender Road corridor or the Silver Spur Place corridor.

L. PASSIVE RECREATIONAL USES IN OSO FLACO LAKE AREA.

Day Use

1. Parking area near Jack Lake to accommodate 30 vehicles. - No development will take place near Jack Lake.

Overnight Use

Hike-in campground suitable for family and (small) group use to accommodate 50 persons. - Campground development within the Oso Flaco Lake area should be primitive in design and located near the beach strand. No stabilized (vegetated) back-dune camping shall be developed in or immediately adjacent to vegetated dune structures.

Administrative Facilities

1. Provide initial-phase entrance station at Oso Flaco Lake. A future-phase entrance station will be located at Highway 1 access. - Entrance station development at Oso Flaco Lake shall not be developed by the Department of Parks and Recreation. The two existing entrance stations shall remain open at the Grand Avenue and Pier Avenue entrances and function as the primary entrances to the Pismo State Beach and SVRA.

Future entrance stations will be incorporated into the design of alternative entrances developed for the SVRA.

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. - An Oso Flaco entrance is no longer being considered by the Department for the SVRA. Future siting of the maintenance and residence area will not be located in the SVRA. The maintenance and residence area will remain within the Department of Parks and Recreation's existing campground approximately a mile north of the Pier Avenue entrance. A future maintenance yard may be incorporated into a new entrance design in either the Callender Road corridor or Silver Spur Place corridor.

Fees

The Department of Parks and Recreation has developed the following fee schedule for the Pismo State Beach and Pismo Dunes State Vehicular Recreation Area which is subject to change by the Director of the California Department of Parks and Recreation:

Day Use - \$3.00

Overnight Use - \$5.00

XI. MANDATORY FINDINGS

A. UNAVOIDABLE ADVERSE ENVIRONMENTAL EFFECTS.

The identification of the least environmentally damaging access corridor into the Pismo Dunes SVRA does not result in any unavoidable adverse environmental effects. The General Development Plan and Resource Management Plan updates providing for the continued use or minor expansion of the Grand Avenue and Pier Avenue alternatives do not result in unavoidable adverse environmental effects. If the Callendar Road, Railroad Avenue, and/or Silver Spur Place alternatives were developed in the future, unavoidable adverse environmental effects may occur. Development of the Callendar Road alternative would result in unavoidable adverse environmental effects on biological resources and possibly land use. Development of the Railroad Avenue alternative may also result in unavoidable adverse environmental effects on land use. Development of the Silver Spur Place alternative would result in the loss of some prime agricultural land, an unavoidable adverse environmental effect. The development of any new entrance is not proposed for the near future since the level of service at the existing entrances continues to be high and the existing entrances provide the least environmentally damaging access points into the Pismo Dunes SVRA.

B. SHORT TERM USE VS. LONG TERM PRODUCTIVITY.

The preferred alternatives, Grand Avenue and Pier Avenue, would not result in a short-term use that will limit the long term productivity of the environment in the project study area. The continued use of both Grand Avenue and Pier Avenue does not decrease the long-term productivity of the environment since any new development in these corridors would be minor and in areas already developed for other uses.

The potential development of the Silver Spur Place alternative would result in the loss of some prime agricultural land which would decrease the long-term productivity of the area in terms of agricultural production. However, the long-term productivity of the biological resources occurring in the area could

be enhanced through appropriate landscaping and resource management. The combined decrease in agricultural practices (ie. fertilizing, pest control, harvesting, etc.) and development of potential wildlife habitat through landscaping activities may increase the long-term productivity of the environment.

The Railroad Avenue and Callender Road alternatives would not result in a short-term use that would decrease long-term productivity. The development of these alternatives would require improving existing roads, developing parking areas, and associated infrastructure to provide an entrance to the SVRA. However, the development of either corridor would be offset by a decrease in use at one of the existing entrances. Furthermore, both entrances would utilize sand roads through areas of biological sensitivity. If these roads were no longer needed or used in the future the areas could be revegetated with native species of plants and the long-term productivity of the site would be preserved.

C. SIGNIFICANT IRREVERSIBLE CHANGES.

The continued operation and potential expansion of both Pier Avenue and Grand Avenue would not result in any significant irreversible changes to the environment. This is based on the fact that no sensitive plant or animal species will be adversely effected if the Department of Parks and Recreation continues to use these existing entrances.

If Silver Spur Place were developed the loss of prime agricultural land would constitute a significant irreversible change.

Both the Callender Road and Railroad Avenue alternatives would have some significant effects on the environment, however, none of these are considered irreversible since the area could be restored if the entrances were retired.

D. GROWTH INDUCEMENT.

The proposed project is intended only to serve as an access corridor into the Pismo Dunes SVRA. The continue use of two existing entrances or development

of an additional entrance would not individually or cumulatively induce significant new growth in the project area. The development and operation of a park entrance is not labor intensive and would not provide new jobs in the area, therefore, the project would not result in significant migration of people into the project area or induce growth.

E. CUMULATIVE EFFECTS.

The proposed project would not result in an adverse cumulative effect on the environment. No new development will take place at the two existing entrances unless future recreational demands require such improvements to continue the same level of service which the Department provides today. If a new entrance is constructed in the future south of the existing entrances, it is likely that the Grand Avenue entrance would serve only as a pedestrian access point. Therefore, potential cumulative effects would be offset by the decreased use of an existing entrance. The number of visitors to the park is not anticipated to change dramatically in the future regardless of the location and/or number of entrances to the SVRA.



XII. PERSONS CONTACTED

1. Henry Ortmann, Department of Parks and Recreation, OHMVR Div.
2. Lester Maddox, Department of Parks and Recreation, OHMVR Div.
3. Donald Patton, Department of Parks and Recreation, OHMVR Div.
4. Patricia Beck, San Luis Obispo County Planning Department
5. Ellen Rognas, San Luis Obispo County Planning Department
6. Diana Gould, San Luis Obispo County Air Pollution Control District
7. Larry Allen, San Luis Obispo County Air Pollution Control District
8. Mary Tanner, California Coastal Commission
9. James Johnson, California Coastal Commission
10. Les Strnad, California Coastal Commission
11. Mr. Michael Kutilek, CSU San Jose
12. Mr. Howard Shellhammer, CSU San Jose
13. Mr. Art Diamond, California Air Resources Board
14. Pat Beck, Principal Planner, County of San Luis Obispo Planning Department
15. Michael Drazee, Senior Planner, County of San Luis Obispo Planning Department
16. Ted Bench, Planner, County of San Luis Obispo Planning Department
17. Jacquelyn Hulsey, Airport Operations Supervisor, Department of General Services, San Luis Obispo County
18. Bill Reason, Chief of Airports, Division of Aeronautics, California Department of Transportation
19. Dale Sutliff, Professor, Landscape Architecture Department, California Polytechnic University, San Luis Obispo.
20. Paul Hood, Executive Director, San Luis Obispo Local Agency Formation Commission
21. Berkley Brannon, Director, Oceano Community Services District
22. Tom Sullivan, Director of Planning, City of Grover City.
23. Harold Guiton, Oceano Sand Company
24. Diana Kaljumagi, Student Assistant, Farmland Mapping Program, Department of Conservation

XIII. LIST OF PREPARERS

Document Preparers:

1. Jeff Martinez, Department of General Services, OPDM
2. Marji Feliz, Department of General Services, OPDM

Word Processing:

1. Sandra Acox, Department of General Services, OPDM

XIV. REFERENCES

1. Airport Land Use Commission: Airport Land Use Plan for the Oceano County Airport; February 1976.
2. Technical Support Division: State and Local Air Monitoring Network Plan; California Air Resources Board, Sacramento, CA, 1990.
3. Technical Support Division: Areas Designations for State and National Air Quality Standards; California Air Resources Board, Sacramento, CA 1989.
4. City of Arroyo Grande: City of Arroyo Grande General Plan, Circulation Element; Arroyo Grande, CA, 1986.
5. Arroyo Grande Planning Department and Planning Network: City of Arroyo Grande General Plan; Arroyo Grande, CA, 1990.
6. Bell, Daniel: An Archeological Inventory of a Portion of Pismo Dunes SVRA Access Alternative 5: (Parcel Adjacent to Unocal Refinery); The Resources Agency, Department of Parks and Recreation, Sacramento, CA, 1991.
7. Carreker, Raymond: Habitat Suitability Index Models: Least Tern; U.S. Department of the Interior, Fish and Wildlife Service, Fort Collins, CO, 1985.
8. Chipping, David H. and McCoy Randy: Coastal Sand Dune Complexes, Pismo Beach and Monterey Bay; Calpoly San Luis Obispo, San Luis Obispo, CA, 1982.
9. Office of Land Conservation: 1986-88 Farmland Conversion Report, Farmland Mapping and Monitoring Program; Department of Conservation, Sacramento, CA, 1989.
10. California Department of Fish and Game: Natural Diversity Data Base Search of the Oceano, Arroyo Grande, and Pismo Beach Quads; The Resources Agency, Sacramento, CA, 1990.
11. Grover City Planning Department: Grover City Local Coastal Program; Grover City, CA, 1981.
12. Kutilek Michael, Shellhammer Howard, and Bros William: Inventory, Wildlife Habitat Protection Program, and Monitoring Program for Pismo Dunes State Vehicular Recreation Area, California; CSU San Jose, San Jose, CA, 1991.
13. Kutilek, Michael and Shellhammer, Howard: Biological Evaluation of Access Corridor to Pismo Dunes State Beach and State Vehicular Recreation Area; CSU San Jose, San Jose, CA, 1991.
14. Department of Parks and Recreation: Pismo State Beach and Pismo Dunes State Vehicular Recreation Area General Development Plan and Resource Management Plan; The Resources Agency, Sacramento, CA, 1975.
15. Department of Parks and Recreation: Biennial Report on the Status of OHV Recreation in California 1987-88 and 1988-89; The Resources Agency, Sacramento, CA, 1991.

16. Department of Parks and Recreation: Pismo Dunes State Vehicular Recreation Area Proposals to be Considered for a Permanent Entrance; The Resources Agency, Sacramento, CA 1988.
17. Department of Parks and Recreation: Off-Highway Motor Vehicle Recreation User Survey; The Resources Agency, Sacramento, CA, 1989.
18. Department of Parks and Recreation: Proposed Amendment to General Development Plan for Pismo State Beach and Pismo Dunes State Vehicular Recreation Area; The Resources Agency, Sacramento, CA, 1982.
19. Pritcher, Donald C.: Final Environmental Impact Report for the Pismo State Beach and Pismo Dunes State Vehicular Recreation Area Land Acquisition and Development; The Resources Agency, California Department of Parks and Recreation, Sacramento, CA, 1978.
20. San Luis Obispo County Planning Department: Land Use Element and Local Coastal Plan - South County Planning Area; San Luis Obispo, CA, 1988.
21. San Luis Obispo County Planning Department: Land Use Element and Local Coastal Plan - San Luis Bay Planning Area; San Luis Obispo, CA, 1988.
22. San Luis Obispo County Planning Department: Land Use Element and Coastal Plan Policies; San Luis Obispo, CA, 1988.
23. San Luis Obispo County Department of Planning and Building: Allowable Land Uses in the Coastal Zone of the County; San Luis Obispo, CA, 1991.
24. Smith, Kent: The Natural Resources of the Nipomo Dunes and Wetlands; California Department of Fish and Game, Sacramento, CA, 1976.
25. California Department of Transportation, District 5: Negative Declaration/Finding of No Significant Impact for Curve Improvements at Callender Road Route 01 Post Miles 6.3 to 7.6, San Luis Obispo; Caltrans, San Luis Obispo, CA, 1986.

APPENDIX 1



DEPARTMENT OF PARKS AND RECREATION

P.O. BOX 942896

SACRAMENTO 94296-0001



NOTICE OF PREPARATION

To: All Interested Agencies

From: California Department of Parks and Recreation
Division of Off-Highway Motor Vehicle Recreation
P.O. Box 942896, 1416 Ninth Street
Sacramento, CA 94296-0001

Project Title: Pismo State Beach General Development Plan and
Resource Management Plan Update

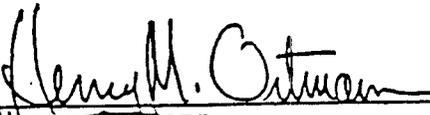
The California Department of Parks and Recreation (DPR) will serve as the Lead Agency during the preparation of the Draft Environmental Impact Report for the project identified above. The DPR needs to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use this Draft EIR when considering your permit or other approval for the project.

The project description, location, and probable environmental effects are contained in the attached materials. Since it has been determined that an EIR will be prepared on the project, an Initial Environmental Study is not required (See Section 15063(a) of the CEQA Guidelines).

Due to the time limits related to this case, your response must be sent at the earliest possible date, but no later than 30 days after the receipt of this notice.

Please send your response to Jeff Martinez, EIR Project Manager, at the following address:

Department of General Services
Office of Project Development and Management
400 P Street, Suite 3460
Sacramento, CA 95814

 12/4/90
Henry Ormann
Senior Landscape Architect

PROJECT SUMMARY

DEPARTMENT OF PARKS AND RECREATION

PISMO STATE BEACH STATE VEHICULAR RECREATION AREA GENERAL DEVELOPMENT PLAN AND RESOURCE MANAGEMENT PLAN UPDATE PROJECT SAN LUIS OBISPO COUNTY

Project Purpose.

The Department of Parks and Recreation (DPR) proposes to update the General Development Plan and Resource Management Plan for the Pismo State Beach and State Vehicular Recreation Area (SVRA). The update will focus on the changes necessary to comply with the Coastal Development Permit (CDP# 4-82-300) issued for the park development in 1982. The CDP stipulated that the least environmentally sensitive access corridor and staging area be identified and utilized for the off-road recreational activities associated with the State Vehicular Recreation Area. Other conditions imposed as part of the CDP include the development of a method to identify camper units within the park and prepare an annual report specifying the effects of recreational activities on dune and wetland resources found in and adjacent to the park.

The Environmental Impact Report (EIR) will address the environmental effects associated with alternative access corridors and staging areas. Two existing corridors and one existing staging area will also be analyzed. The EIR will focus on the development standards, circulation elements and resource management sections of the existing General Development and Resource Management Plans. The Department of Parks and Recreation is currently in the process of completing a study that will satisfy the CDP condition for annual reports addressing resource impacts related to recreational use. The methodology for identifying and regulating camper units within the park will be developed by the Department of Parks and Recreation separate from this EIR.

Project Background.

The Department of Parks and Recreation, Division of Off-Highway Motor Vehicle Recreation, has developed an off-highway vehicle (OHV) recreation area in the Pismo Dunes vicinity in San Luis Obispo County (See Figure 1). In 1975 DPR adopted a General Plan that was to guide the development and operation of Pismo State Beach and Pismo SVRA. That plan specified that the primary entrance to the SVRA would be developed at Callendar Road and secondary entrances would be along the beach via the existing entrances at Pier and Grand Avenues. The causeway that runs through the Oso Flaco Lake dune area was also to be used as an entrance. In 1982, DPR sought a permit from the California Coastal Commission (CCC) for some minor construction activities. In response the CCC issued a Coastal Development Permit (CDP) with a variety of conditions imposed, one of which was that DPR identify the least environmentally damaging entrance to the SVRA. Consideration of an entrance in the Oso Flaco Lake vicinity was to be specifically excluded and the existing Oso Flaco Lake causeway entrance was to be closed. DPR has met the

operational conditions of the CDP, however, the studies necessary to identify the least environmentally damaging entrance have not been carried out. This EIR will provide the information necessary to make that determination. Since the inception of the SVRA the two existing access points (Pier & Grand Avenues) have provided a cost effective and timely option to immediately begin public OHV recreational use in the dune "play area". The initial staging area (ie. loading and unloading zone) was located on the beach. Since that time the DPR has relocated the staging area to the dune play area. At the present time an individual wishing to recreate or camp in the dunes would be required to enter at either Grand or Pier Avenue and drive his/her vehicle to the State Vehicle Recreation Area boundary before unloading the OHV(s). The OHV(s) would then need to be reloaded prior to leaving the SVRA boundaries.

Although the use of the existing access points was timely and cost effective it has resulted in some problems. During high use periods (ie. holidays) the existing access points become congested. San Luis Obispo County, Grover City and Oceano have all expressed concerns regarding traffic congestion in and around Grand and Pier Avenues. It is anticipated that the subject plan amendments will identify some means of alleviating traffic related problems during high use periods.

In an effort to comply with the CDP and update the existing park development plans the Environmental Impact Report will address the environmental concerns associated with alternative plan schemes. Past consultation with the California Coastal Commission and other trustee agencies has resulted in the identification of five potential access corridors and staging areas (See Figure 2). Included in the analysis are the Grand and Pier Avenue entrances both of which are currently used for park access.

Project Location.

The project site is located in the southwestern portion San Luis Obispo County. The project study area would run from Grand Avenue (north) near Pismo Beach to the Callendar Road area (south). In general the study area is bounded by the Southern Pacific Railroad (east) and bordered by the Pacific Ocean to the west (See Figure 3). Communities adjacent to the study area include Pismo Beach, Grover City, Oceano and Arroyo Grande. Major arterials in the area include Highways 101 and 1.

Project Alternatives.

The EIR will discuss several alternative General Plan strategies for the State Vehicular Recreation Area. Since the proposed project is the updating of the existing plans, the no project alternative would consist of allowing the existing development and management plans to remain unchanged. The project alternatives will consist entirely of alternative long-term plan schemes. The EIR will address the effects of alternative access corridors and staging areas for the park. Based on these findings, management schemes, reflected in General Development and Resource Management Plan Updates, will be discussed and analyzed. Therefore, the project alternatives will stem from the identification and analysis of alternative access corridors and staging areas. The two existing access corridors and staging area will be analyzed along with several alternative corridors. The alternative corridors targeted for further study will be drawn from the Callendar Road area, lands immediately south of

Arroyo Grande Creek, and the two existing corridors (See Figure 2). Based on public input and agency concerns resulting from this Notice of Preparation additional corridors may be analyzed as part of this EIR.

Probable Environmental Effects.

The EIR to be prepared for the Pismo State Beach, State Vehicular Recreation Area General Development and Resource Management Plan Updates Project will address a broad range of potential environmental impacts that could result from long-term management policies. It is anticipated that this analysis will cover such issues as: land use compatibility; visual resources; traffic; soils; geology; hydrology; biological resources; and cultural resources. The EIR will also identify mitigation measures that will either avoid or substantially lessen the effects of any potentially significant environmental impacts of the General Development and Resource Management Plan Updates.

Based on initial environmental studies conducted for this project, specific environmental issues that staff has determined in advance will be addressed in the EIR in detail will include:

1. Biological Resources. The regional study area being considered for the proposed project contains both urbanized and native dune environments. The eastern edge of the study area is developed in urban and agricultural land uses while the western boundary is the Pacific Ocean. Arroyo Grande Creek runs through the northern portion of the study area and a number of freshwater lakes are located in the eastern and southern portions of the study area.

Vegetative communities include the active coastal dune, southern foredune, central dune scrub, central coastal scrub and several disturbed areas. The study area contains both stabilized and unstabilized dune formations.

Sensitive plant species that potentially occur in the study area include San Luis Mariposa lily (Calochortus obispoensis), marsh sandwort (Arenaria paludicola), beach spectacle pod (Dithyrea maritima), Gambell's yellow cress (Rorippa gambellii), shag-bark manzanita (Arctostaphylos rudis), Nipomo mesa lupine (Lupinus nipomensis), Pismo clarkia (Clarkia speciosa ssp.), San Luis Obispo County monardella (Monardella undulata var. frutescens), crisp monardella (Monardella crispa), soft-leaved indian paintbrush (Castilleja mollis), short-lobed broomrape (Orobanche parishii ssp. brachyloba), La Graciosa thistle (Cirsium loncholepis), and surf thistle (Cirsium rhotophilum).

Sensitive wildlife species that potentially occur in the study area include southwestern pond turtle (Clemmys marmorata pallida), California black rail (Laterallus jamaicensis coturniculus), snowy plover (Charadrius alexandrinus nivosus), California least tern (Sterna antillarum browni), monarch butterfly (Danaus plexippus), and white sand bear scarab beetle (Lichnanthe albipilosa).

The subject EIR will identify the presence of, and evaluate the potential impacts to, sensitive plant and animal species in the project study area. During the preparation of the environmental impact report, staff will consult with the Department of Fish and Game and the U.S. Fish and Wildlife Service regarding the potential effect of the project on sensitive biological resources.

2. Geology/Soils/Seismicity. -The eastern portion of the project study area is dominated by active and stabilized dune formations, while the western portion consist of subtidal and intertidal zones.

The subject EIR will identify geological and seismic profiles of the study area and the potential effects of those characteristics on the proposed project. Issues such as soil erosion, compaction and liquefaction will be addressed in the EIR.

3. Air Quality/Traffic/Noise. The proposed project could potentially reconfigure existing traffic circulation if a new access corridor is developed. The effects of high volume traffic on local arterials will be determined during the preparation of this EIR. The peak use periods of the year may result in substantial changes to the existing traffic patterns in and around the park if the existing entrances are removed from service or expanded. It will be determined to what extent the development of a new kiosk and associated facilities would ease traffic related impacts. Air quality and noise effects will be studied to determine if future management polices would substantially impact the project area.

The subject EIR will identify existing levels of service (LOS) for the arterials affected by the existing park entrances and the proposed new entrances. Based on the existing LOS an impact analysis will be developed to determine the future capacity of each alternative entrance and staging area and the long-term impact on local traffic patterns. Vehicle emissions will be calculated using a modelling program approved by the California Air Resources Board.

4. Visual Resources. The development of a new entrance and staging area for the park would require the construction of roads, parking areas, unloading and loading areas, kiosk, and signage. The use of the existing entrances may also require construction activities to provide facilities sufficient to meet future demands. Visual receptors in the surrounding commercial, agricultural and residential developments would have views of the new developments. Travelers on Highways 101 and 1 may also have brief views of the new development. A landscape architect will be retained to provide conceptual drawings of each alternative. Based on these drawings, a visual analysis will be carried out taking into consideration the existing landscape, number and type of viewers, and project contrast.

5. Land Use Compatibility. The County of San Luis Obispo, the Cities of Pismo Beach, Oceano, Arroyo Grande and the California Coastal Commission all have land use jurisdiction in the project study area.

The proposed project appears to comply with the County of San Luis Obispo General Plan and certified Local Coastal Program as adopted by the California Coastal Commission. Surrounding land uses consist of agricultural, commercial, recreational and residential. The proposed project would be consistent with the existing surrounding land uses.

The subject EIR will analyze the potential conflicts between the park development and surrounding land uses. Local land use agencies will be consulted during the preparation of this EIR to determine if land use conflict could potentially occur as a

result of developing a new entrance and staging area or continuing the use of the existing entrances.

6. Cultural Resources. The proposed study area contains recorded archaeological sites. A comprehensive records search and site surveys will be carried out to determine the significance of the sites that are known to exist within the study area and determine if any additional sites are within any study corridor. Dependent upon the background records search, site specific cultural resource reconnaissance will be performed by a qualified cultural resource specialist. If archaeological/cultural resources are found within the preferred corridor appropriate mitigation measures will be developed to ensure that impacts to such resources are kept to a minimum.

This list of probable environmental effects is not meant to be completely inclusive. Subsequent environmental studies that will be prepared as part of the Environmental Impact Report process may reveal additional issues that need to be addressed in this document or may result in issues being dismissed because they are clearly insignificant.

Additional Information. Questions pertaining to the conceptual design or operational characteristics of the proposed project should be directed to Jeff Martinez at (916) 445-0788 or (916) 265-5923 in the Office of Project Development and Management.

