

Final Program Environmental Impact Report

For The

Port San Luis Harbor District 2003 Port Master Plan

SCH # 2003081007

Prepared for:

THE PORT SAN LUIS HARBOR DISTRICT

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1. Introduction

This Final Environmental Impact Report (FEIR) evaluates the potential environmental impacts of buildout of the Port San Luis Harbor District in accordance with the 2003 Draft Port Master Plan.

Purpose/Legal Authority

The updated Port Master Plan requires the discretionary approval of the Port San Luis Harbor District and amendments to the San Luis Obispo County Local Coastal Program (LCP). Therefore, the Port Master Plan is considered a "project" as defined by Section 21000 et seq. of the California Public Resources Code (the California Environmental Quality Act, or CEQA), and is subject to the environmental review requirements specified by the statute.

CEQA requires that an *environmental impact report* (EIR) be prepared when a project has the potential to result in significant adverse impacts to the environment. This EIR has been prepared in accordance with CEQA and the *State CEQA Guidelines*. As provided by Section 15121(a) of the *Guidelines*, the purpose of the EIR is to serve as an information document that will:

". . . inform the public agency, decision-makers and the public generally of the significant environmental effects of a project, identify ways to minimize the significant effects, and describe reasonable alternatives to the project . . ."

Program EIR

The State CEQA Guidelines provide for a number of different types of EIRs to suit the range of projects and activities that may be considered by the Lead Agency. This FEIR has been prepared as a *program EIR* which, according to Section 15168, is appropriate when a project consists of:

"...a series of actions that can be characterized as one large project and are related in one of more of the following ways:

- 1. Geographically,*
- 2. As logical parts in the chain of contemplated actions,*
- 3. In connection with the issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or*
- 4. As individual activities carried out under the same authorizing, statutory, or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.*

Forecasting, Degree Of Specificity

The preparation of an EIR necessarily involves some degree of forecasting and speculation. The CEQA Guidelines speak to these issues as follows:

15144. Forecasting. Finaling an EIR or preparing a Negative Declaration necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can.

15145. Speculation. If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the Agency should note its conclusion and terminate discussion of the impact.

15146. Degree of Specificity. The degree of specificity required by an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.

a. An EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.

b. An EIR on a project such as the adoption or amendment of a comprehensive zoning ordinance or local general plan should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.

This EIR focuses on the impacts that could result from buildout of Harbor District properties in accordance with the 2003 Draft Port Master Plan. The degree of specificity corresponds to the degree of detail contained in the project description provided by the lead agency.

Scope and Content of this EIR

To determine if the project could adversely affect the environment, an Initial Study was prepared (See Appendix A). The Initial Study concluded that the project could result in a number of potentially significant adverse impacts that will be addressed in this EIR in the following topical areas:

Geologic hazards	Drainage and watershed resources
Biological resources	Cultural resources
Public services	Traffic and circulation
Air quality	Noise
Visual resources, light and glare	Growth inducement
Hazardous materials	Cumulative impacts
Alternatives	

Lead, Responsible and Trustee Agencies

The *State CEQA Guidelines* distinguishes among "Lead", "Responsible", and "Trustee" agencies on the basis of their responsibilities for approving or carrying out certain aspects of a project. The Port San Luis Harbor District is the Lead Agency for the project because it has the primary responsibility for approving and implementing the various improvements identified in the Final Master Plan. A "Responsible Agency" refers to an agency other than the Lead Agency that has discretionary approval over the project. San Luis Obispo County and the California Coastal Commission are

considered Responsible Agencies. A "Trustee Agency" refers to a state agency having jurisdiction by law over natural resources affected by a project.

Environmental Impact Review Process

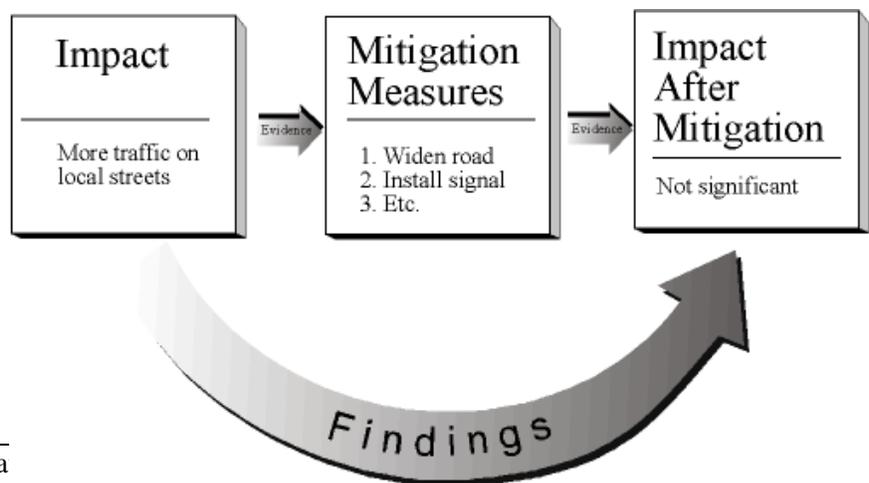
The environmental review process as mandated by CEQA is summarized below. The steps are presented in sequential order.

Notice of Preparation. Immediately after deciding that an EIR is required, the lead agency must send a Notice of Preparation (NOP) soliciting input on the scope and content of the EIR. The NOP is sent to all "responsible," "trustee," and relevant federal agencies; to the State Clearinghouse, if one or more state agencies is a responsible or trustee agency; and to any other parties previously requesting notice in writing (*State CEQA Guidelines* Section 15082; Public Resources Code Section 21092.2). The NOP must also be posted in the office of the County Clerk for 30 days. The NOP was distributed in May 2003.

Draft Environmental Impact Report (DEIR) Prepared. The DEIR provides the public and decision-makers with the initial evaluation of potential environmental impacts of the proposed project. The DEIR must contain the following elements: a table of contents or index; a summary of the findings of the EIR; the project description; the environmental setting; environmental impact analysis; mitigation measures to reduce identified significant adverse impacts; an assessment of significant irreversible environmental changes and growth inducing impacts; an evaluation of cumulative impacts; a description of effects found not to be significant; a discussion of project alternatives; and references.

Public Notice and Review of Final EIR. A lead agency must prepare a Public Notice of Availability of a Final EIR. The notice must be posted in the County Clerk's office for 30 days (Public Resources Code Section 21092). The lead agency must send a copy of the notice to anyone requesting it (*State CEQA Guidelines* Section 15087). Additionally, public notice of the availability of a DEIR must be given by at least one of the following methods: 1) publication in a newspaper of general circulation; 2) posting on and off the project site; or 3) direct mailing to owners and occupants of contiguous property. The lead agency must consult with and request comments on the DEIR from responsible and trustee agencies, and adjacent cities and counties, as applicable (Public Resources Code Sections 21104 and 21253). When a DEIR is sent to the State Clearinghouse for review, the public review period must be at least 45 days unless a shorter period is approved by the State Clearinghouse; in no case may the public review period be less than 30 days (Public Resources Code 21091). CEQA does not require public hearings on the DEIR, although in practice most agencies conduct such hearings.

Notice of Completion. A Notice of Completion (NOC) states that an EIR has been prepared for a particular project and states where the DEIR can be reviewed. The lead agency must file a Notice of Completion with the State Clearinghouse as soon as it completes a DEIR.



Final EIR (FEIR). A final EIR must include: 1) the DEIR; 2) copies of comments received during public review; 3) list of persons and entities commenting; and 4) responses to the comments.

Certification of FEIR. To approve a project for which an EIR has been prepared, the Lead Agency must make certain specific findings that 1) the FEIR has been completed in compliance with CEQA, 2) that the FEIR was presented to the decision-making body of the lead agency, 3) that the decision-making body reviewed and considered the information contained in the FEIR prior to approving a project (*State CEQA Guidelines* Section 15090) and 4) that the conclusions of the FEIR represent the independent judgment and analysis of the lead agency, and 5) that the FEIR provides factual evidence that links the significant adverse impacts identified in the FEIR with the conclusions reached regarding their significance after mitigation.

For each significant impact identified in the FEIR, the lead agency (and responsible agencies) must find, based on substantial evidence in the record, that either 1) the project has been changed to avoid or substantially reduce the magnitude of the impact, 2) changes to the project are within another agency's jurisdiction and such changes have or should be adopted, or 3) specific legal, technological, economic social, or other considerations make the mitigation measures or project alternatives infeasible. The lead agency may approve a project for which significant and unavoidable adverse impacts have been identified in the FEIR. In such cases, findings of overriding considerations must be made by the lead agency, which state that the benefits of the project outweigh the significant unavoidable impacts.

Lead Agency Project Decision. A lead agency may: 1) disapprove a project because of its significant environmental effects; 2) require changes in a project to reduce or avoid significant environmental effects; or 3) approve a project in spite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*State CEQA Guidelines* Sections 15041 through 15043).

Mitigation Monitoring/Reporting Program. When an agency makes findings on significant effects identified in the FEIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval (Public Resources Code Section 21081.6).

Notice of Determination. An agency must file a Notice of Determination after deciding to approve a project for which an EIR is prepared (*State CEQA Guidelines* Section 15094). A local agency must file the Notice with the County Clerk. The notice must be posted for 30 days and sent to anyone previously requesting such notice. Posting of the notice starts a 30-day statute of limitations on legal challenges to the adequacy of the FEIR (Public Resources Code Section 21167[c]).

Figure 1-1 Regional Location/District Boundaries

Figure 1-2 Planning Sub-areas

2. Summary

To aid the public and decision-makers in understanding the findings of an EIR, Section 15123 of the CEQA Guidelines requires that a summary be provided which discusses the significant environmental effects and mitigation measures; areas of controversy, and issues to be resolved (if any). This may include making a choice among alternatives and/or whether or how to mitigate the significant effects.

The summary that follows is divided into two parts. The first provides a brief synopsis of the project and any areas of controversy known to the lead agency (Port San Luis Harbor District). The second identifies the environmental impacts associated with implementation of the project and cumulative development.

Project Synopsis

Project Proponent

Port San Luis Harbor District
Pier No. 3, Avila Beach Drive
PO Box 249
Avila Beach, CA
Contact: Jay Elder, Harbor Manager
(805) 595-5400

Project Description

The project evaluated by this FEIR is a comprehensive update of the Port San Luis Harbor District Master Plan ("Final Master Plan") which is incorporated herein by reference and is available for public review at the Harbor District offices located at the base of Harford Pier at the end of Avila Beach Road and on the following web site: www.portsanluis.com.

Location

The majority of Harbor District facilities are located in central San Luis Obispo County about 1 miles west of the community of Avila Beach (Figure 1-2).

Areas of Controversy Known to the Lead Agency

Traffic on Avila Beach Drive and the allocation of road capacity among coastal-dependent, coastal-related and other land uses continues to be a controversial issue in the Avila/Port San Luis area.

Summary of Environmental Impacts and Mitigation Measures

Table 1-1 provides a summary of the potential significant environmental impacts that could result from the project. Throughout this Final EIR, impacts are categorized according to their level of significance after mitigation has been applied. Four categories of impacts are identified:

Class I. Class I impacts are significant and unavoidable. To approve a project resulting in Class I impacts, the CEQA Guidelines require decision makers to make findings of overriding consideration that “... *specific legal, technological, economic, social, or other considerations make infeasible the mitigation measures or alternatives identified in the EIR...*”.

Class II. Class II impacts are significant but can be mitigated to a level of insignificance by measures identified in this EIR and the project description. When approving a project with Class II impacts, the decision-makers must make findings that changes or alternatives to the project have been incorporated that reduce the impacts to a less than significant level.

Class III. Class III impacts are adverse but not significant.

Class IV. Beneficial impacts.

Impacts Found to be Less Than Significant

Based on evidence provided in the project description and initial study, the following impacts were found to be less than significant.

Agricultural resources Population and housing

Alternatives

A fundamental aspect of environmental analysis under CEQA is the identification and examination of alternatives to the proposed project {CEQA Guidelines Section 15126(d)}. The number and type of alternatives is not specified by law, but left to the “rule of reason” {Citizens of Goleta Valley v. Santa Barbara (1990) 54 Cal 3rd 353}. While alternatives need not be studied at the same level of detail as the proposed project, they should provide the reviewer with a reasonable opportunity to compare impacts of the various alternatives. The discussion should focus on alternatives capable of eliminating any significant adverse environmental effects, or reducing them to a level of insignificance, even if these alternatives would impede, to some degree, the attainment of the project objectives, or would be more costly {CEQA Guidelines 15126(d)(3)}.

The Alternatives section of this EIR focuses on alternatives capable of eliminating or reducing significant adverse environmental effects associated with the project, while providing decision-makers with a range of different policy choices and feasibly attaining the objectives of the project. The alternatives evaluated by this EIR include:

No Project

The No Project alternative is required by Section 15126.6 (e) of the CEQA Guidelines. Under the No Project Alternative, the Harbor District would continue to develop in accordance with the existing Port Master Plan adopted in 1983. Table 8.1 in Section 8: Alternatives, provides a summary of the

improvements recommended by the 1983 Master Plan. In general, the 1983 recommends somewhat less development of coastal-related uses than the 2003 Final Master Plan. Accordingly, impacts relating to traffic; water and wastewater generation; impacts to police and fire protection; storm water runoff; noise; and visual resources would be somewhat less at buildout than those expected from the 2003 Final Plan.

Alternative I -- Coastal Dependent Emphasis

Section 30255 of the Coastal Act states:

Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

The Coastal Act favors the development of coastal-dependent uses in proximity to the ocean. Unfortunately, these uses traditionally do not generate sufficient revenues to keep pace with the rising cost of providing these services and facilities. On the other hand, coastal-related uses, such as retail shops and restaurants, are generally financial “winners”. The Draft Port Master Plan seeks a balance between the two that will enable the Harbor District to meet its obligations to the public while satisfying these provisions of the Coastal Act.

If the Harbor District applied Section 30255 without consideration of its revenue implications, it would emphasize coastal-dependent uses and either reduce the level of service and facilities it provides or develop some other revenue source to make up the shortfall. Conversely, the Harbor District could emphasize coastal-related uses such as retail and restaurants with the notion that increased revenues could be used to subsidize and expand coastal-dependent uses. These two ends of the continuum between coastal-dependent and coastal-related represent the range of choices for decision-makers in balancing these competing interests.

Under the Coastal Dependent Emphasis alternative, all of the new lease spaces recommended by the Final Master Plan would be occupied by marine-related uses such as boat repair, fish processing and sport fishing, and exclude non-coastal dependent retail, food establishments or other coastal-related uses. For the Harbor Terrace site, the campgrounds/RV/cabins would be replaced by expanded fishermen laydown yards, boat repair and other coastal-dependent uses.

Alternative II – Near Term Emphasis of Coastal Related Uses

Under this alternative, all of the lease spaces would be occupied by general retail, food service and other coastal-related businesses with no expansion of the existing coastal-dependent uses. For the Harbor Terrace site, a 147-room hotel and 22,000 sq. ft. restaurant would be constructed instead of the park, campsites, and cabins.

Environmentally Superior Alternative

The discussion of alternatives provided in Chapter 8 of this FEIR concludes that the Coastal Dependent Emphasis alternative is the environmentally superior alternative. The next most environmentally superior alternative is the No Project Alternative.

Cumulative Impacts

The cumulative impact analysis (Chapter 7) assesses the cumulative impacts associated with reasonably foreseeable projects in the vicinity of the project, recognizing that development activities may be individually limited in their impact but cumulatively significant.

Mitigation Monitoring Program

Section 21081.6 of the Public Resources Code requires all state and local agencies to establish mitigation monitoring or reporting programs whenever approval of a project relies upon a mitigated negative declaration or an environmental impact report (EIR). The monitoring or reporting program must ensure implementation of the measures being imposed to mitigate or avoid the significant adverse environmental impacts identified in the mitigated negative declaration or EIR.

Table 1-1: Summary of Impacts and Mitigation Measures

Class I Impacts

Air Quality

Impact A-2 Construction activities associated with uses accommodated by the Final Master Plan could generate emissions that may adversely impact local and regional air quality. This impact is considered significant after mitigation (Class I).

Mitigation Measures

- AQ-1 The Harbor District shall, to the extent feasible, separate sensitive land uses from significant sources of air pollution.
- AQ-2 The Harbor District shall submit environmental documents to the San Luis Obispo County Air Pollution Control District for review and comment in accordance with the California Environmental Quality Act prior to consideration for approval.
- AQ-3 The Harbor District shall promote and encourage the use of alternate modes of transportation by incorporating public transit, bicycle, and pedestrian modes in new development.
- AQ-4 The following measures shall be applied to reduce impacts related to PM₁₀ and NO_x emissions from project construction to the extent feasible.
- a.** Equipment Emission Control Measures. To the extent feasible, newer construction equipment (manufactured after 1990) shall be used that produces fewer emissions, especially for the highest emitting piece of diesel-fired heavy equipment. In any case, all equipment shall be properly tuned and maintained. Additional measures that would reduce construction-related emissions include, but are not limited to:
- Retarding fuel injection timing two degrees from the manufacturer's recommendation.
 - Using high pressure fuel injectors.
 - The use of reformulated diesel fuel .
 - The use of Caterpillar pre-chamber, diesel-fired engines (or equivalent low NO_x engine design) in heavy equipment used to construct the project to further reduce NO_x emissions.
- b.** Dust Control Measures. Dust generated by construction activities shall be kept to a minimum by full implementation of the following measures:
- During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems are to be used when necessary to prevent dust from leaving the site and to create a crust after each day's activities cease;
 - During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas in the morning and after work is completed for the day and whenever wind exceeds 15 miles per hour;
 - Stockpiled earth material shall be sprayed as needed to minimize dust generation.
 - During construction, the amount of disturbed area shall be minimized.
 - Onsite vehicle speeds should be reduced to 15 mph or less;
 - Exposed ground areas that left exposed after project completion should be sown with a fast-germinating native grass seed and watered until vegetation is established;
 - After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will be minimized;
 - Grading and scraping operations shall be suspended when necessary to minimize dust generation;
 - All roadways, driveways, and sidewalks associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading unless seeding or soil binders are used.

Residual Impacts

Unavoidable and adverse.

Traffic and Circulation

Impact T-2 Cumulative vehicle trips generated by buildout of the Port in accordance with the Final Master Plan in addition to trips associated with regional development, will adversely affect the level of service of Highway 101. This impact is considered significant and unavoidable (Class I).

Implement the recommendations of the 2003 Avila Circulation Study.

Residual Impacts

Unavoidable and adverse.

Class II Impacts

Geology and Geologic Hazards

- Impacts GEO-2: In a major earthquake on the Los Osos or San Andreas faults, ground accelerations of 0.15g to 0.7g may occur, which would cause significant ground shaking within the Master Plan area resulting in damage to structures and a potential safety hazard to occupants of such structures. This impact is considered significant unless mitigated (Class II).
- Impact GEO-3: Portions of the project area may be subject to landslides and/or slope failure. This impact is considered significant unless mitigated (Class II).
- Impact GEO-5: Construction and operation of the various facilities proposed in the Port Master Plan has the potential to result in erosion of soils. This impact is considered significant unless mitigated (Class II).
- Impact GEO-6: The planning area contains areas of undocumented fill, which may be unstable. This impact is considered significant unless mitigated (Class II).
- Impact GEO-7: Field investigations of the Harbor Terrace planning area have revealed the potential for differential settlement which could damage foundations and/or the structural integrity of buildings. This impact is considered significant unless mitigated (Class II).
- Impact GEO-8: Portions of the project area underlain by undocumented fill may exhibit expansive soils. This impact is considered significant unless mitigated (Class II).

Mitigation Measures

- G-1 Future development shall conform with all applicable requirements of the Uniform Building Code and other applicable construction regulations relating to potential seismic and/or geologic and slope-related hazards.
- G-2 No development shall occur until 1) a geologic investigation has been prepared conforming to Section 3309.6 of the Uniform Building Code, 1994 Edition as amended by pertinent sections of Title 24 of the California Code of Regulations, and standard geologic practice; and 2) a Geotechnical Engineering Investigation has been prepared conforming to Section 3309.5 of the Uniform Building Code, 1994 Edition as amended by pertinent sections of Title 24 of the California Code of Regulations, and standard geologic practice. The contents of these investigations are described below:
- a. The geologic investigation shall be conducted by a certified Engineering Geologist, which at a minimum, shall address the following: the extent, depths, configurations, and activity levels of the existing major landslides, including the landslide that has been obscured by the buttress fill; the potential for destabilization of these landslides due to the proposed grading; the stability of slopes under the proposed grading and appropriate mitigation; evaluation of the sheared rock zone and its relations to fault activity; determination of the location of the San Luis Bay Fault at the site and its potential ramifications for the project; evaluations of the cut slope at the eastern corner of the site and its potential for instability, as well as appropriate mitigations; the potential for liquefaction and lateral spreading in the area where fill will be placed for the Port access road and which may extend into the Bay (Phase II); and assessment of the potential for bluff erosion along the coastal length of the project. This investigation will also provide feasible engineering and/or design solutions for these potential geologic impacts including the need for construction or augmentation of bluff protection and setback requirements from existing constraints.
 - b. The geotechnical engineering investigation shall be conducted by a Registered Geotechnical Engineer or a Registered Civil Engineer experienced ~. in geotechnical investigations. In addition to the items that normally are addressed in such an investigation, the report should include, but not be limited to, the following factors: soil and groundwater conditions encountered; preparation of the site prior to grading; grading criteria for pavement and building areas; types and depths of foundations; maximum allowable bearing capacities; site coefficients for use in foundation design; potential for liquefaction; total and differential settlement; resistance to lateral loads; subslab ground treatment; design criteria for retaining walls; pavement design criteria; site drainage; assessment of the existing fill at the site, including the suitability of the materials used, original site preparation, and degree of compaction; the impact of placing fill upon the existing fills and appropriate mitigation; settlement potential of the fill and appropriate mitigation; and placement of fill over cut slopes and appropriate mitigation. This investigation will also provide feasible engineering or design solutions to these potential geologic impacts.
- G-3 There are five major landslides which have been identified on the Harbor Terrace site. These landslides are depicted as Landslides #1 through #5 in Figure 5.1-2. Specific recommendations related to each landslide are provided below as well as within the Geologic Hazards Study incorporated by reference into this FEIR and available for review at the Harbor District Offices.

- a. Landslide 1, located in the eastern region of the site, shall be thoroughly assessed by the project geologist. In addition to analyzing the inherent stability of the landslide, the impact of making cuts in the body of the landslide must also be considered, as well as the impact of the 40-foot fill planned in the southeast region of the landslide. This study shall be conducted as part of the final project design, when final grades have been set and are available in a grading plan, yet while modifications are still possible to accommodate site conditions. This study shall be conducted as a feasibility study to determine the major characteristics of the slide and the extent of required mitigation. Specific measures that could be implemented, depending upon the characteristics of the landslide and the relationship of the landslide debris to the proposed building locations, include excavation of appropriate portions of the landslide and replacement with compacted fill. This type of grading solution would entail benching, the installation of drains, and possibly the use of geogrid reinforcing. Fill slopes shall not exceed a 2:1 horizontal to vertical ratio. Other alternatives could include stabilization systems utilizing tie-backs or caissons or project redesign to relocate structures out of the slide area.
- b. Landslide 2, located in the northwest region of the site, shall be studied by the project geologist to determine its depth, activity level, and extent. This study shall be conducted as part of the final project design, as the relationship of the grading to the location and depth of the landslide will determine the appropriate mitigation(s). Possible mitigation measures for this landslide could include excavation of the landslide and replacement as a compacted fill, possibly with drains and geogrid reinforcement; increasing the height of the retaining wall to allow it to also function as a debris wall; or using another stabilizing system such as a tie-back system above the retaining wall in caissons.
- c. Landslide 3, located below the existing water tank, shall be analyzed to determine its depth and geometry and the effect of the proposed cut upon slope stability. This study shall be conducted as part of the final project design, as a fairly accurate depth of cut must be known to properly assess its impact upon slope stability. As major cuts are planned in this area, mitigation could be achieved by modifying the grading plan to remove all of the landslide debris. Other possible mitigations could include replacement with compacted fill, possibly with drains and geogrid reinforcement, use of a retaining wall, tie-backs, or caissons.
- d. The location of Landslide 4 has been obscured by past grading, and by the subsequent placement of a buttress fill. This landslide area shall be investigated as part of final project design with respect to the materials used and its state of compaction. Mitigation, if any, will be determined by the outcome of such an investigation. Possible mitigations include removal of the slide debris and replacement as a compacted fill, placement of additional buttress fill, or use of structural solutions such as retaining walls, tie-backs, or caissons. This assessment shall be conducted by the project geologist as part of final project design.
- e. In addition to the four major landslides described above, there are numerous smaller landslides and slumps located throughout the property. Landslide 5 will not be impacted by project development other than the possibility of decreasing the need for frequent maintenance due to the placement of fill and the subsequent increased distance between the landslide and the affected roadway. In areas where cuts are made, the project geologist shall determine whether all of the slide debris has been removed in each area. This determination should be made during project grading. If it is determined that slide debris remains in any areas, assessments regarding stability and any necessary mitigation measures shall be made at that time.
- G-4 In areas where cuts are planned, the stability of the proposed slopes shall be evaluated by the project geologist. This study shall be conducted as part of the final design, as the depths of the cuts must be known to accurately assess their impact upon slope stability. In the event that the slopes in their planned configurations prove unstable, there are several potential mitigation measures. These potential measures include flattening of the proposed slopes to a stable configuration, overcutting the slopes and rebuilding them as stable, compacted fill, and possibly structural applications, such as retaining walls, caissons, driven piles, and installation of geogrid reinforcement.
- G-5 The project geotechnical engineer shall conduct sufficient exploration of the existing fill during final project design to render an opinion regarding the suitability of the fill materials use, the degree of compaction, the settlement characteristics, and the strength of the fill materials. The stability and settlement potential of the fill, following the proposed grading shall also be assessed. If the results of this analysis indicate the existence of unstable soil materials, slope instability, inadequate compaction or excessive settlement potential, this situation shall be mitigated by project grading.
- G-6 The placement of fill over cut slopes is specifically addressed in the Uniform Building Code; the potential for slope failure can be readily mitigated by proper grading techniques in accordance with the Uniform Building Code.
- G-7 Slopes which involve new fill material over existing fill will require assessment by the project geotechnical engineer or geologist. Recommendations shall be developed as to the best method of mitigation. Such measures could include excavation of the cut slope and rebuilding the entire slope as a compacted fill, possibly utilizing drains and/or geogrid reinforcement. Recommendations from this shall be incorporated into the geotechnical engineering investigation or geologic study as part of the final project design.
- G-8 Detailed grading plans shall be prepared and submitted for all project phases which identify existing and proposed drainage channels and proposed final site configuration. Grading plans shall be in conformance with the County Coastal Zone Land Use Ordinance.
- G-9 It is recommended that on-site areas of sheared rock be evaluated by the project geologist and a determination made as to whether the sheared rock is fault-related. If the sheared rock zone is fault-related, the potential ramifications of the fault shall be studied and addressed by the project geologist. Potential mitigation measures to avoid seismic-related displacement include: setting back from the fault, structural augmentation of the foundation where the fault is straddled or removing the bedrock and replacing it with compacted fill as the foundation support material.
- G-10 The entire length of bluff along San Luis Bay shall be assessed through a Stability Evaluation Report to determine the rate of bluff retreat and the characteristics of wave run-up. The need for setbacks or bluff protection shall be addressed by the project geologist in this assessment. The adequacy of the existing rip-rap structures shall also be assessed and a determination made as to whether augmentation is necessary to protect the proposed improvements. With respect to the fill planned to support the widened access road (Phase II), mitigation measures for erosion will include construction of a retaining structure at the toe of the fill, facing the fill with rip-rap, constructing the lower portion of the fill out of rip-rap, or other equivalent design solution.