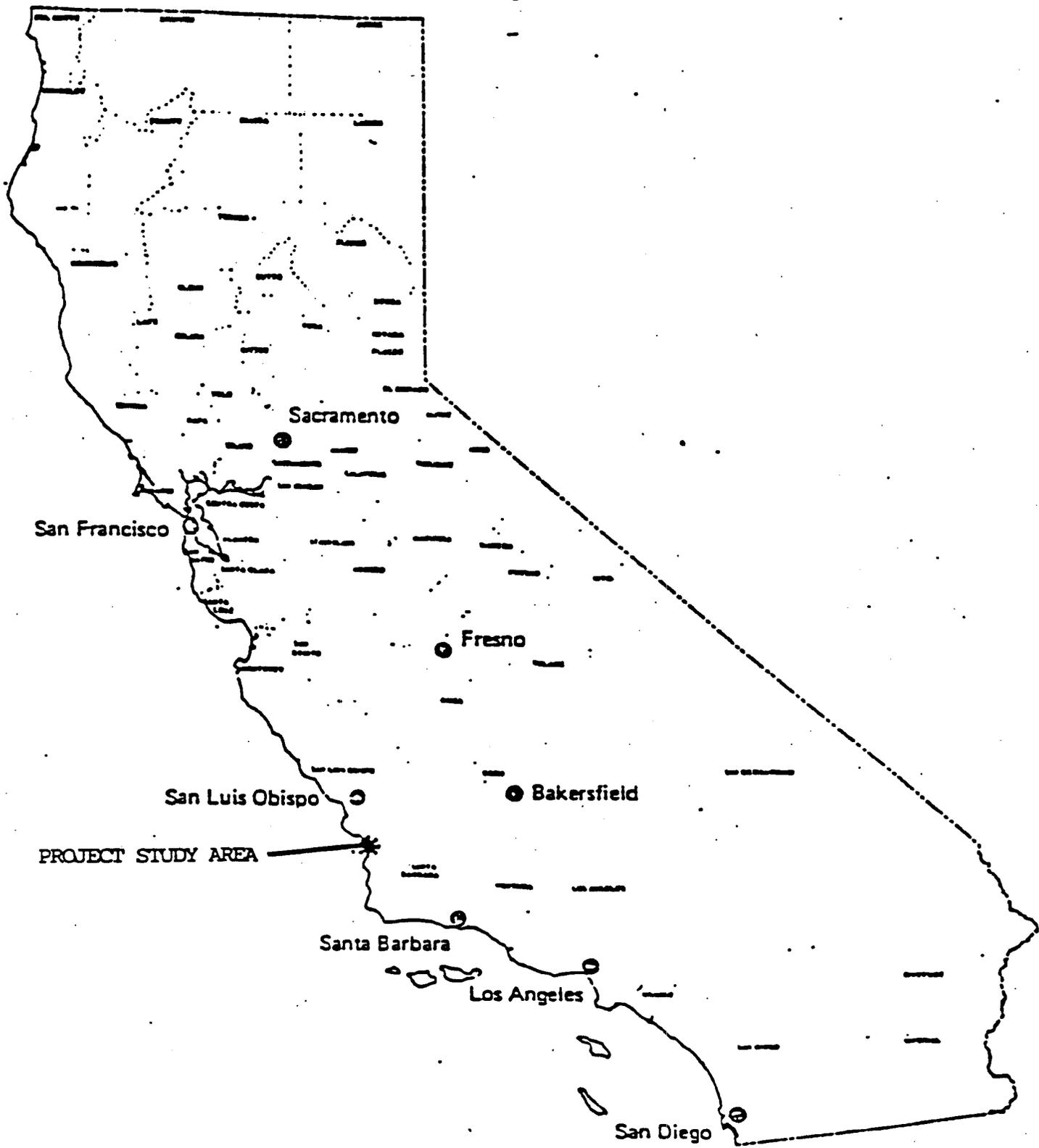
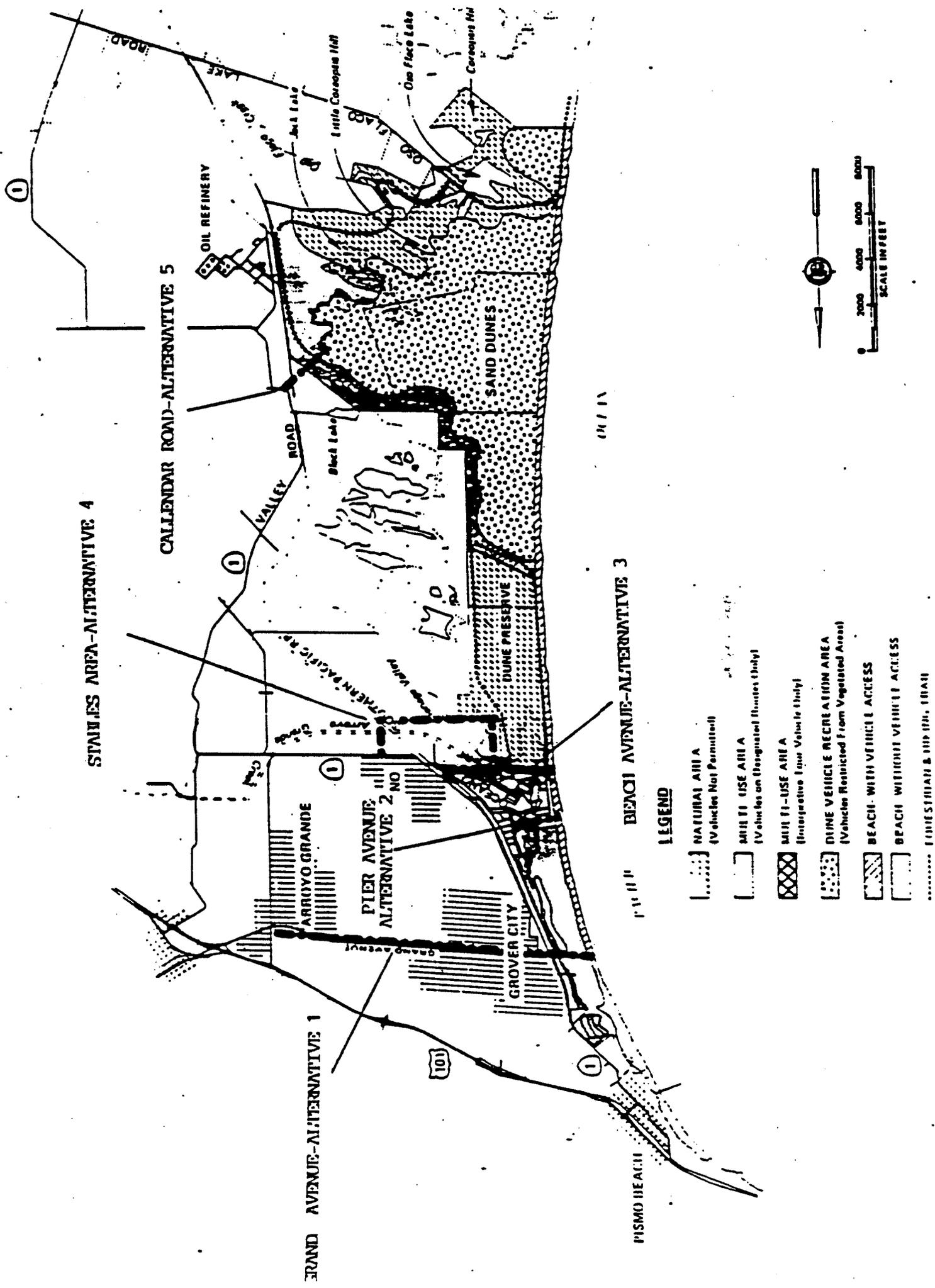


FIGURE 1
LOCATION MAP



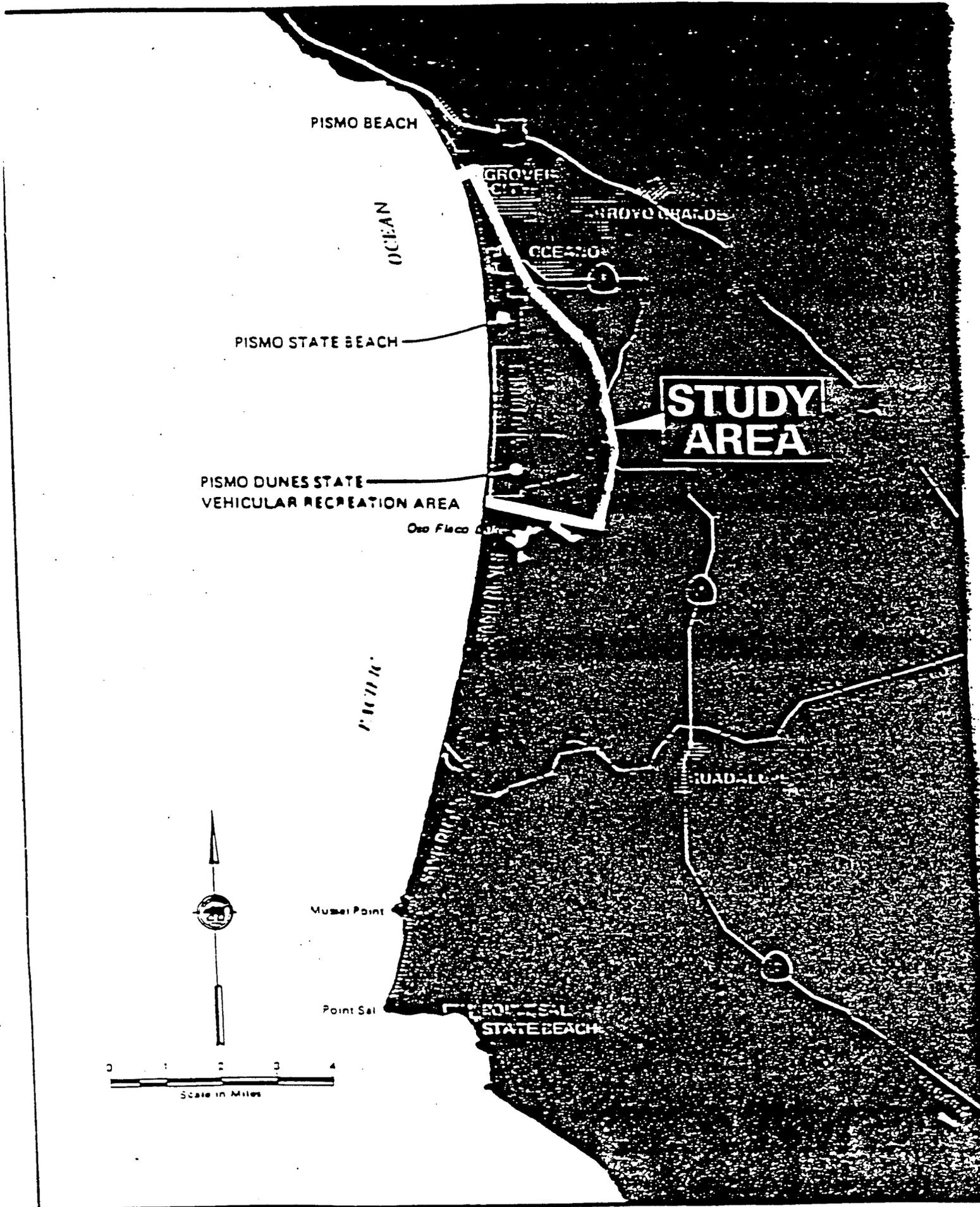


FIGURE 3



APPENDIX 2



OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO, CA 95814

DATE: Dec 06, 1990

TO: Reviewing Agency

RE: DEPARTMENT OF PARKS AND RECREATION'S NOP for
PISMO STATE BEACH GENERAL DEVELOPMENT PLAN AND RESOURCE MGMT
SCH # 90011118

Attached for your comment is the DEPARTMENT OF PARKS AND RECREATION'S Notice of Preparation of a draft Environmental Impact Report (EIR) for PISMO STATE BEACH GENERAL DEVELOPMENT PLAN AND RESOURCE MGMT.

Responsible agencies must transmit their concerns and comments on the sc and content of the EIR, focusing on specific information related to th own statutory responsibility, within 30 days of receipt of this notice. encourage commenting agencies to respond to this notice and express th concerns early in the environmental review process.

Please direct your comments to:

JEFF MARTINEZ
DEPARTMENT OF PARKS AND RECREATION
1416 NINTH STREET
SACRAMENTO,, CA 94296-0001

with a copy to the Office of Planning and Research. Please refer to SCH number noted above in all correspondence concerning this project.

If you have any questions about the review process, call Terri Lovelady at (916) 445-0613.

Sincerely,

A handwritten signature in cursive script, appearing to read "David C. Nunenkamp".

David C. Nunenkamp
Deputy Director, Permit Assistance

Attachments

cc: Lead Agency

DEPARTMENT OF TRANSPORTATION

P.O. BOX 8114
SAN LUIS OBISPO, CA 93403-8114
TELEPHONE: (805) 549-3111
TDD (805) 549-3259



January 4, 1991

5-SLO-1-6.9/14.1
Pismo State Beach
Gen. Devel. Plan &
Resource Manage.
Plan Update, NOP
SCH# 90011118

Jeff Martinez
Department of General Services
Office of Project Development
and Management
400 P Street, Suite 3460
Sacramento, CA 95814

Dear Mr. Martinez:

Caltrans District 5 staff has reviewed the above-referenced document. The following comments were generated as a result of the review:

It should be noted on page 5, item 5, that Caltrans also has land use jurisdiction (Route 1) within the project study area.

Please send us a copy of the completed Draft Environmental Impact Report when it is available. Thank you for the opportunity to comment.

If you have any questions, please contact me at (805) 549-3640.

A handwritten signature in cursive script that reads "Sarah J. Chesebro".

Sarah J. Chesebro
District 5
Intergovernmental Review Coordinator

Memorandum

To : Mr. Jeff Martinez
Environmental Planner
Department of General Services
Office of Project Development and Management
400 "P" Street, Suite 3460
Sacramento, CA 95814

Date: December 28, 1990

From : Department of Fish and Game

Subject: Pismo Beach State Vehicular Recreation Area Notice of Preparation and
California Endangered Species Act Consultation

Department of Fish and Game's contact for the subject document review will be Mr. Jim Lidberg, Wildlife Biologist, San Luis Obispo County. We recommend that Mr. Don Patton of the California Department of Parks and Recreation, San Luis Obispo, contact Mr. Lidberg at 1616 13th Street, Los Osos, CA 93402, or by telephone at (805) 528-0782 for early consultation on this project.


For Brian Hunter
Regional Manager
Region 3

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA

925 DE LA VINA

SANTA BARBARA, CA 93101

(805) 963-6871

December 26, 1990



Department of General Services
Office of Project Development and Management
Attn: Jeff Martinez, EIR Project Manager
400 P Street, Suite 3460
Sacramento, CA 95814

Re: Project: Update of the General Development Plan for the Pismo Beach and State Vehicular Recreation Area (SVRA).

Dear Mr. Martinez,

- [] There seems to be no significant environmental impacts associated with this project.
- [] The Commission has no comment at this time. However, a Coastal Development Permit will be required from our office.
- [] The Commission has no comment; please refer to your certified LCP when issuing the Coastal Development Permit for this project.
- [X] There are some significant coastal issues raised by this project.
- [X] The Commission may have some comments; however, due to budget and staff limitations, we are unable to comment in the given time frame.
- [] The project appears to be located outside the coastal zone. All public agencies carrying out or supporting activities outside the coastal zone that could have direct impact on resources within the coastal zone shall consider the effect of such actions on the coastal zone resources. (PRC Section 30200(a)).

Thank you for the opportunity to comment on this document.

Sincerely,

A handwritten signature in black ink, appearing to read "James Johnson".

James Johnson
Area Manager

cc: Calif. Depart. of Parks and Recreation
Sacramento, CA.

BB/JJ
0159M

STATE LANDS COMMISSION

LEO T. McCARTHY, *Lieutenant Governor*
GRAY DAVIS, *Controller*
JESSE R. HUFF, *Director of Finance*

EXECUTIVE OFFICE
1807 - 13th Street
Sacramento, CA 95814
CHARLES WARREN
Executive Officer

January 9, 1991

Mr. Jeff Martinez
Department of Parks and Recreation
1416 Ninth Street
Sacramento, CA 95814

RECEIVED
JAN 17 1991
PLANNING

Dear Mr. Martinez:

Staff of the State Lands Commission (SLC) has reviewed the Notice of Preparation (NOP) for Pismo State Beach General Development Plan and Resource Management (SCH #90011118). Based on this review, we offer the following comments.

The SLC has jurisdiction and authority over all ungranted tidelands, submerged lands, and the beds of navigable rivers, sloughs, lakes, etc. The SLC has an oversight responsibility for tide and submerged lands legislatively granted in trust to local jurisdictions (Public Resources Code Section 6301). All tide and submerged lands, granted or ungranted, as well as navigable rivers, sloughs, etc. are impressed with the Common Law Public Trust.

The Public Trust is a sovereign public property right held by the State or its delegated trustee for the benefit of all the people. This right limits the uses of these lands to waterborne commerce, navigation, fisheries, open space, recreation, or other recognized Public Trust purposes. A lease from the Commission is required for any portion of a project extending onto State-owned lands which are under its exclusive jurisdiction.

The proposed study area is adjacent to the Pacific Ocean, which is State-owned sovereign land under the jurisdiction of the SLC. As a result, the project may have the potential for impacting lands and resources within SLC jurisdiction. The Commission is extremely concerned about the natural resources and recreational opportunities of lands under its jurisdiction. We are concerned that the environmental review and decision-making processes of all agencies take into account the impacts that projects may have on public trust resources in and along the State's waterways.

It appears from the NOP, that those issue areas of concern to the SLC will be addressed in the draft document. The Department of Parks and Recreation should consider the potential impacts of this plan on the waterways within and adjacent to the subject area. Significant biological values associated with these areas should be protected from direct and indirect impacts. Such impacts could include, but not be limited to, runoff, sedimentation, degradation and erosion. It is clear that implementation of the plan will induce growth and

RECEIVED

JAN 30 1991

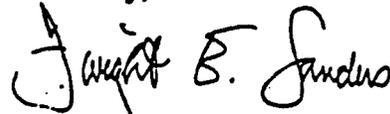
RFD

Mr. Jeff Martinez
January 9, 1991
Page 2

encourage the development of the area. The potential impacts of such growth on the sensitive and finite resources, as described, should be addressed at this time and advance thought given to how such impacts may be mitigated.

We appreciate the opportunity to comment and look forward to our review of the draft document. If you have any questions, please contact Betty Eubanks at (916) 322-2795.

Sincerely,

A handwritten signature in cursive script that reads "Dwight E. Sanders". The signature is written in dark ink and is positioned above the typed name.

Dwight E. Sanders, Chief
Division of Environmental
Planning and Management

cc: Betty Eubanks
OPR

AIR POLLUTION CONTROL DISTRICT

COUNTY OF SAN LUIS OBISPO

2156 SIERRA WAY, SUITE B - SAN LUIS OBISPO, CALIFORNIA 93401 - (805) 549-5912



16 January 1991

Jeff Martinez
Department of Parks and Recreation
1416 Ninth Street
Sacramento, CA. 94296-0001

SUBJECT: Department of Parks and Recreation's NOP for Pismo State Beach
General Development Plan and Resource Management Plan Update.
SCH #90011118.

Dear Mr. Martinez;

The District has reviewed the information contained in the Notice of Preparation for the above-mentioned project. The Department of Parks and Recreation is proposing to update the General Development Plan and the Resource Management Plan for the Pismo State Beach and State Vehicular Recreation Area (SVRA). This update will focus on changes necessary to comply with the Coastal Development Permit (CDP # 4-82-300) issued for the park development in 1982.

The CDP stipulated that the least environmentally sensitive access corridor and staging area be identified and utilized for off-road recreational activities associated with the State Vehicular Recreation Area (SVRA). In addition, the CDP requires the development of a method to identify the number of camper units within the park and prepare an annual report specifying the effects of recreational activities on dune and wetland resources found in and adjacent to the park.

The California Clean Air Act, adopted in 1988, requires that all Air Pollution Control Districts (APCDs) and Air Quality Management Districts (AQMDs) adopt and enforce regulations to achieve and maintain the state ambient air quality standards for the area under its jurisdiction. The District has been designated a nonattainment area for the state ozone standard and is required to reduce emissions of nonattainment pollutants (or their precursors) by at least 5% per year until the standards are achieved. State law requires that emissions of nonattainment pollutants countywide be decreased by at least 40% from the 1987 levels in order to meet clean air standards. Motor vehicle emissions in this county contribute over 40% of the precursor pollutants responsible for ozone formation.

TK

Pursuant to the requirements of the law, the San Luis Obispo County APCD is in the process of preparing a Clean Air Plan to demonstrate attainment of the state standards by the earliest practicable date. In order to accurately evaluate existing and future emissions we are requesting emission calculations for the following:

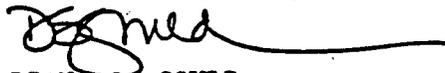
1. Vehicle trips made to and from the park.
2. Idling emissions during extended queuing on high use weekends.
3. Emissions from all-terrain vehicles in use at the park.

Emission calculations should be made using URBEMIS #3, a computer program available from the State Air Resources Board for nominal cost. Data from traffic studies and vehicle counts should be used as inputs to the model. Emissions for both baseline and future years should be calculated. If emissions are projected to increase above the baseline, then mitigation should be proposed. Emissions should be calculated in lbs./day for the projected peak day and in tons/per year for an annual average.

We appreciate the opportunity to comment on this project. Please contact the District at (805) 549-5912 if you have any questions concerning these comments.

Respectfully,

LARRY R. ALLEN
Senior Air Quality Specialist



DIANA S. GOULD
Air Quality Specialist

AIR POLLUTION CONTROL DISTRICT

COUNTY OF SAN LUIS OBISPO

2156 SIERRA WAY, SUITE B - SAN LUIS OBISPO, CALIFORNIA 93401 - (805) 549-5912



SUGGESTED MITIGATION MEASURES FOR PROJECTS

(to be used in conjunction with SLOAPCD INTERIM GUIDELINES)

The APCD is in the process of developing a comprehensive guidance document to be used in the assessment of potential air quality impacts from urban and industrial development. Revising the project review procedure is part of this process. Appropriate mitigation measures will be determined for each project or group of projects that exceed the vehicle trip threshold of 100 vehicle trips per day. Mitigation measures listed below are categorized based on project type, and whether they are on-site or off-site mitigations.

I. RESIDENTIAL PROJECTS

A. ON-SITE MITIGATION MEASURES

1. The District recommends that all woodburning appliances installed in new developments have an air to fuel ratio of less than 35 to 1, or emit no more than 7.5 grams per hour of particulate. This measure corresponds to the specifications for EPA-certified wood burning devices, which are available from local vendors. A list of approved devices can be supplied by the District on request.
2. Enact an aggressive tree planting program using native species endemic to the area. On average, a maturing, actively growing tree can remove about 45 lbs. of CO₂ from the atmosphere each year, and help to remove particulates and organic gases as well. Deciduous trees, planted so that they can shade homes in summer, can decrease indoor temperatures substantially, reducing energy demands for air conditioning and fossil fuel emissions. Trees should be planted at the rate of 20/acre, or 1 tree/2000 square feet of land.
3. Require developer easements and land dedication for convenient, centrally located pedestrian and bicycle pathways. Easements should be dedicated now in order to provide a practical transportation alternative. Pathways should link cul-de-sacs and dead-end streets to other parts of the development. These measures would encourage the use of walking and biking rather than automobiles when travelling from one part of a housing development to another.
4. Encourage or require the use of solar, or solar-assisted water heaters in all homes. Over their lifetime, solar water heaters are competitive in cost with fossil fuel heaters and, of course, create no emissions.
5. Require passive solar design for 20% of all new homes in subdivisions \leq 10 units. Encourage the design to incorporate passive solar heating and cooling systems. This measure can reduce heating costs and associated emissions up to 40%, depending on site characteristics.
6. Pave dirt roads in the project area that carry over 100 daily trips.

APD

7. The county and cities should set and enforce low speed limits (less than or equal to 15 mph.) on unpaved roads in the project area.
8. Incorporate zoning changes to allow mixed use for the purpose of developing neighborhood markets and other convenience facilities.
9. Incorporate major open space and recreational facilities within residential development.
10. Provide shuttlebus services within residential developments of _____ units and between trip attractors.

B. OFF-SITE MITIGATION MEASURES

1. Construct a transit center that will serve the development/community. This should include a bus turnout, shelter, benches, bus schedules, secure bike parking, and a public telephone.
2. Complete a per capita portion of the local and regional bikeway system identified in the Regional Transportation Plan, using funds from new development fees.
3. If there is an established need in the vicinity of the project, require payment of developer fees to fund the acquisition and development of a Park-n-Ride lot in a location specified by Cal Trans, and the San Luis Obispo Regional Transportation Planning Agency. Cal Trans generally provides signage, maintenance, and liability insurance for approved lots.
4. Provide vehicle pools for high density developments.

II. INDUSTRIAL AND COMMERCIAL PROJECTS

A. ON-SITE MITIGATION MEASURES

1. The developer should identify at least one of every ten parking spaces for use by employee carpools, and locate these in preferential locations.
2. Post carpool information. This can be obtained from the County Rideshare Coordinator by calling 541-CARS. The following incentives encourage carpooling:
 - a. Allow flex-time for employees in order to facilitate the formation of carpools.
 - b. Consider allowing employees to use a company-owned vehicle for carpooling.
 - c. Offer a guaranteed ride home to carpoolers in case of illness, or emergency.
 - d. The firm could acquire a van for vanpooling, perhaps using grants, loans and lease agreements available from Cal Trans and the County Rideshare Coordinator.
 - e. The firm could provide on-site childcare, which would accommodate employees with young children.

3. Covered, secure bicycle parking should be constructed on-site at a minimum rate of 1 bike space per 10 car spaces, close to shower/locker facilities if possible.
4. For employers, or development with multiple employers where an average of 50 or more employees will be present, an employee shower/locker area should be constructed with adequate facilities to serve employee pedestrian and bike commuters. One full size locker per 10 employees is considered standard for facilities of this type. Access to this area can be restricted to employees only by maintaining a locked door.
5. Provide employer subsidized transit passes to encourage the use of alternate modes of transportation.
6. Depending on the size of development/employer, the following measures can be used to help reduce the number of single purpose motor vehicle trips.
 - a. Provide on-site Automated Teller Machines (ATMs).
 - b. Provide on-site postal services.
7. Employer could charge parking fees of employees who choose to use single occupant motor vehicles.

B. OFF-SITE MITIGATION MEASURES

1. Request Engineering Department to determine if the proposed project is located on an established transit route. If so, a transit stop should be constructed by the developer if none exists nearby. The developer could contribute funds toward the construction of a transit center at an appropriate location determined by the County Transit Manager. Such a center might include a bus turnout, shelter and benches, bus schedules, secure bike parking, and a public telephone.
2. Request Engineering Department to determine the location of proximate local and regional bikeway links identified in the City General Plan and/or the Regional Transportation Plan. If applicable, complete a per capita portion of the bikeway using funds from new development fees.
3. Construct a Park-n-Ride lot at a well traveled location. Cal Trans provides services such as signage, maintenance, and liability insurance for approved lots.

III. CONSTRUCTION MITIGATION MEASURES

Short term construction impacts are primarily caused by fugitive dust emissions from grading and site preparation, and exhaust emissions from construction equipment. The following mitigation measures address these impacts.

A. PM10 Mitigation Measures

The following measures should be implemented on all projects with a grading area greater than 2 acres to mitigate the impacts associated with PM10 emissions from fugitive dust:

1. Use of water trucks or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site.
2. All dirt stock-pile areas should be sprayed daily as needed.
3. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities.
4. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast-germinating native grass seed and watered until vegetation is established.
5. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the APCD.
6. Water trucks or sprinkler systems should be used in sufficient quantities on haul roads and other areas of vehicle movement to prevent airborne dust from leaving the site. Increased watering frequency would be required whenever wind speeds exceed 15 mph.
7. All roadways, driveways, sidewalks, etc. should be paved as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

B. Combustion Emissions Mitigation Measures

The following measures should be implemented by any project that will move 50,000 cubic yards or more of earth within any 3 month period. These measures are currently considered to be Best Available Control Technology (BACT) for construction activities:

1. Use of Caterpillar prechamber diesel engines (or equivalent) together with proper maintenance and operation to reduce emissions of oxides of nitrogen (NOx).
2. Retardation of injection timing and adjustment of air-to-fuel ratios.
3. Electrify equipment where feasible.
4. Maintain equipment in tune per manufacturer's specifications.
5. Install catalytic converters on gasoline-powered equipment.
6. Implement timing retard (four degree) for diesel-powered equipment.
7. Substitute gasoline-powered for diesel-powered equipment.

c. Activity Management Techniques

The following measures should be implemented on any construction project that cannot adequately mitigate its impacts even with implementation of the PM10 and BACT measures previously identified:

1. Development of a comprehensive construction activity management plan designed to minimize the amount of large construction equipment operating during any given time period.
2. Scheduling of construction truck trips during non-peak hours to reduce peak hour emissions.
3. Limiting the length of the construction work-day period, if necessary.
4. Phasing of construction activities, if appropriate.

mm/proj/eirmit.doc
11-21-90/dsg
DRAFT



APPENDIX 3



State of California, Edmund G. Brown, Jr., Governor

California Coastal Commission
SOUTH CENTRAL COAST DISTRICT
735 State Street, (805) 963-6877
Balboa Building, Suite 612
Santa Barbara, CA 93101

| | |
|---------------|-------------------|
| FILED: | <u>5/20/82</u> |
| NOTE DATE: | <u>6/29/82</u> |
| NOTE DAY: | <u>10/19/82</u> |
| STAFF: | <u>PJM</u> |
| STAFF REPORT: | <u>6/2/82</u> |
| HEARING DATE: | <u>6/15-18/82</u> |

REGULAR CALENDAR

STAFF REPORT AND PRELIMINARY RECOMMENDATION

APPLICATION NO.: 4-82-390

APPLICANT: State Department of Parks and Recreation: Edwin Williams

PROJECT: Within the Pismo Dunes Vehicle Recreation Park Area, construct 35,000 linear feet of fencing to keep off-highway recreational vehicles out of sensitive vegetated dunes and wetland environments. Place three (3) kiosks for access control, one each at Grande Avenue, Grover City, Pier Avenue, Oceano and Oso Flaco Road (Exhibit C).

SITE: Pismo Dunes State Beach Park and State Vehicle Recreation Area, San Luis Obispo County, west of Highway One and south of Grande Avenue, Grover City.

SUBSTANTIVE FILE DOCUMENTS:

1. County of San Luis Obispo Land Use Plan (submittal) of its Local Coastal Plan.
2. Coastal Commission staff recommendation for Substantial Issue February 13, 1982.
3. Analysis of Off-Road Vehicle Damage: Distribution and Status of Endangered Native Vascular Plants. Nipomo Dunes CA 1977 Randy J. McCoy
4. Update of an evaluation of the Nipomo Dunes Point Sal Areas for the Registered Natural Landmark Designation by Dr. Robert Rodin, 1974.
5. General Development and Resources Management Plan, April 1975 for the Pismo State Beach and Pismo Dunes State Vehicle Recreation Area.
6. Memorandum to Russel Cahill, Director, Department of Parks and Recreation from C. Fullerton, Director, Department of Fish and Game.

SUMMARY: The staff recommendation is for approval of the project with special conditions. The conditions are necessary to render the project consistent with PRC Sections 30240 and 30251 which require the protection of sensitive habitats and the biological productivity of coastal waters.

PRELIMINARY CALENDAR: Hearing and Vote



I. PRELIMINARY RECOMMENDATION

1. Approval with Conditions

The Commission hereby approves the proposed development subject to the conditions below, on the grounds that, as conditioned, the proposed development is in conformity with the provisions of Chapter 3 of the Coastal Act of 1976, with the public access and public recreation policies of Chapter 3 of the Coastal Act, will not prejudice the ability of local Government having jurisdiction over the area to prepare a local coastal program that is in conformity with the provisions of Chapter 3 of the Coastal Act, and will have no significant adverse environmental impacts.

II. CONDITIONS

This permit is subject to the following conditions:

Standard Condition: (See Exhibit A)

Special Conditions:

As conditions of approval the applicant shall undertake and accomplish the following activities in the manner, and where applicable, within the dates prescribed.

1. Staging Area Location:

A. An interim OHV staging area shall be operational no later than Labor Day weekend 1982 in a designated area on or adjacent to the beach south of Sand Highway (Exhibit C). This staging area shall remain operational subject to the stated conditions and standards herein until such time as a permanent staging area is constructed.

Upon implementation of the interim beach staging area, all OHVs, ATCs and other non-street legal vehicles shall be trailored to and from Grande and Pier Avenues. At all times such vehicles when under their own power, shall be prohibited north of the northerly terminus of Sand Highway.

B. A permanent staging area site shall be selected as expeditiously as possible but in no case later than 18 months from the effective date of the County's LUP certification consistent with the following standards. Construction of this permanent staging area shall begin no later than three (3) years from the date of the certification of the County's LUP of its LCP. If construction and operation of a permanent staging area cannot be accomplished within the above time limits, this permit shall be subject to review and modification if necessary or appropriate by the County or the Commission or either in consultation with the other. Prior to construction, the County's LUP and the State Parks General Development Plan shall be amended to include the selected site with all additional standards or conditions for its design and operation. At the present time, there are several known locations which shall be considered and evaluated for staging area use, these locations are: Callendar Road area; the stables/agricultural lands area south of Arroyo Grande Creek; Agricultural lands north of Oso Flaco Creek adjacent to the Union Oil property; on the beach as per the interim staging area described herein (see Exhibit C). Other potential sites may also be evaluated. The site selection process shall include an environmental impacts analysis adequate to enable the selection of the least environmentally damaging location for the use. Accordingly, the on and off-site impacts of each alternative shall be

measured against the impacts of each of the others. In selecting the site and amending the County's LUP and the State Parks General Development Plan to incorporate the selected site, the following standards must be found to have been met: 1) that the site selected is the least environmentally damaging alternative; and 2) that all feasible design and operational related mitigations have been incorporated to minimize adverse environmental impacts. Additional standards for site selection are in their order of importance: locating a site which reduces to the maximum extent feasible OHV related impacts to the residential character of the community of Oceano; locating a site which facilitates the successful separation and regulation of recreational uses within the park itself; locating a site which can be constructed and operational expeditiously.

- C. Oso Flaco Lakes Area: An off-highway vehicle staging area shall not be constructed at the Oso Flaco Lake site indicated on Exhibit C. As part of the fencing proposed in this project, the Oso Flaco causeway to the PSVRA shall be permanently closed to vehicular traffic. Pedestrian and equestrian access only shall be allowed over the causeway or in the vicinity of the Oso Flaco Lakes. The state owned agricultural lands south of Oso Flaco Lakes may be utilized for the development of a campground for passive recreational use of the dune areas within the Park excluded from OHV use. The State Parks and Recreation Department shall amend its General Development Plan accordingly. Uses in this camping area shall be permitted only if consistent with the resource protection policies of the San Luis Obispo County Land Use Plan; 100 foot buffering setbacks from the lakes, creek and wetlands shall be applied at a minimum with greater setbacks required if necessary, only resource dependent uses and passive recreational activities shall be permitted.
2. Control of Access to the Park Effective immediately upon issuance of this permit and until either a permanent staging area is operational or this permit and the County's LUP is amended to accommodate possible necessary minor adjustments in the operation of these conditions, access and egress to and from the park shall be controlled and monitored in the following manner:
- A. All vehicular access and egress shall be via Grande Avenue and Pier Avenue, and effective vehicle barriers shall be placed at the southern end of the Oso Flaco causeway to assure that no OHV access over the causeway is permitted.
- B. Manned vehicle contact stations (kiosks) shall be placed at the Pier and Grande Avenue access points.
3. Control of uses within the Park: By the July 4 week-end of 1982 and as soon as possible prior to that date, the Parks and Recreation Department shall institute a Public Information program for vehicular recreational users within the Park units. At the Grande and Pier Avenue's kiosks, occupants of all vehicles entering the Park will be provided a pass or ticket to the park and the following information:
- A. The following rules are effective immediately with violators subject to citation and fines:
- All non-street legal vehicles shall be prohibited from the area north of Sand Highway after 6 p.m. each day.
 - Vegetated Dune areas, whether they are fenced or unfenced, are strictly off-limits to all vehicles.
 - All areas posted as Private Property or Restricted Use are off-limits to vehicle activity.
 - All vehicle activity is prohibited south of the Oso Flaco Creek (or south of the fence line once it is constructed).

- B. Beginning with the LABOR DAY WEEKEND 1982 Beach Camping within the Park units shall be restricted to a maximum of 500 units* with each unit available only through a reservation obtained through the State Parks Reservation system (Ticketron). On that weekend and thereafter, admittance to the Park for the purposes of overnight camping will be denied to individuals without a valid reservation unless vacant unreserved camping spaces are available.

* One unit equals a campsite for a single camper vehicle.

- C. Beginning LABOR DAY WEEKEND, 1982, specific areas of the Park will be designated for specific types of vehicles. The designations will be as follows:

- Area north of Sand Highway to Grande Avenue designated for and restricted to street legal vehicle use.
- Area south of Sand Highway to the fenced or posted area north of Oso Flaco Creek designated for OHV use.

- D. On or before January 1983, the following will occur: OHV day use will be allowed only by reservation and restricted to a specified number of users established in consultation with and agreement by the County of San Luis Obispo and the Executive Director of the Coastal Commission. OHV day use fees may be collected.

- E. Protective Fencing of Dunes, archaeological resources, and wet environments shall be accomplished in the following manner subject to review and approval by the Executive Director of the Coastal Commission in consultation with the County of San Luis Obispo and the State Department of Fish and Game.

(a) Fencing proposed and approved herein, plus fencing of the area shown as Area A on Exhibit D plus the perimeter fencing along Sand Highway and the eastern boundary of the PDSVRA shall be accomplished by August 31, 1982. All other vegetated areas indicated on Exhibit D shall be fenced by Aug. 31, 1983.

(b) One primary objective of the fencing is to prohibit vehicle access to the dune area south of Oso Flaco Creek. Accordingly, the east/west aligned fence north of Oso Flaco Creek shall continue seaward to the mean low water line so that vehicles do not pass to the south. The continuation of this line to mean low water may require a different construction than normal fencing - possibly driven piles.

(c) All fencing alignments shall be placed a minimum of 100 feet from the vegetated areas being fenced.

(d) If fenced corridors to the Oso Flaco Lake causeway are constructed, they shall be only for the use of State Parks personnel and for the purpose of emergency, normal patrol duties, management and enforcement. Accordingly, these corridors shall have locked gates at points shown on Exhibit D.

(e) Since a barrier to OHV movement south of Oso Flaco Creek is to be constructed on the north side of the creek, any construction of fencing south of Oso Flaco Creek or lakes shall be only for the purpose of preventing OHV intrusion into the State Park holdings from adjacent private lands. Such fencing shall therefore be perimeter fencing around parcels 8, 7, 3 and 4 and shall require a coastal development permit. Fencing applied for herein south of Oso Flaco Creek which is not perimeter fencing shall not be constructed, or if constructed shall have been relocated to an alignment approved herein by August 31, 1982.

4. Restoration

A dune restoration program shall be undertaken by the DPR. The program shall be reviewed and approved by the Executive Director of the Coastal Commission. Restoration of vegetated dunes within the fenced-off areas shall be undertaken as expeditiously as funds and technical knowledge allows. Plantings shall begin no later than January 1983 with notification of the County and the Executive Director of the Coastal Commission.

5. Protection of Archeological Resources

Archeological resources within the PDVRA shall be protected by fencing. Accordingly, as part of the current fencing project, site No. SLO 199 shall be fenced for protection. Other sites shall be fenced as their locations become known.

III. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

1. Project Description:

The proposed projects comprise the placement of two types of structures to control access and protect natural and man made resources within and adjacent to the State Beach Parks at the Pismo Dunes. As proposed temporary kiosks would be placed at Oso Flaco Road, Pier Avenue in Oceano and Grande Avenue in Grover City to control and monitor access and dispense user information; in addition, 35,000 linear feet of wire mesh fencing will be placed around sensitive resource areas within the park to protect them from further degradation and destruction from off-highway vehicle users. Within the fenced off areas the DPR will undertake a vegetated dune restoration program. (See Exhibit C for the proposed placement of the kiosks and fencing.)

The proposed projects recommended for approval herein are central to the resolution of a major Substantial Issue within the submitted San Luis Obispo County Land Use Plan of its Local Coastal Program. They are proposed by State Parks as an initial step in the resolution of that issue.

In March of 1982, the Commission at its regular hearing found that the policies and standards within the submitted San Luis Obispo County LUP raised a Substantial Issue with regard to their effect on environmentally sensitive habitats in the Pismo Dunes/Oso Flaco Lake area. In finding substantial issue the Commission was concerned primarily with the County's designation of an area immediately adjacent to Oso Flaco Lakes as the staging area for off-highway vehicle enthusiasts utilizing the Pismo Dunes State Vehicle Recreation Area. The Commission recognized that with the exception of the designated site for the staging area, the County's policies and standards effecting the impacts of off-highway vehicle use within the park were generally consistent with the protection of coastal resources, adjacent private property interests, and values of the community of Oceano, which abuts the Pismo State Beach to the northeast.

However, the Commission did take Substantial Issue with all the Pismo Dunes/OHV related policies and standards within the Plan because in varying degrees the

site(s) ultimately selected for the staging area will effect both the substance and applicability of those policies and standards which include among other requirements, that DPR protect natural resources within and adjacent to the Park holdings; protect private property from further intrusion and degradation; separate uses/activities within the Park; and limit the number of users to a level equal to DPR's enforcement capabilities.

Accordingly, at the hearing on the Land Use Plan, the Commission directed its staff, the County and the State Department of Parks and Recreation to work together and resolve, if possible, the problem of siting a staging area in a manner consistent with both natural resource protection and the protection of adjacent private and community interests. -

Since that Commission meeting, the DPR undertook the organization of a committee consisting of staff members of the Coastal Commission, County of San Luis Obispo, Department of Fish and Game and DPR. Through numerous meetings, the last of which was attended by members of the community of Oceano, the Director of the Oceano Community Service District, and representatives of OHV user groups, the Committee has formulated a program to resolve the Pismo Dunes/OHV related problems. Because the issue is extremely complex it is not possible to identify a program which would effect all the necessary remedies immediately, instead the program consists of elements which must be implemented in phases over time. For example, the selection of a permanent site for the staging area will take a minimum of one year and perhaps 18 months; acquisition, funding and construction will add to that time. Therefore, the program identifies an interim staging area location (on the beach) which would operate under specific limitations subject to review for effectiveness, until a permanent staging area is operational.

The kiosks proposed in this application are an immediate and initial step in the implementation of the interim staging area. In the early part of the summer state personnel manning the kiosks will hand-out information informing users of the park that a specific program of use limitations and rules will be gradually implemented over the next year with some occurring immediately and others on identified future dates. The operational date for the interim staging area of 500 units is Labor Day weekend 1982 and at that point the kiosks at Grande and Pier Avenues will function as the controlled access points to and from the Park units. (Staff is recommending that the kiosk at Oso Flaco Road not be approved.) They will remain in that function until a permanent staging area is operational.

The fencing project proposed herein is also an immediate and initial step in a program to fence all sensitive areas and private property from OHV intrusion.

Both of these projects are indispensable and integral elements of the overall Pismo Dunes/OHV program. The conditions recommended herein represent very closely the remaining elements of the overall program formulated by the aforementioned committee. Staff is recommending them as conditions of approval so that the entire integrated program be set in motion immediately under the authority of a Commission permit action.

2. Surrounding Land Uses

The Pismo State Beach and Pismo Dunes State Vehicular Recreation Area (PSVRA) extend from Grande Avenue at Grover City to approximately 1 mile south of Oso

Flaco Creek. Pismo State Beach Park lies north, or upcoast, of the PSVRA. From Grover City south to Oceano, the State Beach is a narrow strip of coastal dune/strand and beach with dispersed backdune wetlands all west of Highway One.

From Pier Avenue and Arroyo Grande Creek at Oceano, the State Parks holding widens considerably as Highway One moves further from the shoreline. Moving south from the Community of Oceano the land uses and types surrounding the Park holdings are as follows.

Moving north to south from the Community of Oceano:

- The Cienaga Valley with approximately 700 acres of prime agricultural lands west of Highway One.
- The Dune Lakes Preserve Area west of Highway One, a complex of privately owned dune lakes and heavily vegetated dunes maintained in an enhanced natural condition as a hunting preserve.
- Seaward of Dune Lakes Preserve 500+ acres of County owned land abutting the State Park and utilized for OHV activity.
- Union Oil property west of Highway One abutting the PSVRA, 500+ acres of heavily vegetated backdune evidencing considerable degradation from OHV use.
- The Oso Flaco Valley, several thousand acres of prime agricultural lands the tip of which intrude into the dunes area along the north and south sides of Oso Flaco Creek, the creek which results in Oso Flaco and Little Oso Flaco Lake. Approximately 200 acres of this agricultural land has been purchased by DPR for the construction of a staging area at Oso Flaco Lake.
- South of Oso Flaco Creek a continuance of the Pismo Dune system southward to merge with the Guadalupe Dunes to and across the Santa Maria River into Santa Barbara County. Except for approximately 500 acres south of Oso Flaco Creek, this dune system is privately owned, much of it by Union Oil Company.

3. Protection of Sensitive Habitats and Biological Productivity

Section 30240

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30231

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation

buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

The above PRC Sections have special significance and applicability to the projects proposed herein because individual elements of each of the projects (fencing and access control kiosks) would be placed, and function in a manner not consistent with these sections of the Coastal Act. First, one of the three kiosks proposed would be located at Oso Flaco Road (Exhibit C). It is proposed that this kiosk initially dispense DPR information to OHV users entering the Park at this point, and that Oso Flaco Road and the causeway across Oso Flaco Lake be utilized as an OHV access point into the Park.

Second, portions of the fencing proposed would provide two access corridors from the Oso Flaco Lakes causeway through the otherwise fenced off dune area (see Exhibit D). In addition, portions of the fence alignment would allow OHVs to cross Oso Flaco Creek into an area which has been relatively preserved from the destruction characteristic of OHV activity (see also Exhibit D).

In addition to its intrinsic values, the biological significance and value of the Oso Flaco lakes area of the Nipomo Dunes is extremely high. Though the entire Nipomo Dunes complex is unique and valuable, the Oso Flaco Lakes area is comprised of an inter-related system of distinct habitat types. Within this relatively small geographical area from the creek mouth to the back dunes exists freshwater lakes and marsh, a significant riparian system, dune vegetation and coastal sage scrub supporting numerous rare and endangered plants and animal species. The uniqueness and variety of terrestrial habitats makes the area attractive to such endangered species as the least tern, black rail, brown pelican, peregrine falcon and southern bald eagle which have been sighted foraging in the lakes area. The least tern is known to nest in the area south of Oso Flaco Creek.

In addition to the significant plant and bird species inhabiting the area, there are significant mammals, amphibians and aquatic and terrestrial invertebrates and archaeological resources (for a more complete description of the resource values of the Nipomo Dunes see Exhibit E). Also, the lakes area does provide a drainage function for the Oso Flaco Creek watershed area. One obvious impact of recent OHV activity in this area is the filling in of the lakes by moving sand dunes no longer stabilized by natural vegetation. As the lakes fill with sand the water displaced moves landward to flood or raise the water table under adjacent prime agricultural lands thereby rendering them unusable for agricultural purposes.

Because of the significant resource values endangered by OHV activity in the PDSVRA, it is required that developments proposed by DPR in this area be consistent with PRCs 30240 and 30231. The former requires that sensitive habitats be protected from significant disruption and that only uses dependent upon the resources be permitted within them. The latter requires that the biological productivity of coastal waters be protected to maintain optimum populations of marine organisms. DPR has, by proposing to fence off the larger area recognized the significant biological resources of the Oso Flacos environs. However, the effect of the overall fencing program in accomplishing the desired protection will be diminished significantly by particular fence alignments which allow for the continued use of the lakes area as an OHV access point. Keeping the causeway open will allow OHV activity which conflicts with and will inhibit wildlife nesting and foraging activities.

In addition, policing and enforcing this access route through the lakes area will require commitments of limited DPR personnel which are needed at other critical locations within the Park units (between Grande Avenue and Sand Highway and west to the perimeters of adjacent private property). For this reason condition Numbers 1c and 2 preclude the use of Oso Flaco Road and causeway for OHV access other than by DPR personnel for the purpose of normal emergency and patrol duties.

Recommended condition No. 3E(b) requires that the fenceline north of Oso Flaco Creek extent to the mean low water line in a manner and construction sufficient to prevent trespass south of this fenceline. In this manner, the unique and relatively undegraded dune areas south of Oso Flaco Creek will be protected consistent with PRC Section 30240 a & b. It is anticipated that once DPR implements even the initial phases of its access control program for the PDSVRA there will be an increased number of OHV trespassers attempting to enter the Park from adjacent private lands to the south of Oso Flaco creeks and lakes. Accordingly, condition No. 3E(e) provides for the fencing only of the perimeters of those park owned parcels which will be subject to such trespass.

Because the two projects proposed herein are the initial integral phases of, and do set the direction for, the DPR's longer term program to manage OHV use within the park units consistent with the access, recreation and resource protection policies of the Coastal Act (PRC Sections 30210, 30240, 30231), and because that program in its present concept is a product of the input of the Coastal Commission and its staff, the County of San Luis Obispo and its staff, representatives of the Department of Fish and Game and representatives of the Department of State Parks and Recreation, and because the program has been formulated as a specific response to a coastal resource issue which has been the subject of prior Commission action (permit # 21-17,1975) and is now again the subject of Commission action, it is therefore appropriate and necessary that the specific elements of said program be incorporated as conditions of permit approval.

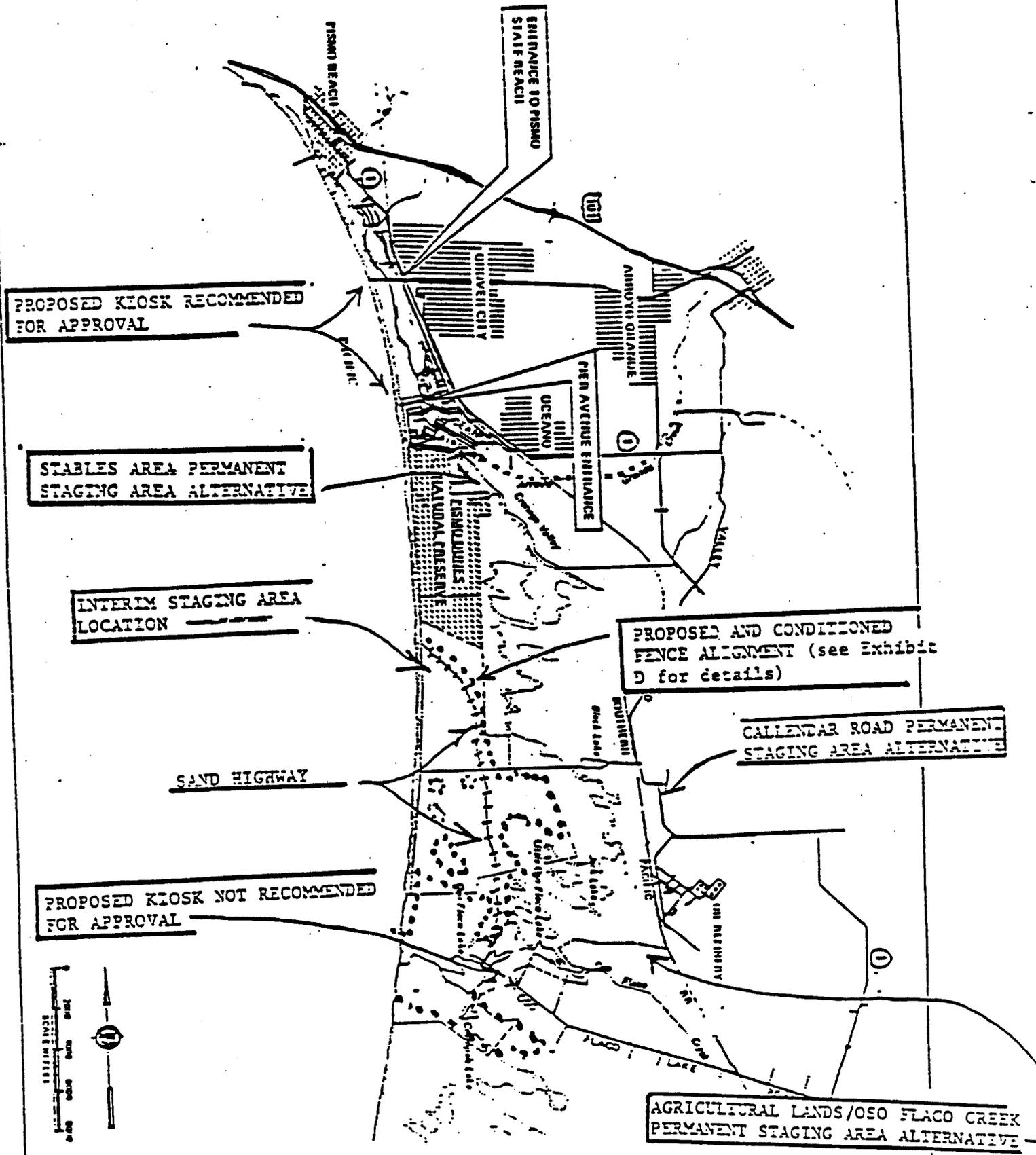
PM/ct

EXHIBIT A

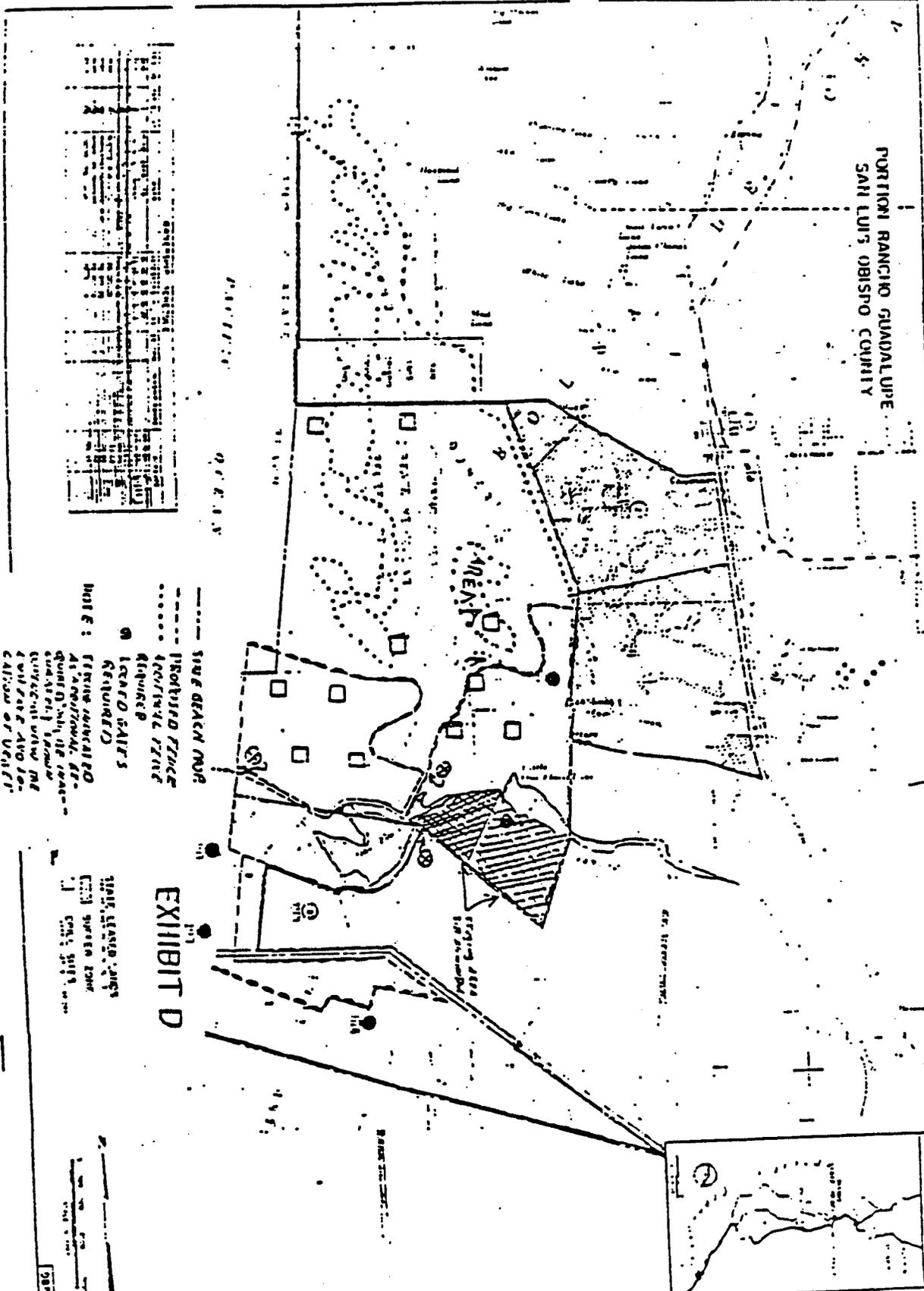
STANDARD CONDITIONS:

1. Notice of Recusal and Acknowledgments. The permit is not valid and construction shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging recusal of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If construction has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Construction shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All construction must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission in addition to accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

EXHIBIT C



PORTION RANCHO GUADALUPE
SAN LUIS OBISPO COUNTY



| NO. | DESCRIPTION | DATE | BY |
|-----|------------------|----------|-----------|
| 1 | PRELIMINARY PLAN | 10/15/51 | J. H. ... |
| 2 | ... | ... | ... |
| 3 | ... | ... | ... |
| 4 | ... | ... | ... |
| 5 | ... | ... | ... |
| 6 | ... | ... | ... |
| 7 | ... | ... | ... |
| 8 | ... | ... | ... |
| 9 | ... | ... | ... |
| 10 | ... | ... | ... |
| 11 | ... | ... | ... |
| 12 | ... | ... | ... |
| 13 | ... | ... | ... |
| 14 | ... | ... | ... |
| 15 | ... | ... | ... |
| 16 | ... | ... | ... |
| 17 | ... | ... | ... |
| 18 | ... | ... | ... |
| 19 | ... | ... | ... |
| 20 | ... | ... | ... |
| 21 | ... | ... | ... |
| 22 | ... | ... | ... |
| 23 | ... | ... | ... |
| 24 | ... | ... | ... |
| 25 | ... | ... | ... |
| 26 | ... | ... | ... |
| 27 | ... | ... | ... |
| 28 | ... | ... | ... |
| 29 | ... | ... | ... |
| 30 | ... | ... | ... |
| 31 | ... | ... | ... |
| 32 | ... | ... | ... |
| 33 | ... | ... | ... |
| 34 | ... | ... | ... |
| 35 | ... | ... | ... |
| 36 | ... | ... | ... |
| 37 | ... | ... | ... |
| 38 | ... | ... | ... |
| 39 | ... | ... | ... |
| 40 | ... | ... | ... |
| 41 | ... | ... | ... |
| 42 | ... | ... | ... |
| 43 | ... | ... | ... |
| 44 | ... | ... | ... |
| 45 | ... | ... | ... |
| 46 | ... | ... | ... |
| 47 | ... | ... | ... |
| 48 | ... | ... | ... |
| 49 | ... | ... | ... |
| 50 | ... | ... | ... |

NOTE: FURTHER REVISIONS TO THIS PLAN SHALL BE MADE BY THE ARCHITECT AND THE ENGINEER AND THE COUNTY OF SAN LUIS OBISPO.

EXHIBIT D

15651

1577

| | | |
|---------------------------------------------------------------------------------------------|------------------------------------|-------|
| PISMO STATE BEACH PISMO DUNES STATE VEHICULAR RECREATION AREA ACQUISITION PLAN | DEPARTMENT OF PARKS AND RECREATION | 15651 |
| | | 1577 |

EXHIBIT E

RESOURCE VALUES OF THE NIPOMO DUNES

(Staff summary of material from the substantive file documents)

Coastal dunes are one of the most unstable, and therefore fragile, habitat types found in the Coastal Zone. The Nipomo Dunes complex of which the State Park is a part, is the largest example of this habitat type in California; the complex extends south from the City of Pismo Beach about nine miles to the mouth of the Santa Maria River. The dunes are generally located west of Highway One and vary in width from one and half miles to several hundred yards. The areal extent of the dune complex is approximately 12,150 acres, or eighteen square miles. The Park holdings within this is approximately 2000 acres.

In addition to the dune formations (9,400 square acres), the Nipomo Dune complex encompasses an unusually wide variety of distinct habitats. These include: tidal flats (435 square acres), fresh water lakes (600 square acres), riparian vegetation (300 acres), coastal salt marsh (35 acres), mudflats (100 acres), dune vegetation (200 acres), coastal sage scrub (300 acres), and oak woodland (40 acres). Because of the diversity of habitats, the Nipomo Dunes complex supports an exceptionally rich assemblage of resident wildlife, including birds, mammals, amphibians, and aquatic and terrestrial invertebrates.

As a result of its location along the Pacific Coast Flyway and the various types of aquatic habitats, the Nipomo Dunes is utilized annually by thousands of migratory birds. Over 86 species of water associated birds have been observed in the dunes complex, including shorebirds, waterfowl, gulls, terns, pelicans, cormorants, coots, rails, loons, grebes, herons, and egrets. In addition, more than 100 species of terrestrial birds (including 24 species of raptors) have been identified. Of these species, five are listed as rare and endangered: California brown pelican, Clapper rail, Least tern, Southern bald eagle, and the Peregrine falcon.

Besides the large number of avian species, the Nipomo Dunes support more than fifty species of mammals, and thirty species of reptiles. Several resident species are in danger of being eliminated locally. Invertebrates are also common, though less well known. The Pismo clam found in the intertidal portion of the dune complex is perhaps the most important economic species associated with the Nipomo dune complex; however, its numbers have been reduced significantly as a result of increased harvesting.

The basis for the diverse wildlife of the Nipomo Dunes is the diverse plant life found within the dunes. Over 150 plant species have been identified in seven distinct plant communities. The flora of the dunes, in addition to providing food, cover, roosting, and nesting habitat, has important intrinsic values. With the exception of the European beach grass which was planted by the railroad and is now being reduced in coverage through natural selection, the dunes are almost free of introduced species. The flora of the dunes also contains a number of species whose range is restricted to the Nipomo Dune complex such as the Nipomo lupine. Several species occurring in the dunes are rare or endangered, or are being considered for such designation; these include Bull thistle, Blochman's leafy daisy, La Graciosa thistle, Nipomo lupine, Crisp monardella, and the San Luis Obispo curly-leafed monardella. A significant number of the rare, endangered and uncommon plant species found within the dunes are found at or in the near vicinity of the Oso Flaco lakes and creek; it is in this area and the dune lakes preserve area that the endangered least tern has been sited foraging. The Oso Flaco lakes area is the northernmost limit of several species, including the Giant Coreopsis, and the southern limit of several species such as the Yellowpond lilly. In addition, there is a special Willow Wax Myrtle community attaining a maximum height of 15 to 20 feet in the hollows around Oso Flaco lakes.

Aside from their rarity or uniqueness, the flora of the Nipomo Dunes plays an essential role in the stabilization of the dune complex; these plants are able to trap shifting sands by the roots, rhizomes, and underground stems characteristic of these plants. Without vegetative cover, the coastal dunes under the influence of onshore breezes are easily breached and migrate rapidly.

The Nipomo Dunes complex also contains significant cultural resources in the form of pre-historical aboriginal remains. About 25 individual archaeological sites of Chumash occupation or use have been identified within the dunes; several sites are within the State Park unit and have been degraded by OHV activity; with additional systematic surveying, it is possible that additional sites will also be discovered.

In recognition of the outstanding resource values of the Nipomo Dunes complex, the area was designated a National Natural Landscape by the National Park Service in 1974. However, at this point in time there is some interest by the Park Service to remove the National landmark designation because of the severe degradation which has occurred to the resources over the past 16 years. The resource values of the Nipomo Dunes complex was most recently recognized by the U.S. Fish and Wildlife Service which gave the area the highest priority ranking in a statewide survey of wildlife habitats needing protection.

Because of its diverse resource values, and the unique opportunities for off-road vehicle activity, the Nipomo dunes has attracted large numbers of recreationists; this recreational use, particularly by off-road vehicles, has increased dramatically within the past decade. It is estimated that as many as 50,000 individuals visit the dunes for the purpose of engaging in off-road vehicle activity. The increase in off-road vehicle activity has had the greatest impact on the basic resource values of the Nipomo Dunes. Most importantly, off-road vehicle use has resulted in stripping of major areas of dune vegetation. This has resulted in the direct loss of intrinsically valuable plant species as well as wildlife habitat. The instability of the dunes created by the removal of this vegetation has also resulted in the migration of dunes into the adjacent Oso Flaco lakes, thus decreasing their depth and aerial extent. Wildlife values have also been reduced by the noise created by the operation of motorized vehicles within the dune complex. Finally, the use of motorized vehicles has created conflicts with or discouraged passive uses of the Nipomo Dune complex such as plant and wildlife observation, photography, and nature study. Unless measures are instituted to control the use of the Nipomo Dunes complex, the resources values which distinguish the area will continue to be degraded, and ultimately lost completely.



APPENDIX 4



State of California, Edmund G. Brown, Jr., Governor

California Coastal Commission
SOUTH CENTRAL COAST DISTRICT
735 State Street, (805) 963-6871
Balboa Building, Suite 612
Santa Barbara, CA 93101

| | |
|---------------|-------------------|
| FILED: | <u>8/9/82</u> |
| 49TH DAY: | <u>9/27/82</u> |
| 180TH DAY: | <u>2/5/83</u> |
| STAFF: | <u>PMJ</u> |
| STAFF REPORT: | <u>8/12/82</u> |
| HEARING DATE: | <u>8/24-27/82</u> |

REGULAR CALENDAR

STAFF REPORT AND PRELIMINARY RECOMMENDATION

APPLICATION NO.: 4-82-300-A

APPLICANT: State Department of Parks and Recreation, Ross T. Henry
Chief Statewide Planning and Assistance Programs

PROJECT: Amend Coastal Permit Number 4-82-300 to modify the conditions of approval.

SITE: Pismo State Beach and Pismo Dunes State Vehicle Recreation Area in San Luis Obispo County from Grande Avenue in Grover City south to approximately Oso Flaco Creek.

PRELIMINARY CALENDAR: Amendment

SUBSTANTIVE FILE DOCUMENTS:

1. County of San Luis Obispo Land Use Plan (submittal) of its Local Coastal Plan.
2. Coastal Commission staff recommendation for Substantial Issue February 18, 1982.
3. Analysis of Off-Road Vehicle Damage: Distribution and Status of Endangered Native Vascular Plants. Nipomo Dunes CA 1977 Randy J. McCoy
4. Update of an evaluation of the Nipomo Dunes Point Sal Areas for the Registered Natural Landmark Designation by Dr. Robert Rodin, 1974.
5. General Development and Resources Management Plan, April 1975 for the Pismo State Beach and Pismo Dunes State Vehicle Recreation Area.
6. Memorandum to Russel Cahill, Director, Department of Parks and Recreation from C. Fullerton, Director, Department of Fish and Game.

I. PRELIMINARY STAFF RECOMMENDATION

The staff recommends that the Commission adopt the following resolution:

1. Approval

The Commission hereby grants an amendment to permit #4-82-300 on the grounds that the amendment will be in conformity with the provisions of Chapter 3 of



the Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

II. FINDINGS.

The Commission finds and declares as follows:

1. Project History/Background

In June of 1982, the Commission approved a coastal permit application submitted by the Department of Parks and Recreation (DPR). The application was in large measure a preliminary step by DPR to undertake both planning and operational measures which would regulate off-highway vehicle use within the Park in a manner consistent with the policies, standards and programs of the County of San Luis Obispo's pending Land Use Plan (LUP) of its Local Coastal Program. The LUP is currently being reviewed by the Commission for certification and does require the DPR to undertake land use and operational measures which would correct long-standing abuses of habitats, private property and public safety by OHV users within the park and on adjacent privately owned lands.

The application submitted by the DPR was for the approval of access control kiosks and protective fencing for vegetated areas within the park unit. These projects were basic elements of a much broader DPR program to meet the requirements of the County's LUP; the broader program had been under development for several months prior to the application and had been formulated by representatives of the DPR, Department of Fish and Game, County of San Luis Obispo, Coastal Commission with input from OHV user groups, representatives of affected adjacent communities and private property and environmental interested groups. In approving the application for the access control kiosks and fencing, the Commission required as conditions of approval that the DPR also implement the complete program which had been under development. To the extent that there were still minor points of disagreement over details of the program between the DPR, County and Coastal Commission staff, the Commission did require the implementation of some program elements or features which were objected to by the DPR but strongly advocated by the County as essential to the success of its LUP as it regards the OHV issue. Since that time the DPR and the County have mutually resolved those differences in a manner which has resulted in this application to amend the conditions of approval of permit #4-82-300.

2. Amendment Description

Amend condition numbers 1A and Exhibit C, 3A, 3B and C, 3E(a), 3E (C2), 3C(2) of the Coastal Development Permit number 4-82-300 as follows (amendments are shown as underlined and lined-out text. The entire set of conditions is included for reference and perspective) (See Exhibit 1) In brief the amendments would 1) delay for two weeks the effective date implementing the 500 campsite limit by reservation (from Labor Day to September 15th); 2) move the location of the interim staging area site approximately 3/4 mile to the north of its original location; 3) more specifically set forth the fencing requirements of the foredune and Sand Highway areas.

3. Protection of Sensitive Habitats and Biological Productivity

Section 30240

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30231

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and maintaining alteration of natural streams.

The proposed amendments to coastal permit number 4-82-300 are consistent with the above Coastal Act requirements and do not diminish the ability of the Commission's prior action (Permit #4-82-300) to protect coastal resources. The amendment delaying for two weeks the effective date of implementation of 500 campsite limitation by reservation will not significantly effect coastal resources and will make the initial implementation of this critical element of the program more manageable than it would be on a major holiday weekend; the movement of the interim staging area north approximately 3/4 mile from the terminus of Sand Highway will not significantly affect the Community of Oceano or natural resources, but ostensibly will allow some of the larger recreational vehicles to avail themselves of the staging area use, whereas the location at Sand Highway would have prohibited their use. The amendment language related to fencing along the foredune and Sand Highway is merely a clarification of the graphics in Exhibit D.

PM/dr

EXHIBIT 1

III. CONDITIONS

This permit is subject to the following conditions:

Standard Conditions: These are not modified by this amendment request.

Special Conditions:

As conditions of approval the applicant shall undertake and accomplish the following activities in the manner, and where applicable, within the dates prescribed.

1. Staging Area Location:

A. An interim OHV staging area shall be operational no later than Labor Day-weekend September 15th 1982 in a designated area on or adjacent to the beach south of Sand-Highway the two mile post (Exhibit C). This staging area shall remain operational subject to the stated conditions and standards wherein until such time as a permanent staging area is constructed.

Upon implementation of the interim beach staging area, all OHVs, ATVs and other non-street legal vehicles shall be trailered to and from Grande and Pier Avenues. At all times such vehicles when under their own power, shall be prohibited north of the northerly terminus of Sand Highway.

3. A permanent staging area site shall be selected as expeditiously as possible but in no case later than 18 months from the effective date of the County's LUP certification consistent with the following standards. Construction of this permanent staging area shall begin no later than three (3) years from the date of the certification of the County's LUP of its LUP. If construction and operation of a permanent staging area cannot be accomplished within the above time limits, this permit shall be subject to review and modification if necessary or appropriate by the County or the Commission or either in consultation with the other. Prior to construction, the County's LUP and the State Parks General Development Plan shall be amended to include the selected site with all additional standards or conditions for its design and operation. At the present time, there are several known locations which shall be considered and evaluated for staging area use, these locations are: Callandar Road area; the stables/agricultural lands area south of Arroyo Grande Creek; Agricultural lands north of Oso Flaco Creek adjacent to the Union Oil property; on the beach as per the interim staging area described herein (see Exhibit C). Other potential sites may also be evaluated. The site selection process shall include an environmental impacts analysis adequate to enable the selection of the least environmentally damaging location for the use. Accordingly, the on and off-site impacts of each alternative shall be measured against the impacts of each of the others. In selecting the site and amending the County's LUP and the State Parks General Development Plan to incorporate the selected site, the following standards must be found to have been met: 1) that the site selected is the least environmentally damaging alternative; and 2) that all feasible design and operational related mitigations have been incorporated to minimize adverse environmental impacts. Additional standards for site selection are in their order of importance: locating a site which reduces to the maximum extent feasible OHV related impacts to the residential character of the community of Oceano; locating a site which facilitates the successful separation and regulation of recreational uses within the park itself; locating a site which can be constructed and operational expeditiously.

- C. Oso Flaco Lakes Area: An off-highway vehicle staging area shall not be constructed at the Oso Flaco Lake site indicated on Exhibit C. As part of the fencing proposed in this project, the Oso Flaco causeway to the PSVRA shall be permanently closed to vehicular traffic. Pedestrian and equestrian access only shall be allowed over the causeway or in the vicinity of the Oso Flaco Lakes. The state owned agricultural lands south of Oso Flaco Lakes may be utilized for the development of a campground for passive recreational use of the dune areas within the Park excluded from OHV use. The State Parks and Recreation Department shall amend its General Development Plan accordingly. Uses in this camping area shall be permitted only if consistent with the resource protection policies of the San Luis Obispo County Land Use Plan; 100 foot buffering setbacks from the lakes, creek and wetlands shall be applied at a minimum with greater setbacks required if necessary. Only resource dependent uses and passive recreational activities shall be permitted.
2. Control of Access to the Park Effective immediately upon issuance of this permit and until either a permanent staging area is operational or this permit and the County's 107 is amended to accommodate possible necessary minor adjustments in the operation of these conditions, access and egress to and from the park shall be controlled and monitored in the following manner:
- A. All vehicular access and egress shall be via Grande Avenue and Pier Avenue, and effective vehicle barriers shall be placed at the southern end of the Oso Flaco causeway to assure that no OHV access over the causeway is permitted.
 - B. Manned vehicle contact stations (kiosks) shall be placed at the Pier and Grande Avenue access points.
3. Control of uses within the Park: By the July 4 week-end of 1982 and as soon as possible prior to that date, the Parks and Recreation Department shall institute a Public Information program for vehicular recreational users within the Park units. At the Grande and Pier Avenue's kiosks, occupants of all vehicles entering the Park will be provided a pass or ticket to the park and the following information:
- A. The following rules are effective immediately with violators subject to citation and fines:
 - All non-street legal vehicles shall be prohibited from the area north of Sand-Highway the two mile post after dusk each day.
 - Vegetated Dune areas, whether they are fenced or unfenced, are strictly off-limits to all vehicles.
 - All areas posted as Private Property or Restricted Use are off-limits to vehicle activity.
 - All vehicle activity is prohibited south of the Oso Flaco Creek (or south of the fence line once it is constructed).
 - B. Beginning with the ~~LABOR-DAY-WEEKEND~~ September 15th 1982 Beach Camping within the Park units shall be restricted to a maximum of 500 units* with each unit available only through a reservation obtained through the State Parks Reservation system (Ticketron). ~~On-that-weekend-and~~ Thereafter, admittance to the Park for the purposes of overnight camping will be denied to individuals without a valid reservation unless vacant unreserved camping spaces are available.
- *One unit equals a campsite for a single camper vehicle.

C. Beginning ~~LABOR-DAY WEEKEND~~ September 15, 1982, specific areas of the Park will be designated for specific types of vehicles. The designations will be as follows:

- Area north of Sand Highway the two mile post to Grande Avenue designated for and restricted to street legal vehicle use.
- Area south of Sand Highway the two mile post to the fenced or posted area north of Oso Flaco Creek designated for OHV use.

D. On or before January 1983, the following will occur: OHV day use will be limited to a specified number of users established in consultation with and agreement by the County of San Luis Obispo and the Executive Director of the Coastal Commission and the Department of State Parks. OHV day use fees may be collected.

E. Protective fencing of dunes, archaeological resources, and wet environments shall be accomplished in the following manner subject to review and approval by the Executive Director of the Coastal Commission in consultation with the County of San Luis Obispo and the State Department of Fish and Game.

(a) Fencing proposed and approved herein, plus fencing of the area shown as Area A on Exhibit D plus the perimeter fencing along Sand Highway (or along the ridge just eastward of the Sand Highway) and the eastern boundary of the PDSVRA shall be accomplished by November 30, 1982. All other vegetated areas indicated on Exhibit D shall be fenced by August 31, 1983.

(b) One primary objective of the fencing is to prohibit vehicle access to the dune area south of Oso Flaco Creek. Accordingly, the east/west aligned fence north of Oso Flaco Creek shall continue seaward to the mean low water line so that vehicles do not pass to the south. The continuation of this line to mean low water may require a different construction than normal fencing - possibly driven piles.

(c) Except for the following, fencing alignments shall be placed a minimum of 100 feet from the vegetated areas being fenced:

1. Along Sand Highway where the fence would encroach into the Sand Highway travel corridor.
2. Along the seaward side of the foredunes paralleling the beach where fencing may be placed in a manner similar to that already existing along the westerly line of the State Dune Preserve except that a minimal number of breaks in the foredune fencing outside of the dune preserve may be allowed for OHV access to the backdune area. The fencing protecting the foredunes need not be a closed perimeter fence completely surrounding the foredune vegetation if it can be demonstrated to the Executive Director that such perimeter fencing is not necessary for effective preservation and stabilization of the foredunes.
3. In other areas where it can be demonstrated that a placement closer to the vegetation will not diminish the effectiveness of the fence to stabilize the dune, protect the vegetation and provide the necessary conditions for dune rehabilitation and restoration. Said

demonstration shall be in the form of competent analysis of the dynamics of dune sand transport and the natural conditions necessary for dune stabilization. Reductions in the minimum setback under this condition shall be reviewed and approved by the Executive Director of the Coastal Commission.

(d) If fenced corridors to the Oso Flaco Lake causeway are constructed, they shall be only for the use of State Parks personnel and for the purpose of emergency, normal patrol duties, management and enforcement. Accordingly, these corridors shall have locked gates at points shown on Exhibit D.

(e) Since a barrier to OHV movement south of Oso Flaco Creek is to be constructed on the north side of the creek, any construction of fencing south of Oso Flaco Creek or lakes shall be only for the purpose of preventing OHV intrusion into the State Park holdings from adjacent private lands. Such fencing shall therefore be perimeter fencing around parcels 8, 7, 3 and 4 and shall require a coastal development permit. Fencing applied for herein south of Oso Flaco Creek which is not perimeter fencing shall not be constructed, or if constructed shall have been relocated to an alignment approved herein by November 30, 1982.

4. Restoration

A dune restoration program shall be undertaken by the DPR. The program shall be reviewed and approved by the Executive Director of the Coastal Commission. Restoration of vegetated dunes within the fenced-off areas shall be undertaken as expeditiously as funds and technical knowledge allows. Plantings shall begin no later than January 1985 with notification of the County and the Executive Director of the Coastal Commission. The restoration program shall be an ongoing program with the experimental or initial phase completed within three (3) years of the date of certification of the DPR and the full program in effect on that date or before.

5. Protection of Archeological Resources

Archeological resources within the PDVRA shall be protected by fencing. Accordingly, as part of the current fencing project, site No. SLO 199 shall be fenced for protection. Other sites shall be fenced as their locations become known.

6
Six months after the issuance of this permit, and annually thereafter until a permanent staging area is operational, a formal review of the effectiveness of the conditions of this permit shall take place. This review shall be undertaken jointly by designated representatives of the California Coastal Commission, the California Department of Fish and Game, the County of San Luis Obispo, the Community of Oceano, the California Department of Parks and Recreation, and user groups.

If after each of the annual reviews, or after the three year review required in condition 1(b) above, it is found that the Off-Highway Vehicle (OHV) use within the Pismo Dunes State Vehicle Recreation Area (PDSVRA) is not occurring in a manner which protects environmentally sensitive habitats and adjacent community values consistent with the requirements of the San Luis Obispo County Local Coastal Program Land Use Plan, then OHV access may be further limited pursuant to the access and habitat protection policies of the County certified Land Use Plan. If the above reviews find that OHV use within the PDSVRA is consistent with the protection of environmentally sensitive habitats and adjacent community values, and/or that additional staff and management revenues become available to the California Department of Parks and Recreation, levels of OHV use of the PDSVRA may be increased to a level not to exceed the enforcement and management capabilities available to the Pismo Beach State Park Units.