G-11 To mitigate the potential for excessive settlement of the proposed road fill, bay sediments shall be removed as necessary in order to place fill on the underlying competent rock. The depth to the rock, recommendations for overexcavation, and the precise design solution (i.e. retaining structure, use of rip-rap, etc.) shall be made by the geotechnical engineer as part of the final geotechnical engineering investigation.

G-12 The further erosion of Avila Beach Drive at the entrance to Diablo Canyon shall be mitigated by the installation of engineered rip-rap or equivalent protective measures.

Residual Impacts

Less than significant

Drainage and watershed Resources

Impact W-1 Construction of the various facilities identified in the Draft Port Master Plan will increase the amount of impervious surfaces at the project site, thereby increasing the volume and velocity of runoff, and the potential for erosion on and off the site. The increased runoff could increase the potential for sedimentation in the Pacific Ocean. This impact is considered significant unless mitigated (Class II).

Impact W-2 Heavy metals and other hazardous materials washed from the surface of parking lots and roadways could enter the ocean during a rainstorm. This impact is considered significant unless mitigated (Class II).

Impact W-3 Activities associated with construction (including excavation and grading) of facilities associated with the Draft Port Master Plan would increase the potential for erosion. This impact is considered significant unless mitigated (Class II).

Impact W-4 Construction activities could result in the release of oil, engine fuel and other toxic substances into nearby San Luis Bay, adversely affecting water quality. This impact is considered significant unless mitigated (Class II).

Mitigation Measures

- D-1 Measures to be considered for the mitigation of potential drainage, erosion, seepage and water quality impacts associated with new development include, but are not limited to:
- The incorporation of on-site runoff collection systems which includes energy dissipation, berms, temporary settling basins, and/or a silt/hydrocarbon separator for the collection and removal of hazardous materials and sediments.
 - The incorporation of on-site drainage systems to collect runoff from all impervious onsite services, including parking spaces, roads and buildings.
 - The incorporation of offsite retention basins with appropriate water quality controls.
 - Surface runoff should be collected by curbs, gutters and drainage swales and conveyed to an appropriate point of disposal. Discharges of greater than five feet per second should be released through an energy dissipator or outlet.
 - The incorporation of sub-surface drains to intercept seepage and convey it to an acceptable point of disposal.
 - Watering any construction sites at least twice per day during construction, or more frequently if determined necessary by the Harbor District.
 - Re-vegetating portions of sites exclusive of paved areas as soon as reasonable following grading.
 - Incorporating rain gutters and downspouts for buildings with adequate splash guard protection.
 - Grading surfaces adjacent to buildings so that runoff is conveyed away from foundations and onto paved surfaces or underground collection pipes.
- D-2 Prior to the commencement of new construction activities, a General Construction Activity Storm Water Permit from the Regional Water Quality Control Board (RWQCB) shall be obtained. As part of this permit, a storm water pollution prevention plan shall be prepared specifying Best Management Practices (BMPs) for erosion control and stormwater pollutant discharge control during any construction activities. For all project components, grading and drainage plans shall incorporate BMPs for erosion control and stormwater pollutant discharge control. This may also serve to reduce non-project-related sediment loads further downstream.
- D-3 All newly constructed impervious surfaces, including parking spaces, streets and roads, and storage lots, shall drain to an underground storm drainage system or improved channel. Surface runoff will be collected by curbs, gutters and drainage swales to storm drain pipe inlets. Runoff will be kept underground until it is released to a graded or improved natural channel. Discharges greater than five feet per second will be released through an energy dissipator structure at the drainage system outlet.
- D-4 New roadside shoulders beyond the edge of pavement shall only be used for minor road embankment runoff and emergency overflows from underground pipe systems. Additional drainage swales, inlets and channels will be provided on grading plans in order to handle sheet flows that would otherwise be directed across roads.

- D-5 The following grading procedures shall be included in order to minimize the potential for drainage and erosion problems on slope banks:
- Locate terrace drain ditches at the top of fill slopes greater than a gradient of 4 horizontal to 1 vertical. Allow only surface runoff which is incidental over the face of a fill slope.
 - Include terrace drains and velocity dissipators on existing and proposed slopes greater than 35 feet in height.
 - Install wicks, subdrains or other improvements, as necessary, to insure that groundwater seepage does not occur on man-made slopes.
- D-6 All areas disturbed by grading activities shall be seeded with native or naturalized grasses to reduce dust emissions and erosion.
- D-7 New storm drain inlets and pipe systems shall be added along the edge of the bluff to prevent flows from being released onto unprotected slopes.
- D-8 A site-specific erosion control and temporary revegetation plan shall be developed for all new grading. This plan shall include erosion control devices to be installed prior to the beginning of the rainy season (October 15).
- D-9 Prior to grading operations, application for a construction Storm Water Discharge General Permit shall be submitted to the Regional Water Quality Control Board. This permit request will be accompanied by an indication of construction site erosion control practices, soil tracking control methods and practices, and moisture control of surfaces for dust control.
- D-10 An erosion and sedimentation control plan as required by the National Pollution Discharge Elimination System permit shall be prepared for all new construction. This permit request will comply with all the drainage protection measures and procedures of the on-site Storm Water Pollution Prevention Plan (SWPPP).
- D-11 A Revegetation Plan shall be prepared for all newly graded areas. The goal of this plan is to (1) ensure that sediment is not eroded and transported off-site; and (2) upon completion of construction, to re-establish vegetation compatible with surrounding native plantings.
- D-12 Additional rock dissipator protection shall be provided at new culvert outlets along Avila Beach Drive and at the existing 5 foot diameter culvert for the Diablo Canyon Road channel.
- D-13 Additional rock protection along the shoreline (Avila Beach Drive) will be added to provide protection of the new and existing slopes during high surf conditions.
- D-14 Prior to approval of new grading plans or grading permits, the applicant shall show the following note on grading and drainage plans:
No construction work will be permitted in any flowing channel and no graded material or debris will be placed within existing storm drain channels. All work within seasonally dry streambeds shall be in accordance with permits issued by the County of San Luis Obispo and the Regional Water Quality Control Board.

Residual Impacts

Less than significant.

Cultural Resources

- Impact C-1: Development of facilities in accordance with the Draft Port Master Plan could unearth or disturb previously undiscovered resources of cultural or historic significance. This impact is considered significant unless mitigated (Class II).
- Impact C-2: Development of facilities on Harford Pier could alter the historic character of the Pier. This impact is considered significant unless mitigated (Class II).
- Impact C-3: Development of facilities near the Port San Luis Lighthouse could alter the historic character of the lighthouse and its setting. This impact is considered significant unless mitigated (Class II).

Mitigation Measures

- C-1 In the event archaeological resources are unearthed during project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume. A Chumash representative should monitor any mitigation work associated with prehistoric cultural material.
- C-2 If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC).

Residual Impacts
Less than significant.

Noise

Impact N-1 Noise associated with construction activities on District properties may adversely impact nearby noise-sensitive uses. This impact is considered significant unless mitigated (Class II).

Mitigation Measures

- N-1 All construction equipment shall be in proper operating condition and fitted with factory standard silencing features.
 - i. A haul route plan shall be prepared for review and approval by the Harbor District.
 - ii. Whenever practical, the noisiest construction operations shall be scheduled to occur together in the construction program to avoid continuous periods of noise generation. Scheduling of noisier construction activities shall also take advantage of summer sessions and other times when classes are not in session.
 - iii. Project construction activities that generate noise in excess of 60 dB at the project site boundary shall be limited to the hours of 7 a.m. to 6 p.m.
- N-2 All large construction equipment will be equipped with “critical” grade noise mufflers. Noise level reductions associated with the use of “critical” rather than “stock” grade mufflers can be as high as 5 dBA. Engines will also be tuned to insure lowest possible noise levels.
- N-3 Detailed noise analyses shall be prepared when grading plans are developed to fully determine the need and extent of temporary and/or permanent noise barriers. Final noise barrier heights shall be determined with final grading plans indicating lot locations, trailer setbacks, and precise pad elevations are developed. The barriers may consist of a berm, wall, or a combination berm and wall. Walls should not contain holes or gaps, and should be constructed of slumpstone or other masonry material.
- N-4 Equipment lay-down areas, staging areas or those areas that are reserved for testing and repairing of construction equipment shall be located as far away from sensitive receptors..

Residual Impacts
Less than significant.

Services

- Impact PS-1 Facilities associated with buildout of the Draft Port Master Plan would place additional structures, life and property at risk for damage or destruction from wildland fires and/or structural fires. In particular, development of the Harbor Terrace planning area will pose a risk to wildland fire. This impact is considered significant unless mitigated (Class II).
- Impact PS-2 Buildout of the Port Master Plan will increase the demand for police protection. This impact is considered significant unless mitigated (Class II).

Mitigation Measures

- PS-1 New development shall not be allowed until adequate public services and facilities to serve such development are provided. Where existing facilities are inadequate, new development may only be approved when the following conditions are met:
 - a. It can demonstrated that all necessary public facilities will be installed or adequately financed (through fees or other means); and
 - b. The facilities improvements are consistent with applicable facility plans approved by the Harbor District, the County and/or such other agencies in which provides services to the Port.
- PS-2 Future development shall be required to pay all applicable Public Facilities Fees to the County of San Luis Obispo to offset potential impacts to, among other County services, police and fire protection services.
- PS-3* Where determined by the Harbor District, plans for new development shall be submitted for review by the San Luis Obispo County Sheriffs Department to assess the adequacy in which a project’s design addresses the following issues: emergency access, internal circulation and provision of “defensible space”. The recommendations of the Sheriffs Department shall be considered by the Harbor District in deciding to approve such new development.

- PS-4 The Harbor District shall ensure that all proposed developments are reviewed for compliance with fire safety standards per the California Fire Code and other standards and ordinances of the CDF/San Luis Obispo County Fire Department. Issues to be considered in the review of future development include, but are not limited to, the following:
- a. Improved emergency access to Harford Pier;
 - b. Improved fire protection systems on the pier, including hydrants, sprinklers and standpipes to meet current fire codes;
 - c. The installation of grates on the pier for automatic ventilation to stop the spread of fire;
 - d. Improved access to the Lightstation for fire protection;
 - e. Development of an all-weather secondary access road from Port San Luis to San Luis Bay Drive;
- PS-5 The Harbor District shall promote the efficient use of water and reduced water demand by:
- a. Requiring water-conserving design and equipment in new construction;
 - b. Encouraging water-conserving landscaping and other conservation measures;
 - c. Encouraging the retrofitting of existing fixtures with water-conserving fixtures;
- PS-6 The Harbor District shall promote maximum use of solid waste source reduction, recycling, composting and environmentally-safe transformation of wastes.
- PS-7 The Harbor District shall require that all new development complies with applicable provisions of the San Luis Obispo County Integrated Waste Management Plan.
- PS-8 All water mains and fire hydrants shall provide required fire flows and shall be constructed in accordance with the specifications of the County of San Luis Obispo, the California Department of Forestry or other applicable standards.
- PS-9 Where determined by the Harbor District, plans for new development shall be reviewed by the County of San Luis Obispo to insure that building materials, access, brush clearance and water storage capacity provide adequate fire protection to the proposed project.
- PS-10 Prior to the approval of any site plans for development areas adjacent to open space, a Fuel Reduction Plan shall be submitted to the County of San Luis Obispo and the California Department of Forestry for approval. This Fuel Reduction Plan will provide for an acceptable level of risk in accordance with California Department of Forestry standards. Fuel reduction can be achieved through a gradual transition from native vegetation into irrigated landscape/building areas of the project. This fuel reduction program shall also establish parameters for the percent, age, extent, and nature of native plant removal necessary to achieve the accepted fire prevention standards required to protect human lives and property, while preserving as much natural habitat as possible.
- PS-11 The Harbor District or its designated assignee shall be responsible for maintenance of Fuel Reduction Zones where required of new development. Maintenance agreements shall be submitted to the County of San Luis Obispo and the California Department of Forestry for approval.
- PS-12 All water lines shall be designed and installed in accordance with requirements of the County of San Luis Obispo and County Service Area Number 12.
- PS-13 New development on the Harbor Terrace site shall comply with County of San Luis Obispo and County Service Area Number 12 requirements concerning the installation and use of reclaimed water systems for landscape irrigation.
- PS-14 New development shall incorporate native plant species and ornamental species which are drought-tolerant and/or have low irrigation requirements.
- PS-15 If available, reclaimed water shall be utilized to irrigate major landscaped and planted areas. The on-site water distribution system shall be designed and constructed in a manner to provide separate reclaimed water lines. Such a system shall comply with all County of San Luis Obispo and Regional Water Quality Control Board Requirements for the installation and operation if reclaimed water systems.
- PS-16 All wastewater collection lines shall be designed and installed in accordance with requirements of the County of San Luis Obispo and the Avila Beach County Water District.
- PS-17 No new development shall be approved without first providing assurance that adequate capacity exists in Sewage Lift Station #181 located adjacent to Avila Beach Drive. Where necessary, plans for redesign or upsizing of this facility shall be submitted to the County of San Luis Obispo and the Avila Beach Community Services District prior to issuance of building permits.
- PS-18 Development plans shall delineate the number, location, and general design of solid waste enclosures and storage areas for recycled material.

PS-19 Maintenance of all developed park, open space and recreation facilities on the Harbor Terrace site shall be the responsibility of either the Port San Luis Harbor District or its designee and/or another suitable entity or a combination of the above. Where applicable all recreational facilities (bluff top parks, etc.) shall be landscaped and, where necessary, irrigated.

PS-20 New development shall provide parking in accordance with standards established by the Port San Luis Harbor District, the County of San Luis Obispo and the California Coastal Act.

Residual Impacts
Less than significant.

Biological Resources

Impact B-2: Implementation of the Final Master Plan would not adversely affect riparian habitat, but may impact needlegrass grassland, coastal tidal areas, and other sensitive natural communities. This impact is considered significant unless mitigated (Class II).

Impact B-3: Development of Harbor District facilities will increase the area of impervious surfaces, increasing stormwater run-off into San Luis Bay, which could indirectly affect sensitive species habitat. This impact is considered significant unless mitigated (Class II).

Impact B-4 Development of the Harbor Terrace site may disrupt wildlife movement along the slope above the site. This impact is considered significant unless mitigated (Class II).

Mitigation Measures

B-1. Oak trees removed or damaged by project activities shall be replaced by planting oak trees in areas adjacent to existing oak woodlands outside project grading limits. These oak trees should be grown from locally collected acorns. San Luis Obispo County recommends a 4:1 replacement of oak trees removed or damaged by development activities. Existing oak trees shall be beneficially incorporated where possible in the project landscaping along with other native species.

B-2. Grading and construction in and adjacent to sensitive native habitat areas shall be minimized. Project grading activities shall generally avoid steep slopes and bluff areas.

B-3. Construction limits shall be clearly defined and enforced. Oak tree protective measures shall be incorporated by installing construction fencing outside of the drip line of oak trees and preventing any construction or grading activities from damaging existing oak trees.

B-4. Projects abutting open, natural areas, will incorporate a buffer zone incorporating fire clearance requirements, and transition zones between introduced and native landscaping. Maintenance of this buffer zone would include prevention of non-native vegetation in the project area from spreading into the native habitats surrounding the site.

B-5. Initial land-clearing and grading activities shall be scheduled to avoid spring and early summer months in areas where oak woodland or dense coastal scrub border the site. If clearing must occur during this time period, preconstruction surveys shall be conducted to identify nesting birds in coastal scrub and oak woodland habitats within 500 feet of any project grading or related activities (parking, equipment storage, construction office, etc.). If active nests of Cooper’s hawk, northern harrier, white-tailed kite, or Bell’s sage sparrow are found, construction or related activities shall be postponed within 500 feet of the nest until the young have fledged or the nest becomes inactive.

B-6. Botanical surveys shall be conducted to determine the presence and distribution of special-status plant species on the Harbor Terrace site prior to project approval. Botanical surveys shall be conducted by a qualified botanist during known flowering periods of plant species listed in Table 5.6-1 and focus on vegetated areas that would be disturbed by the project. If special-status species would be adversely affected by the project, mitigation measures shall include:

- a. Relocating project components to avoid impacts;
- b. Preservation of the majority of the population on the project site through a permanent conservation easement; and
- c. Transplanting individual plants (perennials) or seeds (annuals) from impact areas to restoration areas.

Measure a. should be implemented if the plant is threatened or endangered or if a small percentage of the sensitive population on the project site would be affected. Otherwise, measures b. or c. may be implemented.

B-7. Native landscaping shall be designed and installed to discourage pedestrian access from the Harbor Terrace site into adjacent native habitats. In addition, if pets are allowed, designated pet areas shall be incorporated into the design of new development so pets are not allowed into nearby habitat areas or buffer zones that support native wildlife.

Residual Impacts

Less than significant.

Traffic and Circulation

Impact T-1 Vehicle trips generated by buildout of the Port in accordance with the Final Master Plan could adversely affect the operation of surrounding streets and intersections. This impact is considered significant unless mitigated (Class II).

Implement the recommendations of the Avila Circulation Study.

Residual Impacts

Less than significant.

Air Quality

Impact A-1 Motor vehicle and other long-term emissions associated buildout of the Port facilities in accordance with the Final Master Plan would contribute to the lack of attainment of the State ozone and PM₁₀ standards. This impact is considered significant unless mitigated (Class II).

Impact A-2 Dust generated by construction activities may be considered a nuisance adjacent to the project site. This impact is considered significant unless mitigated (Class II).

Mitigation Measures

AQ-5 The Harbor District shall, to the extent feasible, separate sensitive land uses from significant sources of air pollution.

AQ-6 The Harbor District shall submit environmental documents to the San Luis Obispo County Air Pollution Control District for review and comment in accordance with the California Environmental Quality Act prior to consideration for approval.

AQ-7 The Harbor District shall promote and encourage the use of alternate modes of transportation by incorporating public transit, bicycle, and pedestrian modes in new development.

AQ-8 The following measures shall be applied to reduce impacts related to PM₁₀ and NO_x emissions from project construction to the extent feasible.

- a. Equipment Emission Control Measures. To the extent feasible, newer construction equipment (manufactured after 1990) shall be used that produces fewer emissions, especially for the highest emitting piece of diesel-fired heavy equipment. In any case, all equipment shall be properly tuned and maintained. Additional measures that would reduce construction-related emissions include, but are not limited to:
 - Maintain all construction equipment in proper tune according to manufacturer's specifications.
 - Fuel all off-road and portable diesel powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).
 - Maximize to the extent feasible, the use of diesel construction equipment meeting the ARBs 1996 or newer certification standard for off-road heavy duty diesel engines.
 - Should project emissions exceed the APCD's CEQA significance threshold for quarterly emissions, construction equipment shall be retrofitted with the appropriate number of catalyzed diesel particulate filters (CDPF) or diesel oxidation catalysts (DOC). This determination must be conducted in consultation with the APCD.
- b. Dust Control Measures. Dust generated by construction activities shall be kept to a minimum by full implementation of the following measures:
 - During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems are to be used when necessary to prevent dust from leaving the site and to create a crust after each day's activities cease;
 - During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas in the morning and after work is completed for the day and whenever wind exceeds 15 miles per hour;
 - Stockpiled earth material shall be sprayed as needed to minimize dust generation.
 - During construction, the amount of disturbed area shall be minimized.
 - Onsite vehicle speeds should be reduced to 15 mph or less;
 - Exposed ground areas that left exposed after project completion should be sown with a fast-germinating native grass seed and watered until vegetation is established;
 - After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will be minimized;
 - Grading and scraping operations shall be suspended when necessary to minimize dust generation;

- All roadways, driveways, and sidewalks associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Permanent dust control measures identified in the approved project re-vegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities.
- Install wheel washers or rumble pads where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site.
- Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.

Residual Impacts
Less than significant.

Visual Resources

Impact V-1 Development of the various projects under the Master Plan will alter the visual character and/or quality of the project area. This impact is considered significant unless mitigated (Class II).

Impact V-3 Development of the various projects under the Master Plan may result in additional sources of light and glare. These new sources will be visible from adjoining areas and may be visible from areas beyond the Port. This impact is considered significant unless mitigated (Class II).

Mitigation Measures

- V-1. Grading shall be designed to conserve natural topographic features and appearances by means of land sculpturing to blend graded slopes and benches with natural topography.
- V-2. Construction equipment and staging areas for the development of the Harbor Terrace and Avila parking lot sites shall be stored and located in the least visually prominent location on site, and/or screened from public view.
- V-3. Lighting shall be hooded and designed to shine downward. To the extent practical, parking lot lighting shall be confined to the project site and shall be designed and oriented to ensure safety within the parking lots, access and pedestrian walks. Lighting will be installed with the minimum foot-candles necessary to ensure safety.

Residual Impacts
Less than significant.

Hazardous Materials

Impact HAZ-2: Development of the Harbor Terrace site may result in the exposure of existing contaminants in the soil. This impact is considered significant unless mitigated (Class II).

Impact HAZ-3 Serpentine soils are reportedly present on the Harbor Terrace site and may occur elsewhere throughout the project area. Construction on sites containing serpentine soils poses the risk of release of naturally occurring asbestos. This impact is considered significant unless mitigated (Class II).

Impact HAZ-4 Demolition of structures in the project area may result in hazards associated with lead-based paint and asbestos containing materials. Demolition of these structures poses risk of release of these hazardous materials into the environment. This impact is considered significant unless mitigated (Class II).

Impact HAZ-5 Fluorescent light ballasts and removal of any electrical transformers in the project area may pose hazards to the public associated with the release of PCBs. This impact is considered significant unless mitigated (Class II).

Mitigation Measures

- HAZ-1 The use, transport, storage and disposal of hazardous materials on all Harbor District property shall be carried in accordance with the provisions of all applicable federal, State and local laws and regulations.
- HAZ-2 During project grading in areas known to contain contaminants, monitoring of earthwork shall be performed to determine if levels of BTEX or other compounds of interest to the APCD (lead, volatile organic compounds such as gasoline and solvents, and asbestos exceed established exposure thresholds).
- HAZ-3 Grading shall either be performed during the dry season or will be subject to specific erosion control measures (see “Mitigation Measures” in Drainage and Watershed Resources) to prevent erosion of the soil and possible transport of contaminated soils into off-site watercourses.

- HAZ-4 Any oil-contaminated soil discovered during construction shall be disposed off-site at an appropriate facility or used as fill in parking lots or roadways. Areas of finished grade shall not have any surface exposures of oil-contaminated soils. Any activities involving remediation or the handling and disposal of hazardous materials or waste shall comply with all relevant regulations and permitting requirements of the Air Pollution Control District prior to the commencement of such activities.
- HAZ-5 Vapor barriers shall be placed below the foundation of all new structures in order to eliminate the potential for vapors entering any buildings.
- HAZ-6 Where new construction may occur on soils expected to contain asbestos, an Asbestos Health and Safety Program for project construction activities shall be developed and submitted to the San Luis Obispo APCD for review and approval prior to the commencement of project grading. This program shall include the following elements:
1. Preparation of a sampling and survey work plan. Elements of this work plan should include, but are not limited to: geologic mapping of the site, sampling strategy, and lab analysis methodology.
 2. Conduct sampling and survey activities and perform the required lab analysis. Results of these activities shall be submitted to the District for review 30 days prior to start of construction.
 3. If ACM is determined to be present, an Asbestos Health and Safety Program for construction activities in serpentinite to comply with State and Federal law will be required. Work plan elements should include, but are not limited to:
 - construction and project strategy to *prevent* emissions to ambient air
 - notice to APCD of project start date ten working days in advance;
 - protection methods used to prevent worker exposure; and
 - a California certified asbestos environmental monitor or registered geologist with asbestos certification to be present on-site during construction activities to identify potential unmapped or subsurface serpentinite and to initiate APCD contractor/worker emergency procedures, if required.