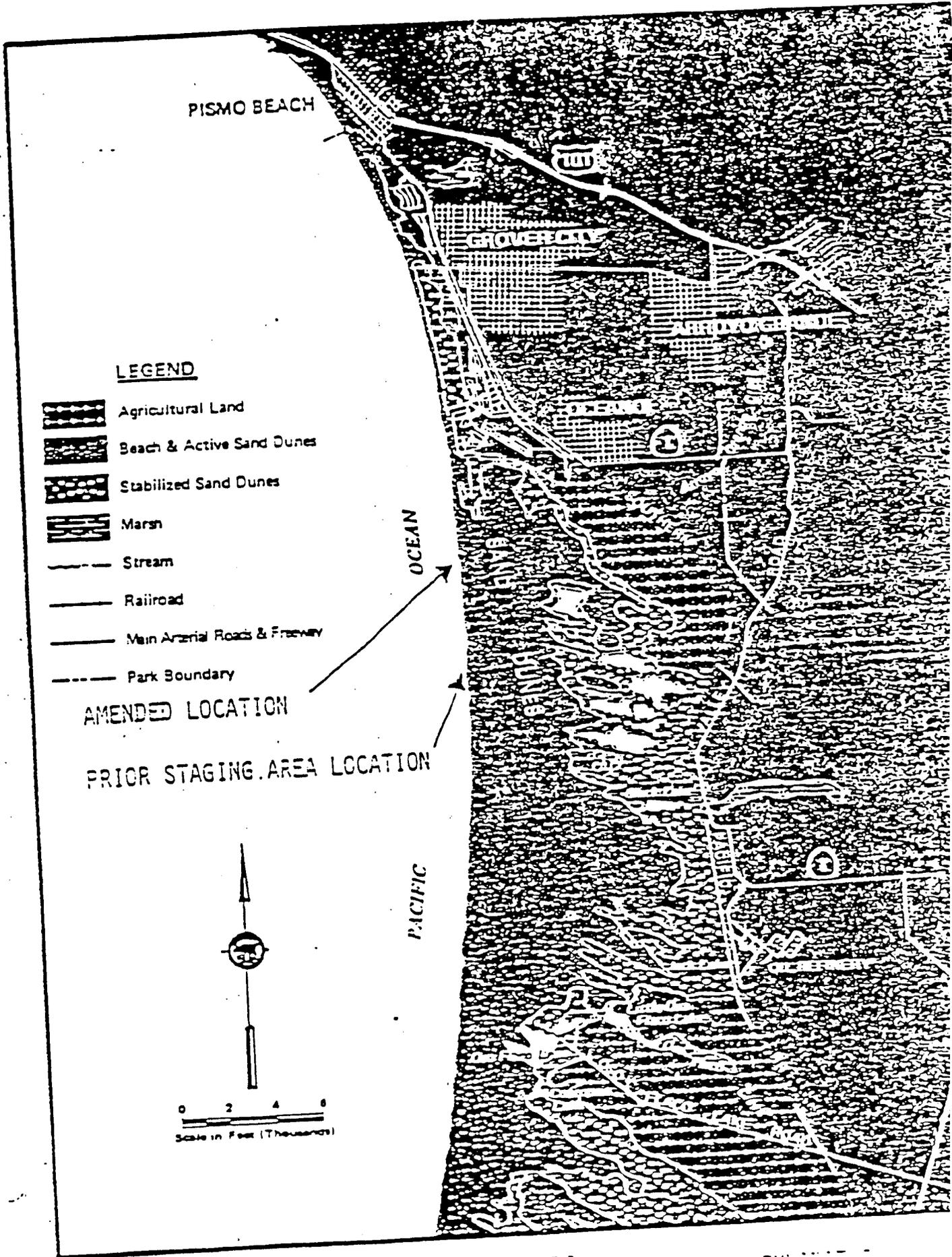


FIGURE 3
PHYSICAL CHARACTERISTICS



APPENDIX 5



- (b) One primary objective of the fencing is to prohibit vehicle access to the dune area south of Oso Flaco Creek. Accordingly, the east/west aligned fence north of Oso Flaco Creek shall continue seaward to the mean low water line so that vehicles do not pass to the south. The continuation of this line to mean low water may require a different construction than normal fencing - possibly driven piles.
- (c) Except for the following, fencing alignments shall be placed a minimum of 100 feet from the vegetated areas being fenced:
1. Along Sand Highway where the fence would encroach into the Sand Highway travel corridor.
 2. Along the seaward side of the foredunes paralleling the beach where fencing may be placed in a manner similar to that already existing along the westerly line of the State Dune Preserve except that a minimal number of breaks in the foredune fencing outside of the dune preserve may be allowed for OHV access to the backdune area. The fencing protecting the foredunes need not be a closed perimeter fence completely surrounding the foredune vegetation if it can be demonstrated to the Executive Director that such perimeter fencing is not necessary for effective preservation and stabilization of the foredunes.
 3. In other areas where it can be demonstrated that a placement closer to the vegetation will not diminish the effectiveness of the fence to stabilize the dune, protect the vegetation and provide the necessary conditions for dune rehabilitation and restoration. Said demonstration shall be in the form of competent analysis of the dynamics of dune sand transport and the natural conditions necessary for dune stabilization. Reductions in the minimum setback under this condition shall be reviewed and approved by the Executive Director of the Coastal Commission.
- (d) If fenced corridors to the Oso Flaco Lake Causeway are constructed, they shall be only for the use of State parks personnel and for the purpose of emergency, normal patrol duties, management and enforcement. Accordingly, these corridors shall have locked gates. ~~at points shown on Exhibit B.~~
- (e) Since a barrier to OHV movement south of Oso Flaco Creek is to be constructed on the north side of the creek, any construction of fencing south of Oso Flaco Creek or lakes shall be only for the purpose of preventing OHV intrusion into the State Park holdings from adjacent private lands. Such fencing shall therefore be perimeter fencing around parcels 8, 7, 3 and 4 and shall require a coastal development permit. Fencing applied for herein south of Oso Flaco Creek which is not perimeter fencing shall not be constructed, or if

constructed shall have been relocated to an alignment approved herein by November 30, 1982.

2. Protection of Environmentally Sensitive Habitats

PRC Section 30240 states that:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

The Pismo Dunes and Dune Lake Complex is recognized by local, State or Federal agencies as one of, if not the most, unique dune ecosystems within the State of California. The Commission, in coastal permit #4-82-300 found that while the dunes complex north of Oso Flaco Creek had historical use as a vehicular recreation area and is in State Parks ownership and managed as an OHV recreational resource, its vegetated dune system and wetlands must be protected by barriers and fencing which restrict OHV entry (see Coastal Permits 4-82-300, 300A and 300A2 plus the County of San Luis Obispo's certified LUP for detailed information.)

The Commission finds that while the proposed amendment would result in the opening of additional dune areas to OHV entry and use, the additional areas are those which do not contain sensitive vegetation or wetland habitats and their accessibility to vehicles use will not result in damage to such habitats.

The areas opened by the fence relocations are areas which are historically unvegetated open sand, or are areas which have been damaged so extensively by past vehicle entry that revegetation is unlikely. The new fence alignment is intended to protect existing vegetated areas without restricting large areas of open sand suitable for OHV recreation. The Commission finds that the proposed amendment is consistent with PRC 30240 of the 1976 Coastal Act, the San Luis Obispo County certified LUP and the expressed intent of Coastal Permit 4-82-300.

A P P E N D I X 6



**Biological Evaluation of Access Corridors to Pismo State Beach
and Pismo Dunes State Vehicular Recreation Area**

by

**Michael Kutilek, Ph.D. and
Howard Shellhammer, Ph.D.**

For

**California Department of General Services
Environmental Planning Unit, Sacramento, California
Contract Number FP6-0104**

**Department of Biological Sciences
San Jose State University
San Jose, California 95192**

408-924-4895 ATSS 556-4895

June 19, 1991

EXECUTIVE SUMMARY

This document contains the report of a short-term biological survey of five existing and proposed access corridors into Pismo State Beach and Pismo Dunes State Vehicular Recreation Area as part of the update of the General Development Plan and Resource Management Plan. The survey was accomplished by an on-site inspection of each corridor and a compilation of species lists from a recent, more intensive study of the area. The results of the survey show that the two existing corridors, (Corridors 1 and 2, Grand and Pier Avenues) have the least biological value of any of those surveyed and that continued use of these corridors, even with some modifications, provides for the least impact on native species of plants and animals. The environmental mitigation necessary to continue to use the existing corridors is also minimal. From a biological perspective, the development of new corridors will have moderate to extensive negative impacts on plant and animal communities and will require substantial mitigation in the case of two sites (corridors 3 and 4). In the case of corridor 5 (Callendar Road), the mitigation is likely to be so great as to make it economically infeasible.

INTRODUCTION

The Department of Parks and Recreation is updating the General Development Plan and Resource Management Plan for the Pismo State Beach and State Vehicular Recreation Area (SVRA) (Fig. 1). The update focuses on the changes necessary to comply with the Coastal Development Permit (CDP# 4-82-300) issued for the park development in 1982. The CDP stipulated that the least environmentally sensitive access corridor and staging area be identified and utilized for off-highway recreational activities associated with the SVRA. We were contracted to characterize the biotic communities, assess the biological impacts upon, and suggest mitigation alternatives for, five present and proposed access corridors (Fig. 2).

METHODS

We used data from the California Natural Diversity Data Base (CNDDB) to compile a list of specially-protected plant and animal species in the Pismo Beach area that have been listed as sensitive, threatened, or endangered by the California Department of Fish and Game and the U.S. Fish and Wildlife Service. With any two-day field survey regardless of the conditions, there are

a limited the number of species that will be observed. Therefore, in order to develop more complete species lists for the area, we utilized information compiled during our recent year-long study of Pismo Dunes SVRA and the vicinity (Appendixes 1-7) (Kutilek et al. 1991). Some of the plant and animal species that we observed during this survey do not appear in the appendixes due to slight differences in the locations surveyed.

We surveyed the proposed corridors on March 26-27, 1991 with a team of four experienced field biologists. The team included Drs. Kutilek and Shellhammer and two current graduate students from SJSU. Ms. Valerie Layne has worked on the vegetation of the SVRA for the last two years. Mr. Rob Burton has studied the birds, reptiles, and amphibians of the Oso Flaco Lake region for the past year and is currently studying the distribution and success of nesting endangered least terns (*Sterna antillarum*) throughout the Pismo Dunes region.

The field team walked the length of each corridor examining the biotic resources within 75 yards of either side of the center line. The plant communities were characterized by the dominant species present. At the same time we recorded the presence of animals by visual observation and detection of sign (scats, tracks, burrows). We also noted the potential for different animal species to live in an area based on the presence of the appropriate habitat characteristics. We paid particular attention to the presence and potential for sensitive, threatened, and endangered species as listed in the CNDDB. Mr. Burton reexamined Corridor 5 on April 6, 1991 looking for the presence of several sensitive and endangered animal species.

SENSITIVE SPECIES OF THE PISMO BEACH REGION

Three sensitive plant species listed in the CNDDB for the Pismo environs were not found in the habitats surveyed or did not occur in the state beach and SVRA. These species were the marsh sandwort (*Arenaria paludicola*), Gambell's yellow cress (*Rorippa gambellii*), and the Nipomo Mesa lupine (*Lupinus nipomensis*). It was too early in the growing season for the San Luis Mariposa lily (*Calochortus obispoensis*) and the Pismo clarkia (*Clarkia speciosa* spp.). Therefore, we did not expect to observe these two species even if they do, in fact, occur in the area.

The other six plant species were all in season and easily identifiable. These were the San Luis Obispo County monardella (*Monardella undulata* var. *frutescens*), crisp monardella (*M. crispa*), soft-leaved indian paintbrush (*Castilleja mollis*), short-lobed broomrape (*Orobanche parishii* spp. *brachyloba*), La Graciosa thistle (*Cirsium loncholepis*), and surf thistle (*C.*

rhotophilum). Of these species, only crisp monardella was identified in or near two of the corridors. All six of these species are specially-protected as candidates (category 2) for federal listing, i.e., existing information may warrant listing as threatened or endangered but substantial information is lacking.

Among the sensitive animal species, the southwestern pond turtle (*Clemmys marmorata pallida*) and the California black rail (*Laterallus jamaicensis coturniculus*) were not expected in the habitats surveyed. The snowy plover (*Charadrius alexandrinus nivosus*), the California least tern (*Sterna antillarum browni*), the silvery (glossy) legless lizard (*Anniella pulchra pulchra*), the black legless lizard (*A. p. nigra*), the two-striped garter snake (*Thamnophis hammondi*), the red-legged frog (*Rana aurora draytoni*), the monarch butterfly (*Danaus plexippus*), and the white sand bear scarab beetle (*Lichmanthe albipilosa*) were all potentially present in the habitats that we examined.

The snowy plover, black legless lizard, and red-legged frog are all California species of special concern and federal candidate 2 species. The silvery legless lizard and the two-striped garter snake are both California species of special concern. The monarch butterfly is considered sensitive by some government agencies. The sand bear scarab beetle is a federal candidate 2 species and the least tern is a state and federally-endangered species.

BIOTIC DESCRIPTIONS, VALUES, AND MITIGATIONS FOR CORRIDORS

Biotic Description of Corridor 1

Corridor 1 (Fig. 2) is a paved three-lane road that is one of the established entrances into the SVRA and State Beach along Grand Avenue. The south side of the road borders a thick growth of arroyo willow (*Salix lasiolepis*) in a portion of the SVRA's Dune Preserve. The north side of Grand Avenue has a gutter and sidewalk which borders a large ruderal (weedy) field and a paved parking lot. The ruderal field mainly supports species of introduced grasses and forbes such as wild oats (*Avena fatua*), ripgut (*Bromus diandrus*), *B. rubens*, mustard, *Brassica* sp., filaree, *Erodium* spp. and cheeseweed, *Malva parvaflora*. The willow marsh on the south side of the avenue had standing water at the time of our survey. The dune preserve was characterized by arroyo willow, wax myrtle (*Myrica californica*), bush lupine (*Lupinus chamissonis*), *Happlopappus ericoides*, and exotic dune grass (*Ammophila arenaria*). No animal sign was observed, however, heavy rains preceding the survey may have removed the

sign.

Biotic Value of Corridor 1

Corridor 1 is the second least biologically valuable corridor. It is the main entrance to the state beach and one of two entrances to the SVRA. The dune preserve, and especially the wet willow area bordering the south side of Grand Avenue, are biologically valuable areas. It is possible that red-legged frogs occur in the willow area. The biological value of the area as a whole would be reduced if Grand Avenue was widened to the south. The willows grow as a thicket so that the traffic noise and motion probably do not greatly limit use of the area by wildlife. The thick growth of willows act as a barrier to entry by most people. Widening Grand Avenue to the north would have little impact on existing wildlife because of the presence of a parking lot and a ruderal field with limited wildlife value.

Proposed mitigation for Corridor 1

Since Grand Avenue is one of the existing entrances into the State Beach and SVRA, no mitigation is necessary to continue to use Corridor 1 unless the entrance road is widened to the south. In this case, mitigation for loss of dune vegetation and willow habitat can take the form of adding to, or enhancing, the vegetation cover on a portion of the dune preserve south of the corridor.

We suggest that one acre of vegetated dune habitat be added for every acre lost. The alternative is to propagate native plants on three acres of existing unvegetated dune, adjacent to vegetated dune, for each acre lost. The one to one replacement and three to one enhancement are standard mitigation measures used throughout the state of California.

Biotic Description of Corridor 2

Corridor 2 is Pier Avenue, the second established entrance into the SVRA and state beach. The first block west of State Hwy 1 on Pier Avenue is a residential and business block. West of the first block, between Norswing and Lakeside streets, is an area with arroyo willows, open water and the State Park campground on the north side. The south side of the block has planted grass, a pond, and a vacant lot containing ruderal species (for ruderal species names, see description of Corridor 1). West of lakeside, Pier avenue is a four lane business district street with gutters and sidewalks. The willow areas

near the eastern end of the avenue, have some biotic value but most of the avenue, especially near the beach, has little wildlife value or natural vegetation.

We understand that a new plan calls for the establishment of an entrance to the SVRA one block north of Pier Avenue. Under this plan, the westernmost block of Pier Avenue (the present entrance) will become the exit. The north side of the proposed new entrance street will border the dune preserve. The establishment of this street will remove a narrow strip of dune vegetation just south of the dune preserve and possibly a narrow slice from the southern edge of the dune preserve. The area which will become the entrance road is presently covered with exotic dune grass and native arroyo willows.

Biotic Value of Corridor 2

Corridor 2 is the least biologically valuable of the proposed alternatives. Much of Pier Avenue is residential or urban. There is little, if any natural habitat and no appropriate habitat for specially-protected species. The avenue as a whole could not be widened without a major relocation of homes and businesses. The amount of wet willow habitat along the corridor's right of way is small. The park land and open water on its south side are artificially maintained and relatively low in biological value.

The new entrance, as we understand its route, would remove mostly introduced dune grass and about 2,000 square feet of willow from dry dunes rather than from the more biologically valuable wet dune habitat. Even if a limited buffer zone was needed on the southern end of the dune preserve, the habitat loss would be small and the loss is situated on the edge of the habitat area.

Proposed mitigation for Corridor 2

Since Pier Avenue is one of the existing entrances into the State Beach and SVRA, no mitigation is necessary to continue to use corridor 2 unless the proposed new entrance is created immediately north of Pier Avenue. In this case, mitigation for loss of dune grass and willow habitat can take the form of adding to, or enhancing, the vegetation cover on a portion of the dune preserve north of the corridor.

We suggest that one acre of vegetated dune habitat be added for every acre lost. The alternative is to propagate native plants on three acres of existing unvegetated dune, adjacent to vegetated dune, for each acre lost.

Biotic Description of Corridor 3

Corridor 3 crossed a ruderal field (for ruderal species names, see description of Corridor 1) at its eastern end, a flood control levee along the side of Arroyo Grande Creek, and a wet willow thicket inside the SVRA near the open dunes bordering the beach. The vegetation on the levee was also largely ruderal interspersed with native shrubs, mainly coyote bush (*Baccharis pilularis*). Midway along the corridor, there was a narrow stand of mature Monterey pines (*Pinus radiata*) and monterey cypresses (*Cupressus macrocarpa*). This row of trees was on the south side of the southern levee bordering Arroyo Grande Creek immediately east of the SVRA boundary.

At the boundary of the SVRA, the levee road crossed a flood plain and passed through a wet willow grove. The interior of the willow grove was composed primarily of arroyo willows. Along the edge of the road there was a narrow band of poison oak (*Toxicodendron diversilobum*), coyote bush, and blackberry (*Rubus vitifolius*).

Biotic Value of Corridor 3

Corridor 3 has equal biotic value to corridor 4; greater value than Corridors 1 and 2, but considerably less than Corridor 5. The willow thicket and the coastal dunes constitute the most biologically valuable portions of Corridor 3. Developing an access road by widening or straightening the present dirt road through the thicket would destroy more of the willow habitat and effectively cut it into two smaller units.

Willow thickets typically support great numbers of resident birds throughout the year as well as seasonal migrants. Rob Burton has studied similar willow thickets around Oso Flaco Lake several miles south and has found them to contain a great diversity and abundance of birds including warblers, sparrows, swallows, towhees, woodpeckers, blackbirds, and raptorial species. We observed heavy bird use in the thicket during the survey.

Reptiles, amphibians, and small to medium-sized mammals all probably make use of this willow habitat as well. The habitat is ideal for the two-striped garter snake and the red-legged frog, both specially-protected species, although neither species was observed during this survey.

The sand dune complex between the willows and the beach, on the south side of the mouth of Arroyo Grande Creek, has moderate biological value, although there is a large portion of introduced dune grass. The northern end of the dune complex also contains a

number of archeological sites (Don Patton, Department of Parks and Recreation Pers. Comm.)

There is some valuable nesting and roosting sites for birds in the row of Monterey pines and cypresses along the outer edge of the south levee described above. However, the value is minor when compared with that of the willow thicket further to the west.

Proposed mitigation for Corridor 3

The impact of road-building on the willow thicket near the end of Corridor 3 can be mitigated by placing the new road along the south edge of Arroyo Grande Creek from the point where the present road leaves the levee and passes through the willow thicket. The road through the willow thicket would then be closed, allowing the old road to revert to natural vegetation. Building the road along the northern edge of the willows rather than through the thicket will maintain the biological value of the thicket.

A road along the north side of the willow thicket will have to be raised until it reaches the dunes bordering the beach. The raised construction will allow flood waters to enter the willow thicket as they now do in order to maintain its biological value. The elevated road could either be on piers or on landfill penetrated frequently by large culverts. The road will pass through the edge of the dune preserve immediately south of Arroyo Grande Creek. The loss of a small portion of the dune preserve could be mitigated by revegetating a nearby area with native plant species on the basis of three acres revegetated for each acre lost.

Part of the dune preserve looms high above the south side of the willow thicket. The northernmost edge of this dunescape has patches of crisp monardella, a specially-protected species. It is, therefore, inadvisable to build an entrance road along the southern edge of the willow thicket because of the presence of a high, unstable dune with a sensitive plant species growing upon it.

Biotic Description of Corridor 4

Corridor 4 crossed a large farming area with fields of agricultural crops and ruderal weeds at its eastern end (for ruderal species names, see description of Corridor 1). The proposed path of this corridor joined the south levee road bordering Arroyo Grande Creek near the point where the row of trees, noted in the description of Corridor 3, began. The

central and western portions of Corridor 4 are the same as for Corridor 3, therefore, the biologically important segment of Corridor 4 has been described above in the description of Corridor 3.

Biotic Value of Corridor 4

Since the most biologically important segment of Corridor 4 is exactly the same as for Corridor 3, the biotic value for Corridor 4 is equal to that described for Corridor 3 above.

Proposed mitigation for Corridor 4

The most biologically valuable areas are the same for Corridors 3 and 4, therefore, the proposed mitigation is the same (see Proposed Mitigation for Corridor 3 above).

An alternative, reasonable mitigation measure for any loss of habitat related to road construction along Corridors 1 through 4 could be the purchase and protection of more lands and waters adjacent to the eastern and southern sides of Oso Flaco Lake, an area with considerable biological value. Currently, much of the southeastern and southern parts of the lake are in private hands and therefore, have limited protection.

Biotic Description of Corridor 5

Corridor 5 extends into the southern dune complex of the SVRA at the point where unstabilized dunes lie closest to Highway 1. The eastern end of the corridor began at Callender Road (Fig. 1). It passed along the east side of the railroad tracks in a north-south direction, turned west through a short length of stabilized dunes and crossed into the unstabilized dunes at the south end of the SVRA.

The east end of the site supported an mature stand of introduced blue gums (*Eucalyptus globulus*) east of the railroad tracks. Specially-protected monarch butterflies were observed beneath these trees near the eastern end of the corridor. The vegetation was an open mixture of herbaceous and woody plants dominated by ruderal weeds, bush lupine and wax myrtle and coyote bush (for ruderal species names, see description of Corridor 1).

West of the railroad tracks on the stabilized dunes, the vegetation was composed of fewer individuals of introduced plants and a greater proportion of native species such as bush lupine and wax myrtle. The unstabilized dunes immediately west of the stabilized dune area supported many stands of specially-protected crisp monardella growing along the sides of most

depressions. Crisp monardella was locally abundant in this area with stands that were often 10 to 25 feet wide and 100 to 200 feet long.

The swales between the larger dunes were inhabited by stands of bush lupine. In the more protected or larger swales, the lupine was dense and tall enough to allow for the buildup of a layer of litter which is important in recycling nutrients back to the nutrient-poor soils.

Biotic Value of Corridor 5

Corridor 5 was biologically the most valuable of the five sites surveyed for a number of reasons.

1. Crisp monardella grew as a barrier across the entrance to the unstabilized dunes and was locally abundant throughout the area.

2. There was a band of unbroken stabilized dunes supporting mostly native vegetation stretching from the Dune Preserve at the mouth of Arroyo Grande Creek through the stabilized dunes of the SVRA, the Union Oil Property, and Oso Flaco lake. This unbroken band continues for almost five miles south to the mouth of the Santa Maria River and is the largest contiguous block of native vegetation along this part of the central coast. The size of this habitat island is undoubtedly a major factor in sustaining the diversity and abundance of wildlife (MacArthur and Wilson 1967). The establishment of a fenced road stretching almost a mile through the stabilized dunes within Corridor 5 could create a barrier to animal and plant migration, no matter how narrow the road may be. This in turn could lead to a reduction in plant and animal diversity.

3. The crisp monardella and other plants at the western end of this corridor were partially protected from being inundated by moving sand due to the presence of a hard dune surface. Breaking the hard surface by allowing even limited vehicular use would create inland sand movement and bury more of the existing vegetation, including specially-protected species.

4. The lupine-filled swales at the edge of the unstabilized dunes were ideal habitat for silvery (glossy) legless lizards and perhaps black legless lizards both of which are specially-protected subspecies. These subspecies spend much of their time below ground where they are nearly impossible to detect. When conditions are ideal, i.e., a warm day immediately following rainfall, they emerge and move about under vegetation cover and litter where they can be detected by searching appropriate areas. If legless lizards do live along Corridor 5, it is not surprising that we did not detect them during our brief survey because the conditions were far from ideal with heavy, intermittent rainfall.

5. The concentration of eucalyptus trees on the east side of the railroad tracks in the proposed staging area for this corridor may be used as resting sites by monarch butterflies. Additional study of this possibility is called for if Corridor 5 is considered further.

6. Least terns are known to nest throughout the dunes during the months of May through August. Opening the area to added vehicular traffic may put additional pressure on this endangered species and create further management problems for the SVRA staff during the busiest seasons of the year.

7. The two-striped garter snake and the sand bear scarab beetle are both potential inhabitants of the habitats found in Corridor 5 and may also be negatively impacted by vehicular traffic.

Proposed mitigation for Corridor 5

We cannot identify suitable mitigation measures for Corridor 5. Constructing even a narrow, unpaved road through the vegetated dunes at this location runs the risk of producing substantial damage. The presence of a fenced road will likely reduce the ability of animals to migrate and hence may effectively create two vegetated islands much smaller than the size of the original tract. A reduction in the size of the islands of habitat may ultimately lead to a loss of species and a reduction in abundance (MacArthur and Wilson 1967).

There is little that can be done to rectify the potential damage of building a road through this area. The amount of habitat that would have to be added or recreated to mitigate the loss of contiguous natural vegetation would be so large as to make it an economically infeasible alternative. Clearly, construction of a road along Corridor 5 poses the greatest negative biological impact to native plants and animals of any of the alternatives and has no appropriate mitigation measures that are economically feasible.

CONCLUSION

From a biological perspective, the least damaging course of action is to continue to use corridors 1 and 2 (Grand and Pier Avenues) as the access roads into the State Beach and SVRA. The development of any of the other three alternatives will have negative impacts on communities of native plants and animals, call for substantial mitigation, and create added natural resource management problems for State Parks staff.

Literature Cited

Kutilek, M., H. Shellhammer, and W. Bros. 1991. Inventory, wildlife protection program, and monitoring program for Pismo Dunes State Vehicular Recreation Area, California. Unpubl. Rep. for the Calif. Dept. Parks and Rec., Off-Highway Motor Veh. Rec. Div. Sacramento, CA.

MacArthur, R.H. and E.O. Wilson. 1967. The theory of island biogeography. Princeton University Press, Princeton, N.J.

Appendix 1. List of plant species detected by visual observation in and around Pismo Dunes State Beach and Vehicular Recreation Area during a year-long study, 1989-90 (Kutilek et al. 1991). Families are listed in alphabetical order. Common names are given before scientific names, where they exist.

 Family/Species

Aizoaceae

Ice Plant - *Mesembryanthemum elongatum*
 Hottentot Fig - *Mesembryanthemum edule*

Amaryllidaceae

Blue Dicks - *Dichelostemma Pulchella*

Anacardiaceae

Poison Oak - *Toxicodendron diversilobum*

Apiaceae

Poison Hemlock - *Conium maculatum*
 Sweet fennel - *Foeniculum vulgare*
 Marsh Pennywort - *Hydrocotyle ranunculoides*

Asteraceae

Ragweed - *Ambrosia dumosa*
 Telegraph Weed - *Heterotheca grandiflora*
 Yarrow - *Achilla borealis* ssp. *arenicola*
Haplopappus ericoides
 Coyote Brush - *Baccharis pilularis consanguinea*
Eriophyllum staechadifolium var. *artemisiaefolium*
 Wild Lettuce - *Lactuca serriola*
 Thistle - *Cirsium occidentale*
Corethrogyne filaginifolia var. *robusta*
Senecio blochmaniae
Jaumea carnosa
Malacothrix californica
Malacothrix incana
Chaenactis glabrisula var. *lanosa*
Aster blochmaniae
Layia glandulosa
Lasthenia chrysostoma
 Ca Sagebrush - *Artemisia californica*

Family/Species

Filago californica
Gnaphalium sp.
Erigeron blochmaniae
African Daisy - *Arctotis stoechadifolia*
Solidago guiradonis

Boraginaceae

Fiddleneck - *Amsinckia intermedia*

Brassicaceae

Sea-rocket - *Cakile maritima*
Wallflower - *Erysimum insulare*

Caprifoliaceae

Virgin's bower - *Clematis* sp.

Caryophyllaceae

Indian Pink - *Silene laciniata* var. *angustifolia*

Chenopodiaceae

Rumex sp.

Convolvulaceae

Calystegia sp.

Crassulaceae

Live-forever - *Dudleya lanceolata*

Cyperaceae

Carex obnupta
Carex pansa

Euphorbiaceae

Family/Species

Croton - Croton Californicus

Fabaceae

Lupinus arboreus
Lupinus chamissonis
Deer Weed - *Lotus scoparius*
Astragalus nuttallii

Hydrophyllaceae

Phacelia ramosissima
Baby Blue Eyes - *Nemophila menziesii*

Juncaceae

Juncus leseurii
Scirpus americanus
Scirpus californicus

Lamiaceae

Monardella crispa

Lennoaceae

Pholisma arenarium

Myricaceae

Ca Wax Myrtle - *Myrica californica*

Nyctaginaceae

Yellow Sand Verbena - *Abronia latifolia*
Beach Sand Verbena - *Abronia umbellatum*

Onagraceae

Camissonia cheiranthifolia
Camissonia micrantha
Oenothera hookeri

Family/Species

Papaveraceae

Ca Poppy - *Eschsholzia californica* var. *maritima*

Poaceae

Ripgut - *Bromus diandrus*

Bromus rubens

Redtop - *Agrostis alba*

Pampas Grass - *Cortaderia selloana*

Rye - *Hordeum* sp.

European Dune Grass - *Ammophila arenaria*

Wild oats - *Avena fatua*

Salt Grass - *Distichlis spicata*

Polemoniaceae

Eriastrum densifolium var. *densifolium*

Prickly Phlox - *Leptodactylon californicum*

Polygonaceae

Eriogonum latifolium

Eriogonum parvifolium

Primulaceae

Sea Milkwort - *Glaux maritima*

Scarlet pimpernel - *Anagalis arvensis*

Ranunculaceae

Larkspur - *Delphinium parryi* spp. *blochmanae*

Rhamnaceae

Coffeeberry - *Rhamnus californica*

Rosaceae

Blackberry - *Rubus vitifolius*

Cinquefoil - *Potentilla egedii*

Sand Strawberry - *Fragaria chiloensis*

Family/Species

Horkelia cuneata

Desert Almond - *Prunus fasciculatum* var. *punctata*

Salicaceae

Arroyo willow - *Salix lasiolepis*

Black Cottonwood - *Populus trichocarpa*

Salviniaceae

Azolla filiculoides

Saxifragaceae

Gooseberry - *Ribes* sp.

Scrophulariaceae

Soft-leaved Indian Paintbrush - *Castilleja mollis*

Scarlet Bugler - *Penstemon centranthifolius*

Owl's clover - *Orthocarpus purpurascens*

Typhaceae

Cattail - *Typha latifolia*

Urticaceae

Stinging nettle - *Urtica holosericea*

Appendix 2. Number of detections/man-hour of herptiles using time-constrained searches in and around Pismo Dunes State Beach and Vehicular Recreation Area during a year-long study, 1989-90 (Kutilek et al. 1991).

| Species | Total |
|---------------------------------------------------|-------------|
| AMPHIBIANS | |
| BULLFROG - <i>Rana Catesbeiana</i> | 0.75 |
| PACIFIC TREE FROG - <i>Hyla regilla</i> | 0.28 |
| REPTILES | |
| W FENCE LIZARD - <i>Sceloporus occidentalis</i> | 0.69 |
| W POND TURTLE - <i>Clemmys marmorata</i> | 0.61 |
| COAST HORNED LIZARD - <i>Phrynosoma coronatum</i> | 0.03 |
| TOTAL | 2.36 |

Appendix 3. Annual number of detections of terrestrial bird species from variable circular plot sampling (N=112 plots) in and around Pismo Dunes State Beach and Vehicular Recreation Area during a year-long study, 1989-90 (Kutilek et al. 1991).

| Species | Total |
|-------------------------------------------------------|-------|
| COMMON BUSHTIT - <i>Psaltriparus minimus</i> | 467 |
| HOUSE FINCH - <i>Carpodacus mexicanus</i> | 295 |
| WHITE-CROWNED SPARROW - <i>Zonotrichia leucophrys</i> | 215 |
| MOURNING DOVE - <i>Zenaida macroura</i> | 211 |
| WRENTIT - <i>Chamaea fasciata</i> | 166 |
| BEWICK'S WREN - <i>Thryomanes bewickii</i> | 144 |
| YELLOW-RUMPED WARBLER - <i>Dendroica coronata</i> | 131 |
| CLIFF SWALLOW - <i>Hirundo pyrrhonota</i> | 122 |
| REDWINGED BLACKBIRD - <i>Agelaius phoeniceus</i> | 112 |
| BREWER'S BLACKBIRD - <i>Euphagus cyanocephalus</i> | 97 |
| CA THRASHER - <i>Toxostoma redivivum</i> | 84 |
| RUFOS-SIDED TOWHEE - <i>Pipilo erythrophthalmus</i> | 68 |
| CA QUAIL - <i>Callipepla californica</i> | 59 |
| BROWN TOWHEE - <i>Pipilo fuscus</i> | 42 |
| BLACK PHOEBE - <i>Sayornis nigricans</i> | 38 |
| ANNA'S HUMMINGBIRD - <i>Calypte anna</i> | 37 |
| LESSER GOLDFINCH - <i>Carduelis psaltria</i> | 34 |
| SONG SPARROW - <i>Melospiza melodia</i> | 27 |
| COMMON YELLOWTHROAT - <i>Geothlypis trichas</i> | 20 |
| LOGGERHEAD SHRIKE - <i>Lanius ludovicianus</i> | 17 |
| MALLARD - <i>Anas platyrhynchos</i> | 15 |
| WATER PIPIT - <i>Anthus spinoletta</i> | 12 |
| KILLDEER - <i>Charadrius vociferus</i> | 11 |
| WHIMBREL - <i>Numenius phaeopus</i> | 10 |
| SCRUB JAY - <i>Aphelocoma coerulescens</i> | 9 |
| YELLOW WARBLER - <i>Dendroica petechia</i> | 9 |
| NUTTALL'S WOODPECKER - <i>Picoides nuttallii</i> | 8 |
| BARN SWALLOW - <i>Hirundo rustica</i> | 8 |
| SAY'S PHOBE - <i>Sayornis saya</i> | 5 |
| NO FLICKER - <i>Colaptes auratus</i> | 4 |
| AM CROW - <i>Corvus brachyrhynchos</i> | 4 |
| HERMIT THRUSH - <i>Catharus guttata</i> | 3 |
| TURKEY VULTURE - <i>Cathartes aura</i> | 2 |
| RED-TAILED HAWK - <i>Buteo jamaicensis</i> | 2 |
| GREAT HORNED OWL - <i>Bubo virginianus</i> | 2 |
| DOWNY WOODPECKER - <i>Dendrocopos pubescens</i> | 2 |
| PLAIN TITMOUSE - <i>Parus inornatus</i> | 2 |
| W MEADOWLARK - <i>Sturnella neglecta</i> | 2 |
| WILSON'S WARBLER - <i>Wilsonia pusilla</i> | 2 |

| Species | Total |
|---------------------------------------------------------|-------|
| BLUE-GRAY GNATCATCHER - <i>Polioptila caerulea</i> | 2 |
| RUBY-CROWNED KINGLET - <i>Regulus calendula</i> | 2 |
| BLACK-SHOULDERED KITE - <i>Elanus caeruleus</i> | 1 |
| SHARP-SHINNED HAWK - <i>Accipiter striatus</i> | 1 |
| GREAT BLUE HERON - <i>Ardea herodias</i> | 1 |
| WILLET - <i>Catoptrophorus semipalmatus</i> | 1 |
| W FLYCATCHER - <i>Empidonax difficilis</i> | 1 |
| EUROPEAN STARLING - <i>Sturnus vulgaris</i> | 1 |
| AMERICAN GOLDFINCH - <i>Carduelis tristis</i> | 1 |
| TOWNSEND'S WARBLER - <i>Dendroica townsendi</i> | 1 |
| GOLDEN-CROWNED SPARROW - <i>Zonotrichia atricapilla</i> | 1 |
| MACGILLIVRAY'S WARBLER - <i>Oporornis tolmiei</i> | 1 |
| TOTAL | 2512 |

Appendix 4. Annual abundance of small mammal species captured in Sherman live traps (N=3600 trap nights) in and around Pismo Dunes State Beach and Vehicular Recreation Area during a year-long study, 1989-90 (Kutilek et al. 1991).

| Species | Total |
|----------------------------------------------------|-------------|
| DEER MOUSE - <i>Peromyscus maniculatus</i> | 1068 |
| HEERMANN KANGAROO RAT - <i>Dipodomys heermanni</i> | 416 |
| CA MOUSE - <i>Peromyscus californicus</i> | 248 |
| CA MEADOW MOUSE - <i>Microtus californicus</i> | 136 |
| DUSKY-FOOTED WOOD RAT - <i>Neotoma fuscipes</i> | 36 |
| W HARVEST MOUSE - <i>Reithrodontomys megalotis</i> | 29 |
| CA POCKET MOUSE - <i>Perognathus californicus</i> | 10 |
| BLACK RAT - <i>Rattus rattus</i> | 1 |
| TOTAL | 1944 |

Appendix 5. Number of tracks detected at 10 track stations in and around Pismo Dunes State Beach and Vehicular Recreation Area during a year-long study, 1989-90 (Kutilek et al. 1991).

| Species | Total |
|-------------------------------------------------|-----------|
| COYOTE - <i>Canis latrans</i> | 31 |
| GRAY FOX - <i>Urocyon cinereoargenteus</i> | 4 |
| RACCOON - <i>Procyon lotor</i> | 2 |
| AUDUBON COTTONTAIL - <i>Sylvilagus auduboni</i> | 1 |
| STRIPED SKUNK - <i>Mephitis mephitis</i> | 1 |
| TOTAL | 39 |

Appendix 6. Number of sightings of larger mammals during night spotlighting in and around Pismo Dunes State Beach and Vehicular Recreation Area during a year-long study, 1989-90 (Kutilek et al. 1991).

| Species | Total |
|------------------------------------------------------------|-------|
| COYOTE - <i>Canis latrans</i> | 17 |
| BLACK-TAILED DEER - <i>Odocoileus hemionus columbianus</i> | 8 |
| AUDUBON COTTONTAIL - <i>Sylvilagus auduboni</i> | 7 |
| BLACK-TAILED JACKRABBIT - <i>Lepus californicus</i> | 6 |
| RACCOON - <i>Procyon lotor</i> | 1 |
| STRIPED SKUNK - <i>Mephitis mephitis</i> | 1 |

Appendix 7. List of incidental species detected at Pismo Dunes State Vehicular Area during a year-long study 1989-90 (Kutilek et al. 1991).

Amphibians

California legless lizard - (*Anniella pulchra*)

Birds

Cooper's hawk - (*Accipiter cooperi*)

Merlin - (*Falco columbarius*)

Oldsquaw - (*Clangula hyemalis*)

Mammals

Long-tailed weasel - (*Mustela frenata*)

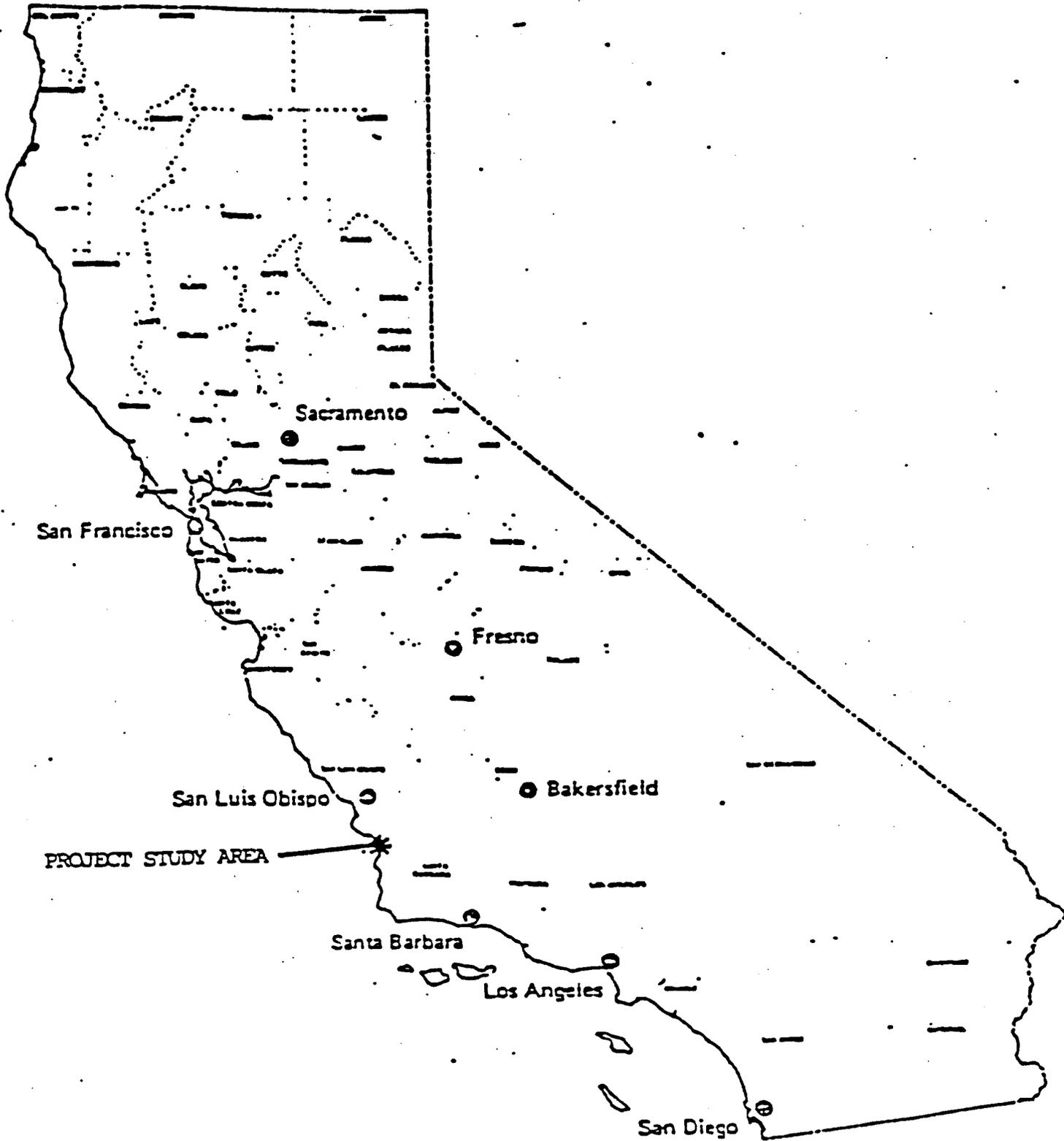
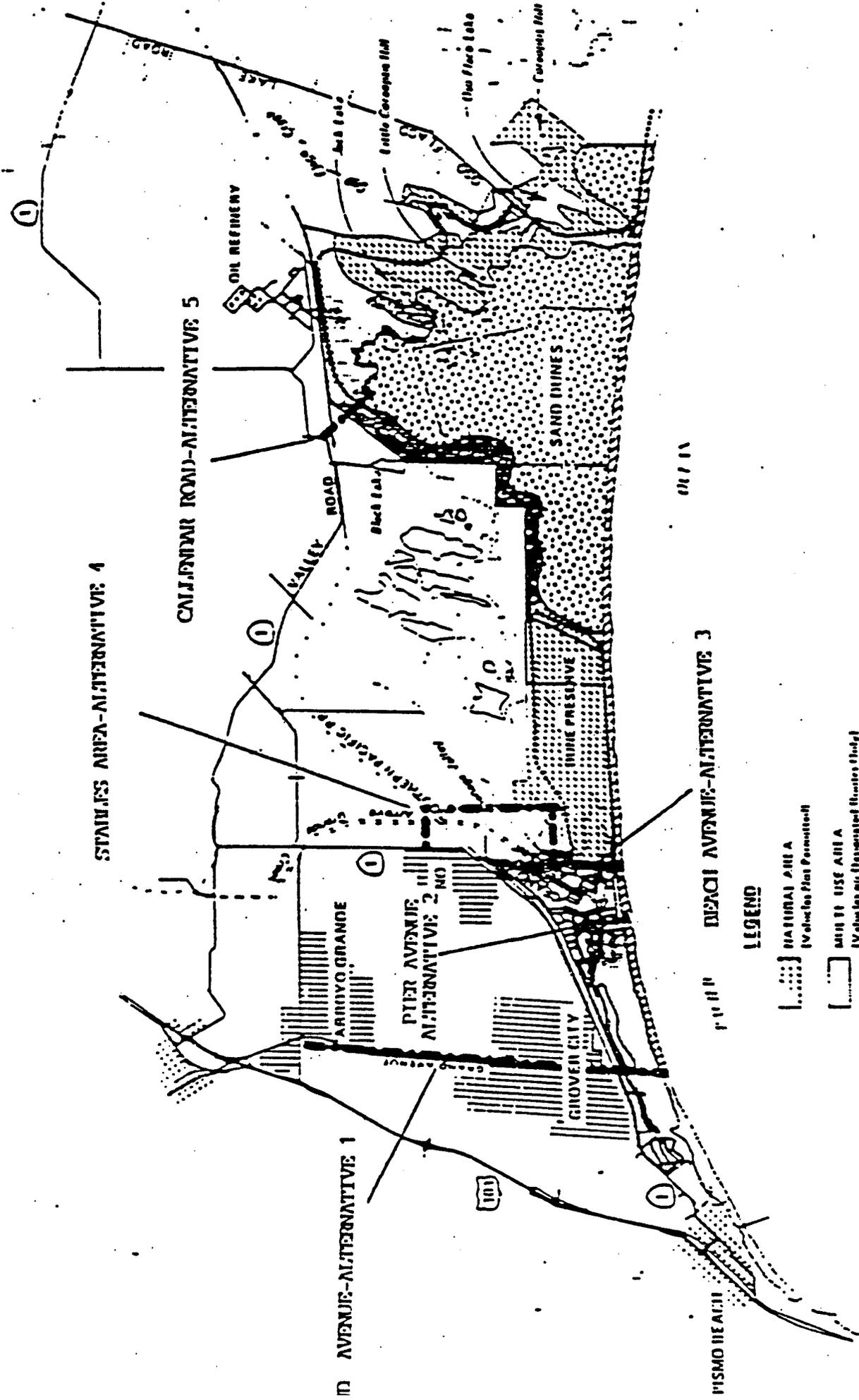
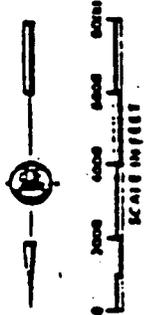


FIGURE 1
LOCATION MAP



LEGEND

-  **NATURAL AREA**
(Values Not Permitted)
-  **MHI USE AREA**
(Values are Integrated Routes Study)
-  **MHI USE AREA**
(Interpretive Four Vehicle Study)
-  **PIEVE RECREATION AREA**
(Values Restricted from Vegetated Areas)
-  **BEACH WITH VEHICLE ACCESS**
-  **BEACH WITHOUT VEHICLE ACCESS**
-  **INDUSTRIAL AND HIGHWAY**



A P P E N D I X 7



Memorandum

Date : April 29, 1991

To : Mr Jeff Martinez, Environmental Planner
 Department of General Services
 Office of Project Development and Management
 400 P. Street, Suite 3460
 Sacramento, Ca. 95814

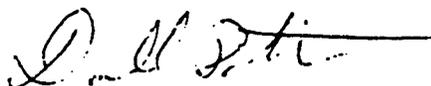
From : Department of Parks and Recreation
 Pismo Dunes District

Subject: FLEET MIX SURVEYS FOR PISMO DUNES SVRA GENERAL PLAN UPDATE

Enclosed are the surveys of vehicles entering Pismo Dunes, as you requested.