The Asbestos Health and Safety Program must reduce potential impacts associated with naturally-occurring asbestos to a less than significant level.
 4. If ACM is determined to be present, no ACM is to be used as surface layer material on any part of the project (road beds, house pads, landscaped areas,
 5. If ACM is determined to be present, notification to employees and patrons that ACM is present shall be required.
 6. If ACM is not found in the serpentine deposits on-site, the following items are required:
 - the preparation of an emergency work plan to address potential unmapped or subsurface serpentinite.
 - a certified asbestos environmental monitor or registered geologist with asbestos certification shall be present during construction activities to initiate emergency work plan if necessary, and
 - APCD shall be notified of project start date.
- HAZ-7 A demolition asbestos survey will be conducted prior to any modifications or demolition of the on-site buildings or storage yards, in accordance with federal NESHAP regulations. The asbestos survey will be conducted by a California-licensed asbestos consultant. If asbestos-containing materials (ACM) are found in the on-site buildings or storage yards, the ACM must be abated prior to the commencement of demolition activities. Abatement activities will be conducted by a California-licensed asbestos abatement contractor. ACM wastes will be disposed at a properly licensed disposal facility.
- HAZ-8 A lead-based paint survey will be conducted prior to commencement of demolition activities. The survey will be conducted by a California-licensed lead consultant. If lead-based paint is identified on the building materials, the paint may be required to be abated prior to demolition if found to be in poor condition. Waste materials containing lead-based paint will be properly characterized for disposal to determine if the material exceeds state or federal hazardous waste thresholds.
- HAZ-9 On-site electrical transformers will be inspected prior to commencement of demolition activities to determine whether they may contain PCBs. Any unlabeled transformer shall be assumed to contain PCBs unless proven otherwise through testing or information from the manufacturer. PCB-containing transformers will be disposed as federal hazardous wastes.
- HAZ-10 Fluorescent light ballasts will be inspected prior to commencement of demolition activities to determine if the ballasts could contain PCBs. Unlabeled ballasts shall be considered PCB containing unless proven otherwise through testing or information from the manufacturer. PCB-containing ballast will be disposed as federal hazardous wastes.

Residual Impacts

Less than significant.

Class III Impacts

Geology and Geologic Resources

- Impact GEO-1 Although seismic events could result in groundshaking in virtually every planning area, the potential for ground rupture in the Master Plan area is considered low. This impact is considered adverse but not significant (Class III).
- Impact GEO-9 Overexcavation of undocumented fill may result in the need to export soils and materials out of the Avila Beach area. This impact is considered adverse but not significant (Class III).
- Impact GEO-10 Interference with wave action and current patterns of sand sourcing and deposition is not anticipated under this plan. This impact is considered adverse but not significant (Class III).

Services

- Impact PS-3 A portion of the increased development accommodated by the Final Master Plan will increase the demand for water. This impact is considered adverse but not significant (Class III).
- Impact PS-4 Buildout of the various facilities accommodated by the Port Master plan will generate additional wastewater that would be collected and treated by the Avila Beach wastewater treatment plant. Increased wastewater generation could adversely impact the wastewater collection system serving the Port, and could secondarily impact the capacity of the wastewater treatment plant. This impact is considered adverse but not significant (Class III).
- Impact PS-6 Buildout of the Port in accordance with the Final Master Plan will generate additional solid waste which will adversely impact landfill capacity. This impact is considered adverse but not significant (Class III).

Biological Resources

- Impact B-1: Construction of facilities may result in the loss of habitat for special-status plant and animal species or the loss of individuals. This impact is considered adverse but not significant (Class III).
- Impact B-5 Construction activities and occupancy of facilities would extend existing human-related disturbance (human presence, wildlife predation by pets, noise, dust, lighting) further into open space areas. This impact is considered adverse but not significant (Class III).

Noise

- Impact N-2 Noise associated with vehicle trips to and from the Port and associated facilities will increase. This impact is considered adverse but not significant (Class III).

Traffic and Circulation

- Impact T-3 Additional trips associated with buildout of the Port in accordance with the Final Master Plan could conflict with emergency evacuation plans associated with Diablo Canyon Nuclear Power Plant. This impact is considered adverse but not significant (Class III).
- Impact T-4 Development of a 3,000 square foot commercial lease space on the Avila parking lot would remove no more than 17 parking spaces while increasing the demand for parking. In addition, development of a new 4,250 square foot lease space on the Avila Pier terminus will increase the demand for parking. This impact is considered adverse but not significant (Class III).
- Impact T-5 Development of uses accommodated by the Final Master Plan will increase the demand for parking at Port facilities. This impact is considered adverse but not significant (Class III).

Visual Resources

- Impact V-2 Grading and construction activities and the storage of construction materials may be visible from public vantage points. This impact is considered adverse but not significant (Class III).

Hazardous Materials

Impact HAZ-1: Construction and operation of Port facilities and improvements may involve the routine use, storage or transport of limited amounts of hazardous materials which may pose a risk to the environment. This impact is considered adverse but not significant (Class III).

3. Project Description

Project Proponent

The project proponent is:

Port San Luis Harbor District
Pier 3, Avila Beach Drive
PO Box 249
Avila Beach, CA
(805) 595-5400
Jay Elder, Harbor Manager

The property is owned and administered by the Port San Luis Harbor District.

Project Location

Port San Luis is located in San Luis Obispo County, about midway between San Francisco and Los Angeles. The Harbor District boundaries reach north to the city of San Luis Obispo and south along the coast into Pismo Beach, Grover Beach and Arroyo Grande (see Figure 1-1). The majority of facilities operated by the Harbor district are located on San Luis Bay west of the town of Avila Beach in central San Luis Obispo County. The Bay is framed by the Irish Hills which rise abruptly to the north and west and offer protection from the westerly breezes that prevail along the central coast of California.

Facilities owned, operated and maintained by the District include Harford Pier; the Harbor District offices, maintenance buildings and storage areas; boat launching and repair (dry dock) facilities; parking lots; buildings leased to a marine supply shop and restaurants (see Figure 3-3); and the Harbor Terrace site (see Figure 3-4). In addition, the District owns facilities in the town of Avila Beach that include the Avila Pier (Figure 3-6) and sandy beach, and a public parking lot (Figure 3-7). Lastly, the Harbor District owns the Point San Luis Lighthouse (Figure 3-1).

Project Objectives

The 2003 Draft Port San Luis Harbor District Port Master Plan (incorporated herein by reference and available for review at the Port San Luis Harbor District) fulfills the requirements of the California Coastal Act and the State Tidelands Grant (Chapters 647 of Statutes of 1955 and as amended by Chapter 302 of Statutes of 1957) which require the preparation of a plan for the use and management of Harbor District facilities and resources. The most recent Port Master Plan was prepared in 1984 and subsequently updated in 1994 to address a variety of issues, including the development of the Harbor Terrace site. The 2003 update responds to changing opportunities for the use and development of the Harbor District's properties to meet the present and future needs of the boating public.

The stated objectives of the Final Master Plan are:

- > Meet Coastal Act priorities for the Harbor, especially the protection of coastal-dependent and coastal-related activities, visitor serving and waterfront recreation opportunities, and public access to the coast;
- > Promote and facilitate the orderly and beneficial development and use of District lands, facilities and resources;
- > Provide land and water uses that are beneficial to the people of the State of California;
- > Increase revenue-producing opportunities to support the Harbor District's public and enterprise functions; and
- > Enhance and maintain the maritime character of the harbor.

These objectives are summarized in the following overall goal for the Master Plan:

Port San Luis should be a harbor with protected, maintained, and enhanced resources that balances the environmental, social, and economic needs of the District and the various user groups.

Project Characteristics

The 2003 Draft Port Master Plan provides an overview of the Harbor District and its facilities, the challenges faced by the Harbor District in serving the needs of the boating public, and establishes policies and implementation programs to meet these challenges. Among the planning challenges identified in the Final Master Plan are:

- > Fiscal considerations in meeting the Harbor District's ongoing obligations to the public;
- > Meeting the needs of both coastal related and coastal dependent uses of Harbor District land and facilities;
- > Environmental protection;
- > Coastal access;
- > Public services;
- > Safety;

The Final Master Plan includes a preface and four topical chapters which are summarized below:

Preface. The preface describes the purpose and intent of the Master Plan, how it is organized, and the process through which the Plan was prepared and adopted.

Chapter 1: Plan Objectives and Challenges. Chapter 1 describes the overall objectives of the Master Plan and the many challenges facing the Harbor District.

Chapter 2: History and Planning Sub-Area Descriptions. Chapter 2 provides a brief history of Port San Luis as the context for past and future planning efforts. Chapter 2 also divides the Harbor District properties into eight planning sub-areas for which specific policies and improvements will be identified in Chapters 3 and 4, respectively.

Chapter 3: Policy Master Plan. This chapter of the Master Plan provides goals and policies to guide future decision making for the use and development of Harbor District property and facilities. The Master Plan distinguishes between goals and policies that apply District-wide and those that are specific to each planning sub-area. Master Plan policies address a wide range of issues, including:

- > Setting priorities for services and facilities among coastal dependent, coastal related and other uses;
- > Coastal access and access to Harbor District facilities;
- > The protection of terrestrial and marine resources;
- > Visual and scenic resources;
- > Cultural resources;
- > Natural and human-made hazards;

Policies specific to each of the planning sub-areas address a similarly broad range of topics.

Chapter 4: Improvements and Implementation. Chapter 4 identifies specific improvement projects for each of the eight planning sub-areas which are intended to achieve the vision for the Harbor District articulated by the goals and policies of Chapter 3. Figures 3-8 through 3-14 illustrate the recommended improvements, which are summarized on Table 3-2. Where applicable, the size/quantity of improvements are provided as well as the time frame for implementation. Chapter 4 also discusses the development review process and funding strategies to pay for the various improvements.

Appendix. The appendices contain a glossary of terms used in the Master Plan; a coastal access plan (required by the Coastal Act); maps illustrating the existing and proposed boundaries of land use permitting authorities; a needs assessment which guided the preparation of the Final Plan; a Coastal Act consistency checklist; guidelines for the design of new development on Harford Pier; an excerpt from Table "O" from the San Luis Obispo County Coastal Zone Land Use Ordinance; and a list of references.

Existing Facilities and Planning Sub-areas

Existing Port Facilities

Existing Port facilities are shown on Figures 3-1 through 3-7 and include Harford Pier; Harford Landing with associated buildings, lease spaces and Harbor District offices; the Harbor Terrace storage area and trailer park; the beach bluff areas along Avila Beach Drive; the Cal Poly Marine Sciences Pier; the Avila Parking lot, beach and Pier. Table 3-1 provides a summary of existing facilities divided between coastal-related and coastal-dependent land uses.

Table 3-1 : Inventory of Existing Port Facilities 2003

Source: Port San Luis Harbor District

COASTAL DEPENDENT LAND USES	
Facility	Quantity
Harbor Operations	
Auxiliary office/storage	400 sq.ft.
Patrol boat moorings	2 moorings
LCM Mooring	1 mooring
Maintenance Yard Area	11,246 sq.ft.
Shop Buildings	2,500 sq.ft.
Harbormaster's Office	3,150 sq.ft.
Commercial Fishing	
Floating work dock	2 docks
Transient mooring (seasonal)	35 moorings
Fishing support area	7,885 sq.ft.
Skiff Storage	90 spaces
Off-load area	360 lin.ft.
Boat Repair Yard	35 spaces
Mobile Boat Hoist	1 hoist
Showers/laundry	100 sq.ft.
Diesel Storage Tank (underground)	12,000 gallon tank
General Public	
Marine Supply/sport launch	920 sq.ft.
Open Pier/fishing	1,720 lin.ft.
Restricted Frontage	1,470 lin.ft.
Fish Cleaning Station	20 lin.ft.
Recreational Boat Parking	35 spaces
Sport Fishing	3 boats

Table 3-1 (cont'd) -- Inventory of Existing Port Facilities 2003

COASTAL RELATED LAND USES	
Facility	Quantity
Harford Pier -- Visitor Serving	
Pod 1	2,600 sq.ft.
Commercial/Restrooms (pier)	4,821 sq.ft.
Commercial/Restaurant (land)	2,922 sq.ft.
General Public	
General Parking	241
OTHER LAND USES	
Landscaping	4,356 sq.ft.

Planning Sub-areas

The Draft Port Master Plan divides the Harbor District's properties and facilities into distinct 'planning areas' which provide a useful context for discussing the environmental setting.

Open Water. The Harbor District manages open water areas that include the waters of San Luis Obispo Bay between Point San Luis and the Sunset Palisades area of Pismo Beach. The Open Water sub-area consists of about 520 acres of sandy-bottomed open bay, including areas under Harford Pier, Avila Pier, and the Cal Poly Marine Education and Research Pier (formerly UNOCAL Pier).

The primary active use of this area is for navigation and mooring of commercial and recreational vessels. The Open Water also serves a variety of water-oriented recreational uses related to Olde Port Beach, Avila Beach, Pirate's Cove, and numerous sheltered inlets below the Sunset Palisades area of Pismo Beach. Marine biological resources in the Bay support numerous activities at Port San Luis including recreational fishing, which includes fishing from piers, small boats, and charter fishing boats, commercial fishing, sightseeing, whale watching, scuba diving, and bird watching, among others.

Currently, there are approximately 280 moorings in use in the main harbor, divided among recreational power and sailing vessels, commercial fishing, guest boats, and about a dozen recreational moorings are on the west side of Avila Pier. A floating pen /aquaculture facility is located in the Open Water as well. The sub-area also encompasses a 2,400-foot rubble mound breakwater and several islands, most notably Whalers Island, which is incorporated into the breakwater, and Smith Island, which lies a few hundred feet north. The US Army Corps of Engineers owns and controls the breakwater.

Harford Pier. Harford Pier is the visual focal point and activity center of Port San Luis Harbor (Figure 3-2). The pier serves both commercial and recreational fishermen and provides harbor users and visitors with boat launching facilities, fishing opportunities, restaurants, retail fish sales, and scenic vistas. In 1992, the California State Historic Preservation Office designated Harford Pier a national historic structure, which requires the Harbor District to preserve and rehabilitate the pier. Because of its age, type of construction, and heavy use, the pier requires almost continuous structural maintenance and repairs.

The pier is a primary access point to boats in the mooring area and the anchorage. The chief means of access to vessels on moorings from the pier is via personal skiffs. There are presently skiff racks and moorings (tie-ups) for 67 skiffs at Harford Pier. The pier has four public hoists and four private hoists dispersed down the length of it. Public landings exist in three locations: two fixed, and one floating. Adjacent to Harford Pier is a floating work dock.

Most of the pier is developed, but there is modest potential to expand some uses and redevelop others, particularly at Pod 1 and the west side of the pier terminus (seawall). A minimum 10-foot setback around the pier's perimeter and buildings provides an emergency escape route for pedestrians and also serves as pier-fishing space. Outside the western pier railing along the pier stem, many of the old 12" x 12" wood caps extend up to 20 feet-over the water on the west side of Harford Pier to the edge of the historical footprint.

Pier Stem. The pier is open for vehicular traffic and provides limited parking. Many visitors use the walkway along the length of the eastern edge of the pier to reach the pier terminus.

Located on the east side of the pier, the first developed portion of the Pier is Pod 1 which sits about 250 feet from Harford Landing and is the first visual impression visitors have of Harford Pier. Pod 1 is currently occupied by coastal dependent and visitor serving uses. A sport-fishing lease occupies a 20' by 20' space with a landing and hoist reserved exclusively for its use. Six parking spaces are located across from Pod 1. A commercial fish buyer and retailer is also located on Pod 1, next to the sport fishing lease.

Pier Terminus. The dominant structure on the pier is the old Pacific Coast Railway warehouse building re-constructed at the pier terminus. A number of uses and activities take place in this area:

Commercial fish unloading	Seafood processing & retail fish sales
Marine education	Patrol Boat tie-ups
Icehouse	NOAA tide station
Public fishing	Diesel Fuel dock
Open pier and viewing space	National Weather Service weather station
Harbor Patrol Offices	Cold storage facilities
Skiff storage & launching	Parking
Two restaurants	Sewer / bilge pumpout facility
Public Restrooms	

Harford Landing. In 1963, the Harbor District acquired the land abutting Harford Pier as well as the access road to the pier, which extends from the end of the County right-of-way into the parking area. With assistance from the California Department of Navigation and Ocean Development (now California Department of Boating and Waterways) and the California Wildlife Conservation Board, the 8.7-acre Harford Landing Area was created from landfill in 1967, at the foot of the Harford Pier to serve as a parking and boat haul-out and repair area.

Harford Landing (Figure 3-3) supports uses that complement the uses on Harford Pier and the harbor in general.

The predominant use of the landfill area is a paved parking lot striped for passenger cars and trailered boats. About 248 automobile spaces are available, of which about 35 spaces are 40' or longer to accommodate boat trailers. At the entrance to Harford Landing are the Fisherman's Memorial linear park, a boat wash down facility, and the North Parking Lot. At the foot of the hillside are a restaurant and an area that is often used for pier lease storage and staging. A boat repair yard is located against the bluffs immediately behind the Harbor District office and includes a 40,975 square foot boatyard work area with a water quality controlled drainage and filtration system.

Adjacent to the boatyard is a 5,540 square foot maintenance complex that includes area for Harbor District vehicles, equipment, and maintenance supplies with public restrooms and showers. In front of the boatyard is the District office (Administration Building) and public restrooms. Along the water at the north (down-coast) end of Harford Landing is a bait-and-tackle/marine supply store,

and trailer boat launching facility in a semi-protected boat basin. A 50-ton mobile boat hoist concrete pier sits at the water's edge, slightly inside the parking area. Parking and vehicle circulation through this lot fluctuates and is largely dependent on the weather. During the winter months with cold or foggy weather, parking and circulation generally are not difficult, although frequently winter storm waves overwash the rocky edge and deposit debris, forcing the closure of parking areas close to the water's edge because of safety hazards.

Beach and Bluffs. The Beach and Bluff Area includes the shoreline adjacent to Avila Beach Drive between the bridge at San Luis Obispo Creek and Harford Pier. The County controls this one-mile stretch of roadway until approximately Diablo Canyon Road, after which it becomes District property. The roadway is the only access route to Port San Luis as well as the primary access to Diablo Canyon Nuclear Power Plant.

The primary uses of the Beach and Bluff Sub-Area include entry to the Port and beaches for day use. Sightseeing from the roadway or bluff overlooks is also a popular activity. The road is virtually the only significant reach of low to moderate-speed public road in this part of the County that offers unobstructed views of the ocean to the motorist at close range.

Nobi Point & Woodyard. Nobi Point and Woodyard are unimproved scenic overlooks with panoramic ocean views on the southeast side of Avila Beach Drive across from Harbor Terrace. The overlook areas on the bluffs offer excellent uninterrupted scenic vistas of marine life, the rural waterfront landscape, and working harbor.

As with coastal bluffs throughout California, the waterfront bluffs along Avila Beach Drive have suffered significant erosion over the years because of persistent wave action and severe storm events. Much of the bluffs at Port San Luis are approximately 15 to 20 feet in height and are in need of armoring against further erosive wave action by riprap revetment, although there are portions of the road with shoreline protective devices. At the intersection of Avila Beach Drive and Diablo Canyon Road, there has been extensive erosion and the road is in jeopardy of washing out.

Olde Port Beach and Fisherman's Beach. The two beaches that sit below the bluffs have adequate accessways from the road to the shoreline including a boat launch ramp, stairways, a handicap ramp, and two minor bluff trails. These beaches are not as heavily used as at Avila, but usage has grown considerably in recent years. Much of the increase relates to the presence of the small boat launch ramp. Olde Port Beach is one of the primary small-boat beach launches for kayaks, windboards, jet skis, and small sailing craft. Sunbathing, swimming, evening campfires, and picnicking are also some of the beach's representative activities. These beaches also make up one of the few County waterfront areas that allow pet-owners to play with their dogs.

Cal Poly Marine Education and Research Pier. The Cal Poly Marine Education and Research Pier (formerly Unocal Pier) is located between Olde Port Beach and San Luis Obispo Creek. The University uses the 3,000-foot long pier for educational purposes and marine research. Historically, Union Oil Company used the pier for transfer of oil to tankers and for receiving petroleum products for distribution to local markets.

In 1983, the pier was completely destroyed in a storm. In 1985, it was replaced by a concrete and steel pier in the same footprint as the original pier. UNOCAL donated the Pier to the University in

2001. The same year, Port San Luis Harbor District entered into a forty-nine year ground lease with Cal Poly for the marine research and education facility.

Harbor Terrace. Harbor Terrace is a coastal hillside property facing San Luis Bay and the Pacific Ocean, north and east of the intersection of Avila Beach Drive and Diablo Canyon Road. The site is surrounded on three sides by privately held vacant undeveloped land and provides a visual backdrop for views from San Luis Bay, Harford Pier, vantage points at Avila Beach, and the Pacific Ocean. The site and surrounding areas comprise lands once owned by the Marre family. Originally, Harbor Terrace consisted of rolling hills that sloped in a southerly direction. Union Oil Company graded the site in the 1930's for storage of crude oil in aboveground oil storage tanks.

In 1973, the site was graded for the proposed Port San Luis Marina Village, a project that was never completed. The Harbor District purchased twenty-three acres of the site with funding from the State Department of Boating and Waterways in 1976 to develop uses that could generate additional revenues for the District and provide needed site area for harbor facilities. In 1980, six acres were added through a long-term lease agreement. The Harbor District has investigated numerous ideas for the development of the property.

Harbor Terrace provides area for storage of Harbor District Pier materials, trailer, boat storage, and boaters' gear storage. Another prominent feature on the site is the 100,000-gallon water tank located at the northern boundary of the site, which provides for the Harbor District's water storage (Figure 3-4). The Port San Luis Trailer Park property occupies approximately three acres off Babe Lane, a narrow paved road that winds up the eastern part of the site. A series of relatively level benches and roadways ascend the hillside. Due to past grading work, slopes between the terraces are very steep in some areas and minor slope failures are visible in several locations. Slope stability is tenuous, with five landslides identified onsite. In addition, there are numerous slumps and smaller slides throughout the property and, although the exact location is unknown, the San Luis Bay fault crosses the property in a northwesterly direction. Vegetation on Harbor Terrace is sparse, largely due to previous grading. However, near the center of the site is a grove of eucalyptus trees, and in areas not exposed to grading, non-native grasses, coastal sage scrub and oak woodlands have also been established.

Lightstation. The Lightstation Planning Sub-Area (Figure 3-1) includes the lighthouse facilities at Point San Luis, the sandy beach area on the east side of the breakwater, and the rocky inter-tidal areas between the Lighthouse and Harford Pier. The Coast Guard lighthouse facility at Point San Luis was constructed in 1890 as one of seven lighthouses built in California in the same architectural style. Today, there are only two remaining Victorian Lighthouses on the West Coast: Port San Luis and East Brother in San Pablo Bay.

The lighthouse site consists of the lighthouse building, whistle house, coal house, oil house, two duplexes, two large underground cisterns, and various outbuildings, most of which date from 1888-1890. In 1974, the Coast Guard automated the lightstation and in 1992 the Harbor District acquired the 30-acre site from the Federal Government under the condition that it be restored and open to the public. In 1995, the Point San Luis Lighthouse Keepers, a non-profit corporation, was formed to assume responsibility for restoration and operation of the lighthouse. A Memorandum of Agreement between the Harbor District and the Lighthouse Keepers imparts the group with funding responsibility for the property.

Avila Pier, Beach and Parking Lot. Avila Beach has traditionally been closely linked with Port San Luis Harbor. Avila Beach is one of the primary recreation and tourist destinations in San Luis Obispo County. The community of Avila Beach presently consists of about 400 permanent residents, but the population swells by an influx of up to 1 million annual visitors (Avila Beach Specific Plan, 2001). The primary route to the Avila Community is Avila Beach Drive, maintained and managed by the County of San Luis Obispo. Recent circulation studies indicate that this route will experience congested traffic conditions in the future and during peak tourist periods, typically summertime weekends (Avila Circulation Study, 2001).

Avila Beach. The beach is approximately 14 acres and extends from the mouth of San Luis Obispo Creek on the west to Fossil Point on the east. The beach is widely known as the warmest and most wind-sheltered in the County. Typical activities on Avila Beach include sunbathing, sightseeing, picnicking, volleyball, swimming, surfing, kite-flying, and similar activities. Avila Beach is a popular location for local organizations to sponsor events including company picnics, swim meets, recreational runs, and beach volleyball tournaments.

The beach is accessible from Front Street along its western end, but Front Street rises gently from west to east until it stands over 30 feet above the sand. Stairways descend from the sidewalk through a concrete sea wall along Front Street to the beach at eleven locations. Permanent structures include a Harbor District Lifeguard office with adjoining restrooms on the pier, outdoor shower, handicap ramp and seating located at the base of the pier, as well as the San Luis Yacht Club building. At the west end of the beach across from the County park, a drainage outfall structure was designed to incorporate a handicap ramp, stairs, and outdoors showers. Port San Luis maintains playground equipment, barbecue grills, and picnic tables along the western section of the beach.

Avila Pier. The State of California constructed the present-day Avila Pier in 1908, shortly after construction of the breakwater at Point San Luis. Originally, the pier contained a large warehouse and several hoists, and was an important fishing and passenger wharf. The pier suffered major storm damage in 1953, 1955, 1960, 1969, 1973, and again in March 1983, just before the transfer of ownership of the Avila Beach properties from the State and County to the Harbor District in 1984. The Harbor District rebuilt the pier, which is an important part of the landscape and environment of Avila Beach (See Figure 3-6).

The pier is approximately 1,635 feet in length, and is about 30' wide at the base, 20' wide along the stem, and 60' wide for the last 200'. Boating facilities include a hoist, and under the pier stair and accessways, skiff tie-ups and a public landing. Avila Pier is a public fishing pier and, along the length of the pier on three sides, incorporates 10-foot setbacks to any structures. The primary uses of the pier are public fishing, sightseeing, and boat access. Structures on the pier include the historic yacht club at the base of the pier, as well as public restrooms, lifeguard station, bait and tackle shop, and fish cleaning station on the pier's terminus.

Avila Parking Lot. The Avila Beach Parking Lot (See Figure 3-7) sits one block north of the beach. It is roughly triangular and was redesigned and rebuilt by Unocal during the Avila Beach restoration to provide 353 parking spaces. According to a deed restriction with the County, the Harbor District must provide at least 300 public parking spaces in this lot to serve beach and pier users. The County owns a right of way through the center of the lot. During peak summer months the lot is heavily used by beach goers and patrons of nearby shops and businesses. A paid parking system has been in effect on and off for many years.