Summary:

| DATE | | <u>ON HIGHWAY VEHICLES</u> | <u>OFF HIGHWAY VEHICLES</u> |
|-------------|-------|----------------------------|-----------------------------|
| Monday | Pier | 92 | 22 |
| Apr.22 | Grand | 146 | 27 |
| Total | | 238 | 49 |
| Tuesday | Pier | 65 | 22 |
| Apr.23 | Grand | 109 | 5 |
| Total | | 174 | 27 |
| Wednes. | Pier | 55 | 18 |
| Apr.24 | Grand | 172 | 9 |
| Total | | 227 | 27 |
| Thurs. | Pier | 84 | 26 |
| Apr.25 | Grand | 104 | 15 |
| Total | | 188 | 41 |
| Friday | Pier | 197 | 183 |
| Apr26 | Grand | 147 | 37 |
| Total | | 344 | 220 |
| Satur. | Pier | 501 | 273 |
| Apr.27 | Grand | 358 | 81 |
| Total | | 859 | 354 |
| Sunday | Pier | 333 | 140 |
| Apr.28 | Grand | 238 | 66 |
| Total | | 571 | 206 |
| Grand Total | Pier | 1,327 | 684 |
| | Grand | 1,274 | 240 |
| | | 2,601 | 924 |



Donald G. Patton
 District Superintendent

cc: Les Maddox



A P P E N D I X 8



Project Name : Pismo Dunes SVRA

Date : 08-27-1991

Analysis Year = 1990

Temperature = 75

EMFAC7 VERSION : EMFAC7D ...11/88

| Unit Type | Trip Rate | Size | Tot Trips | Days Op. |
|------------------|-----------|------|-----------|----------|
| Pismo Dunes SVRA | 0.5/Acre | 2000 | 1000 | 1 |

| | Residential | | | Commercial | |
|----------------|-------------|-----------|------------|------------|----------|
| | Home-Work | Home-Shop | Home-Other | Work | Non-Work |
| Trip Length | 5.3 | 0.0 | 31.0 | 0.0 | 0.0 |
| % Started Cold | 87.7 | 38.4 | 57.0 | 76.6 | 26.6 |
| Trip Speed | 35 | 35 | 35 | 35 | 35 |
| Percent Trip | 27.3 | 21.2 | 51.5 | | |

Vehicle Fleetmix

| Vehicle Type | Percent Type | Leaded | Unleaded | Diesel |
|--------------------|--------------|--------|----------|--------|
| Light Duty Autos | 30.0 | 6.6 | 90.5 | 2.9 |
| Light Duty Trucks | 46.0 | 8.1 | 88.8 | 3.1 |
| Medium Duty Trucks | 20.0 | 15.2 | 84.8 | 0.0 |
| Heavy Duty Trucks | 3.0 | 59.8 | 40.2 | N/A |
| Heavy Duty Trucks | 1.0 | N/A | N/A | 100.0 |
| Motorcycles | 0.0 | 100.0 | N/A | N/A |

Project Emissions Report in Lb/Day

| Unit Type | TG6 | CO | NOx |
|------------------|-----|------|-----|
| Pismo Dunes SVRA | 8.8 | 60.5 | 4.7 |

Project Emissions Report in Lb/Day

| Unit Type | FUEL USE | PM10 | SOx |
|------------------|----------|------|-----|
| Pismo Dunes SVRA | 0.0 | 0.0 | 0.0 |

Project Name : Pismo Dunes SVRA

Date : 08-27-1991

Analysis Year = 1995

Temperature = 75

EMFAC7 VERSION : EMFAC7D ...11/88

| Unit Type | Trip Rate | Size | Tot Trips | Days Op. |
|------------------|-----------|------|-----------|----------|
| Pismo Dunes SVRA | 0.5/Acre | 2000 | 1000 | 1 |

| | Residential | | | Commercial | |
|----------------|-------------|-----------|------------|------------|----------|
| | Home-Work | Home-Shop | Home-Other | Work | Non-Work |
| Trip Length | 5.3 | 0.0 | 31.0 | 0.0 | 0.0 |
| % Started Cold | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Trip Speed | 35 | 35 | 35 | 35 | 35 |
| Percent Trip | 27.3 | 21.2 | 51.5 | | |

Vehicle Fleetmix

| Vehicle Type | Percent Type | Leaded | Unleaded | Diesel |
|--------------------|--------------|--------|----------|--------|
| Light Duty Autos | 30.0 | 1.7 | 95.6 | 2.7 |
| Light Duty Trucks | 46.0 | 2.2 | 95.0 | 2.8 |
| Medium Duty Trucks | 20.0 | 5.3 | 94.7 | 0.0 |
| Heavy Duty Trucks | 3.0 | 29.8 | 70.3 | N/A |
| Heavy Duty Trucks | 1.0 | N/A | N/A | 100.0 |
| Motorcycles | 0.0 | 100.0 | N/A | N/A |

Project Emissions Report in Lb/Day

| Unit Type | TOG | CO | NOx |
|------------------|-----|------|-----|
| Pismo Dunes SVRA | 3.4 | 24.2 | 3.2 |

Project Emissions Report in Lb/Day

| Unit Type | FUEL USE | PM10 | SOx |
|------------------|----------|------|-----|
| Pismo Dunes SVRA | 0.0 | 0.0 | 0.0 |

Project Name : Pismo Dunes SVRA

Date : 08-27-1991

Analysis Year = 2000 Temperature = 75
 EMFAC7 VERSION : EMFAC7D ...11/88

| Unit Type | Trip Rate | Size | Tot Trips Days Op. | |
|------------------|-------------|-----------|--------------------|----------|
| | | | 1000 | 1 |
| Pismo Dunes SVRA | 0.5/Acre | 2000 | 1000 | 1 |
| | | | Commercial | |
| | | | Work | Non-Work |
| Trip Length | | | 0.0 | 0.0 |
| % Started Cold | | | 0.0 | 0.0 |
| Trip Speed | | | 35 | 35 |
| Percent Trip | | | | |
| | Residential | | | |
| | Home-Work | Home-Shop | Home-Other | |
| Trip Length | 5.3 | 0.0 | 31.0 | |
| % Started Cold | 0.0 | 0.0 | 0.0 | |
| Trip Speed | 35 | 35 | 35 | |
| Percent Trip | 27.3 | 21.2 | 51.5 | |

Vehicle Fleetmix

| Vehicle Type | Percent Type | Leaded | Unleaded | Diesel |
|--------------------|--------------|--------|----------|--------|
| Light Duty Autos | 30.0 | 0.2 | 97.3 | 2.5 |
| Light Duty Trucks | 46.0 | 0.6 | 96.8 | 2.6 |
| Medium Duty Trucks | 20.0 | 2.0 | 98.0 | 0.0 |
| Heavy Duty Trucks | 3.0 | 18.0 | 82.0 | N/A |
| Heavy Duty Trucks | 1.0 | N/A | N/A | 100.0 |
| Motorcycles | 0.0 | 100.0 | N/A | N/A |

Project Emissions Report in Lb/Day

| Unit Type | TOG | CO | NOx |
|------------------|-----|------|-----|
| Pismo Dunes SVRA | 2.7 | 24.7 | 2.7 |

Project Emissions Report in Lb/Day

| Unit Type | FUEL USE | PM10 | SOx |
|------------------|----------|------|-----|
| Pismo Dunes SVRA | 0.0 | 0.0 | 0.0 |

Project Name : Pismo Beach SVRA

Date : 07-14-1991

Analysis Year = 1990

Temperature = 75

EMFAC7 VERSION : EMFAC7D ...11/88

| Unit Type | Trip Rate | Size | Tot Trips | Days Op. |
|-----------|-----------|------|-----------|----------|
|-----------|-----------|------|-----------|----------|

| | | | | |
|------------------|----------|------|-----|---|
| Pismo Beach SVRA | 0.2/Acre | 2000 | 400 | 1 |
|------------------|----------|------|-----|---|

| | Residential | | | Commercial | |
|--------------|-------------|-----------|------------|------------|----------|
| | Home-Work | Home-Shop | Home-Other | Work | Non-Work |
| Trip Length | 0.0 | 0.0 | 0.0 | 0.0 | 40.0 |
| Started Cold | 87.7 | 38.4 | 57.0 | 76.6 | 26.6 |
| Trip Speed | 35 | 35 | 35 | 35 | 10 |
| Percent Trip | 27.3 | 21.2 | 51.5 | | |

Vehicle Fleetmix

| Vehicle Type | Percent Type | Leaded | Unleaded | Diesel |
|--------------------|--------------|--------|----------|--------|
| Light Duty Autos | 0.0 | 6.6 | 90.5 | 2.9 |
| Light Duty Trucks | 0.0 | 8.1 | 88.8 | 3.1 |
| Medium Duty Trucks | 0.0 | 15.2 | 84.8 | 0.0 |
| Heavy Duty Trucks | 0.0 | 59.8 | 40.2 | N/A |
| Heavy Duty Trucks | 0.0 | N/A | N/A | 100.0 |
| Motorcycles | 100.0 | 100.0 | N/A | N/A |

Project Emissions Report in Lb/Day

| Unit Type | TOG | CO | NOx |
|------------------|-------|--------|------|
| Pismo Beach SVRA | 149.4 | 1101.7 | 22.1 |

Project Emissions Report in Lb/Day

| Unit Type | FUEL USE | PM10 | SOx |
|------------------|----------|------|-----|
| Pismo Beach SVRA | 313.6 | 1.7 | 1.8 |

Project Name : Pismo Beach SVRA

Date : 07-14-1991

Analysis Year = 1995
 EMFAC7 VERSION : EMFAC7D ...11/88

Temperature = 75

| Unit Type | Trip Rate | Size | Tot Trips | Days Op. |
|------------------|-----------|------|-----------|----------|
| Pismo Beach SVRA | 0.2/Acre | 2000 | 400 | 1 |

| | Residential | | | Commercial | |
|----------------|-------------|-----------|------------|------------|----------|
| | Home-Work | Home-Shop | Home-Other | Work | Non-Work |
| Trip Length | 0.0 | 0.0 | 0.0 | 0.0 | 40.0 |
| % Started Cold | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Trip Speed | 35 | 35 | 35 | 35 | 10 |
| Percent Trip | 27.3 | 21.2 | 51.5 | | |

Vehicle Fleetmix

| Vehicle Type | Percent Type | Leaded | Unleaded | Diesel |
|--------------------|--------------|--------|----------|--------|
| Light Duty Autos | 0.0 | 1.7 | 95.6 | 2.7 |
| Light Duty Trucks | 0.0 | 2.2 | 95.0 | 2.8 |
| Medium Duty Trucks | 0.0 | 5.3 | 94.7 | 0.0 |
| Heavy Duty Trucks | 0.0 | 29.8 | 70.3 | N/A |
| Heavy Duty Trucks | 0.0 | N/A | N/A | 100.0 |
| Motorcycles | 100.0 | 100.0 | N/A | N/A |

Project Emissions Report in Lb/Day

| Unit Type | TOG | CO | NOx |
|------------------|-------|--------|------|
| Pismo Beach SVRA | 143.1 | 1092.3 | 22.2 |

Project Emissions Report in Lb/Day

| Unit Type | FUEL USE | PM10 | SOx |
|------------------|----------|------|-----|
| Pismo Beach SVRA | 313.6 | 1.7 | 1.8 |

Project Name : Pismo Beach SVRA

Date : 07-14-1991

Analysis Year = 2000

Temperature = 75

EMFAC7 VERSION : EMFAC7D ...11/88

| Unit Type | Trip Rate | Size | Tot Trips | Days Op. |
|-----------|-----------|------|-----------|----------|
|-----------|-----------|------|-----------|----------|

| | | | | |
|------------------|----------|------|-----|---|
| Pismo Beach SVRA | 0.2/Acre | 2000 | 400 | 1 |
|------------------|----------|------|-----|---|

| | Residential | | | Commercial | |
|--------------|-------------|-----------|------------|------------|----------|
| | Home-Work | Home-Shop | Home-Other | Work | Non-Work |
| Trip Length | 0.0 | 0.0 | 0.0 | 0.0 | 40.0 |
| Started Cold | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Trip Speed | 35 | 35 | 35 | 35 | 10 |
| Percent Trip | 27.3 | 21.2 | 51.5 | | |

Vehicle Fleetmix

| Vehicle Type | Percent Type | Leaded | Unleaded | Diesel |
|--------------------|--------------|--------|----------|--------|
| Light Duty Autos | 0.0 | 0.2 | 97.3 | 2.5 |
| Light Duty Trucks | 0.0 | 0.6 | 96.8 | 2.6 |
| Medium Duty Trucks | 0.0 | 2.0 | 98.0 | 0.0 |
| Heavy Duty Trucks | 0.0 | 18.0 | 82.0 | N/A |
| Heavy Duty Trucks | 0.0 | N/A | N/A | 100.0 |
| Motorcycles | 100.0 | 100.0 | N/A | N/A |

Project Emissions Report in Lb/Day

| Unit Type | TOG | CO | NOx |
|------------------|-------|--------|------|
| Pismo Beach SVRA | 142.8 | 1091.9 | 22.2 |

Project Emissions Report in Lb/Day

| Unit Type | FUEL USE | PM10 | SOx |
|------------------|----------|------|-----|
| Pismo Beach SVRA | 313.6 | 1.7 | 1.8 |

PROJECT TITLE

**Pismo Dunes State Vehicular Recreation Area
Access Corridor Project**

TYPE OF ASSESSMENT

Final Environmental Impact Report

STATE CLEARINGHOUSE NUMBER

90011118

LEAD AGENCY

**California Department of Parks and Recreation
Division of Off-Highway Motor Vehicles
P.O. Box 942896, 1416 Ninth Street
Sacramento, CA 94296-0001**

PREPARED BY

**Environmental Planning Section
Office of Project Development and Management
California Department of General Services**

DEPARTMENT OF PARKS AND RECREATION

P.O. BOX 942898

SACRAMENTO 94298-0001



October 29, 1991

To All Interested Persons:

Enclosed is a copy of the Final Environmental Impact Report (FEIR) on the Pismo Dunes State Vehicular Recreation Area Access Corridor Project. This FEIR was prepared by the Department of Parks and Recreation, Division of Off-Highway Motor Vehicles, as lead agency under the California Environmental Quality Act (CEQA). The project consisted of identifying the least environmentally damaging access corridor into the Pismo Dunes State Vehicular Recreation Area and updating the Resource Management Plan and General Development based on the findings of the EIR.

As required by CEQA, the FEIR provides a listing of the persons that submitted comments on the Draft EIR and it provides both the comments to the Draft EIR and responses to each substantial environmental issue raised in those comments.

Questions regarding the FEIR should be directed to:

Jeff Martinez, EIR Project Manager
Department of General Services
Office of Project Development and Management
400 R Street, Suite 5100
Sacramento, CA 95814
(916) 322-6963

Sincerely,

A handwritten signature in black ink that reads "Henry Ortman".

Henry Ortman, Senior Landscape Architect
Department of Parks and Recreation, OHMVR Division

Enclosure



TABLE OF CONTENTS

PISMO DUNES STATE VEHICULAR RECREATION AREA
SAN LUIS OBISPO COUNTY

| <u>Chapter</u> | <u>Page</u> |
|-----------------------------------------------------------------------------------------|-------------|
| I. INTRODUCTION..... | 1 |
| A. Proposed Project..... | 1 |
| B. Purpose of Final EIR..... | 1 |
| C. Incorporation by Reference..... | 1 |
| D. Public Review Period..... | 1 |
| II. LIST OF PERSONS, ORGANIZATIONS, AND PUBLIC AGENCIES COMMENTING ON DRAFT EIR..... | 2 |
| III. COMMENTS AND RESPONSES TO THE DRAFT EIR..... | 3 |
| A. Introduction..... | 3 |
| B. Response to Written Comments..... | 3 |
| 1. Office of Planning and Research..... | 4 |
| 2. Dept. of Fish and Game..... | 5 |
| 3. Dept. of Transportation..... | 9 |
| 4. California Coastal Commission..... | 12 |
| 5. San Luis Obispo County Dept. of Planning and Building..... | 15 |
| 6. City of Grover City..... | 18 |



I. INTRODUCTION

A. PROPOSED PROJECT.

This final environmental impact report (FEIR) is intended to address the comments received on the draft EIR prepared to identify the least environmentally damaging access corridor into the Pismo Dunes State Vehicular Recreation Area (SVRA) in San Luis Obispo County. Based on the findings of the draft EIR the Resource Management Plan and General Development Plan for the PDSVRA were updated. This document and the draft EIR constitute the final EIR for the project.

The original Coastal Development Permit for the Pismo Dunes SVRA, issued by the California Coastal Commission, required that the least environmentally damaging entrance corridor be identified. In light of this requirement the Department of Parks and Recreation, OHMVR Division, analyzed five potential entrance corridors and two potential off-highway vehicle (OHV) staging areas that could serve the park. Refer to the draft environmental impact report for a complete description of the proposed project.

B. PURPOSE OF THE FINAL ENVIRONMENTAL IMPACT REPORT.

This final environmental impact report on the proposed Pismo Dunes SVRA entrance corridor has been prepared in compliance with the provisions of the California Environmental Quality Act (CEQA). The basic purpose of this report is to provide responses to the written comments received on the draft EIR. Although a public hearing was held regarding the draft EIR, only one individual presented public testimony. The individual, Mr. Chuck Comstock, prepared a letter reiterating his concerns regarding this project. Therefore, this final EIR will address only written comments received during the public review period for the draft EIR. Chapter II provides a list of persons that submitted comments on the draft EIR. Chapter III of the final EIR provides a copy of all the comment letters received on the draft report and responses to those comments.

C. INCORPORATION BY REFERENCE.

The subject draft EIR for the Pismo Dunes State Vehicular Recreation Area Access Corridor Project is incorporated by reference into this final EIR. Any corrections or clarifications of information to that report are also incorporated by reference. A limited number of copies of the draft EIR are available from the lead agency.

D. PUBLIC REVIEW PERIOD.

The subject draft EIR was available for a 45-day public review period extending from August 30, 1991 to October 13, 1991. A public hearing was held to discuss the environmental consequences of the proposed project on September 25, 1991, at the San Luis Obispo County Government Center. As noted earlier, only one individual provided public testimony at the subject hearing. The issues raised by the public testimony will be addressed in the response to comments section of this document.

II. LIST OF PERSONS, ORGANIZATIONS, AND PUBLIC AGENCIES
COMMENTING ON THE DRAFT ENVIRONMENTAL IMPACT REPORT

The following individuals submitted written comments on the draft EIR:

1. Mr. David C. Nunenkamp, Deputy Director, Governor's Office of Planning and Research.
2. Mr. Brian Hunter, Regional Manager, Department of Fish and Game, Region 3.
3. Mr. Wayne Schnell, Intergovernmental Review Coordinator, California Department of Transportation, District 5.
4. Mr. James Johnson, Manager, California Coastal Commission, South Central Coast Office.
5. Ms. Patricia Beck, Principal Planner, Department of Planning and Building, San Luis Obispo County.
6. Mr. Chuck Comstock, Mayor, City of Grover City.

III. COMMENTS AND RESPONSES
TO THE DRAFT ENVIRONMENTAL IMPACT REPORT

A. INTRODUCTION.

The California Department of Parks and Recreation, Off-Highway Motor Vehicle Division, acknowledges the comments and responses in the final EIR and will consider them regarding the approval of the subject project.

The California Department of Parks and Recreation wishes to thank the individuals who commented on the draft EIR for their participation in the environmental review process for this proposed project.

B. RESPONSES TO COMMENTS.

The following section provides full copies of each letter received by the Department of Parks and Recreation on the draft EIR during the public review period. Responses to each of the substantial issues noted in these letters are provided following the full text of each respective letter. The letter received by the Governor's Office of Planning and Research serves as a transmittal letter for the State Clearinghouse and does not require a response.

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH

400 TENTH STREET
SACRAMENTO, CA 95814

Oct 15, 1991

JEFF MARTINEZ
DEPARTMENT OF PARKS AND RECREATION
1416 NINTH STREET
SACRAMENTO,, CA 94296-0001Subject: PISMO STATE BEACH GENERAL DEVELOPMENT PLAN AND RESOURCE MGMT
SCH # 90011118

Dear JEFF MARTINEZ:

The State Clearinghouse has submitted the above named draft Environmental Impact Report (EIR) to selected state agencies for review. The review period is now closed and the comments from the responding agency(ies) is(are) enclosed. On the enclosed Notice of Completion form you will note that the Clearinghouse has checked the agencies that have commented. Please review the Notice of Completion to ensure that your comment package is complete. If the comment package is not in order, please notify the State Clearinghouse immediately. Remember to refer to the project's eight-digit State Clearinghouse number so that we may respond promptly.

Please note that Section 21104 of the California Public Resources Code required that:

"a responsible agency or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency."

Commenting agencies are also required by this section to support their comments with specific documentation. These comments are forwarded for your use in preparing your final EIR. Should you need more information or clarification, we recommend that you contact the commenting agency(ies).

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact Tom Loftus at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

A handwritten signature in black ink, appearing to read "David C. Nunenkamp".

David C. Nunenkamp
Deputy Director, Permit Assistance

RECEIVED

OCT 24 1991

RPD

Enclosures

cc: Resources Agency

1-6206

DEPARTMENT OF FISH AND GAME

POST OFFICE BOX 47
 YOUNTVILLE, CALIFORNIA 94599
 (707) 944-5500



October 8, 1991

RECEIVED

OCT 09 1991

PROJECT DEVELOPMENT
 AND MANAGEMENT

Mr. Jeff Martinez, Project Planner
 California Department of General Services
 Office of Project Development and Management
 400 R Street, Suite 5100
 Sacramento, California 95814

Dear Mr. Martinez:

Draft Environmental Impact Report (DEIR) for the Pismo Dunes
 State Vehicle Recreation Area Access Corridor, SCH 90011118

1A Thank you for the opportunity to review and comment upon the draft EIR for the Pismo Dunes State Vehicular Recreation Area (SVRA) access corridor project. This project is located in southwestern San Luis Obispo County, near the community of Oceano. The proposed project is for an improved vehicular access corridor to the Pismo Dunes State Vehicular Recreation Area.

2A Department personnel have reviewed the document, and studied the 5 alternatives and their environmental analyses. Based on materials presented, the Department supports the least environmental damaging alternative, Alternative 1, Grand Avenue. Pier Avenue, Alternative 2, would be a second choice. The other alternatives, Railroad Avenue, Silver Spur Place and Callendar Road, have very significant biological constraints. These impacts will be very difficult to mitigate, and in the Callendar Road alternative, cannot be mitigated to a level of insignificance.

3A The document is deficient, and in some cases inaccurate, in its treatment of the wildlife species found within the project area. There are not 36 species of loons in California (only 4 are normally found in the State), and the numbers given for ducks and raptors (24 each) seem to be unrealistic. There is no comprehensive list of mammals, birds, reptiles or amphibians normally expected within the project area, as referenced in the document.

4A The impact analyses reference the ideal habitat for the two-striped garter snake and the red-legged frog that would be severely degraded with the Railroad Avenue and Silver Spur Place alternatives. The mitigation proposed for the loss of this very important habitat type is inadequate. The purchase of additional existing wetlands in the Oso Flaco Lakes area for protection as mitigation for the proposed action, as recommended in both the Railroad Avenue and Silver Spur Place analysis, is inappropriate, and cannot be considered a mitigation measure. Acceptable mitigation for such impacts would be creation of new habitat suitable for these species to assure no net loss. We believe that the "less than significant effect" determination for the Railroad Avenue and Silver Spur Place alternatives is inappropriate.

Mr. Jeff Martinez
October 8, 1991
Page Two

5A The Department has direct jurisdiction under Fish and Game Code sections 1601-03 in regard to any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any stream. Formal notification pursuant to Fish and Game Code Section 1600 *et seq* should be made in order to determine the necessity of this agreement for this proposed project.

6A The U. S. Army Corps of Engineers also have jurisdiction over the discharge of fill to streams and wetlands under Section 404 of the Clean Water Act, as proposed for the Railroad Avenue and Silver Spur Place alternatives. We recommend that the Corps be contacted to determine if a permit would be required for this project.

7A Department of Fish and Game personnel are available to discuss our concerns further. Please contact Mr. Jim Lidberg, Associate Wildlife Biologist, at (805)528-0782, or Mr. Carl Wilcox, Associate Wildlife Biologist, at (707)944-5525.

Sincerely,



Brian Hunter
Regional Manager
Region 3

- 1A. Comment noted regarding opportunity to comment on the subject draft EIR.
- 2A. Comment noted regarding concurrence with the finding that the Grand Avenue corridor is the least environmentally damaging alternative considered in the draft EIR. It is recognized by the Department that the development of the Callender Road alternative would have a significant effect on biological resources.
- 3A. The statement that 36 species of loons exist in the project study area is an error. The sentence is revised to read that 36 species of loons, grebes, herons, bitterns, pelican, cormorants, swans, geese, gulls, and terns potentially occur in the wetland areas of the project study area. The numbers given for species of ducks and raptors (24 each) that potentially occur in the project study area are recognized as being high. However, the numbers are not unrealistic. According to the Department of Fish and Game's 1976 publication, The Natural Resources of the Nipomo Dunes and Wetlands, prepared by Mr. Kent A. Smith, 24 species of ducks and raptors were observed in the area. Appendix 6 of the draft EIR provides a vegetative and wildlife species list based on visual observations during a year-long study performed within and adjacent to the Pismo Dunes SVRA. To complement the list provided in the draft EIR please refer to Appendix A and B of this document for vegetative and wildlife species lists for each habitat type found in the project study area.
- 4A. Comment noted. The development of the Railroad Avenue alternative or the Silver Spur Place alternative would require the preparation of a focused EIR based on the final development schemes for either corridor. The effects of developing either corridor on biological resources would be determined through comprehensive biological surveys and consultation with the Department of Fish and Game and potentially with the U.S. Fish and Wildlife Service. The consultation process is intended to develop adequate mitigation measures to offset adverse effects on biological resources stemming from the proposed development, to a level of less than significant. The purchase of existing wetlands in the Oso Flaco Lakes area was suggested as an additional measure to offset adverse effects on biological resources. The primary mitigation measures suggested for the Railroad Avenue and Silver Spur Place alternatives included the rerouting of the entrance road so as to avoid removing any wet willow grove habitat, which is identified as ideal for the two-striped garter snake and the red-legged frog. At the present time there is an existing dirt road which dissects the wet willow grove. Mitigation measures associated with these two alternatives provide for the closure of the existing road. This would allow for the revegetation of the grove, resulting in a larger contiguous habitat than that which currently is found in the area. In addition, the new road would be elevated so as to allow for the natural flooding of the grove during and immediately following periods of precipitation. Therefore, the end result of the development of the Railroad Avenue or Silver Spur Place alternatives would be the restoration and expansion of the existing wet willow grove. However, the draft EIR recognizes that the increased human activity following the development of either of these alternatives would have adverse effects on the wildlife species associated with the wet willow grove habitat. The adverse effects stem from increased noise levels and potential incidental take of wildlife species. To further offset the adverse effects associated with the entrance corridors, it was suggested that additional wetland habitat be purchased in the Oso Flaco Lakes area. The mitigation measures, taken together, reduce the

adverse effects to biological resources to a level of less than significant for both the Railroad Avenue and Silver Spur Place Alternatives.

- 5A. Comment noted. It is recognized that if the Silver Spur Place or Railroad Avenue alternatives are considered for development in the future, consultation with the Department of Fish and Game would be required.
- 6A. Comment noted. It is recognized that if the Silver Spur Place or Railroad Avenue alternatives are considered for development in the future, consultation with the U.S. Army Corps of Engineers may be required and the agency shall be contacted.
- 7A. Comment noted.

DEPARTMENT OF TRANSPORTATION

P.O. BOX 8114
SAN LUIS OBISPO, CA 93403-8114
TELEPHONE: (805) 549-3111
TDD (805) 549-3259



RECEIVED

OCT 02 1991

September 30, 1991

PROJECT DEVELOPMENT
AND MANAGEMENT

5-SLO-001-6.9/14.1
Pismo Dunes SVRA Access
Corridor Project (DEIR)
SCH# 90011118

Mr. Jeff Martinez
California Department of General Services
Office of Project Development and Management
400 R Street, Suite 5100
Sacramento, CA 95814

Dear Mr. Martinez:

Caltrans District 5 staff has reviewed the above-referenced document. The following comments were generated as a result of the review:

1B

a. Page VI-6, Callender Road - Route 1 between the Callender Road and the Union Oil entrance will require widening and left-turn channelization to support the entrance to the park. Because of sight distance restrictions, advanced signing is required to warn motorists of the entrance to the State Off-Road Vehicle Recreation Area.

2B

b. Biological surveys within the State right-of-way must include Rude's Longhorn Beetle which is usually associated with *Happlopappus ericoides*. This beetle is a candidate for the Federal Endangered Species List.