Figure 3-1 The Point San Luis Lightstation Existing Conditions

Figure 3-2 Harford Pier Existing Conditions

Figure 3-3 Harford Land Existing Conditions

Figure 3-4 Harbor Terrace Existing Conditions

Figure 3-5 Beach and Bluff Areas Existing Conditions

Figure 3-6 Avila Pier Existing Conditions

Figure 3-7 Avila Parking Lot Existing Conditions

**Table 3-2: Port San Luis Harbor District 2003 Final Port Master Plan
Summary of Recommended Improvements**

Planning Sub-Area	Description	Quantity/ Size	Timing
Harford Pier			
East walkway	Upgrade walkways; add interpretive exhibits		0-2 years
West walkway	Rebuild the width of the pier stem from shoreline to terminus up to 20 feet westward to increase the pier drive and to add a pedestrian walkway		
Skiff tie-ups	Places to tie up skiffs, with ladder to pier		
Hoist for Area No.3	Convert this space to skiff rack storage		
Bike racks in parking area			
Skiff racks			
East parking lot			
Pier Roadway	Repair and widen		2-5 years
Pod 1 Redevelopment	Expand and improve lease space, add restrooms	3,000 sq.ft.	
Fixed boat landing for visitors	48' x 12' landing		
Interpretive exhibits			
Harbor offices	If relocated, consider locating the Harbor Patrol offices to admin. building		6-10 years
Add new lease space		1500 sq.ft.	
Harford Landing			
Trolley stop/tour bus drop-off	Provide bus stop near admin. Building with benches, shade, etc.		0-2 years
Bike storage			
Central pedestrian path	Improve the paths along the rock revetment to connect with Harford Pier and other Harbor District properties; create a central path and crosswalks that extends from the east parking lot past the restaurant to admin. And pier;		
Mobile boat hoist	Upgrade pier with steel guide rails and extend seaward; add rip-rap to the area to dissipate waves;		2-5 years
Interpretive exhibits			
Skiff storage			
Administration building	If and when relocated to Harbor Terrace, convert to lease space and/or visitor center;	1,716	6-10 years
Maintenance complex	If and when admin. And maintenance are relocated, convert to lease space for marine repair and related activities;	4,000	
Scuba diving staging area			

East parking lot	Re-grade, pave and stripe parking lot; provide filtered drainage; lighting and landscaping; retaining wall; utility hookups for RVs		
Boat washdown area	Incorporate filtered drainage system; add wastewater dump station;		
West parking lot elevation	Re-grade and raise west parking lot to reduce effects of wave action; add filtered drainage system;		
Jetty improvements	Add seating and public art		
Beach and Bluffs			
Beach stairways	Add stairways to serve Old Port beach		0-2 years
Nobi point overlook	Create an auto parking and viewing area with landscaping, fencing and trash containers;		6-10 years
Woodyard pedestrian overlook	Improve as mini-park with walkways, benches, interpretive exhibits and lighting;		
Shoreline pedestrian trail	Work with County to extend path from Port to Avila Beach		
Harbor Terrace			
Boat trailer parking			2-5 years
Gear storage		18 spaces	
District laydown yard/storage		10,000 sq.ft.	
Infrastructure services	Bring water, sewer, electricity, cable TV, and phone to site; install storm drainage filtration system;		6-10 years
Roadwork	Improve existing roads and provide main access drive;		
Pedestrian circulation improvements	Provide network of pathways to connect to beach and other Port properties;		
Park/open space	Create park and other open space for public use;	46,600 sq.ft.	
Gear storage		30 spaces	
Utility camp sites/RV sites		125	
Tent camp sites		44	
Cabins/Yurts		67	
Harbor offices	Relocate and consolidate Harbor District offices	16,000 sq.ft.	
Parking		66,000 sq.ft.	
Port material storage		10,000 sq.ft.	
Commissary/eating drinking		22,000 sq.ft.	
Trailer boat storage		95 spaces	
Avila Pier Terminus			
Interpretive exhibits			0-2 years
Skiff racks		1000 sq.ft.	
Fixed boat landing	Construct new fixed landing for visiting boats		2-5 years
Beach stairway			

New lease space		4,250 sq.ft.	
Avila Beach Parking Lot			
New lease space		3,000 sq.ft.	2-5 years
Lighthouse			
Lighthouse pier	Replace Coast Guard Pier and extend as necessary to provide adequate depth;		6-10 years
Beach trail/stairway	Add beach access stairway and pedestrian trail		

Discretionary Approvals Required

Adoption of the Port Master Plan requires the approval of the Harbor District Board of Commissioners. Once adopted by the Board, the Harbor District will make application to San Luis Obispo County for an amendment to the Local Coastal Program to incorporate relevant provisions of the Master Plan in accordance with the California Coastal Act. An LCP amendment is decided by the County Board of Supervisors upon the advice of the County Planning Commission. Following approval by the Board of Supervisors, the LCP amendment will be forwarded to the California Coastal Commission for certification.

Figure 3–8 Lighthouse Planning Area Recommended Improvements

Figure 3-9 Harford Landing Recommended Improvements

Figure 3.10 Harford Pier Recommended Improvements

Figure 3-11 Harbor Terrace Recommended Improvements

Figure 3-12 Beach and Bluff Area Recommended Improvements

Figure 3-13 Avila Beach Parking Lot Recommended Improvements

Figure 3-14 Avila Pier Recommended Improvements

4. Environmental and Regulatory Setting and Consistency With Adopted Plans

Environmental Setting

The environmental setting of the project is described in detail in the topical analyses provided in Section 5 of this FEIR.

Climate

The climate of the central coast of California is considered Mediterranean with warm, dry summers and cooler relatively damp winters. Along the coast, milder temperatures are the rule throughout the year due to the moderating influence of the Pacific ocean.

Population

According to the US Census the population of San Luis Obispo County grew from 217,162 in 1990 to an estimated 256,300 in 2003.

Regulatory Setting and Consistency With Adopted Plans and Policies

Land use within Port San Luis Harbor District is governed by three inter-related and overlapping jurisdictions. Areas seaward of the mean high tide line (ie, Harford Pier, Avila Pier and Cal Poly Marine Sciences Pier) fall within the exclusive jurisdiction of the Harbor District who governs land use in accordance with its 1983 Port Master Plan and 2003 Harbor District Code of Ordinances. The Coastal Commission and US Army Corpse of Engineers have jurisdiction below the mean high tide line. Landward of the mean high tide line falls under the jurisdiction of San Luis Obispo County through its adopted General Plan Local Coastal Program. The Port facilities fall within the boundaries of the San Luis Bay Area Plan, Coastal Element which provides planning area standards to guide the future use and development of land, including those within the Port.

And lastly, all of the land and facilities addressed by the Draft Port Master Plan lie within the Coastal Zone as defined by the California Coastal Act of 1976. All land use entitlements issued by either the Harbor District or the County in accordance with the Local Coastal Program are subject to appeal to the California Coastal Commission.

Air Quality Management Plan

The San Luis Obispo County Air Pollution Control District has adopted an Air Quality Management Plan (AQMP) for the County which provides management strategies to attain and maintain relevant state and federal air quality standards. The Plan includes land use and transportation management strategies aimed at reducing our reliance on motor vehicles. Relevant aspects of the AQMP are summarized in Section 5.8: Air Quality.

Port San Luis Harbor District Code of Ordinances

The Port San Luis Harbor District Code of ordinance provides the regulatory framework for the management of Port facilities and resources and incorporates various provisions of State law, including:

- Article X of the California Constitution;
- Sections 6000 et seq. of the Harbors and Navigation Code;
- Sections 65920 et seq. of the Government Code, and
- Section 21082 of the Public Resources Code (CEQA).

The last revision of the Code occurred in 2003 and was initiated to respond to the changing needs of the Harbor District and to address changes to State and local laws that have occurred in the last several years. The Code consist of 10 chapters covering a wide range of activities and subjects, including:

- | | |
|------------------------------------|----------------------------|
| General Provisions and Definitions | Fees and Charges |
| Land Use and Development | Environmental Review |
| Construction Codes | Pier and Wharf Regulations |
| Mooring Regulations | Health and Safety |
| Vehicle Restrictions | Violations and Enforcement |

Project Consistency: The most relevant chapter of the Code with regard to consistency of the Draft Port Master Plan is Chapter 8: Land Use and Development.

Table 8A lists allowable uses for each of the various planning sub-areas along with the corresponding entitlement necessary for approval. Uses are either allowed by right, allowed subject to an administrative permit, or allowed subject to approval of a use permit by the Board of Commissioners. A comparison of the uses proposed by the Draft Port Master Plan with Table 8A reveals that the uses proposed for each planning area are either allowed by right or allowed subject to a use permit. The one exception is the new lease space proposed for the Avila Parking lot. This space would presumably be occupied by commercial businesses which are currently prohibited on this site by the Code.

Port San Luis Resource Capacity Study

Planning Area standards contained in the *San Luis Bay Area Plan*, a component of the County’s Local Coastal Program (LCP), state that development projects and related improvements for Port San Luis “...shall be within the circulation and utility capacity...” available to the Harbor area, or be guaranteed through a planned program of improvements. Capacity standards in the Area Plan are provided for water, sewer, traffic and parking. Thus, prior to approving any projects for the expansion of port-related facilities, the Harbor District must find that infrastructure capacity is available (or is programmed to be available) to serve such development, and that the standards relating to water, sewer, traffic and parking will not be exceeded. This finding must be based on a thorough assessment of the present capacities of the aforementioned infrastructure, and a projection of the improvements necessary to accommodate buildout of the Harbor District as envisioned by the Harbor District Master Plan. The Harbor District has prepared a resource capacity study to provide the necessary documentation to make the required findings.

The following is a discussion of each standard from the Area Plan, followed by a brief analysis of how the capacity of each resource could be affected by the various uses proposed under the Draft Port Master Plan.

Standard (Traffic): Avila Beach shall not be subjected to traffic levels exceeding Level of Service "C". The level of service shall be based on the average hourly weekday two-way 3:00 PM to 6:00 PM traffic counts to be conducted during the second week in May of each year.

Discussion: Section 5.7: Transportation/Circulation, of this Final ER examines the impact of project-related traffic upon various area roadways, particularly Avila Beach Drive, the primary roadway serving the Port. According to the traffic study buildout of the Port and reasonably foreseeably development in the area will not result in a significant adverse impact on traffic so long as the improvements recommended by the Avila Circulation Study (2003) are implemented.

Standard: (Parking) All new uses shall be required to provide additional parking consistent with the County Coastal Zone Land Use Ordinance requirements or to provide an in-lieu contribution to a District-wide parking program pursuant to Standard c. Improved Capacity Program; any new or expanded use may be approved only upon finding that sufficient parking exists consistent with the County Coastal Zone Land Use Ordinance requirement, or will be made available either by the applicant for the use or by the District.

Discussion: Parking is analyzed in Section 5.7 of this FEIR. In the Harford Landing planning area there are approximately 248 automobile parking spaces of which 35 are 40 feet in length to accommodate trailered boats. The Avila Beach parking lot provides 353 spaces, of which the port is obligated by a deed restriction to provide 300 to serve public beach and pier users.

The Harford Pier parking area is proposed to be reconfigured to provide additional spaces under the Draft Port Master Plan. In addition, parking for proposed uses on the Harbor Terrace site will be incorporated into the design of future development consistent with County standards. For the Avila Parking lot the Final Master Plan proposes reserving a 50 foot deep portion of the parking lot along First Street as a site for the development of a new 3,000 square foot lease space with the loss of not more than 17 parking spaces.

Table 5.7-6 in Section 5.7 provides an estimate of additional parking spaces needed to accommodate buildout of the Port in accordance with the Final Master Plan. Parking generation factors were taken from the County Land Use Ordinance, where a standard was available. Parking demand for other uses was derived from discussions with Harbor District Staff regarding the nature of the use and its expected parking demand. Table 5.7-6 concludes that 333 additional spaces will be needed to accommodate all of the expected new Port facilities. This figure does not account for the possibility that parking will be shared by more than one use (boaters who patronize one of the restaurants, for example). Thus, the actual parking demand is somewhat lower.

Standard: (Wastewater) Wastewater generation shall not exceed available capacity owned by the Harbor District in the Avila Beach County Water District (community services district) wastewater treatment plant and/or such other facility as may be constructed pursuant to Standard c. Improved Capacity Program.

Project Consistency: Section 5.5: Services, provides a detailed analysis of wastewater generation associated with buildout of the Port in accordance with the Final Master Plan and reasonably

foreseeable development currently relying on the Avila Wastewater Treatment Plant. As described in Section 5.5, buildout of the Port and other reasonably foreseeable development will not exceed the Harbor District's allocation of treatment plant capacity nor the capacity of the treatment plant.

Standard: (Water) Usage shall not exceed the 100 acre-feet per year available to the Harbor District from its Lopez entitlement; the District shall not sell or otherwise dispose of this entitlement to any users except lessees, concessionaires, or other harbor uses consistent with the Port Master Plan. Adequate water pressure for fire suppression shall be maintained in all District water mains at all times.

Project Consistency: As discussed in Section 5.5: Services, the Harbor District derives all of its drinking water from Lopez Reservoir through an allocation of 100 acre-feet per year. As Section 5.5 shows, the future demand for water at buildout of the Port in accordance with the Final Master Plan will not exceed its allocation from Lopez Reservoir.

County General Plan, San Luis Bay Area Plan Coastal Element

The San Luis Bay Area Plan, Coastal Element of the County General Plan governs land use and development within the San Luis Bay area, including the Port and the community of Avila Beach. The majority of Harbor District property is designated *Public Facilities* which accommodates a wide range of governmental and other public facilities.

In addition to providing overall policy guidance for development within the Plan area, the San Luis Bay area plan contains specific standards for development at the Port which address public services, landscaping, grading and other aspects of development as described below and in the topical sections of this FEIR.

Port San Luis Service Capacity

Port San Luis Service Capacity: The resource capacity standards for water, wastewater, parking and traffic are discussed above.

Harbor Terrace Goals and Policies

Standard: n. Permitted Uses: Permitted uses shall include long-term parking for general visitor-serving use, Harbor District storage and maintenance yard, and secured boat and equipment storage for commercial fishermen and recreational boats. The balance of the terraced area not required for these priority uses shall be used for a campground.

Project Consistency: The Final Master Plan proposes land uses for the Harbor Terrace planning area generally consistent with this standard as described in the project description. Uses include camping, Harbor District lay down yard, trailer boat storage and the other uses listed. The standards do not specifically allow for the location of the Harbor District offices as proposed in the Final Master Plan.

Standard: o. Planning Criteria: Development plans for Harbor Terrace shall be evaluated according to the following criteria:

(1) *Landscape plans and appropriate irrigation plans shall be submitted identifying proposed revegetation necessary to stabilize slopes, and planting necessary to minimize visual impacts of terracing and proposed use of the site for storage. The area of cut shall be immediately reseeded.*

Project Consistency: No development plans are currently proposed for the Harbor Terrace site. However, measures recommended in Section 5.1: Geology and Geologic Hazards and Chapter 5.2: Drainage and Watersheds, address requirements for landscaping and revegetation following grading.

Standard: (2) *Detailed grading plans shall be submitted which identify existing and proposed drainage channels and proposed final site configuration. Grading shall be permitted in accordance with the County Coastal Zone Land Use Ordinance and shall be designed to minimize the potential discharge of sediment and pollutants into the Bay. Construction shall be completed during the non-rainy season (April through October) to avoid potential runoff and sedimentation. The contours of the finished surface are to be blended with adjacent natural terrain to achieve a natural appearance, and revegetated immediately after completion of finish grading, so as to assure establishment of groundcover prior to October 1. Berms shall be provided for each terrace to enhance screening of campsites as well as parking and storage areas.*

Project Consistency: No specific development plans are proposed for the Harbor Terrace site as part of the Final Master Plan. A conceptual distribution of intended uses is provided which describes the type and location of uses on the site. Measures recommended in Section 5.1: Geology and Geologic Hazards and Chapter 5.2: Drainage and Watersheds, address requirements for grading, landscaping and revegetation following grading.

Standard: (3) *An archaeological field survey shall be completed prior to beginning of construction. Previous site alteration may have substantially eliminated any resources; however, the potential should be evaluated and protection of any resources identified and incorporated in the proposed site design. In accordance with Section 23.05.140 of the Coastal Zone Land Use Ordinance, all construction activities shall cease should resources be identified during actual construction.*

Project Consistency: An archaeological field survey of the Harbor Terrace site was completed in November, 1996. A complete description of the results of these surveys is contained in the "Results of Phase One Archaeological Surface Survey of the Harbor Terrace Project" which is incorporated by reference into this Final ER and available for review at the Harbor District offices. Three archaeological sites were recorded near or within the Harbor Terrace site boundaries. Chapter 5.3: Cultural Resources recommends additional mitigation measures to address potential adverse impacts to these resources that may result from development. These measures include a requirement for a monitoring program to accompany construction excavation to document the presence or absence of displaced or intact cultural materials. In addition, a procedure for notification of accidental discovery and communication network shall be developed so that if any suspected cultural materials are unearthed, they can be quickly examined and evaluated by a qualified archaeologist and appropriate recommendations can be made.

Standard: p. *Potential Use as Borrow Site: Should fill material be required from the lower portion of this site for the Minor Landfill noted above in the Harford Pier area, the resulting flat excavated area shall be utilized for visitor-serving parking and/or trailered boat storage. Any change from these uses shall require an amendment to the LCP.*

Project Consistency: No plans for development of the Harbor Terrace site. However, the Final Master Plan provides for additional trailer boat storage on the Harbor Terrace site, consistent with the intent of this policy.

Standard: *q. Beach and Bluff Area Goals and Policies: The following policies shall govern development of the Beach and Bluff Area:*

(1) Improved public access shall be provided to Olde Port Beach through improved stairways. Accessways (may) also be provided via a pedestrian bridge to the Harbor Terrace campground, located near the P. G. & E. barge land; this area may include a bus shelter for tram service to the Harford Pier area and other visitor-serving commercial or recreational uses over the existing barge landing structure.

Project Consistency: The Final Master Plan provides for the construction of beach stairways to serve Olde Port beach and Fisherman's beach and recommends evaluating the need to add or improve other accessways to the beach. The PG&E barge landing has been removed and no commercial uses are proposed. The Final Plan recommends enhancements such as viewing areas.

Standard: *(2) Restrooms shall be provided, and a small concessions area may also be provided for the beach area in locations that enhance the recreational use of the beach and bluff area, and which do not remove significant amounts of sandy beach from public use.*

Project Consistency: No new concessions or restrooms are proposed for the beach and bluff area.

Standard: *(3) Parking in this area will be improved and regulated to prevent overnight parking; the entire length of the bluff adjacent to Avila Beach Drive from the Port to San Luis Creek bridge shall be developed as a landscaped parkway emphasizing its scenic characteristics.*

Project Consistency: The Final Master Plan recommends development of new visitor serving amenities along the Woodyard area with a mini-park, benches and pedestrian paths. Improvements recommended for Nobi Point include additional parking for ocean viewing. Overnight parking along the beach and bluff area will be phased out with development of the uses proposed for the Harbor Terrace site. The landscaped parkway mentioned in the standard is not proposed as part of the Final Plan.

Standard: *(4) Public Access shall be maintained and provided along the seaward side of any new rock abutments which may be needed to provide an adequate road, sidewalk and bikeway section for the parkway.*

Project Consistency: No new rock abutments are proposed as part of the Final Master Plan. However, public access to the beach will be improved by the facilities described above.

Standard: *(5) All improvements shall be designed with severe storms in mind.*

Project Consistency: All improvements will be designed consistent with this policy.

Standard: *(6) Vehicular access for boat launching and beach maintenance shall be maintained*

Project Consistency: The Final Master Plan will not affect access for boat launching or beach maintenance.

California Coastal Act and Local Coastal Program Policies

The California Coastal Act of 1976 (Public Resources Code Section 30000 et seq.) sets forth policies for the use, management and conservation of land and resources within the coastal zone. The Act includes policies to address specific issues including, but not limited to, shoreline access for the public, visitor-serving facilities, coastal-dependent industrial and energy-related facilities and activities, protection of sensitive habitats, and protection and preservation of visual and scenic resources.

In addition, the Coastal Act establishes a framework for prioritizing land uses. The Coastal Act places as its highest priority on the preservation and protection of natural resources, including environmentally sensitive habitat areas and agricultural lands. Only uses that are dependent on such resources are allowed within habitat areas. For agricultural land, the Coastal Act specifically addresses protection of the maximum amount of prime agricultural land in production. On non-agricultural land, coastal-dependent development has the highest priority, with public recreation uses the next highest priority. Where land is not required for habitat preservation, agriculture, coastal-dependent uses, or public recreation, other development is permitted. However, the Coastal Act requires that visitor-serving commercial recreation development have priority over private residential, general industrial, and general commercial development.

Policies of the Coastal Act are implemented at the local level by the certified Local Coastal Program (LCP). The following are relevant policies of the certified LCP for the San Luis Bay Area Plan which covers the Port and Avila Beach areas.

Shoreline Access

The Coastal Act contains policies requiring that the existing legal rights of public access to the coast be protected, and that reasonable requirements for public access be established in new developments.

The Coastal Act requires each local government to prepare a shoreline access component as part of its Local Coastal Program. This access component includes the policies by which access requirements will be established and identifies: 1) actions that public agencies should take to provide and protect existing and future access, and 2) standards for access that should be incorporated in future development.

Policy 1: Protection of Existing Access. Public prescriptive rights may exist in certain areas of the County. Development shall not interfere with the public's right of access to the sea where acquired through historic use or legislative authorization. These rights shall be protected through public acquisition measures or through permit conditions which incorporate access measures into new development.

Project Consistency: The Final Master Plan provides for increased and enhanced public access to the beach and harbor. Improvements are recommended for the beach and bluff area that incorporate parking, stairs for beach access, and pedestrian walkways along the blufftop. Policies of the Final Master Plan require the incorporation of public access facilities into new development that may occur on the Harbor Terrace site and elsewhere on Harbor District property. No reduction in public access will result from the Final Plan. All waterfront property is public and available for access.

Access to the harbor is provided by various Port facilities, including the boat ramp; skiff hoists; and piers.

Policy 2: New Development. Maximum public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development. Exceptions may occur where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources; (2) adequate access exists nearby, or; (3) agriculture would be adversely affected. Such access can be lateral and/or vertical. Lateral access is defined as those accessways which extend to the shore or perpendicular to the shore in order to provide access from the first public road to the shoreline.

Project Consistency: See response to Policy 1 above.

Policy 3: Access Acquisition. In implementing the above policies, purchase in fee (simple) is to be used only after all other less costly alternatives have been studied and rejected as inappropriate or infeasible. In addition to fee simple purchase and offers of dedication or deed restriction for public access as a condition of development approval, other alternatives may include the purchase of easements, or the establishment of in-lieu fees where access is not appropriate. Offers-to-dedicate and deed restrictions to allow for public access are the most frequently used means of guaranteeing public access. Deed restrictions are most appropriate for large projects which are in single ownership and where continuity can be maintained over time.

Project Consistency: Based upon the nature and extent of public access associated with the Final Master Plan, acquisition of additional public access to the coastline is not contemplated or necessary.

Policy 4: Provision of Support Facilities and Improvements. Facilities necessary for public access shall be provided. This may include parking areas, restroom facilities, picnic tables or other such improvements. The level of these facilities and improvements should be consistent with the existing and proposed intensity and level of access use and provisions for on-going maintenance. Requirements for coastal access and improvements are identified in the spec y7c Planning Area Standards and the Land Use Ordinance for the coastal zone.

Project Consistency: See response to Policy 1 above.

Policy 5: Acceptance of Offers to Dedicate. Dedicated accessways shall not be required to be opened to public use until a public agency or private association agrees to accept the responsibility for maintenance and liability of the accessway. New offers to dedicate public access shall include an interim deed restriction that restricts the property owner from interfering with the present use by the public of the areas subject to the easement prior to acceptance of the offer. Existing offers for dedication having such an interim deed restriction, shall remain open and unobstructed during the period when the offer is outstanding. Once a public agency or private association agrees to accept the responsibility for maintenance and liability of the access, the property owner's responsibility under the interim deed restriction may be relinquished.

Project Consistency: All public access proposed by the Final Master Plan will be under the jurisdiction of the Harbor District, the County and/or the State.

Policy 6: Public Safety. The level and intensity of shoreline access is to be consistent with public safety concerns related to bluff stability, trail improvements as well as the provision of adequate facilities such as signs, fences and stairways.

Project Consistency: A brief summary of shoreline access facilities recommended under the Final Master Plan is provided in the response to Policy 1 above. All new development will be subject to the review and approval of the Harbor District and in some instances, the County. This review will insure that provision of all required improvements and facilities necessary for public safety will be provided.

Policy 7: Development of Uniform Access Signs. A uniform signing system program should be developed. Such signs would assist the public in locating and recognizing access points. Once accessways are accepted by a public agency, they shall be signed and posted to indicate any restrictions or presence of sensitive habitats or hazards.

Project Consistency: Section 5.5: Services provides a mitigation measure requiring that “all accessways to the shoreline or beach shall have signs to assist the public in locating and recognizing these access points. The number and design of such signage must conform with standards established by the California Coastal Commission and shall be approved by the Port San Luis Harbor District and the County of San Luis Obispo.” Moreover, one of the supporting programs for access improvements calls for enhanced signage on Port properties to better inform visitors of the various facilities provided by the Harbor District.

Policy 8: Minimizing Conflicts with Adjacent Uses. Maximum access shall be provided in a manner which minimizes conflicts with adjacent uses. Where a proposed project would increase the burdens on access to the shoreline at the present time or in the future, additional access areas may be required to balance the impact of heavier use resulting from the construction of the proposed project.

Project Consistency: New development will be required to maintain public access to the bluff top and beach in a manner that avoids conflicts with adjacent uses.

Policy 9: Restoration and Enhancement of Shoreline Access Areas. Areas that have been severely degraded through overly intense and unrestricted use should be restored by such techniques as revegetation with native plants, trail consolidation and improvement and through the provision of support facilities such as parking, defined trail and/or beach walk stairway systems, trash receptacles, restrooms, picnic areas, etc. In extremely degraded areas (especially sensitive habitat areas), a recovery period during which public access would be controlled and limited may be necessary. This should be determined through consultation with the property owner and appropriate public agencies to establish the means of controlling public access that is reasonable and cost effective. Any limitation of use shall be evaluated periodically to determine the need for continued limited use.