3B

c. An encroachment permit must be obtained before any work can be conducted within the Caltrans right-of-way. Please be advised that prior to obtaining an encroachment permit, you are required to have design plans reviewed by this office and an environmental document approved by the lead agency. Biological and archaeological surveys must specifically address impacts in the state right-of-way. Should you have further questions regarding encroachment permits, please contact Steve Senet, Permits Engineer, at (805) 549-3152.

Mr. Jeff Martinez
September 30, 1991
Page 2

4B | Please send us a copy of the Final Environmental Impact Report
when it is available. Thank you for the opportunity to comment.
If you have any questions, please contact me at (805) 549-3683.

Sincerely,



Wayne M. Schnell
District 5
Intergovernmental Review Coordinator

- 1B. Comment noted. The development of the Callender Road alternative would require improvements to Highway 1. Improvements, at a minimum, would require widening between Callender Road and the Union Oil entrance, left-turn channelization, and appropriate signing.
- 2B. The development of the Callender Road corridor would require the preparation of a focused EIR. The EIR would be based on the final design configuration of the entrance and associated facilities as described in the draft EIR. Site-specific biological surveys would be performed for the entire corridor and along the State right-of-way. The Rude's longhorn beetle and other sensitive species would be surveyed for to determine their presence or absence by a qualified biologist. Consultation with the Department of Fish and Game would also be formally carried out if any development is proposed for the Callender Road corridor in the future.
- 3B. Comment noted. If the Callender Road corridor is considered for development in the future, the Department of Parks and Recreation, OHMVR Division, would prepare a focused EIR. The EIR would address the effects of the development on biological resources, traffic/circulation patterns, noise, archaeological/cultural resources and other issues raised during the public review of the Notice of Preparation. The Department of Parks and Recreation would submit the appropriate documents (ie. DEIR, site plan, etc.) to satisfy the requirements of the Department of Transportation for an encroachment permit.
- 4B. Comment noted. A copy of the final EIR will be sent to the Department of Transportation.

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA
925 DE LA VINA
SANTA BARBARA, CA 93101
(805) 963-6871



October 21, 1991

Jeff Martinez
California Department of
General Services
Office of Project Development
and Management
400 R Street, Suite 5100
Sacramento, CA 95814

RECEIVED

OCT 23 1991

PROJECT DEVELOPMENT
AND MANAGEMENT

Re: Pismo Dunes State Vehicular Recreation Area Access Corridor Project.
(SCH # 90011118)

Dear Mr. Martínez:

1C Staff of the California Coastal Commission (CCC) has reviewed the Draft Environmental Impact Report for the Pismo Dunes State Vehicular Recreation Area Access Project (PDSVRA) and offer the following brief comments. Staff appreciates State Parks efforts to meet permit conditions to select a permanent staging area for the SVRA and revise the State Parks General Development Plan for this popular park.

2C In June 1982, the Commission approved State Parks request to establish the PDSVRA and a temporary staging area and access route to the Park. Since then, State Parks has amended the permit four times to modify the Off-Highway Vehicle (OHV) staging area, control uses in the park, and limit access through Oso Flaco Lake.

3C The Draft EIR is well written and creatively organized to identify impacts associated with each alternative access corridor. At minimum the corridor is expected to consist of a paved road, kiosk and parking lot. This approach allows a complete comparative analysis of the alternatives to determine the environmentally preferred alternative (EPA). Once the environmentally preferred alternative is identified the State General Development Plan will be updated and an amendment to the San Luis Obispo County Local Coastal Program will be reviewed by the County and the Commission.

4C The DEIR identifies the Grand Avenue entrance as the EPA as a result of a numerical ranking selection process. If the Pier Avenue entrance were improved with an offstreet parking lot and the road widened as currently proposed by the County, Pier Avenue could become the EPA. Pier Avenue is closer to the PDSVRA providing users a shorter distance than from Grand Avenue. In addition, the Pier Avenue entrance bypasses the beach area along an environmentally sensitive dune area. Once these improvements are completed Pier Avenue will become, if not an equal access route, the EPA. The Final EIR should reconsider this issue and revise the document accordingly.

5C The Final EIR should note that State Parks is in the process of requesting the County to increase the number of campsites from 500 to 1000 within the PDSVRA. The Commission's Executive Director has approved the increase in June 1991.

6C As noted on page IV-12, the Oso Flaco Lake area is designated in the County Coastal Plan's Land Use Element as the future primary entrance to the SVRA. Since Oso Flaco Lake will soon be open only to pedestrians, State Parks should ask the County to revise the land use designation by deleting this entrance designation. This action could occur as part of the County's action on the State Park General Development Plan as noted on pages X-8 and 10.

7C Equestrian access to the beach area west of the PDSVRA from the north and south should be addressed in the Final EIR. The Commission has approved State Parks request to prohibit equestrian access from the south through Oso Flaco Lake by March 1992 while State Parks and the County identify an alternative equestrian access route. This type of recreational use, including pedestrian use, should be addressed in the General Development Plan.

8C Thank you for the opportunity to provide delayed comments. If you have any further questions, please contact Barbara Benn or me at (805) 963-6871.

Sincerely,



James Johnson
Area Manager

JJ/BB
0290M

- 1C. Comment noted.
- 2C. Comment noted regarding past Commission findings related to the PDSVRA.
- 3C. Comment noted regarding adequacy of the draft EIR.
- 4C. The Department of Parks and Recreation recognizes that traffic patterns on Pier Avenue would be improved with the development of increased off-street parking and road widening. However, development constraints along this corridor such as commercial and residential development limit potential future improvements to the roadway. The Grand Avenue alternative does not have these development constraints. The additional distance between the Grand Avenue entrance to the SVRA, as compared to the Pier Avenue entrance, is approximately one mile. Vehicles are required to travel along the beach from the Grand Avenue entrance to the SVRA and are restricted from entering the stabilized dune formations along this portion of the sand highway.

The Department recognizes that the issues raised are valid and it is clear that the Grand Avenue alternative and Pier Avenue alternative are extremely close, if not equal, in terms of environmental sensitivity. It is clear that the Pier Avenue alternative would result in some land use conflicts (ie. residential development) that the Grand Avenue alternative would not. However, the Pier Avenue alternative, with minor improvements, could be equal to the Grand Avenue alternative. Please refer to response 2E which revises the draft EIR allowing for the Grand Avenue and Pier Avenue alternatives to both serve as primary entrances.

- 5C. Comment noted. The Department of Parks and Recreation has received approval from the County of San Luis Obispo to increase the camper units from 500 to 1,000 on four holiday weekends. The weekends include Memorial Day, Fourth of July, Thanksgiving, and Labor Day. The Commission's Executive Director approved the increase in June of 1991.
- 6C. The Department of Parks and Recreation will make a formal application to amend the County of San Luis Obispo's LCP to reflect the findings of the subject EIR. The deletion of Oso Flaco Lake as a future primary entrance from the plan is proposed as an element of the amendment.
- 7C. Currently equestrian staging is an allowable use at the Grand Avenue and Pier Avenue entrances. Equestrian enthusiasts will continue to be allowed to utilize these entrances for beach access. Any future development of equestrian access will be considered as addressed in this EIR. The Department of Parks and Recreation recognizes that equestrian access will no longer be allowable in the Oso Flaco Lakes area.
- 8C. Comment noted.



Department of Planning and Building San Luis Obispo County

Alex Hinds, Director
Bryce Tingle, Assistant Director
Barney McCay, Chief Building Official
Norma Salisbury, Administrative Services Officer

October 10, 1991

Jeff Martinez
California Department of General Services
Office of Project Development and Management
400 R Street, Suite 5100
Sacramento, CA 95814

Dear Mr. Martinez:

**SUBJECT: DRAFT EIR FOR PISMO DUNES STATE VEHICULAR RECREATION AREA
ACCESS CORRIDOR PROJECT, STATE CLEARINGHOUSE
NO. 90011118**

1D Thank you for the opportunity to comment on the above listed draft EIR. We have a few comments which are listed below by topic and page number.

2D Land Use Impact Analysis - Silver Spur Place, pages IV-20-22. The proposed parking and staging area for the Silver Spur Place corridor appears to be in an area subject to special planning area standards in the San Luis Bay Area Plan of the Land Use Element and Local Coastal Plan. The standards are for the Recreation land use category (zone) for the area south of Arroyo Grande and Los Berros Creeks and include a standard which limits the allowable use to a recreational vehicle park only per Ordinance 1198. This standard may have the effect of precluding any other uses.

3D Mitigation Measures and Statement of Significance for Land Use Impacts - Railroad Avenue and Silver Spur Place, page IV-24. It should be noted that the proposed parking and staging areas and related improvements for both the Railroad Avenue and Silver Spur Place corridors appear to be located within areas subject to flood hazards, as designated on the Local Coastal Program land use maps. Appropriate mitigation measures should be considered in those areas.

Effects Deemed Equal for All Alternatives.

4D a. Seismicity/Geology, page IX-3. The statement that there are no prime agricultural soils in the project study area contradicts a previous statement on page IV-21 in the EIR that says development of the Silver Spur Place alternative would affect prime agricultural land.

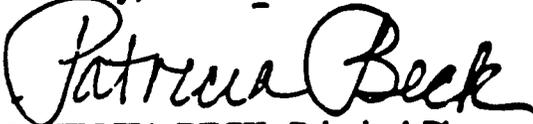
5D b. Noise, pages IX-3,4. The EIR should consider that additional traffic along the proposed

Mr. Jeff Martinez
October 10, 1991
Page 2.

5D
Cont. | corridors could expose noise sensitive land uses along those corridors to increased noise levels. To the extent that traffic volumes increase on Highway 1 and on 22nd Street in Oceano (in the case of the Silver Spur Place corridor), noise levels will increase and could affect noise-sensitive land uses along 22nd Street. Likewise, increased traffic on Highway 1 and other routes which would serve the Callendar Road access corridor could also affect noise-sensitive land uses along those roads.

6D | Thank you for considering our comments. If you have any questions, please call Mike Wulkan of this department at 549-5600.

Sincerely,



PATRICIA BECK, Principal Planner
Development Review

PISMDUNE.LTR

- 1D. Comment noted.
- 2D. Comment noted. The exact delineation of the area subject to special planning area standards would be identified if the Silver Spur Place corridor was proposed for future development. The exact location of the parking and staging area for the Silver Spur Place alternative is contingent upon successful acquisition of suitable lands in the area, final design considerations, and approval from responsible and trustee agencies. However, if the Silver Spur Place alternative is partially or wholly within the special planning area boundary, the findings of the draft EIR would not be affected since it is recognized that this alternative would have a significant adverse effect on land use.
- 3D. The Department recognizes that both the Railroad Avenue and Silver Spur Place Alternatives may have portions of each respective corridor within a designated flood zone. Development of either corridor would require site-specific flood hazard studies to determine the extent to which the corridors would be affected by flood events. Mitigation measures would be developed through engineering schemes based on the final site configuration and proposed development.
- 4D. Comment noted. The Silver Spur Place alternative would have an adverse effect on prime agricultural soils resulting in a significant adverse effect on land use.
- 5D. The Department of Parks and Recreation recognizes that a focused EIR would be required if the Silver Spur Place, Railroad Avenue, or Callender Road alternatives were proposed for future development. The EIR would address the effects of the development on biological resources, traffic/circulation patterns, noise, archaeological/cultural resources, and other issues raised during the public review of the Notice of Preparation. The noise levels would be relatively the same for any of the alternatives discussed in the draft EIR, since a change in visitation is not expected. The noise would just be transferred from one area (ie. closing of an existing entrance) to another. For the purposes of this EIR it is assumed that the noise levels would be the same regardless of which alternative is being considered, since the number of vehicles (the primary noise generators) would remain the same for all alternatives. Furthermore, the highest noise levels are known to occur in the "play area" within the SVRA. These noise levels would remain the same for all the alternatives discussed in this EIR. However, it is recognized that developing a new entrance would have varying effects on local noise receptors. The level of significance would be dependent upon a variety of factors including receptor sensitivity, receptor proximity, and site-specific considerations (eg. topography). These factors would need to be considered in any future environmental documents prepared for the development of a new access corridor.
- 6D. Comment noted.



CITY OF GROVER CITY

MAYOR - CHUCK COMSTOCK

MAYOR PRO TEM - LOWELL FORISTER

COUNCILMAN - HENRY "GIVE" GATES

COUNCILMAN - PETER KEITH

COUNCILMAN - FRED MUNROE

CITY ADMINISTRATOR - ENELOPE CULJIKI

October 16, 1991

DEPT. PARKS & RECREATION
PISMO DUNES DISTRICT

OCT 18 1991

Mr. Don Patton
District Superintendent
Pismo Dunes District
576 Camino Mercado
Arroyo Grande, California 93420

Dear Mr. Patton:

1E

On September 25, 1991, I was the sole public participant at the hearing for the Pismo Dunes SVRA Access Corridor Project. The information and dialogue I was able to have with State personnel was very productive and helpful. I wanted to confirm my understanding of this meeting with you in writing to ensure that I have not confused the State's position.

2E

It is my understanding that although the State prefers Grand Avenue to remain as a primary entrance to the Pismo State Beach and Vehicular Recreation Area, the State believes that a secondary entrance, preferably Pier Avenue, should also be maintained to relieve Grand Avenue from the entire impact of access.

3E

While continued beach access is important to our City, I would encourage the State to consider the traffic impact upon our area in any plans for expansion. We would appreciate being notified prior to the construction of any improvements at Grand Avenue, as suggested in the Draft EIR dated August 1991.

4E

I appreciate your desire to work with local public entities in designing the best access to the Pacific Ocean.

Sincerely,

Chuck Comstock
Mayor

c.c.: Council Members

1E. Comment noted.

2E. The Department of Parks and Recreation recognizes Grand Avenue as the least environmentally damaging access corridor into the Pismo Dunes SVRA. The Department proposes to continue to operate both Grand Avenue and Pier Avenue as primary entrances. Chapter I, page I-1, in the second paragraph under PREFERRED ALTERNATIVE, is revised to read:

The Grand Avenue alternative was determined to be the least environmentally damaging entrance corridor considered in this environmental impact report. The Grand Avenue alternative was determined to have less than significant impacts on all of the resources considered in the DEIR. No mitigation measures would be required for the continued use or minor expansion of this entrance.

Chapter I, page I-2, in the first and second paragraphs under FUTURE DEVELOPMENT, is revised to read:

Based on the findings of this DEIR the Department of Parks and Recreation, Off-Highway Motor Vehicle Recreation Division, should continue to utilize both Grand and Pier Avenues as primary entrance points for the Pismo Dunes State Vehicular Recreation Area.

Pier Avenue. The Pier Avenue entrance could be expanded to include additional off-beach parking, a 3,000 square foot administrative building and interpretive center, and an additional entrance lane and kiosk. The Pier Avenue entrance should continue to serve as one of the primary entrances into the SVRA.

3E. Comment noted. The current traffic levels on Grand Avenue are not expected to change as long as Grand Avenue continues to serve as a vehicle access point to the park. If the Grand Avenue entrance is closed to vehicle traffic in the future, it would be in conjunction with developing one of the alternatives considered in the draft EIR. Should the Department of Parks and Recreation choose to develop a new entrance to the south, a focused EIR would be prepared. The EIR would address traffic/circulation patterns.

4E. Comment noted.



APPENDICES

APPENDIX A

Plant Species List

(Adapted from: Port of Long Beach and California Public Utilities Commission, 1977).

A complete listing of plants within the area can be found in The Natural Resources of the Nipomo Dunes and Wetlands, (California State Department of Fish and Game, 1976).

TABLE A-1
 PLANTS OF THE COASTAL DUNES
 COASTAL STRAND HABITAT

| | | |
|------------------|---------------------|-------------------------------------------------|
| Common: | Yellow sand verbena | <i>Abronia latifolia</i> |
| | Purple sand verbena | <i>Abronia maritima</i> |
| | Sea rocket | <i>Cakile maritima</i> |
| | Beach morning glory | <i>Calystegia soldanella</i> |
| | Beach bur | <i>Xanthium spinosum</i> |
| | Dune dandelion | <i>Malcothrix incana</i> |
| | African ice plant | <i>Sesuvia stans</i> |
| | Sea fig | <i>Carpobrotus acrilaterus</i> |
| Endemic: | Crisp Monardella | <i>Monardella crispata</i> |
| | Blochman's daisy | <i>Erigeron foliosus</i> var. <i>Elochmanus</i> |
| | Dune dandelion | <i>Malcothrix incana</i> |
| Rare/Endangered: | None known | |
| At Range Limit: | None known | |

TABLE A-2

PLANTS OF THE COASTAL DUNES
COASTAL SAGE SCRUB OR DUNE SCRUB HABITAT

| | | |
|------------------|-----------------------------------------|-------------------------------------------|
| Common: | Mock heather | <i>Nauploappus ericoides</i> |
| | Buckwheat | <i>Eriogonum parvifolium</i> |
| | Dune lupine | <i>Lupinus chamissonis</i> |
| | Tree lupine | <i>Lupinus arboreus</i> |
| | Lizard tail or Yerba mansa | <i>Anemopsis californica</i> |
| | Coast senecio | <i>Senecio blochmanae</i> |
| | Cudweed-aster | <i>Gnaphalium ramosissimum</i> |
| | Beachgrass | <i>Ammophila arenaria</i> |
| | California sagebrush | <i>Artemisia californica</i> |
| | White leaved sage | <i>Salvia leucophylla</i> |
| | Lemonade-berry | <i>Rhus integrifolia</i> |
| | Black sage | <i>Salvia melifera</i> |
| | Coyote brush | <i>Baccharis pilularis</i> |
| | Scrub oak | <i>Quercus dumosa</i> |
| | White sage | <i>Salvia apiana</i> |
| Endemic: | Nipomo lupine | <i>Lupinus nipomensis</i> |
| Rare/Endangered: | Nipomo lupine | <i>Lupinus nipomensis</i> |
| | Crisp monardella | <i>Monardella crisper</i> |
| | San Luis Obispo curly-leaved monardella | <i>M. undulata</i> var. <i>frutescens</i> |
| | Surf thistle | <i>Cirsium rothophilum</i> |
| | LaGraciosa thistle | <i>Cirsium loncholepis</i> |
| | Coast senecio | <i>Senecio blochmanae</i> |
| At Range Limit: | Giant Coreopsis | <i>Coreopsis gigantea</i> |

TABLE A-3
 PLANTS OF THE COASTAL DUNES
 OPEN WATER HABITAT

| | | |
|------------------|---------------|-----------------------------------------------|
| Common: | Algae | Several spp. |
| | Stonewort | Family <i>Characeae</i> |
| | Duckweed | <i>Lemna minor</i> |
| | Pondweed | <i>Potamogeton pectinatus</i> |
| | Water-milfoil | <i>Myriophyllum spicatum</i> var. <i>alb.</i> |
| Endemic: | None known | |
| Rare/Endangered: | None known | |
| At Range Limit: | None known | |

TABLE A-4
 PLANTS OF THE COASTAL DUNES
 FRESHWATER MARSH HABITAT

| | | |
|------------------|------------------------------|---------------------------------------------------------|
| Common: | California bullrush | <i>Scirpus cernuus</i> var. <i>californicus</i> |
| | Cat-tail | <i>Typha latifolia</i> |
| | Rush | <i>Juncus leeuwerikii</i> |
| | Common spikerush | <i>Eleocharis macrostachya</i> |
| | Yellow pond lily or cow lily | <i>Nymphaea polysepala</i> or <i>Nuphar polysepalum</i> |
| | Bur-reed | <i>Sparganium eurycarpum</i> |
| Endemic: | None known | |
| Rare/Endangered: | None known | |
| At Range Limit: | Yellow pond lily or cow lily | <i>Nymphaea polysepala</i> or <i>Nuphar polysepalum</i> |

TABLE A-5
 PLANTS OF THE COASTAL DRIES
 RIPARIAN HABITAT

| | | |
|------------------|------------------------|------------------------------------------------|
| Common: | Arroyo willow | <i>Salix lasiolepis</i> |
| | California wax-myrtle | <i>Myrica californica</i> |
| | Wild rose | <i>Rosa californica</i> |
| | Blackberry | <i>Rubus ursinus</i> |
| | Giant horsetail | <i>Equisetum telmateia</i> var. <i>brownii</i> |
| Endemic: | None known | |
| Rare/Endangered: | Black-flowered figwort | <i>Scrophularia atrata</i> |
| At Range Limit: | Bitter cress | <i>Cardamine gambelii</i> |

APPENDIX B

Animal Species List

(Adapted from: Port of Long Beach and California Public Utilities Commission, 1977).

A complete listing of animals within the area can be found in The Natural Resources of the Nipomo Dunes and Wetlands, (California State Department of Fish and Game, 1976).

TABLE B-1
ANIMALS OF THE COASTAL DUNES
COASTAL STRAND HABITAT

| | | |
|--------------------------|------------------|------------------------------------|
| Common Birds: | Shorebirds | 10 spp. |
| | Gulls and terns | 12 spp. |
| | Roadrunner | |
| | Mourning dove | |
| | California quail | |
| | Raptors | 18 spp. |
| | Passerines | 52 spp. |
| Mammals: | None known | |
| Reptiles/ Amphibians: | None known | |
| Endemic: | None known | |
| Rare/Endangered: | Least tern | <i>Sterna albigrons browni</i> |
| | Peregrine | <i>Falco peregrinus anatum</i> |
| | Bald eagle | <i>Haliaeetus leucocephalus l.</i> |
| At Range Limit: | None known | |

TABLE B-2
ANIMALS OF THE COASTAL DUNES
COASTAL SAGE SCRUB OR DUNE SCRUB HABITAT

| | | |
|--------------------------|----------------------------------------------------|------------------------------------|
| Common Birds: | Hawks, eagles and other raptors | 19 spp. |
| | Hummingbirds | 3 spp. |
| | Woodpeckers | 4 spp. |
| | Flycatchers | 4 spp. |
| | Swallows | 6 spp. |
| | Finches and sparrows | 15 spp. |
| | Other passerines | 19 spp. |
| | Roadrunner | |
| | Mourning dove | |
| | California quail | |
| Mammals: | Killdeer | |
| | Common opossum | |
| | Shrews | 2 spp. |
| | Bats | 7 spp. |
| | Rabbits | 3 spp. |
| | Rodents | 16 spp. |
| | Carnivores (coyotes, skunks, raccoons, bobcats) | 9 spp. |
| Deer | 2 spp. | |
| Reptiles/ Amphibians: | Lizards | 4 spp. |
| | Snakes | 12 spp. |
| Endemic: | None known | |
| Rare/Endangered: | Bald eagle | <i>Haliaeetus leucocapillus</i> L. |
| | Peregrine falcon | <i>Falco peregrinus anatum</i> |
| At Range Limit: | None known | |

TABLE B-3
ANIMALS OF THE COASTAL DRIES
OPEN WATER HABITAT

| | | | |
|--------------------------|----------------------|---------|---------------------------------|
| Common Birds: | Loons and grebes | 6 spp. | 6 spp. |
| | Swans and geese | 6 spp. | 6 spp. |
| | Ducks | 21 spp. | 21 spp. |
| | Bald eagle | | |
| | Phalaropes | 2 spp. | 2 spp. |
| | White-throated swift | | |
| | Belted kingfisher | | |
| | Swallows | 6 spp. | 6 spp. |
| Mammals: | Bats | 12 spp. | 12 spp. |
| | Beaver | | |
| | Muskrat | | |
| Reptiles/ Amphibians: | Pond turtle | | |
| Endemic: | None known | | |
| Rare/Endangered: | Bald eagle | | <i>Haliaeetus leucocephalus</i> |
| At Range Limit: | None known | | |

TABLE B-4
ANIMALS OF THE COASTAL DUNES
FRESHWATER MARSH HABITAT

| | | |
|--------------------------|-------------------------------------|------------------------------------|
| Common Birds: | Grebes | 4 spp. |
| | White pelican | |
| | Cormorants | 2 spp. |
| | Hérons | 7 spp. |
| | Swans and geese | 5 spp. |
| | Ducks | 24 spp. |
| | Raptors | 10 spp. |
| | Waterbirds (rails, plovers, stilts) | 22 spp. |
| | Phalaropes | 2 spp. |
| | Gulls and terns | 12 spp. |
| | White-throated swift | |
| | Belted kingfisher | |
| | Woodpeckers | 4 spp. |
| | Swallows | 6 spp. |
| | Other passerines | 12 spp. |
| Mammals: | Bats | 12 spp. |
| | Common opossum | |
| | Shrews | 2 spp. |
| | Beaver | |
| | Rodents | 6 spp. |
| | Coyote | |
| | Grey fox | |
| | Raccoon | |
| Reptiles/ Amphibians: | Salamanders | 4 spp. |
| | Toads | 2 spp. |
| | Frogs | 4 spp. |
| | Garter snakes | 3 spp. |
| Endemic: | None known | |
| Rare/Endangered: | Bald eagle | <i>Haliaeetus leucocephalus</i> L. |
| | Clapper rail | <i>Rallus longirostris</i> |
| | Black rail | <i>Laterallus jamaicensis</i> cot. |
| | Least tern | <i>Sterna albifrons</i> br. |
| At Range Limit: | None known | |

TABLE B-5
ANIMALS OF THE COASTAL DRIES
RIPARIAN HABITAT

| | | |
|--------------------------|----------------------------------------|---------------------------|
| Common Birds: | Herons, egrets, bitterns | 3 spp. |
| | Ducks | 1 spp. |
| | Raptors | 14 spp. |
| | Mourning dove | |
| | Flycatchers | 5 spp. |
| | Swallows | 6 spp. |
| | Belted kingfisher | |
| | Hummingbirds | 3 spp. |
| | Passerines | 54 spp. |
| | Mammals: | Common opossum |
| Shrews, moles | | 3 spp. |
| Bats | | 12 spp. |
| Rabbits | | 3 spp. |
| Rodents | | 8 spp. |
| Carnivores | | 8 spp. |
| Deer | | 2 spp. |
| Reptiles/ Amphibians: | Garter snakes | 3 spp. |
| | Salamanders | 4 spp. |
| | Toads | 2 spp. |
| | Frogs | 4 spp. |
| Endemic: | Dark color phase of coast garter snake | <i>Thamnophis elegans</i> |
| Rare/Endangered: | None known | |
| At Range Limit: | Coast garter snake | <i>Thamnophis elegans</i> |