Project Consistency: The Harbor Terrace and Beach and Bluff planning areas possess areas of overuse, as suggested by this policy. Harbor Terrace originally consisted of rolling hills sloping in a southerly direction and has been altered to form a series of graded, relatively level terraces that ascend the hillside to an elevation of approximately 180 feet above mean sea level. Slopes between the terraces are relatively steep.

Section 5.2: Drainage and Watershed Resources, provides mitigation measures which require that “all areas disturbed by grading activities shall be seeded with native or naturalized grasses to reduce dust emissions and erosion” and that a site specific revegetation plan be prepared. Section 5.6: Biological Resources, provides mitigation measures which require that “cut slopes shall be revegetated with native coastal sage scrub and native or naturalized grassland species in areas that are not a part of permanent landscaping”.

Policy 10: Protection of Property Rights and Privacy. The acquisition of rights for access and view purposes and other uses by the public should be consistent with the protection of the property and use rights of property owners. Access routes should be selected and designed so as to minimize the public impact on private property.

Project Consistency: The Final Master Plan does not recommend the acquisition of public access from private property. All waterfront land is owned by the public and is available for, and will be maintained as, public access.

Policy 11: Taking of Private Property. In meeting the foregoing policies for ensuring public access to the shoreline, careful consideration must be given to the requirements of Section 30010 which declares that no local governments may exercise their power to grant or deny a permit in a manner which will take or damage private property for public use, without the payment of just compensation...

Project Consistency: The Port San Luis Harbor District, County of San Luis Obispo and the California Coastal Commission, must all adhere to this requirement.

Recreation And Visitor-Serving Facilities

One of the primary goals of the 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.” To achieve this goal, the Coastal Act requires local government to provide and protect recreational opportunities in the coastal zone through appropriate land use designations and management techniques in the Local Coastal Program.

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. Visitor-serving facilities include all lodging establishments included in the definition of Hotels, Motels in Chapter 7 of Framework for Planning of the Land Use Element and Local Coastal Plan; provided that hotels and motels which are condominium or planned development projects may be approved only where specifically identified as an allowable use by planning area standards of the Land Use Element and Local Coastal Plan. The new construction of non-visitor-serving or non-principally permitted uses shall only be permitted if it can be found that they would not prejudice the provision of adequate visitor-serving facilities to meet the foreseeable demand over the next 20 years.

Project Consistency: The Final Master Plan provides for the expansion of recreation uses throughout the various planning areas as described in the project description. The Harbor Terrace site will contain low cost visitor serving uses in the form of camping and overnight accommodations.

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. 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. Visitor-serving commercial developments that involve construction of major facilities should generally be located within urban areas. Provisions for new facilities or expansion of existing facilities within rural areas shall be confined to selected points of attraction.

Project Consistency: The Final Master Plan recommends the expansion of visitor serving commercial uses in the Harford Pier, Harford Landing, Harbor Terrace, Avila Parking Lot and Avila Pier planning areas.

Policy 3: Low Cost Facilities. Larger visitor-serving projects shall make provisions for services which are geared to a range of costs, including low cost facilities.

Project Consistency: As noted above, the camping and overnight accommodations recommended for the Harbor Terrace site will be affordable short-term visitor uses. Policy No. 3 for Harbor Terrace requires that a minimum of 10 percent of the visitor-serving accommodations be low cost.

Policy 4: Visitor-Serving Uses in Agricultural Areas. When visitor-serving facilities are proposed within areas designated as Agriculture on the County Land Use Element map it, the findings specified in Agriculture Policy 3 shall be met.

Project Consistency: None of the Harbor District properties is designated "Agriculture" on the County Land Use Element.

Commercial Fishing And Recreational Boating

The Coastal Act requires San Luis Obispo County, through the Local Coastal Plan, to protect and, where feasible, upgrade commercial fishing facilities and recreational boating opportunities within the coastal zone. As an important and appropriate use of the coastline, the Coastal Act gives priority to development dependent on coastal resources, which includes commercial fishing and recreational boating.

Policy 1: Protection of Commercial Fishing and Recreational Boating Opportunities. Commercial fishing and recreational boating shall be protected and where feasible upgraded. Commercial fishing needs shall be assigned first priority. Recreational boating facilities shall be designed and located to not interfere with the needs of the commercial fishing industry.

Project Consistency: The Final Master Plan includes areas for fisherman's gear storage, trailer boat storage, and an equipment and materials "lay down" yard for the stockpiling of materials such as pilings for pier repair, etc., on the Harbor Terrace planning area. In recent years commercial fishing along the central coast has been in decline and the amount of facilities allocated to the fishing industry in the Final Plan reflects this trend. The Harbor District anticipates that the recommended square footage for each use will be adequate to serve the future needs of those utilizing Port San Luis facilities. The Harbor District will directly operate and oversee activities in the area and will establish design, maintenance and management standards to guide the operation of these facilities.

Policy 2: Priorities for Development of Facilities. Where feasible, oceanfront recreational development should give priority to boat ramps, dry storage and other recreational boating facilities as otherwise consistent with the policies of the Coastal Act.

Project Consistency: As noted above, the Harbor Terrace planning area includes facilities devoted to fisherman's gear storage and trailer boat storage. As also noted above, these facilities are anticipated to adequately serve the existing and future needs of recreational boaters utilizing San Luis Bay. An existing boat ramp is currently available within Port San Luis facilities and the boat hoist will be upgraded. In addition, the reorganization of Harford Landing accommodates trailered boats and improved circulation. New boating related facilities proposed at Avila Pier, Harford Pier include new skiff storage racks and hoists, and an extension of the dock at the San Luis Lightstation.

Policy 3: Port San Luis Harbor Master Plan. New development of facilities under jurisdiction of the Port San Luis Harbor District shall be permitted where consistent with the Local Coastal Program and Chapter 3 of the Harbor Master Plan. The policies of Chapter 3 have been extracted from the Master Plan and summarized in Policies 4 through 6 below. Specific standards for development are incorporated under public facilities in Chapter 8 of the LUE for the San Luis Bay Planning Area.

Project Consistency: Future development will require approval by the Port San Luis Harbor District and will be assessed for consistency with the Master Plan and Local Coastal Program.

Policy 4: Priorities for Development of Facilities and Allocation of Service Capacity. Priorities for development of the harbor will reflect the goals and priorities as follows:

Priority I: Coastal-Dependent Uses

*Commercial fishing and related mariculture-aquaculture.
Sport fishing.
Recreational boating and other oceanfront recreational uses.
Energy -related facilities.*

Priority II: Coastal-Related Uses

Other visitor-serving retail commercial uses and other coastal-related uses.

Priority III: Other Uses

Other uses which are neither coastal dependent or related priorities and policies of the California Coastal Act shall be considered in all harbor development. Prior to approval of any use which is not coastal-dependent the Harbor District shall make a finding that adequate resources and services have been reserved for all coastal dependent uses proposed in the Master Plan.

Project Consistency: The Final Master Plan recommends a range of coastal-related and coastal-dependent uses consistent with the priorities set forth above.

Policy 5: Port San Luis Service Capacity. Proposed development of projects and related improvements shall be within the circulation and utility capacity available to the harbor area, or to be guaranteed through a planned program of improvements as specified in the Harbor Master Plan. These capacity limits are recognized for each service as follows:

a. Water: Usage shall not exceed the 100 AFY available to the Harbor District from its Lopez entitlement. Adequate water pressures for fire suppression shall be maintained in all district water mains at all times.

b. Sewer: Wastewater generation shall not exceed available capacity owned by the Harbor District in the Avila Beach County water district wastewater treatment plant and/or such other facility as may be constructed.

c. Traffic: Avila Beach Drive shall not be subjected to traffic levels exceeding Level of Service "C" overall, except that from Memorial Day to Labor Day, Los "D" may be experienced for periods.

d. Parking: All new uses shall be required to provide additional parking consistent with the County Coastal Zone Land Use Ordinance requirements or to provide an in-lieu contribution to a district-wide parking program.

Project Consistency: See previous discussion under "Resource Capacity Analysis."

Environmentally Sensitive Habitats

A basic goal of the California Coastal Act is to "protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and man-made resources." To achieve this goal, the Local Coastal Program identifies and protects sensitive habitat areas through the designation of appropriate land uses and management techniques. Environmentally sensitive habitats are defined by the Coastal Act as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."

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.

Project Consistency: Environmentally sensitive areas are defined as but not limited to: 1) wetlands and marshes; 2) endangered or threatened species; 3) habitats containing or 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 nesting and feeding. The Coastal Act provides protection for these areas and permits only resource-dependent uses within the habitat area. Development adjacent to such resources must be sited to avoid impacts.

As indicated in Section 5.6: Biological Resources, no rare, threatened or endangered plant or wildlife species have been observed on Harbor District properties. As noted in Section 5.6, the California brown pelican or American peregrine falcon may occasionally overfly the Harbor Terrace site. Thirteen California Species of Special Concern (CSC) are known to occur on Harbor District property; they could potentially be found to occur on the project site in the future. However, none of these species would be expected to inhabit or breed on Harbor District property.

Adjacent to or within a short distance of the Harbor Terrace planning area are coast live oak woodlands, coast live oak forest, annual grassland, coastal sage scrub and maritime chaparral

habitats. Section 5.6 recommends mitigation measures to protect and maintain these adjacent habitats during construction activities and subsequent operations. The closest sensitive habitat to the Port, according to a field biologist, is the San Luis Obispo Creek estuary located approximately three-quarters of a mile east of the Harbor Terrace planning area, well outside the area of potential impact from projects contemplated by the Final Master Plan.

Policy 2: Permit Required 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.

Project Consistency: Section 5.6, Biological Resources, provides the results of on- and off-site field surveys for the Harbor Terrace planning area which contains the only significant remaining sensitive habitat on Harbor District property. These surveys and their results were prepared by a qualified biologist and provide a complete delineation of existing biological resources, the potential impacts of the proposed project and measures to reduce these impacts to a level of insignificance. The Final EIR for the Final Master Plan, when certified, will contain a Mitigation Monitoring Program as a means of monitoring and evaluating the effectiveness of these measures.

Policy 3: Habitat Restoration. The County or Coastal Commission should require the restoration of damaged habitats as a condition of approval when feasible.

Project Consistency: As previously indicated, little in the way of sensitive habitats exists on Harbor District property. Section 5.6, Biological Resources, provides mitigation measures to protect and maintain habitats adjacent to the Harbor Terrace planning area which could be potentially impacted by new development.

Policy 4: No Land Divisions in Association with Environmentally Sensitive Habitats. No divisions of parcels having environmentally sensitive habitats within them shall be permitted unless it can be found that the buildable area(s) are entirely outside the minimum standard setback required for that habitat (100 feet for wetlands, 50 feet for urban streams, 100 feet for rural streams). These building areas (building envelopes) shall be recorded on the subdivision or parcel map.

Project Consistency: Harbor District properties contain little in the way of environmentally sensitive habitats, particularly wetlands and streams. The closest sensitive habitat is the San Luis Obispo Creek estuary, located approximately three-quarters of a mile east of the Harbor Terrace site. This estuary is well outside the area of potential impact from development of uses contemplated by the Master Plan.

Policy 5: Protection of Environmentally Sensitive Habitats. Coastal wetlands are recognized as environmentally sensitive habitat areas. The natural ecological functioning and productivity of wetlands and estuaries shall be protected, preserved and where feasible, restored

Project Consistency: As noted in the response to Policy 4 above, the closest sensitive habitat is the San Luis Obispo Creek estuary well outside the area of potential impact from Port activities.

Policy 27: Protection of Terrestrial Habitats. Designated plant and wildlife habitats are environmentally sensitive habitat areas and emphasis for protection should be placed on the entire ecological community. Only uses dependent on the resource shall be permitted within the identified sensitive habitat portion of the site.

Project Consistency: As previously indicated, little in the way of sensitive habitats exist on Harbor District property. Section 5.6: Biological Resources, provides mitigation measures to protect and maintain habitats adjacent to the Harbor Terrace planning area which could be potentially impacted by new development.

Policy 28: Protection of Native Vegetation. Native trees and plant cover shall be protected wherever possible. Native plants shall be used where vegetation is removed.

Project Consistency: Section 5.2: Drainage and Watershed Resources, recommends mitigation measures which require that “all areas disturbed by grading activities shall be seeded with native or naturalized grasses to reduce dust emissions and erosion” and that a site specific revegetation plan be prepared. Section 5.6: Biological Resources, provides mitigation measures which require that “cut slopes shall be revegetated with native coastal sage scrub and native naturalized grassland species in areas that are not a part of permanent landscaping” and that “selected native plant species (including coastal sage scrub and grassland species) that are attractive to wildlife for food and cover shall be incorporated into project landscaping plans.”

Policy 29: Design of Trails In and Adjoining Sensitive Habitats. San Luis Obispo County, or the appropriate public agency, shall ensure that the design of trails in and adjoining sensitive habitat areas shall minimize adverse impact on these areas.

Project Consistency: Section 5.6: Biological Resources, recommends mitigation measures intended to restrict access into adjacent habitat areas. As stated, “fences or other physical barriers shall be installed across existing trails to discourage pedestrian access from the site into adjacent native habitats”. In addition, “if pets are allowed, designated pet areas will be incorporated into the design of new development so pets are not allowed into nearby habitat areas or buffer zones that support native wildlife”.

Policy 30: Public Acquisition. The California Department of Parks and Recreation, Department of Fish and Game and other public and private organizations should continue to acquire or accept offers-to-dedicate for sensitive resource areas wherever possible.

Project Consistency: Given the lack of sensitive resource areas on Harbor District property, public acquisition of these areas in conjunction with new development is not contemplated.

Policy 31: Agriculture and Open Space Preserves. The County should encourage the uses of Agriculture Preserves or Open Space Preserves to protect sensitive habitat areas where public acquisition is not feasible.

Project Consistency: Given the lack of sensitive habitat areas, the use of Agricultural or Open Space Preserves to protect these habitat areas is not necessary.

Policy 32: Rare and Endangered Species Survey. The State Department of Fish and Game should continue to identify rare or endangered plant and animal species within the County.

Project Consistency: As indicated in Section 5.6: Biological Resources, no rare, threatened or endangered plant or wildlife species were observed on Harbor District property. In addition, any bird species of Special Concern which may occasionally overfly the site (California brown pelican or American peregrine falcon) or which are known to occur in the region would not be expected to inhabit or breed on the Harbor Terrace site.

Policy 33: Protection of Vegetation. Vegetation which is rare or endangered or serves as cover for endangered wildlife shall be protected against any significant disruption of habitat value. All development shall be designed to disturb the minimum amount possible of wildlife or plant habitat.

Project Consistency: Although no rare, threatened or endangered species were observed or are expected to occur on Harbor District property, Section 5.6: Biological Resources provides mitigation measures to protect and maintain existing habitats adjacent to the Harbor Terrace planning area.

Coastal Watersheds

One of the goals of the Coastal Act is to "...protect, maintain and where feasible, enhance and restore the overall quality of the coastal zone environment." A major concern of the Act is to ensure protection of the biological productivity and quality of coastal waters. Such waters include streams, estuaries, wetlands and lakes. A second concern is that new development not create or contribute to erosion.

Policy 1: Preservation of Groundwater Basins. The long-term integrity of groundwater basins within the coastal zone shall be protected. The safe yield of the groundwater basin, including return and retained water, shall not be exceeded except as part of a conjunctive use or resource management program which assures that the biological productivity of aquatic habitats are not significantly adversely impacted.

Project Consistency: As indicated in Section 5.2: Drainage and Watershed Resources, no groundwater wells exist on Harbor District property and there is no known beneficial use of groundwater below Harbor District property. The Harbor District's thin alluvial soil cover and its proximity to the Pacific Ocean make it a poor candidate for groundwater production. Given the lack of viable groundwater resources combined with the lack of wells, no impacts to existing groundwater resources are anticipated.

Policy 6: Priority for Agriculture Expansion. Agriculture shall be given priority over other land uses to ensure that existing and potential agricultural viability is preserved, consistent with protection of aquatic habitats.

Project Consistency: The Port has not been the site of agricultural use in the past nor is it anticipated to be the site of such activities in the future.

Policy 7: Siting of New Development Grading for the purpose of creating a site for a structure or other development shall be limited to slopes of less than 20 percent except:

Existing lots of record in the Residential Single-Family category and where a residence cannot be feasibly sited on a slope less than 20 percent;

When grading of an access road or driveway is necessary to provide access to an area of less than 20 percent slope where development is intended to occur, and where there is no less environmentally damaging alternative.

The County may approve grading and siting of development on slopes between 20 percent and 30 percent through Minor Use Permit, or Development Plan approval, if otherwise required by the Coastal Zone Land Use Ordinance.

Project Consistency: Development of uses recommended by the Final Master Plan for the Harbor Terrace planning area is anticipated to occur on slopes generally less than 20 percent. Slopes greater than 20 percent within areas proposed for development are manufactured slopes (from prior site grading and terracing) rather than natural slopes. The maximum grade of all on-site roadways in will not exceed 10 percent grade.

Policy 8: Timing of Construction and Grading. Land clearing and grading shall be avoided during the rainy season if there is a potential for serious erosion and sedimentation problems. All slope and erosion control measures should be in place before the start of the rainy season. Soil exposure should be kept to the smallest area and the shortest feasible period.

Project Consistency: Section 5.2: Drainage and Watershed Resources, recommends mitigation measures to minimize the potential for erosion as a result of development. These measures include conveyance of on-site drainage through an underground storm drainage system; the use of roadside shoulders, drainage swales, inlets and channels to convey drainage from on-site roadways; the use of terrace drains and velocity dissipaters on slopes greater than 35 feet in height; the use of native or naturalized grasses on all areas disturbed by grading; preparation of erosion control and temporary revegetation plans; the installation of erosion control devices prior to the beginning of the rainy season; and preparation of an application for a Construction Storm Water Discharge General Permit to be submitted to the Regional Water Quality Control Board. Implementation of these measures will reduce potential erosion impacts to a level of insignificance.

Policy 9: Techniques for Minimizing Sedimentation. Appropriate control measures (such as sediment basins, terracing, hydro-mulching, etc.) shall be used to minimize erosion and sedimentation. Measures should be utilized from the start of site preparation. Selection of appropriate control measures shall be based on evaluation of the development design, site conditions, predevelopment erosion rates, environmental sensitivity of the adjacent areas and also consider costs of on-going maintenance.

Project Consistency: See response to Policy 8 above.

Policy 10: Drainage Provisions. Site design shall ensure that drainage does not increase erosion. This may be achieved either through on-site drainage retention, or conveyance to storm drains or suitable watercourses.

Project Consistency: See response to Policy 8 above.

Policy 11: Preserving Groundwater Recharge~ In suitable recharge areas, site design and layout shall retain runoff on-site to the extent feasible to maximize groundwater recharge and to maintain in-stream flows and riparian habitats.

Project Consistency: As noted above, the Port is considered a poor candidate for groundwater production due to thin alluvial soil cover and its proximity to the Pacific Ocean. These factors also make Harbor District properties a poor candidate for groundwater recharge.

Policy 12: *Agricultural Practices. Erosion and sedimentation measures that aid soil conservation are encouraged.*

Project Consistency: The Port has not been the site of agricultural use in the past nor is it anticipated to be the site of such activities in the future.

Policy 13: *Vegetation Removal. Vegetation clearance on slopes greater than 30% in geologically unstable areas or on soils rated as having severe erosion hazards shall require an erosion and sedimentation control plan. Stream vegetation removal is discussed in greater detail in the Sensitive Habitat chapter.*

Project Consistency: See response to Policy 8 above.

Policy 14: *Soil Conservation Techniques. Proper soil conservation techniques and grazing methods shall to the maximum extent feasible be employed in accordance with the 208 water quality standards adopted by the California Water Quality Control Board.*

Project Consistency: See response to Policy 8 above.

Visual And Scenic Resources

The Coastal Act dictates that 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.

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.*

Project Consistency: Portions of Harbor District properties, such as Harford Pier, possess unique and visually attractive features. Although areas of the Port are considered to possess a high level of visual sensitivity, prior site alteration has in some instances eliminated any unique or significantly attractive visual features of the existing viewscape. For example, the Harbor Terrace planning area, which originally consisted of rolling hills, has been extensively altered to form a series of relatively level terraces which ascend the hillside up to an elevation of 180 feet above sea level. The Final Master Plan provides the following goal with regard to scenic resources:

1. Waterfront Character. Protect scenic qualities including time-honored character of Port San Luis and compatibility with surrounding uses and views.

2. Bluffs and Hillides. Site and design new development on bluffs and scenic hillides to protect scenic resources and reduce visual impacts.
3. Historic Areas. Adhere to adopted guidelines and legal provisions for renovation of Port properties with historic significance.
4. Long-term Design. Incorporate visually pleasing design solutions that limit long-term maintenance requirements.

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.

Project Consistency: The Final Master Plan provides goals and policies to address visual resources, as described above. In addition, the Master Plan recommends design guidelines for new development throughout the Harbor District planning areas. In addition, Section 5.9: Visual Resources, recommends mitigation measures intended to minimize the aesthetic impacts of new development. These measures include the "review of project design and landscape elements (which) shall be based upon, but not limited to, the following criteria:

- minimizing the project's visual impacts to surrounding areas;
- reducing the visual impacts of slopes greater than ten feet in height; and
- the adequacy of landscaping berms as 'visual buffers'.

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 ridge top shall be prohibited

Project Consistency: See response to Policy 2, above. In addition, Section 5.2: Drainage and Watershed Resources, provides mitigation measures which require that "all areas disturbed by grading activities shall be seeded with native or naturalized grasses to reduce dust emissions and erosion" and that a site specific revegetation plan be prepared. Section 5.6: Biological Resources, provides mitigation measures which require that "cut slopes shall be revegetated with native coastal sage scrub and native or naturalized grassland species in areas that are not a part of permanent landscaping" and that "selected native plant species (including coastal sage scrub and grassland species) that are attractive to wildlife for food and cover shall be incorporated into project landscaping plans".

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.

Project Consistency: no grading plans are currently under review with the Final Master Plan. However, future development will be required to adhere to recommended design guidelines and all mitigation measures that may be adopted as part of this FEIR.

Policy 6: Special Communities and Small-Scale Neighborhoods. Within the urbanized areas defined as small-scale neighborhoods or special communities, new development shall be designed and sited to complement and be visually compatible with existing characteristics of the community which may include concerns for the scale of new structures, compatibility with unique or distinguished architectural historical style, or natural features that add to the overall attractiveness of the community.

Project Consistency: Areas surrounding the Port proper involve open space areas to the west, north and east. San Luis Bay lies to the south. As such, the Port proper is not adjacent to urbanized areas containing “small urbanized areas containing “small scale neighborhoods or special communities”. However, the Avila Parking lot and Avila Pier are located in the urban community of Avila Beach. Design guidelines provided in the Final Master Plan were Finalized to be consistent with those provided in the Avila Specific Plan and will ensure that new development is consistent with the surrounding neighborhood.

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.

Project Consistency: Section 5.6: Biological Resources, provides mitigation measures which require that “oak trees removed or damaged by new development on the Harbor Terrace planning area shall be replaced by planting oak trees adjacent to existing oak woodlands outside the project grading limits. These oak trees should be grown from locally collected acorns. San Luis Obispo County recommends a 4:1 replacement of oak trees removed or damaged by development activities. Existing oak trees shall be beneficially incorporated where possible in project landscaping along with other native species”. In addition, “remaining native habitats on the (Harbor Terrace) property shall be protected by establishing and enforcing construction limits. Oak tree protective measures shall be incorporated by installing construction fencing outside of the drip line of oak trees and preventing any construction or grading activities from damaging existing oak trees.”

Policy 8: Utility Lines within View Corridors. Where feasible, utility lines within public view corridors should be placed underground whenever their above ground placement would inhibit or detract from ocean views. In all other cases, where feasible, they shall be placed in such a manner as to minimize their visibility from the road.

Project Consistency: Section 5.9: Visual Resources, provides a mitigation measure which requires that “all utility lines be placed underground”.

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 direction signs shall be designed to be simple, easy-to-read and harmonize with surrounding elements.

Project Consistency: The number, size and design of signage for new development must conform to standards established by the California Coastal Commission and approved by the Port San Luis Harbor District and the County of San Luis Obispo.

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.

Project Consistency: The Final Master Plan recommends improvements to the bluff and beach areas to enhance public access and beach use, consistent with this policy. In addition, the Final Plan provides the following policies:

Goal: Adequate access for all Harbor users and visitors.

1. Access to Vessels and Water. Maintain and enhance access to the water, boats, and boating facilities. Maintain the overall launching capability of the Harbor at levels in consideration of demand and safety, the availability of parking, economic circumstances, and dredging needs.
2. Shoreline Access. Maintain public access to the beaches, oceans, and Harbor District properties, and enhance where feasible and consistent with public safety.
3. Development Contributions to Enhanced Access. Require new commercial developments or redevelopments to provide public access improvements and enhancements including related improvements such as interpretive exhibits, benches, and picnic tables.

Policy 11: Development on Coastal Bluffs. New development on bluff faces shall be limited to public access stairways and shoreline protection structures. Permitted development shall be sited and designed to be compatible with the natural features of the landform as much as feasible. New development on bluff tops shall be designed and sited to minimize visual intrusion on adjacent sandy beaches.

Project Consistency: See response to Policy 10 above.

Hazards

The Coastal Act requires that new development be located in areas that are relatively safe from hazardous conditions, and that development shall not aggravate or create erosion, geologic instability or other hazardous conditions. To achieve this goal, the Coastal Act requires each local government to ensure public safety within the coastal zone by locating new development in a safe location and using suitable management techniques.

Policy 1: New Development All new development proposed within areas subject to natural hazards from geologic or flood conditions (including beach erosion) shall be located and designed to minimize risks to human life and property. Along the shoreline new development (with the exception of coastal-dependent uses or public recreation facilities) shall be designed so that shoreline protective devices (such as seawalls, cliff retaining walls, revetments, breakwaters, groins) that would substantially alter landforms or natural shoreline processes, will not be needed for the life of the

structure. Construction of permanent structures on the beach shall be prohibited except for facilities necessary for public health and safety such as lifeguard towers.

Project Consistency: The Final Plan provides the following policies:

Hazards

1. Natural Hazards. In areas subject to natural hazards, require new development to be located and designed to limit risks to human life and property to the greatest extent practicable.

In addition, Section 5.1: Geology, recommends mitigation measures to minimize hazards due to geologic conditions existing regionally and on the Harbor Terrace planning area in particular. These hazards primarily relate to landslides, soil conditions and faulting. According to the project geologist, conditions found on the Harbor Terrace site are considered mitigable with proper design, engineering and construction. Along the shoreline (bluff edge and beach), development will be confined to sidewalks, a bikeway, improved beach access and parking. A Stability Evaluation Report shall determine the need for and the extent of bluff protection for new development along the bluff top. Mitigation measures include the use of a retaining structure or rip-rap to support fill which, in turn, will support the relocated access road.

Policy 2: Erosion and Geologic Stability. New development shall ensure structural stability while not creating or contributing to erosion or geological instability.

Project Consistency: Section 5.1: Geology, recommends mitigation measures to insure structural stability relative to on-site landslides, soils and seismic conditions as they relate to the Harbor Terrace planning area. Section 5.2: Drainage and Watershed Resources, recommends measures to minimize the potential for erosion as a result of new development.

Policy 3: Development Review in Hazard Areas. The County shall require a detailed review of development proposed within the geologic study area and flood hazard combining designations as indicated on the Land Use Element maps for the coastal zone. The review shall be performed by a qualified registered and/or certified engineering geologist and shall be adequately detailed to provide recommendations and conclusions consistent with this plan. Residential, commercial and industrial development shall be prohibited within the 100 year floodplain (1% chance of inundation in any year) as delineated in the Flood Hazard combining designation except for those areas within an urban reserve line.

Project Consistency: None of the Harbor District properties lie within the 100 year flood plain nor are they subject to inundation due to flooding. Section 5.1: Geology, and 5.2: Drainage and Watershed Resources, provide the results of field surveys and analyses relative to geologic and flood hazards, respectively. These surveys and their results were prepared by a qualified geologist and engineers and provide a complete delineation of existing geologic and drainage resources.

Policy 4: Limitations on the Construction of Shoreline Structures. Construction of shoreline structures that would substantially alter existing landforms shall be limited to projects necessary for:

- a) protection of existing development (new development must ensure stability without depending upon shoreline protection devices);

- b) public beaches and recreation areas in danger of erosion;
- c) coastal dependent uses;
- d) existing public roadway facilities to public beaches and recreation areas where no alternative routes are feasible.

Project Consistency: Along the shoreline (bluff edge and beach) development will be confined to sidewalks, a bikeway, improved beach access, and parking. Little in the way of major landform alteration is anticipated.

Policy 5: Design and Construction of Shoreline Structures. Shoreline structures developed consistent with Policy 4 (including projects for maintenance and repair) shall be designed and constructed to mitigate or eliminate effects on local shoreline sand movement and supply. Construction activities shall be carefully managed to minimize unnecessary effects on natural landforms and shoreline processes. Upland grading and drainage shall be designed and constructed to avoid adverse impacts on bluff lines by channeling drainage away from the bluff where feasible.

Project Consistency: See response to Policy 4 above.

Policy 6: Bluff Set backs. New development or expansion of existing uses on blufftops shall be designed and set back adequately to assure stability and structural integrity and to withstand bluff erosion and wave action for a period of 75 years without construction of shoreline protection structures which would require substantial alterations to the natural landforms along bluffs and cliffs. A site stability evaluation report shall be prepared and submitted by a certified engineering geologist based upon an on-site evaluation that indicates that the bluff setback is adequate to allow for bluff erosion over the 75 year period. Specific standards for the content of geologic reports are contained in the Coastal Zone Land Use Ordinance.

Project Consistency: Section 5.1: Geology, recommends mitigation measures to assure stability and structural integrity through adequate preconstruction geologic investigations and assessments as they relate to the Harbor Terrace planning area. As indicated, the entire length of bluff along San Luis Bay shall be assessed through a Stability Evaluation Report to determine the rate of bluff retreat and the characteristics of wave run-up. The need for setbacks or bluff protection shall be addressed by the project geologist in this assessment. The adequacy of the existing rip-rap structures shall also be assessed and a determination made as to whether augmentation is necessary to protect the proposed improvements and roadway.

Policy 8: Coastal Access and Pipelines. New development shall not be permitted on the bluff except where public access or pipelines for coastal dependent uses are necessary and no feasible alternatives exists. Pipeline design shall be adequate to ensure pipeline integrity considering wave action and bluff erosion.

Project Consistency: No pipelines along the bluff are proposed as part of the Final Master Plan. The response to Policy 4 above provides an indication of the nature and extent of bluff development associated with the Master Plan.

Policy 9: High Fire Risk Area. New residential development in high risk fire areas shall be required to be reviewed and conditioned by the Fire Warden to ensure that building materials, access, brush clearings and water storage capacity are adequate for fire flow and fire protection purposes.

Project Consistency: Section 5.5: Services provides mitigation measures which require the review of all project plans by the Avila Beach Fire Department “to insure that building materials, access, brush clearance, and water storage capacity provide adequate fire protection to the proposed project”. All structures are also required to be constructed with fire retardant roof materials. Where applicable a Fuel Reduction Plan must be prepared and submitted for approval to County of San Luis Obispo and the California Department of Forestry.

Archaeology

Archaeological resources are protected by the Coastal Act policy which states that where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Policy 1: Protection of Archaeological Resources. The County shall provide for the protection of both known and potential archaeological resources. All available measures, including purchase, tax relief purchase of development rights, etc., shall be explored at the time of a development proposal to avoid development on important archaeological sites. Where these measures are not feasible and development will adversely affect identified archaeological or paleontological resources, adequate mitigation shall be required

Project Consistency: As indicated in Section 5.3: Cultural Resources, on-site surveys confirmed the existence of three archaeological sites within or adjacent to the Harbor Terrace planning area boundaries. Mitigation measures are recommended to reduce potential project impacts to these archaeological resources that may occur during site development.

Policy 2: Vandalizing of Resources. Activities other than development, which could damage or destroy archaeological sites, including off-road vehicle use on or adjacent to known sites and unauthorized collecting of artifacts, shall be prohibited

Project Consistency: Section 5.3: Cultural Resources, provides mitigation measures which are intended to prevent vandalizing of archeological resources. These measures include subsurface testing to identify the extent of existing resources, provision of fencing and “no trespassing” signs along portions of the northern project boundary and within 200 feet of known archaeological sites and the provision of fencing along the western project boundary.

Policy 3: Identification of Archaeological Sites. The County shall establish and maintain archaeological site records of data files about known sites. These sensitive areas shall be defined as follows:

Within rural areas, the County maintains on file a parcel number list of known sites as prepared and updated by the California Archaeological Site Survey Office.

Within urban areas, the County shall maintain maps in the Land Use Element (combining designation) which reflect generalized areas of known sites. These maps shall be prepared by the California Archaeological Site Survey Regional Office.

Project Consistency: Section 5.3:: Cultural Resources, provides the results of field surveys and analyses of the Harbor Terrace planning area and surrounding areas relative to archaeological resources. This survey and its results were prepared by a qualified archaeologist and provide a complete delineation of existing archaeological resources, the potential impacts of project development and measures to reduce these impacts to a level of insignificance.

Air Quality

The Coastal Act states that new development shall “be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development”. In addition, under Section 30253.(4), new development shall “minimize energy consumption and vehicle miles traveled”. A number of other sections of the Coastal Act reinforce these policies either directly or indirectly.

Policy 1: Air Quality. The County will provide adequate administration and enforcement of air quality programs and regulations to be consistent with the County ‘s Air Pollution Control District and the State Air Resources Control Board.

Project Consistency: Section 5.8: Air Quality, provides an assessment of potential air quality impacts that may result from development under the Final Master Plan. This assessment provides a complete delineation of existing air quality conditions, potential impacts of project impacts and measures to reduce these impacts.

The California Coastal Act

Priority Uses

Section 30224. *Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.*

Section 30234. *Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.*

Section 30234.5 *The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.*

Section 30255. *Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.*

Section 30101. "Coastal-dependent development or use" means any development or use which requires a site on, or adjacent to, the sea to be able to function at all.

Section 30101.3. "Coastal-related development" means any use that is dependent on a coastal-dependent development or use.

Project Consistency. Port San Luis provides numerous facilities for coastal dependent uses including those that are necessary for commercial fishing, recreational boating, and coastal access. In addition, the Harbor District contains coastal related development that supports these coastal dependent uses, such as storage facilities, maintenance areas, and parking. Accordingly, new uses that would be allowed by the Final Master Plan must not interfere with the provision of facilities needed now and in the future to support commercial fishing and recreational boating at Port San Luis. As a result, an appropriate balance must be struck between accommodating non-priority uses needed to financially support priority uses, and preserving adequate space for the facilities necessary to support commercial fishing and recreational boating. This includes consideration of other coastal resource constraints that will limit the overall extent of development, regardless of priority.

The Final Master Plan recognizes these needs by establishing criteria for future development which requires that sufficient areas be set aside for commercial fisherman storage and trailer parking. It also requires that other uses be designed and constructed so that fishing and boating uses are given priority.

To ensure that future development will not jeopardize the provision of these facilities, the Final Master Plan identifies specific areas that will be reserved to accommodate these facilities.

Lower-Cost Visitor Serving Opportunities

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

The commission shall not: (1) require that overnight room rentals be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private lands; or (2) establish or approve any method for the identification of low or moderate income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.

Project Consistency. The Final Master Plan will increase opportunities for lower cost visitor facilities and recreation through construction of a campground and RV park on portions of the Harbor Terrace site that are not needed for facilities that serve fishing, boating, and coastal access.

Visual Resources

Section 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.

Project Consistency. The Port occupies a visually prominent portion of the viewshed of San Luis Obispo County and San Luis Bay coastline, particularly from vantage points to the southeast, south and southwest. As such, the Port, and the Harbor Terrace site in particular, provide a visual backdrop for views from San Luis Bay, Harford Pier and Port San Luis. The Harbor Terrace site is also visible at a greater distance from vantage points in Avila Beach as well as from U.S. Highway 101 (near Spyglass Drive) and from the Pacific Ocean.

This viewshed is characterized by open space hillsides that form a ridgeline that extends from Avila Beach to Montana de Oro north of Point San Luis. Vegetated with grassland, coastal scrub and Oak woodland, these open space areas provide a scenic resource that adds to the attractiveness of the area as a visitor destination and as a place to enjoy coastal access and recreation activities. One exception to this open space character is the San Luis Bay Inn, located about one-half mile east of the Harbor Terrace site. This large visitor serving complex is highly visible from the town of Avila and its main beach area.

Notwithstanding the open space, natural characteristics of most of the surrounding area, a significant portion of the Harbor Terrace site was previously altered (prior to the Coastal Act) in a manner that created a number of terraces along the hillside, to an elevation of approximately 180 feet above sea level. Between these relatively flat terraces, steep cut slopes are generally devoid of vegetation. The terraced areas are currently used for boat and equipment storage, and approximately 14 mobile homes that were installed prior to the Harbor District's ownership of the site. The previous land form alterations, as well as the current use of the site, most of which is not shielded with landscaping, detract from the scenic quality of the surrounding area.

Currently, the LCP calls for the site to be used for "long-term parking for general visitor-serving use, Harbor District storage and maintenance yard, and secured boat and equipment storage for commercial fisherman and recreational boats. The balance of the terraced area not required for these priority uses shall be used for a campground consistent with Figure 8-6, Harbor Terrace Plan." (San Luis Bay Area Plan, page 8-21). The San Luis Bay Area Plan requires that the development of such uses include landscaping that will revegetate the site as necessary to stabilize slopes and minimize visual impacts of terracing and proposed use of the site for storage. While this planning area standard does not specifically call for landscaping to minimize the visual impact of campground development, other visual resource protection standards of the LCP would be applied to any campground development proposal. Such standards include:

Coastal Plan Policy 1 for Visual and Scenic Resources, which requires:

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.

Coastal Plan Policy 2 for Visual and Scenic Resources, which states:

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.

Coastal Plan Policy 5 for Visual and Scenic Resources, which addresses landform alterations as follows:

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 constant grade and natural appearance.

And Coastal Plan Policy 7 for Visual and Scenic Resources, which requires:

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.

As provided by Section 23.04.124 of the San Luis Obispo County Coastal Zone Land Use Ordinance, new structures within areas designated for Public Facilities (such as the Port) can have a maximum height of 45 feet which may result in visually prominent development. As noted above, the Final Master Plan provides design guidelines intended to address the visual impact of new development. In addition, the LCP contains visual and scenic resource protection standards with which any future structural development must comply.

Coastal Access and Recreation

Section 30210. *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

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

Section 30221. *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

Section 30223. *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

Project Consistency. *The Port San Luis Harbor District plays a critically important role in providing public access to the coast and facilitating coastal recreation in the San Luis Bay area of San Luis Obispo County. As a public agency that owns and manages valuable coastal lands, and that provides and maintains facilities which serve coastal access and recreation, the Port San Harbor District implements the Coast Act objectives of maximizing opportunities for coastal access and recreation in numerous ways. The Final Master Plan provides expanded opportunities for recreation and coastal access consistent with the certified LCP.*

Environmentally Sensitive Habitats

Section 30240. (a) *Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those 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 those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

Project Consistency. The habitat values of the Harbor District property and the Harbor Terrace planning area in particular have been significantly diminished due to the land form alterations and grading activities that occurred prior to the Coastal Act. According to Section 5.6: Biological Resources, no threatened or endangered species are known to occur, with exception to birds such as the California brown pelican or American peregrine falcon that may occasionally fly over the site.

Native habitats that do occur are limited to patches of coastal sage scrub that can be found in the upper eastern portion of the site and on the upcoast (or western) side of Diablo Canyon Road, and some Coast live oaks that occur on the periphery of the site. On the upcoast side of Diablo Canyon Road is a drainage corridor that supports riparian habitats. Habitats adjacent to the Harbor Terrace site include Coast live oak woodland, annual grassland, coastal sage scrub, maritime chaparral, and intertidal and marine habitats.

To protect terrestrial habitats, this FEIR recommends measures that require development to avoid the disturbance of coastal sage scrub habitat, and provide adequate buffers for both wildlife and fire protection. They also require that the removal of oak trees be avoided, and where avoidance is not feasible, that the development include a detailed tree replacement program. The measures further require that the site be landscaped with native vegetation appropriate to the site, not only to minimize visual impacts of new development, but to enhance habitat values as well.

While most of the Harbor Terrace site is devoid of sensitive habitats due to previous grading and landform alterations, there remain some patches of native coastal scrub and oak woodland habitats, as well as riparian habitat on the western portion of the slope that was not impacted by prior development. Important native habitat values surround the site. Thus, in order to achieve consistency with Section 30240 of the Coastal Act, protection of the remnant native habitats on the site should be required, and new development should to be set back from these and adjacent habitats so that their biological productivity will be protected. As an additional means of achieving compliance with Section 30240, the recommended mitigation measures require that the site be landscaped with native vegetation, and that the riparian corridor be restored and protected.

Marine Resources and Water Quality

Section 30230. *Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*

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.*

Project Consistency. The Final Plan provides the following policies relating to habitat protection:

Responsibly managed and protected resources in and surrounding San Luis Obispo Bay (State-granted Tidelands).

1. Marine Environments. No actions taken by the Board of Commissioners or Harbor District will result in significant and unavoidable decreases in water quality of San Luis Obispo Bay, including sensitive habitats to San Luis Creek.
2. Clean Boating. Work with other entities in efforts to educate and encourage boaters and boating facility operators to use best management practices.
3. Runoff Controls. Require implementation of effective runoff control strategies and pollution prevention activities by incorporating the most current best management practices for all new development.
4. Native Vegetation. Require landscaping plans to incorporate native plants and other coastal species appropriate to the site that reflect the Port's waterfront character.
5. Land-based Sensitive Resources. Incorporate decisions and implementation measures that protect environmentally sensitive resources.

In addition, the various topical sections of this FEIR include mitigation measures to reduce the impacts associated with future development to a less than significant level.

Archaeological Resources

Section 30244. *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

Project Consistency. As detailed in Section 5.3: Cultural Resources, the Harbor Terrace planning area contains, or is in close proximity to three recorded archaeological sites. One of these sites, located west of Diablo Canyon Road, is expected to contain highly significant cultural resources. According to a preliminary assessment of this site in 1977, "...it was a major village site, probably dating to post 1500 A.D. It contains evidence of a full range of cultural activities associated with a permanent Chumash village including one or more cemeteries. ... The site is probably the largest, deepest, and most significant remaining prehistoric site in the Avila Beach/Port San Luis area. The cemetery has also been used in the late 1970's (and possible more recently) by Native Americans for reburials and ceremonial internments".

To preclude potential disturbance to this significant cultural resource, measures recommended in Section 5.3: Cultural Resources prohibit any development on the portion of the Harbor Terrace planning area west of Diablo Canyon Road, other than restoration of the existing drainage course, and any archaeological preservation and/or protection activities that have been coordinated and approved by the State Historic Preservation Officer and cultural resource representatives of the Chumash tribe.

Public Service Capacities

Section 30250. (a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

(b) Where feasible, new hazardous industrial development shall be located away from existing developed areas.

(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 for visitors.

Project Consistency. Port San Luis is an established harbor, within the confines of the Urban Services Line established by the LCP, and in close proximity to the town of Avila Beach. As detailed in previous sections, mitigation measures have been recommended to avoid new development from having an adverse impact on coastal resources, particularly visual resources, water quality, and sensitive habitats.

In addition to avoiding such impacts, Coastal Act Section 30250 requires that new development only be permitted where there are adequate services to accommodate it.

As described in Section 5.7: Traffic and Circulation, traffic capacity is the limiting factor for future buildout of the Port and the Harbor Terrace site. The intensity of development accommodated by the Final Master Plan reflects the traffic capacity of Avila Beach Drive, which is a two-way collector terminating at Harford Pier and the only vehicular access to the Port. The certified LCP requires that the traffic capacity on Avila Beach Drive not exceed LOS C. The Harbor District has provided traffic analyses that support a finding that there will still remain adequate traffic capacity to accommodate other Port uses and remain consistent with the LOS C criteria.

Adequate water, wastewater, and traffic services will be available to support the future development of Port facilities and the Harbor Terrace site. Thus, the Final Master Plan is consistent with Coastal Act Section 30250.

San Luis Obispo County/Cities Nuclear Power Plant Emergency Response Plan (1994)

Diablo Canyon Nuclear Power Plant (DCNP) is located about six miles west of Port San Luis. The proximity of the plant and its location immediately upwind place the Port at greater risk from the effects of an emergency than more distant places in the County. Moreover, the improvements accommodated by the Final Master Plan would place additional people and property at risk from an emergency at the plant, while adding vehicle trips to local roadways which in turn could hamper emergency efforts established by the County.

Although the licensing and regulation of nuclear power plants is primarily the responsibility of the federal government, emergency response planning is a local issue. State and local agencies are guided in these efforts by the Federal Emergency Management Agency (FEMA) publication *Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants*. Accordingly, the County Office of Emergency Services has prepared a comprehensive plan, entitled *San Luis Obispo County/Cities Emergency Response Plan, 1994* (ERP) to address emergencies that may arise at the power plant. The plan sets forth the policies and procedures to be followed in the event of an emergency, and defines the scope of emergencies that would require activation of the plan.

In 2003, the Harbor District prepared an assessment of the ERP within the context of proposed changes at the DCNP with the potential to increase the risk to the Port associated with an emergency. That assessment, entitled *Diablo Canyon Nuclear Power Plant Emergency Response Plan Evaluation* (Douglas Wood & Associates, 2003) recommends a number of changes to the ERP to address concerns of the Harbor District, such as:

- Amending the boundaries of the County's protective action zones to include Port San Luis/Avila Valley within PAZ 2;
- Improving the emergency alert system to provide better coverage of the Port/Avila Beach area;
- Improving the notification system and moving the Harbor District higher up the notification hierarchy that would be used in the event of an emergency;
- Improving the overall notification and emergency coordination system, the training of emergency personnel and equipment to be used;
- Recommending future analyses and modifications regarding evacuation procedures;

Protective Actions Contained in the ERP

The federal, state and County governments have each defined different emergency planning zones surrounding the plant which correspond to varying levels of potential hazard and emergency response. The ERP establishes twelve Protective Action Zones (PAZs) arranged into five groups generally increasing in distance from the plant (see Figure 4-1). The majority of Port facilities lie within PAZ 3.

The ERP provides two levels of protective actions that may be taken immediately to reduce the potential radiation dose associated with a gaseous plume originating at the power plant: evacuation and shelter. Evacuation is a major countermeasure to prevent or reduce exposure and contamination of the general public, and is a complex operation involving several governmental jurisdictions.

Sheltering involves staying inside with all doors, windows, and ventilation systems closed, reducing exposure to radiation due to the reduced chances of breathing in or receiving body surface contamination from radioactive materials. The ERP states that, except in rare circumstances, sheltering should not be relied upon when projected radiation doses are expected to be severe (10.0 Rem total effective dose equivalent).

When a potentially radioactive plume is expected to arrive at a given location within 0-3 hours, the ERP recommends that all affected areas take shelter as the protective action. In some instances an evacuation could be called for Avila Beach within a shorter timeframe. Evacuation is also recommended for Avila Beach with estimated times of 3 to 5 hours and 5 to 8 hours prior to plume arrival. However, as mentioned above, sheltering should never be relied upon at projected doses greater than 10.0 Rem TEDE. The decision to shelter or evacuate is made at the time of the emergency and is based on additional factors, such as current meteorological conditions, magnitude and composition of potential release and other offsite conditions. Wind velocity, specifically the time necessary for a release plume to travel through or over a PAZ will be a prime determinant upon the decision to evacuate.

Protective Actions/Standard Operating Procedures Specific to Port San Luis

In the event of an emergency, and when directed by the County Emergency Services Director, Harbor District staff would implement emergency or protective actions provided by the ERPs Standard Operating Procedures (SOP). SOPs are essentially implementing instructions to be used by the County Command Group, the County Emergency Operations Center (EOC) and other key officials in directing emergency response activities. These actions are not recommended to be automatically performed at Alert or higher emergencies. SOP No. 111.44 provides detailed preparedness measures and emergency procedures specific to Port San Luis. Under SOP 111.44, Harbor District staff may be directed to do one or more of the following:

Route Alerting - notify the public at Port San Luis and surrounding areas in the event of siren failures by using mobile "public address (PA)" systems. The public would be instructed to tune their radios to the local Emergency Alert System (EAS) radio stations for the actions they should take.

Precautionary closure of Port San Luis and surrounding area - in the early stages of an emergency, the County Emergency Service Director may recommend closure of the Port San Luis area in order to allow visitors to be evacuated out of the area. Once this evacuation is complete, Harbor District personnel can secure the facility and relocate to an unaffected area if the emergency worsens. The Harbor Manager will assign staff to inform the public to leave and to listen to the EAS. Areas to be closed would include: the dry dock, Mooring Area, Business Office, Parking Area, lighthouse, Harford Pier, and Olde Port Beach.

Evacuation of Port San Luis and surrounding area - The County Emergency Services Director may recommend evacuation of the Harbor District as part of Protective Action Zone 3 (see Figure 4-1). The recommendation to evacuate would be accompanied by a directive for Harbor District personnel to evacuate all members of the public in areas described above, as well as Harbor Terrace. Once the public has evacuated the area, Harbor District personnel will move to a location outside the affected area.

During an emergency, non-local travelers will be diverted from entering the planning area. Roadblocks outside the perimeter of the planning area may be established at the Declaration of Local

Emergency by the County in response to the severity of the emergency. In the event that the emergency occurs outside regular business hours, officials at Port San Luis would be contacted at their homes and many may have difficulty returning to carry out the tasks assigned them in their capacity as “emergency workers” due to roadblocks and outgoing traffic.

Should releases occur which would deposit sufficient quantities of radioactive materials in populated areas, sheltered populations would be relocated (evacuated after plume passage). Evacuees would be monitored and decontaminated as necessary. In regards to Evacuation, its sole purpose is to remove the population from the affected areas as rapidly as possible to locations beyond the health hazard limits.

A critical component of any ERP is the available evacuation routes. While this topic is discussed in the 1994 ERP, a more recent study has been prepared titled *Final Report – Evacuation Time Assessment for Transient and Permanent Population from Various Areas Within the Plume Exposure Pathway Emergency Planning Zone, Diablo Canyon Power Plant, 2002 Update* (September 2002) prepared by Wilbur Smith Associates (discussed below).

In the event of evacuation of Diablo Canyon Power Plant personnel, such evacuation would occur in stages, with non-essential personnel exiting first. Evacuees are to assemble at designated points to be monitored for contamination prior to being released by the PG&E Site Emergency Coordinator. Designated evacuation assembly points to the south include the Port San Luis Harbor District parking lot adjacent to the plant gate at Avila Beach, the Avila Beach parking lot and the PG&E Community Center. There are approximately 900 personal vehicles at the plant and 1,500 onsite personnel at a given time. Should evacuation of the Nuclear Power Plant personnel be necessary, the County will notify the Unified Dose Assessment Center (UDAC), City of Morro Bay, State Parks and Recreation, Avila Fire Department and South Bay Fire Department. The Port San Luis Harbor District is not on the list of agencies to be notified.

Sheltering – The County Emergency Services Director may recommend sheltering, which means that all members of the public in the area should go to any well-built structure, close all doors and windows and await further instructions over the EAS radio station. Harbor District personnel will assist persons who may not have a place to shelter.

Emergency Worker Protective Actions – Harbor District personnel may be instructed to follow emergency worker protective actions, including use of EWEC instruments, taking potassium iodide tablets, relocating to areas having lower exposure levels, and reporting to an Emergency Worker Monitoring and Decontamination Center.

Project Consistency. The Final Master Plan accommodates additional facilities at the Port and other Harbor District properties. Construction of additional lease spaces and facilities would accommodate additional “transient populations” who would be subject to the procedures outlined above in the event of an emergency. Transient populations consist of non-resident visitors to the EPZ area, such as tourists and beachgoers, as well as students and employees who reside outside the EPZ. Higher levels of transient population occur within the EPZ during the summer, on weekends and holidays. During these periods, a significant number of persons from outside the EPZ visit the beach recreation areas, including Port San Luis, Harford Pier, Olde Port Beach and Avila Beach. All of these facilities, as well as the adjoining shorelines, beaches and harbor areas in the Avila area fall under the jurisdiction of the Port San Luis Harbor District.

The increase in transient population accommodated by the Draft Port Master Plan on a given day is difficult to estimate. However, since almost all Harbor District and beach users arrive by automobile, a surrogate may be derived by estimating the parking demand associated with future development and assigning an average occupancy to each vehicle. According to Table 5.7-6 in Section 5.7: Traffic and Circulation, parking demand from new development could be as much as 333 spaces (assuming no sharing of parking spaces among uses), which includes 125 RV spaces, 44 tent camping sites and 67 cabins/yurts on the Harbor Terrace site. Assuming an average of two persons per vehicle, the facilities and uses associated with the Final Master Plan could accommodate as many as 666 more people on Harbor District property and within the EPZ during periods of peak use.

In September 2002 Wilbur Smith Associates prepared an *Update of the Evacuation Time Assessment for the Diablo Canyon Power Plant*. This analysis was intended to update prior evacuation time assessments in accordance with the requirements of the Nuclear Regulatory Commission (NRC). The prior Evacuation Time Assessment was prepared in 1992 and reflected 1990 conditions within the twelve Protective Action Zones (PAZ) established by the County (see Figure 4-1). The 2002 Update reflects year 2000 uses and population data, the current distribution of population, and 2002 traffic circulation conditions. For example, for the entire twelve-zone EPZ, year 2000 non-transient population totals were estimated to be 142,427 persons, indicating an 8.7 percent increase over 1990 totals. The number of dwelling units within the EPZ was estimated to be 61,394, an increase of approximately 11.5 percent over 1990 totals.

During a non-summer weekday, the transient population which includes workers as well as visitors within the entire EPZ is estimated to be 30,544. For a non-summer weeknight, the transient population is estimated to be 15,919. On a summer weekday, the transient population is estimated to total 36,495 while on a summer weekend day the transient population is estimated to be 35,437. The summer weekday transient population total is slightly higher due to the increased number of weekday workers versus weekend workers. The Evacuation Time Assessment also indicates that on certain holidays, such as the Fourth of July, "*these transient population numbers can be considerably higher.*"

The computer simulation model used to prepare the Evacuation Time Assessment examined four different evacuation conditions and estimated the evacuation time for each. For each condition, nine different evacuation scenarios of various Protective Action Zones were analyzed in order to simulate the evacuation of various portions of the entire Emergency Planning Zone. The results are provided on Table 4-1. According to Table 4-1, the model estimated that on a non-summer weekday, approximately 13 hours would be required to evacuate the entire EPZ, which includes all twelve of the zones designated by the County. On a non-summer weeknight, approximately 11 hours would be required for full evacuation of the EPZ. On a summer weekday, 12 ½ hours are estimated to be required for full evacuation, while 12 hours is estimated to be required on a summer weekend day. Partial evacuations, which are considered to be the most likely evacuation scenario, would require less time.

Table 4-1: Estimated Evacuation Times for Different Conditions

Source: Wilbur Smith & Associates, 2002

Condition	Transient Population	Estimated Evacuation Time
Non-summer weekday	30,544	13 hours
Non-summer weeknight	15,919	11 hours
Summer weekday	36,495	12 hours 30 minutes
Summer weekend day	35,437	12 hours

If the evacuation time increases in direct proportion to the increased transient population, the evacuation times for the EPZ under the different conditions described in Table 4.1 would increase at buildout of the Final Master Plan as summarized in Table 4.2.

Table 4.2 Estimated Evacuation Times for EPZ

Source: Wilbur Smith & Associates, 2002 and CMCA 2003

Condition	Transient Population	Estimated Evacuation Time
Non-summer weekday	31,210	13 hours 17 minutes
Non-summer weeknight	16,585	11 hours 27 minutes
Summer weekday	37,161	12 hours 44 minutes
Summer weekend day	36,103	12 hours 44 minutes

Table 4.2 suggests that the time required to evacuate the entire EPZ would increase under each condition. It should be noted that these evacuation times are estimated for the entire twelve zone EPZ and do not necessarily reflect the time necessary to evacuate a given location, such as the Port/Avila Beach area, which may be subject to localized constraints. On the other hand, a partial evacuation would likely take much less time due to the smaller area and corresponding population.

The Evacuation Time Assessment updated the inventory of existing highway facilities within the EPZ including facility type, number of lanes, operating speeds and traffic controls in order to define the evacuation roadway network for use within the evacuation time assessment computerized transportation model. The primary evacuation route(s) from the Port San Luis/ Avila Beach area is Avila Beach Drive until it reaches San Luis Bay Drive both of which ultimately connect to Highway 101, a distance of approximately three to four miles (see Figure 5.7-8). According to Section 5.7: Traffic and Circulation, the additional traffic associated with buildout of the Draft Port Master Plan

will have an insignificant effect on the capacity of area roadways and intersections, so long as the improvements recommended in the Avila Circulation Study are implemented.

The assumptions concerning traffic operations during an emergency evacuation include average speeds on local two-lane roadways of 10 to 25 miles per hour, assuming traffic levels are below capacity. Once traffic flows reach or exceed roadway capacity, the computer model simulates the formation of traffic queues (or congestion) resulting in reduced speeds and increased travel time estimates. Below-capacity roadway speeds have a relatively small effect upon evacuation time estimates since evacuation traffic begins to exceed roadway capacities within the first hour of the evacuation.

The Evacuation Time Assessment indicates that *“because of the directional flow and controlled routings, lane capacities could be higher than those observed under normal circumstances”* and *“Another factor which could contribute to smoother flow and higher capacities is that the drivers involved in the evacuation would probably be the more seasoned, experienced driver(s) of each household”* (page 48).

The four evacuation conditions noted in Table 4.1 and 4.2 above were assumed to occur during warm weather conditions in order to maximize the estimated transient population. A fifth scenario was also investigated which reflects evacuation during adverse weather conditions (heavy rainfall or during dense fog).

The Evacuation Time Assessment concludes by identifying several *“bottleneck”* locations within the EPZ where *“traffic demand can be expected to significantly exceed available capacity during a general evacuation, resulting in lengthy vehicle queues and delays”* (page 53). Bottleneck locations are identified at access points to Highway 101 in San Luis Obispo as well as along Highway 101 on the Cuesta Grade, along South Bay Boulevard, along Highway 1 in the Morro Bay/ Cayucos area and on both Highways 101 and 1 in the Five Cities area. No bottlenecks or areas of anticipated traffic congestion are identified on either Avila Beach Drive or San Luis Bay Drive west of Port San Luis and leading to Highway 101.

Figure 4-1 Protective Action Zones

5. Impact Analysis

Predicting the environmental effects of future development in accordance with the Draft Port Master Plan necessarily involves some degree of speculation. This is due in part to the conceptual and programmatic nature of the project description at the time of preparation of this FEIR. Section 15004 (b) of the CEQA Guidelines states:

- b. *Choosing the precise time for CEQA compliance involves a balancing of competing factors. EIRs and Negative Declarations should be prepared as early as feasible in the planning process to enable environmental considerations to influence project program and design and yet late enough to provide meaningful information for environmental assessment.*
 - 1. *With public projects, at the earliest feasible time, project sponsors shall incorporate environmental considerations into project conceptualization, design, and planning. CEQA compliance should be completed prior to acquisition of a site for a public project.*

Moreover, Section 15146 of the State CEQA Guidelines states:

- a. *“The degree of specificity required in an EIR will correspond to the degree of specificity involved in the underlying activity which is described in the EIR.*
- b. *An EIR on a construction project will necessarily be more detailed in the specific effects of the project than will be an EIR on the adoption of a local general plan or comprehensive zoning ordinance because the effects of the construction can be predicted with greater accuracy.*
- c. *An EIR on a project such as the adoption of a comprehensive zoning ordinance or a local general plan [such as a Port Master Plan] should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.”*

And lastly, Section 15151 of the CEQA Guidelines states:

“An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.”

The following topical sections provide analyses of the potential environmental consequences of buildout of Harbor District properties and facilities in accordance with the Draft Port Master Plan based on the level of detail currently available regarding the description of the program for development. Given that a precise description of the various project components and their arrangement are conceptual at present, the analysis of potential impacts will necessarily be general and focus on the potential range of primary and secondary environmental effects. When detailed plans for individual projects are completed, additional environmental review may be required to

assess the significance of potential impacts which were not foreseen or analyzed in sufficient detail by this Program EIR.

Throughout the sections that follow, impacts are categorized according to their level of significance after mitigation has been applied. Four categories of impacts are identified:

Class I. Class I impacts are significant and unavoidable. To approve a project resulting in Class I impacts, the CEQA Guidelines require decision makers to make findings of overriding consideration that “... *specific legal, technological, economic, social, or other considerations make infeasible the mitigation measures or alternatives identified in the EIR...*”.

Class II. Class II impacts are significant but can be mitigated to a level of insignificance by measures identified in this EIR and the project description. When approving a project with Class II impacts, the decision-makers must make findings that changes or alternatives to the project have been incorporated that reduce the impacts to a less than significant level.

Class III. Class III impacts are adverse but not significant.

Class IV. Beneficial impacts.

5.1 Geology and Geologic Hazards

Issues

This section identifies potential area-wide geologic hazards and regional seismic characteristics and evaluates the potential effects of geologic hazards related to the development of Harbor District properties and facilities in accordance with the Final Master Plan. These potential hazards include earthquakes, ground rupture, ground shaking, settlement, liquefaction, and landslides. Much of the analysis that follows is based on two documents: a geotechnical engineering investigation prepared for the Harbor Terrace site for a hotel project (Harbor Terrace EIR, 1998), and the Unocal Avila Beach Cleanup EIR, also prepared in 1998. Both documents are incorporated herein by reference.

Setting

Regional Geology

The Port is located within the Coast Ranges Province of California, a north-northwest trending mountain belt extending from the vicinity of Santa Maria northward into Humboldt County, with a small portion extending to the California-Oregon border. The Coast Ranges are composed of Mesozoic Age to recent sedimentary, volcanic, metavolcanic, metamorphic, and granitic rocks.

The Port is also located at the base of the Irish Hills of the southern Coast Ranges. The Irish Hills are part of the San Luis/Pismo structural block and, unlike the remainder of the Coast Ranges Province, are composed of Cenozoic Age to recent sedimentary rocks. Folds and faults within the Irish Hills are generally oriented northwesterly, which diverges slightly from the north-northwest structure of the Coast Ranges. The Irish Hills are bordered on the north by the Los Osos fault, on the west by the Hosgri fault, on the south by the Wilmar Avenue/Oceano/Pecho faults, and on the east by the West Huasna/Edna faults.

In the project area, the Irish Hills are composed predominately of the Miocene-Pliocene age Pismo Formation and the Miocene Age Monterey Formation. The Pismo Formation consists of five members: the Squire, Belleview, Gragg, Miguelito, and Edna Members. These members are composed of a variety of sedimentary rocks ranging from sandstone, siltstone, claystone, conglomerate, dolomitic sandstone, and bituminous sandstone. Each member has been mapped within the Irish Hills.

The Monterey Formation has been mapped along the northern and southern flanks of the Irish Hills. In the project region, the Monterey Formation consists of siltstone, claystone, dolomitic siltstone, cherty and opaline shale, and tuffaceous sandstone.

The Pismo and Monterey Formations are locally covered by Quaternary Age alluvium and terrace deposits. The alluvium is found mainly in association with drainages, such as San Luis Creek, while the terrace deposits are concentrated along the coastal zone near Shell Beach.

Local Geology/Topography

Town, Beach and Bluffs (also Piers, Harford Landing). Avila Beach has been built on a relatively narrow band of blufftop and alluvial terrace. Ringing the community are the Irish Hills, sloping to the southwest at a relatively steep grade. The Irish Hills are the major physical barrier dividing Avila Beach from inland areas. Due to its location near the confluence of two waterways, and its proximity to the ocean, the majority of Avila Beach is underlain by alluvial and marine sediments, overlying sandstone bedrock. The alluvium is thought to be underlain by the Pismo Formation. The alluvium overlies the Gragg Member of the Pismo Formation in the eastern portion of the City, and the Squire and Belleview Members of the Pismo Formation in the western portion of the City. The Gragg Member is estimated to be lower Pliocene in age and consists of relatively massive, white sandstone. The Gragg Formation has been mapped as dipping about 20 degrees toward the northwest.

The Squire and Belleview Members are estimated to be of upper Pliocene age, with the Squire Member described as a massive, white, medium- to coarse-grained sandstone, and the Belleview Member described as interbedded claystone and siltstone. West of the City, the Squire Member is mapped as dipping 15 degrees to the northwest.

In addition to the alluvium and Pismo Formation, pillow basalt of the Franciscan Formation have been mapped at the western termination of the beach. The pillow basalt is volcanic in origin and has not been mapped with any flow-path orientations. Terrace deposits have been mapped overlying the pillow basalt and the Squire Member on the western margin of the City. The thickness and constituents of the terrace deposits are unknown.

Harbor Terrace. The Harbor Terrace site, which is located along the southern margin of the Irish Hills, originally consisted of rolling hills sloping in a southerly direction. The site has been extensively altered to form a series of relatively level benches that ascend the hillside to an elevation of approximately 180 feet above sea level. Slopes between the benches are very steep in some areas; minor slope failures are visible in several locations.

According to a geotechnical report prepared for the Harbor Terrace hotel project DEIR in 1998, the site was originally graded by the Union Oil Company in the 1920's and used as an oil storage facility. Additional grading across a portion of the property was performed by the Marre family to accommodate a trailer park. The dates of this grading are reported in various documents to range from the 1950's to 1970. In or about 1973, the site was again graded for the proposed Port San Luis Marina Village, a project that was never completed.

The Harbor Terrace site is underlain by a mixture of claystone, siltstone and sandstone of the Miocene Monterey Formation. Beneath the Monterey Formation rock units, rocks of the Franciscan Melange are present. The Franciscan Melange, which is found throughout much of San Luis Obispo County, is a mixed rock unit that dates to the Cretaceous/Jurassic periods. It is dominated by sandstone and shales with intrusions of serpentinite. The Franciscan formation is particularly prone to instability and landsliding. The entire unit has been highly altered by tectonic activity, which is expressed as severe shearing and folding. Overlying the bedrock are surficial units composed of native soils, fill soils, and landslide debris.

Lightstation. The geologic composition of the area underlying the lightstation has not been determined; however, based on nearby formations it is likely that the site is underlain by Pleistocene-era marine terrace deposits.

Seismic Setting

The Port San Luis Harbor District is located in a seismically active region of California where relatively strong ground motion has occurred in the past, and is likely to occur again in the future. The fault activity nomenclature defined under the State of California's Alquist-Priolo Fault Hazards Act (APFHA) was used as the basis for evaluating fault activity and seismicity for this study. The activity rating of faults under the act is summarized by the following guidelines:

- > A fault is considered *active* if it can be substantiated that the fault has ruptured during the Holocene (within the last 11,000 years before present).
- > A fault is considered *potentially active* if it can be substantiated that the fault has ruptured during the Pleistocene (within the last 2,000,000 years before present) but not during the Holocene.
- > A fault is considered *inactive* if it can be substantiated that the fault has not ruptured during the Pleistocene or Holocene (in other words, it has not ruptured within the last 2,000,000 years).

APFHA active faults are assigned an exclusionary zone of variable width, which require special fault studies to estimate the feasibility of construction within that zone. It should be noted, however, that there are scores of faults within California that satisfy the Alquist-Priolo Fault Hazard Act definition of being active, that are currently not zoned under the act. In the project region, such faults exist; some of which are discussed below.

Los Osos Fault Zone. The Los Osos fault is located approximately 3.5 miles north of Port San Luis. This fault is a west-northwest-trending reverse fault located on the south side of the Los Osos Valley. The Los Osos fault is divided into four segments. The westerly segment of the fault is the Estero Bay segment, which lies mostly offshore. The Irish Hills segment starts near Los Osos and extends to just past San Luis Obispo Creek. A two-mile length of this segment west of Laguna Lake is considered active and is designated as an Earthquake Fault Zone. The project area is located approximately 5-8 miles southwest of this active segment of the fault. The other two segments of the Los Osos fault are the Lopez Reservoir segment and the Newsome Ridge segment, located southeast of the Irish Hills segment. The Los Osos fault is capable of generating a maximum moment earthquake of magnitude 6.8A; the recurrence interval for an earthquake of this magnitude is approximately 1,925 years (San Luis Obispo Seismic Safety and Safety Element, 2001).

Other faults capable of generating strong ground motion within the project region are the San Andreas Fault, the Nacimiento fault, the Rinconada fault, and the Hosgri-San Simeon fault. Other local faults mapped in the project vicinity are classified as potentially active to inactive. A map showing the location of the faults discussed is presented on Figure 5.1-1. A description of the major active faults in the region is presented below.

San Andreas Fault Zone. The Mojave segment of the San Andreas Fault is mapped along the eastern County line, approximately 35 miles east of the City of San Luis Obispo. The San Andreas is the most historically active fault in California, and is considered the most likely source of future major earthquakes. The San Andreas Fault is estimated to be capable of a maximum credible seismic event of moment magnitude 8.3 to 8.5. It is expected that a magnitude 8.5 earthquake on the fault could result in up to 30 feet of ground displacement along the fault trace.

Nacimiento Fault Zone. The Nacimiento fault is a regional, active to potentially active fault extending northwest from about Santa Margarita into northern Monterey County. The fault system is located about 10 miles east of the project site and may have been responsible for the November 21, 1961, magnitude 6.0 earthquake. However, there is some controversy related to the location of that seismicity (San Luis Obispo Seismic Safety and Safety Element, 2001). The CDMG assigns a maximum moment earthquake potential of 7.5 for this fault.

Rinconada Fault Zone. The Rinconada Fault, which trends northwest to southeast, lies between the Nacimiento and San Andreas Faults approximately 12 miles east of the project area. Geomorphic evidence suggests Quaternary movement on the fault, and the CDMG has assigned a long-term slip rate of 3 mm/yr to the fault. It is considered by most investigators to be a potentially active fault.

San Simeon-Hosgri Fault. The Hosgri fault is located offshore approximately 15 miles west of San Luis Obispo. The fault trends in a northwesterly to southeasterly direction, and comes onshore as the San Simeon fault near San Simeon Point. It has been identified as having the potential to produce an earthquake event of magnitude 7.2 to 7.7 every 200 to 800 years. The San Simeon fault, which is onshore, is a right-lateral fault that has been substantiated as having ruptured during the Holocene, thus indicating the fault is active. The Hosgri fault, which is also a right-lateral fault, is inferred to have moved within the Holocene; also indicating the fault is active. The last rupture event along the San Simeon fault could have occurred between about 265 and 2,000 years ago. The southern segment of the Hosgri fault could be responsible for the 1927 magnitude 7.0 Lompoc Earthquake.

San Luis Bay Fault.¹ According to the Harbor Terrace EIR, the San Luis Bay fault trends in a northwesterly direction across the Harbor Terrace site. The exact location of the fault is not known; however, it is believed to lie within an approximately 1200-foot wide zone that encompasses the majority of the Harbor Terrace site. The fault originates offshore to the west, coming onshore by Rattlesnake Canyon, and continues in an easterly direction through the southern margin of the Irish Hills. The fault crosses the Harbor Terrace site then trends southeasterly offshore just west of the Harford Pier.

¹ The text describing the San Luis Bay Fault is largely excerpted from the Harbor Terrace EIR, 1998.

Figure 5.1-1 Regional Faults

The fault is poorly defined and not well expressed geomorphically, suggesting a low level of activity. However, an area of highly sheared rock exists in the north central region of the Harbor Terrace site. Such a highly sheared rock zone is suggestive of faulting. Due to the absence of onshore geomorphic expression, the age of the most recent movement is unknown. It is generally believed to be late Pleistocene (100,000 years to 11,000 years before present) with little or no Holocene (less than 11,000 years before present) movement. It should be noted, however, that the approximately 10,000 years that separates this date from the active classification is only a fraction of time in geologic terms. For the purposes of this report, the fault is considered inactive.

Oceano Fault. The Oceano fault is a 12-mile long, northwest-trending reverse fault located in the Nipomo Mesa area. The Oceano fault is not geomorphically expressed within the onshore segment due to relatively thick alluvial and Aeolian cover. The fault is not believed to have been active since the late Pleistocene.

Pecho Fault. The northwest trending Pecho fault lies offshore west and south of Point San Luis. Based on geophysical data, the fault is interpreted to dip steeply to the northeast with north-side up, reverse displacement. The fault merges with or terminates against the Hosgri fault to the northwest. There is evidence of late Quaternary movement on the fault.

Geologic Hazards

The project area is subject to several types of related but distinct geologic hazards. These hazards are described briefly below.

Ground Shaking

Small to moderate earthquakes (magnitudes less than 5.0 on the Richter Scale) are common in San Luis Obispo County. The most significant quakes affecting the County during the last century have been centered outside the County, and have included events in excess of 7.0 (Lompoc in 1927 and Tehachapi in 1952). The most recent major quake within 100 miles of the area was the 6.5 Coalinga temblor of 1983. Although the July 1992 Landers earthquake (7.5) and January 1994 Northridge earthquake (6.6) were felt in the Avila Beach area, no damage was known to occur.

Research has shown that areas that are underlain by layers of unconsolidated, recent alluvium and unconsolidated soil materials with high ground water have an increased risk of experiencing the damaging effects of groundshaking. Portions of Avila Beach underlain by alluvium are considered to be at increased risk of amplification of ground motion.

In addition to ground shaking, several types of seismic hazards are associated with earthquake events, including ground rupture, liquefaction, seismic settlement, and ground lurching. Each of these potential hazards is described below.

Fault Rupture

Seismically induced fault rupture is defined as the physical displacement or ground rupture along a fault plane in response to a seismic event. Rupture is most likely to occur along active faults; however, the potential for ground rupture also exists along potentially active faults. The only known fault to traverse the project area is the San Luis Bay fault, which is considered inactive, and therefore poses a low risk of rupture. The closest active faults to the Harbor Terrace site are the Hosgri Fault, located approximately 5 to 8 miles offshore from and west of the site, and the Los Osos

Fault, located 5 to 8 miles north of the site. Seismic events along these fault lines would not impact the project area through rupture.

Liquefaction

Liquefaction is a phenomenon where unconsolidated and/or near saturated soils lose cohesion and are converted to a fluid state because of severe vibration. Unconsolidated, granular soils in saturated conditions are most susceptible to these effects, while more stable silty clay and clay materials are generally somewhat less affected. In order for a soil to be considered potentially liquefiable, three general conditions should be met: 1) the soil is granular; 2) the relative density of the soil is loose to medium dense; and 3) ground water is present within the potentially liquefiable soil column. Thus, in areas underlain by rock or clay, or dense sands, or in areas where ground water is very deep, there is a low potential for liquefaction to occur during an earthquake.

The beach areas are underlain by granular soils in the presence of shallow ground water. The relative density of the granular soils encountered generally ranges from loose to dense, and varies in areal and vertical extent. CPT soundings and drill holes performed for the Unocal project in 2000 indicated that the sandy materials encountered in the beach area contain loose to medium soils, with ground water typically present within 0 to 8 feet of the ground surface.

Seismic Settlement

Seismic settlement and differential compaction occur when loose to medium dense granular soils densify during ground shaking. Seismically induced settlement or collapse can occur in soils that are loose, soft, or that are moderately dense but weakly cemented. Additionally, settlement can occur in relatively dry, partially saturated, and saturated granular soils.

Seismic shaking of loose to medium sands can result in a reduction in volume, or settlement, of those sands. This settlement could occur in or out of the presence of liquefaction. The settlement occurs because of grain-to-grain reorganization of sand particles due to shaking, resulting in a decrease in void space between grains. The result of such settlement can consist of expulsion of sediments and interstitial fluids during settlement. That expulsion could occur onto the ground surface or into a soil layer that could accommodate the volume of material being expelled.

Unidentified fill underlies a number of areas within the jurisdiction of the Harbor District, most notably, the Harbor Terrace site and portions of Avila Beach Drive. Due to the unknown nature of the fill material, the potential for settlement is considered high. This risk is typically mitigated by ensuring that unidentified fill materials are completely excavated and replaced with a substance of known compaction prior to construction.

Where foundations rest in soils of unknown composition or straddle differing soil types, differential settlement can occur. This phenomenon occurs in instances where soils have differing compaction rates, such as between rock and bay sediments.

Tsunamis

Tsunamis, or long-period sea waves created due to seismic events or submarine landslides, have historically occurred in the project region. According to Kilbourne and Maulchin (1980), the following historical tsunamis have occurred in the project region:

Table 5.1-1: Tsunami Occurrences

Year	Estimated Tsunami Generation Location	Estimated Impact Location	Estimated Tsunami Runup (meters/feet)
1868 ¹	Unknown	Morro Bay	Unknown
1878	Unknown	Morro Bay	Unknown ²
1927	Local	Pismo Beach	1.8 meters/5.9 feet
1946	Aleutian Trench	San Luis Obispo Bay	1.2 - 1.5 meters/3.9 - 4.9 feet
1960	Chile-Peru Trench	Central Coast	>1.0 meters/>3.3 feet
1964	Gulf of Alaska	Central Coast	>1.0 meters/>3.3 feet

¹Speculative

²Reportedly overtopped the sand spit that separates Morro Bay from the ocean (County of San Luis Obispo, 1975).

As noted in the above table, tsunamis generated from far-field sources have historically occurred in the project region. A study performed by Houston & Garcia (1978) estimated the 100-year and 500 year tsunami runups in the study area, based upon far-field source generation locations (such as the Aleutian or Chile-Peru Trenches). Based on their study, the estimated tsunami runup in the project area could be up to approximately 9 feet and 24 feet for the 100-year and 500 year events, respectively. The runups were calculated using astronomical high tides and compare well with recorded tsunamis that have occurred in Crescent City and other locations along the California coast. The runups could be greater if a tsunami event occurred during a meteoric (storm surge) high tide.

Landslides, Erosion and Slope Stability

The potential for and occurrence of landslide varies throughout the project area. Typically, landslide is of increased concern on slopes exceeding 10 percent, especially where vegetation has been removed. Landslide potential can be exacerbated by seismic events, excessive rain events, and grading activities.

Such events increase the potential for erosion, as well. Erosion is the displacement of soil through wind, water, or other natural forces. Erosion increases sedimentation of waterways, including bays and streams.

In general, portions of the project area with 10 percent or lower slope (beaches, blufftops, piers, etc.) are at low risk of landslide. Due to relatively steep slope and historical grading activities, the Harbor Terrace site exhibits at least five major landslides, and exhibits slope failure in a number of locations.

Erosion through wave action occurs naturally along beaches and bluffs. Along the south side of Avila Beach Drive, the bluff along San Luis Bay is approximately 15 to 20 feet in height. Much of the bluff is protected by rip-rap (rock) revetments. Natural rock outcrops are also present in the central area of the bluff face. No rip-rap is present at the northeast and southwest revetments of the former PG&E barge landing dock.

The Port Master Plan notes that potential erosion of the bluff supporting Avila Beach Drive is a concern. The roadway is under the jurisdiction of the County and provides the sole vehicular access to Port facilities. Options for relocation of the roadway are limited due to steep slopes on the north side. The Master Plan encourages rip-rap protection of Avila Beach Drive.

Expansive Soil

Expansive soils tend to swell with seasonal increases in soil moisture and shrink during the dry season as soil moisture decreases. The volume changes that the soils undergo in this cyclical pattern can stress and damage slabs and foundations if precautionary measures are not incorporated into the construction procedure. Methods commonly used for slab protection include placement of nonexpansive material beneath the slab or premoistening of subslab soils. Expansive soil can be of particular concern in areas of undocumented fill.

Regulatory Setting

The following state and local regulations have been enacted to protect the public from geologic hazards:

Public Resources Code, Section 2621, et seq.

The Alquist-Priolo Special Studies Zone Act of 1972 establishes criteria and policies to assist cities, counties, and state agencies in the exercise of their responsibility to prohibit the location of developments and structures for human occupancy across the trace of active faults as defined by the State Mining and Geology Board. As previously discussed, no Alquist-Priolo zones have been established within the project area.

Title 23 of the San Luis Obispo County Code

The Coastal Zone Land Use Ordinance (CZLUO) (at 23.07.080) sets forth the Combining Designation Standards for Geologic Study Areas. These are areas where "geologic and soil conditions could present new developments and their users with potential hazards to life and property." The standards require preparation of a report on geologic hazards and appropriate mitigation measures. Structures must be designed to overcome these hazards. Sedimentation and erosion control plans are required under the CZLUO (sec. 23.05.036) for land-disturbing activities that occur under certain conditions. Geologic study areas have been identified within the project area, extending east from Harford Landing to the Cal Poly pier. This area incorporates the slopes at Harbor Terrace, and bluffs along the coastline. Development in much of the project area, therefore, is subject to special standards under the CZLUO.

Other Regulatory Requirements

Section 17922, 179511-17958.7 of the California Government Code requires cities and counties to adopt and enforce the Uniform Building Code (UBC), including a grading section (Chapter 70), providing minimum protection against some geologic hazards. The County of San Luis Obispo implements these provisions.

Thresholds of Significance

The CEQA Guidelines state that a project will have a significant impact if it would result in one or more of the following:

- > Expose people or structures to potential hazards which may result in an increased risk of loss, injury or death involving;
- > Rupture of known a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
- > Strong seismic ground shaking;
- > Landslides;
- > Substantial soil erosion or the loss of topsoil;
- > Being located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- > Being located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Impacts

Impact GEO-1 Although seismic events could result in groundshaking in virtually every planning area, the potential for ground rupture in the Master Plan area is considered low. This impact is considered adverse but not significant (Class III).

Ground rupture is typically associated with active fault traces. Where structures are located along, or astride, an active fault, rupture can result in significant damage to those structures and risk to life. No active faults traverse the project area; however, sympathetic movement along the San Luis Bay fault could result in surface disturbance affecting structures located on the Harbor Terrace site.

Impacts GEO-2: In a major earthquake on the Los Osos or San Andreas faults, ground accelerations of 0.15g to 0.7g may occur, which would cause significant ground shaking within the Master Plan area resulting in damage to structures and a potential safety hazard to occupants of such structures. This impact is considered significant unless mitigated (Class II).

In the event of a major earthquake on the Los Osos or San Andreas faults, ground accelerations of 0.15g to 0.7g may occur, which would cause significant adverse impacts at the site. Ground

acceleration of this magnitude could cause local quake intensities ranging between VII and XI on the Modified Mercalli scale.² Earthquakes of such intensity have the potential to destroy unreinforced masonry structures and cause general damage to some well-built wooden structures and foundations.

Many recent earthquakes in the planning area have not caused significant damage because they have occurred in rural areas of the County. In addition, as previously discussed, earthquakes centered outside the planning area have not adversely affected the project site. Since the project site is located in a seismically active region, however the potential for impacts associated with structural damage from a seismic event exists.

As previously discussed, the inactive San Luis Bay Fault traverses the Harbor Terrace site in a northwesterly direction. There is a low potential for the San Luis Bay Fault to rupture during the lifetime of the proposed project. However, development of the site may experience moderate to severe sympathetic groundshaking from other nearby active faults (Hosgri and Los Osos Faults).

Impact GEO-3: Portions of the project area may be subject to landslides and/or slope failure. This impact is considered significant unless mitigated (Class II).

Grading activities in portions of the project area may result in unstable slopes, which could result in failure or increased erosion potential. The majority of the project area is covered by a special GSA combining designation in the San Luis Bay Area Plan LUE, and is therefore subject to special conditions on project proposals outlined in the CZLUO designed to reduce the incidence of landslide. Applying the provisions of the combining designation will reduce these potential impacts to less than significant.

The Harbor Terrace site has been graded over the years and now exhibits as number of benched areas, separated by relative steep, unreinforced slopes. Although grading has obscured the natural topography of the site, the Harbor Terrace EIR identifies five major landslides on site (shown in Figure 5.1-2), along with a number of smaller landslides and slumps. Each of the landslides is described in the following table.

² The Modified Mercalli Scale is a measure of earthquake intensity ranging from I (very minor) to XII (catastrophic). This scale accounts for local conditions such as soil types and underlying geology units. It provides a description of potential damage at a location, rather than a measure a quake's absolute magnitude as indicated by the more familiar Richter Scale.

Table 5.1-2: Landslides on the Harbor Terrace Site

Landslide No.	Location	Activity
1	Eastern area	Unknown/minor movement
2	Northwestern area	Unknown
3	Northern boundary	Unknown
4	Western area (obscured)	Unknown - reactivated during 1970's, reference to a buttress fill installed at that time
5	Western area	Unknown

Figure 5.1-2 Landslide locations

Regrading of the Harbor Terrace site could reactivate dormant landslides, exacerbate existing landslide movement, or activate new landslides. Construction of recreational and office facilities on site will expose additional structures to risk of damage from a landslide event. Due to the extensive grading of the site over the years, it is particularly difficult to relocate historic landslides. The impact is compounded by the presence of smaller landslides and slumps throughout the site.

Impact GEO-4: Construction and operation of the various facilities proposed in the Port Master Plan has the potential to result in erosion of soils. This impact is considered significant unless mitigated (Class II).

Construction of facilities proposed under the Master Plan will involve grading, excavation, and fill, all of which will expose soils to wind, water and other eroding elements.

Impact GEO-5 The planning area contains areas of undocumented fill, which may be unstable. This impact is considered significant unless mitigated (Class II).

There is a considerable volume of existing fill on the Harbor Terrace planning area site. Most of the fill is undocumented (i.e. there are no records as to its placement and extent). Potential impacts of undocumented fill include excessive soil settlement, slope instability, and accelerated soil erosion. If deleterious materials were used in the fill (there is evidence of dumping of debris at the northwest limit of the Harbor Terrace site), the settlement potential could be significant, even in the fill's current configuration.

Impact GEO-6 Field investigations of the Harbor Terrace planning area have revealed the potential for differential settlement which could damage foundations and/or the structural integrity of buildings. This impact is considered significant unless mitigated (Class II).

A geotechnical investigation prepared for the Harbor Terrace project DEIR identifies the potential for differential settlement of soils on the Harbor Terrace site due to the potential for foundations to bear in both rock and marine terrace deposits. .

Impact GEO-7: Portions of the project area underlain by undocumented fill may exhibit expansive soils. This impact is considered significant unless mitigated (Class II).

Expansivity of soil is directly proportional to the clay content. The sandy beaches and alluvial soils underlying the project area in the community of Avila Beach have low potential for expansion due to their more granular nature. Areas of undocumented fill may be at risk from expansion in that the characteristics of the fill are not understood.

Impact GEO-8 Overexcavation of undocumented fill may result in the need to export soils and materials out of the Avila Beach area. This impact is considered adverse but not significant (Class III).

Relocation or disposal sites for excavated soils in the Avila Beach area are limited; moreover, the undocumented fill may not be suitable for subsequent use. Although the volume of export is not known at this time, impacts are considered potentially significant.

Impact GEO-9 Interference with wave action and current patterns of sand sourcing and deposition is not anticipated under this plan. This impact is considered adverse but not significant (Class III).

Sand scouring and loss of sand sources through bluff protection is a major concern for California coastal communities. Construction of structures that interfere with, or deflect wave energy, may cause erosion in other portions of the coast. Bluff protection measures may protect property, but often cut off sources of sand. Bluff protection measures are in place along the south side of Avila Beach Drive (rip-rap (rock) revetments), however, no rip-rap is present at the northeast and southwest revetments of the former PG&E barge landing dock.

The Port Master Plan does not propose expansion of revetments within the project area. The Harbor District maintains existing revetments. Should revetments become necessary at other locations in the project area, subsequent environmental review will be required. The CZLUO requires setbacks from bluffs, and includes coastal bluffs in the GSA combining designation.

Mitigation Measures

Mitigation Provided By Existing Regulations

The Harbor Terrace site is included in the GSA combining designation in the San Luis Bay Area Plan Land Use Element. Inclusion in the GSA imposes additional requirements on development projects, including measures aimed at reducing the potential for landslide. Specific project proposals for the site will be required to provide detailed grading plans, and recommended building techniques to reduce risks to insignificant levels (Section 23.07.084).

New construction accommodated by the Final Master Plan is subject to compliance with the Uniform Building Code which includes measures to reduce risk from seismic events. The majority of the project area is also subject to the GSA combining designation standard under the San Luis Bay Area Plan LUE and the CZLUO. New development will be required to submit detailed grading plans, and to incorporate building techniques to reduce risk from seismic events to insignificant levels.

The GSA combining designation includes areas of coastal bluffs greater than 10 feet in vertical relief, along with areas of landslide potential, and areas of liquefaction potential. The GSA standards include a provision that new development ensure structural stability while not creating or contributing to erosion, sedimentation, or geologic instability. Specific development proposals greater than one acre in size would also be subject to the conditions of a Section 401 permit from the Regional Water Quality Control Board, which would regulate stormwater runoff during and after construction. Regardless of size, specific project proposals will be required to comply with the conditions of the CZLUO, which specifically require reduction of erosion to insignificant levels.

Additional Recommended Measures

G-1. Future development shall conform with all applicable requirements of the Uniform Building Code and other applicable construction regulations relating to potential seismic and/or geologic and slope-related hazards.

The following standards shall apply to development of the Harbor Terrace planning area:

- G-2. No development shall occur until 1) a geologic investigation has been prepared conforming to Section 3309.6 of the Uniform Building Code, 1994 Edition as amended by pertinent sections of Title 24 of the California Code of Regulations, and standard geologic practice; and 2) a Geotechnical Engineering Investigation has been prepared conforming to Section 3309.5 of the Uniform Building Code, 1994 Edition as amended by pertinent sections of Title 24 of the California Code of Regulations, and standard geologic practice. The contents of these investigations are described below:
- a. The geologic investigation shall be conducted by a certified Engineering Geologist, which at a minimum, shall address the following: the extent, depths, configurations, and activity levels of the existing major landslides, including the landslide that has been obscured by the buttress fill; the potential for destabilization of these landslides due to the proposed grading; the stability of slopes under the proposed grading and appropriate mitigation; evaluation of the sheared rock zone and its relations to fault activity; determination of the location of the San Luis Bay Fault at the site and its potential ramifications for the project; evaluations of the cut slope at the eastern corner of the site and its potential for instability, as well as appropriate mitigations; the potential for liquefaction and lateral spreading in the area where fill will be placed for the Port access road and which may extend into the Bay (Phase II); and assessment of the potential for bluff erosion along the coastal length of the project. This investigation will also provide feasible engineering and/or design solutions for these potential geologic impacts including the need for construction or augmentation of bluff protection and setback requirements from existing constraints.
 - b. The geotechnical engineering investigation shall be conducted by a Registered Geotechnical Engineer or a Registered Civil Engineer experienced in geotechnical investigations. In addition to the items that normally are addressed in such an investigation, the report should include, but not be limited to, the following factors: soil and groundwater conditions encountered; preparation of the site prior to grading; grading criteria for pavement and building areas; types and depths of foundations; maximum allowable bearing capacities; site coefficients for use in foundation design; potential for liquefaction; total and differential settlement; resistance to lateral loads; subslab ground treatment; design criteria for retaining walls; pavement design criteria; site drainage; assessment of the existing fill at the site, including the suitability of the materials used, original site preparation, and degree of compaction; the impact of placing fill upon the existing fills and appropriate mitigation; settlement potential of the fill and appropriate mitigation; and placement of fill over cut slopes and appropriate mitigation. This investigation will also provide feasible engineering or design solutions to these potential geologic impacts.
- G-3. There are five major landslides which have been identified on the Harbor Terrace site. These landslides are depicted as Landslides #1 through #5 in Figure 5.1-2. Specific recommendations related to each landslide are provided below as well as within the

Geologic Hazards Study incorporated by reference into this FEIR and available for review at the Harbor District offices.

- a. Landslide 1, located in the eastern region of the site, shall be thoroughly assessed by the project geologist. In addition to analyzing the inherent stability of the landslide, the impact of making cuts in the body of the landslide must also be considered, as well as the impact of the 40-foot fill planned in the southeast region of the landslide. This study shall be conducted as part of the final project design, when final grades have been set and are available in a grading plan, yet while modifications are still possible to accommodate site conditions. This study shall be conducted as a feasibility study to determine the major characteristics of the slide and the extent of required mitigation. Specific measures that could be implemented, depending upon the characteristics of the landslide and the relationship of the landslide debris to the proposed building locations, include excavation of appropriate portions of the landslide and replacement with compacted fill. This type of grading solution would entail benching, the installation of drains, and possibly the use of geogrid reinforcing. Fill slopes shall not exceed a 2:1 horizontal to vertical ratio. Other alternatives could include stabilization systems utilizing tie-backs or caissons or project redesign to relocate structures out of the slide area.
- b. Landslide 2, located in the northwest region of the site, shall be studied by the project geologist to determine its depth, activity level, and extent. This study shall be conducted as part of the final project design, as the relationship of the grading to the location and depth of the landslide will determine the appropriate mitigation(s). Possible mitigation measures for this landslide could include excavation of the landslide and replacement as a compacted fill, possibly with drains and geogrid reinforcement; increasing the height of the retaining wall to allow it to also function as a debris wall; or using another stabilizing system such as a tie-back system above the retaining wall in caissons.
- c. Landslide 3, located below the existing water tank, shall be analyzed to determine its depth and geometry and the effect of the proposed cut upon slope stability. This study shall be conducted as part of the final project design, as a fairly accurate depth of cut must be known to properly assess its impact upon slope stability. As major cuts are planned in this area, mitigation could be achieved by modifying the grading plan to remove all of the landslide debris. Other possible mitigations could include replacement with compacted fill, possibly with drains and geogrid reinforcement, use of a retaining wall, tie-backs, or caissons.
- d. The location of Landslide 4 has been obscured by past grading, and by the subsequent placement of a buttress fill. This landslide area shall be investigated as part of final project design with respect to the materials used and its state of compaction. Mitigation, if any, will be determined by the outcome of such an investigation. Possible mitigations include removal of the slide debris and replacement as a compacted fill, placement of additional buttress fill, or use of structural solutions such as retaining walls, tie-backs, or caissons. This assessment shall be conducted by the project geologist as part of final project design.

- G-4. In addition to the four major landslides described above, there are numerous smaller landslides and slumps located throughout the property. Landslide 5 will not be impacted by project development other than the possibility of decreasing the need for frequent maintenance due to the placement of fill and the subsequent increased distance between the landslide and the affected roadway. In areas where cuts are made, the project geologist shall determine whether all of the slide debris has been removed in each area. This determination should be made during project grading. If it is determined that slide debris remains in any areas, assessments regarding stability and any necessary mitigation measures shall be made at that time.
- G-5. In areas where cuts are planned, the stability of the proposed slopes shall be evaluated by the project geologist. This study shall be conducted as part of the final design, as the depths of the cuts must be known to accurately assess their impact upon slope stability. In the event that the slopes in their planned configurations prove unstable, there are several potential mitigation measures. These potential measures include flattening of the proposed slopes to a stable configuration, overcutting the slopes and rebuilding them as stable, compacted fill, and possibly structural applications, such as retaining walls, caissons, driven piles, and installation of geogrid reinforcement.
- G-6. The project geotechnical engineer shall conduct sufficient exploration of the existing fill during final project design to render an opinion regarding the suitability of the fill materials use, the degree of compaction, the settlement characteristics, and the strength of the fill materials. The stability and settlement potential of the fill, following the proposed grading shall also be assessed. If the results of this analysis indicate the existence of unstable soil materials, slope instability, inadequate compaction or excessive settlement potential, this situation shall be mitigated by project grading.
- G-7. The placement of fill over cut slopes is specifically addressed in the Uniform Building Code; the potential for slope failure can be readily mitigated by proper grading techniques in accordance with the Uniform Building Code.
- G-8. Slopes which involve new fill material over existing fill will require assessment by the project geotechnical engineer or geologist. Recommendations shall be developed as to the best method of mitigation. Such measures could include excavation of the cut slope and rebuilding the entire slope as a compacted fill, possibly utilizing drains and/or geogrid reinforcement. Recommendations from this shall be incorporated into the geotechnical engineering investigation or geologic study as part of the final project design.
- G-9. Detailed grading plans shall be prepared and submitted for all project phases which identify existing and proposed drainage channels and proposed final site configuration. Grading plans shall be in conformance with the County Coastal Zone Land Use Ordinance.
- G-10. It is recommended that on-site areas of sheared rock be evaluated by the project geologist and a determination made as to whether the sheared rock is fault-related. If the sheared rock zone is fault-related, the potential ramifications of the fault shall be studied and addressed by the project geologist. Potential mitigation measures to avoid seismic-related displacement include: setting back from the fault, structural augmentation of the foundation

where the fault is straddled or removing the bedrock and replacing it with compacted fill as the foundation support material.

- G-11. The entire length of bluff along San Luis Bay shall be assessed through a Stability Evaluation Report to determine the rate of bluff retreat and the characteristics of wave run-up. The need for setbacks or bluff protection shall be addressed by the project geologist in this assessment. The adequacy of the existing rip-rap structures shall also be assessed and a determination made as to whether augmentation is necessary to protect the proposed improvements. With respect to the fill planned to support the widened access road (Phase II), mitigation measures for erosion will include construction of a retaining structure at the toe of the fill, facing the fill with rip-rap, constructing the lower portion of the fill out of rip-rap, or other equivalent design solution.
- G-12. To mitigate the potential for excessive settlement of the proposed road fill, bay sediments shall be removed as necessary in order to place fill on the underlying competent rock. The depth to the rock, recommendations for overexcavation, and the precise design solution (i.e. retaining structure, use of rip-rap, etc.) shall be made by the geotechnical engineer as part of the final geotechnical engineering investigation.
- G-13. The further erosion of Avila Beach Drive at the entrance to Diablo Canyon shall be mitigated by the installation of engineered rip-rap or equivalent protective measures.

Residual Impacts

No additional mitigation measures are recommended to address impacts associated with geologic hazards on other Harbor District properties. With the implementation of the mitigation measures listed above, and the existing regulatory framework, geologic impacts would be reduced to less than significant levels (Class III). Because of the nature of California's seismic conditions, cumulative impacts associated with geologic hazards will always exist. Specific development projects will be subject to individual review at the time of proposal.

5.2 Drainage and Watershed Resources

Issues

This section of the Final EIR assesses the potential impacts to drainage and watershed resources associated with buildout of the Draft Port Master Plan. A watershed is a region, usually defined by ridgelines, which drains into a specified body of water. Watershed-related impacts are those associated with grading and drainage, erosion and water quality that may arise as a result of construction and occupancy of the facilities described in the Draft Port Master Plan. The alteration of drainage patterns can lead to water sheeting and erosion, which in turn may adversely impact downstream water quality and may increase flood hazards. Construction activities can further impact water quality through the accidental release of fuels and other toxic substances.

Setting

Regional Drainage Pattern

The primary surface drainage feature affecting San Luis Bay and the Avila Beach area is San Luis Obispo Creek, which drains areas north of the City of San Luis Obispo. The San Luis Obispo Creek estuary is located about two miles west of the Harbor Terrace planning area. Historically, flow within much of San Luis Obispo Creek has been absent primarily during the late summer months (July through October) of low rainfall years. High flows within the creek occur primarily during and immediately following significant storm events. The City of San Luis Obispo constructed a Wastewater Reclamation Facility (WRF) in the 1940s near the southern city boundary, and began direct discharge to the creek in the late 1960s. This 5.0 to 5.5 cubic feet per second (cfs) supplemental discharge flow has altered natural stream flow of San Luis Obispo Creek resulting in a perennial stream. Data from the San Luis Obispo County Engineering Department shows creek flow to range from 6.2 cfs in September to 124.9 cfs in March (Fugro West, 1995).

Stream flow volumes associated with flooding are generally discussed in terms of recurrence interval, which defines the frequency at which a given size flow is likely to occur. Therefore, a 100 year flood is the flow volume that is statistically expected to occur on the average of once every 100 years. The 100 year flood plain, as calculated using HEC-2 cross-sectional modeling accepted by the Federal Emergency Management Agency (FEMA), is generally used as a threshold to assess flood hazard for planning and insurance purposes. The 100 and 500 year floodplains of lower San Luis Obispo Creek is shown in Figure 5.2-1.

The Flood Insurance Study (FIS) conducted by FEMA for San Luis Obispo County notes that runoff from all the streams in the County is very small, with appreciable flows occurring only during and immediately after precipitation. However, during large storms, streamflow increases rapidly, and floodwaters can contain high amounts of debris, causing major flood damage. The last flooding event causing major flood damage in Avila Beach occurred in the spring of 1995.

Figure 5.2-1 Flood Hazard

Local Watersheds

The drainage basin immediately north of the Port that contribute runoff to San Luis Bay includes hillside areas of approximately 530 acres. Existing peak flows for this drainage area is estimated to be approximately 520 cubic feet per second (cfs). Figure 5.2-2 shows watershed boundaries affecting the project site.

Both Pecho Creek and Sea Canyon Watersheds affect the Harbor District area. Sea Canyon feeds San Luis Creek. The portion of the Pecho Creek watershed that drains toward the project site consists mostly of moderately steep to steep slopes with gradients between 15 percent and 45 percent. These slopes are covered by annual grasses, brush and oak trees. Slopes are drained primarily by sheet flow. The Diablo Canyon Road channel, a well-defined earth channel is a primary, natural channel connecting several smaller secondary channels. The downstream portion of this primary channel is partially improved with concrete lining. Additional downstream improvements include a 500-foot long, 5-foot diameter culvert that outfalls into San Luis Bay. Because there has been a history of overtopping at this culvert, there is potential for erosion damage at Diablo Canyon Road, Avila Beach Drive, and the San Luis Bay pipe outlet.

Soil coverage for much of the area involves a shallow well-drained layer of brown clay loam with an underlying layer of grayish brown clay loam and fractured sandstone. These soils have a moderately slow permeability; as such, water holding capacity is low or very low. Surface runoff for these soils and slope conditions is rapid and there is high potential for erosion and surface slides.

The Harbor Terrace planning area consists of steep slopes with gradients between 25 percent and 35 percent and is covered by annual grasses and moderate brush and oaks. There are areas of previously graded terraces that exist on the hillside east of Diablo Canyon Road. Terraces and slopes are drained primarily by sheet flow to a 500 foot long trapezoidal gunnite channel that discharges into a reinforced concrete headwall and a five foot diameter culvert.

Several seeps of groundwater have been identified on the Harbor Terrace site. Groundwater seeps have also been identified in soil borings at depths of 8 to 25 feet below grade, as well as in fractures within bedrock below this site. No groundwater wells exist on-site or downstream of this site. There is no known beneficial use of groundwater below the Harbor Terrace site. The soil characteristics and its proximity to the Pacific Ocean make the Harbor Terrace site a poor candidate for groundwater production.

Figure 5.2-2 Watersheds

Surface Water Quality

Surface water quality has been monitored in San Luis Obispo Creek by the City of San Luis Obispo at several locations. The creek has been monitored for water temperature, dissolved oxygen (DO), pH, turbidity, biochemical oxygen demand (BOD), and other constituents. The creek water quality data meets water quality criteria specified in the City's National Pollutant Discharge Elimination System (NPDES) permit (Fugro, 1995).

Improved drainage systems within the project area include the downstream portion of the Diablo Canyon Road channel. This channel is partially improved with a concrete lining. Additional downstream improvements include a 500-foot long, 5-foot diameter culvert that outfalls into San Luis Bay.

Geology and Soils

The geologic setting and soils associated with the Port are described in Section 5.1 of this FEIR.

Erosion and Sedimentation

Erosion is a natural process that occurs over time by either wind or water moving over soils. The natural erosion process is an important factor in building up fertile valley soils and beach sand along the coastline. However, soil erosion can become a problem when human activities accelerate the rate at which soils are being displaced. Non-point sources of erosion, such as impervious surfaces, unsound farming practices, over-grazing, construction activities, and road construction (particularly unpaved roads) can all accelerate the rate at which soils are removed from hillsides. Point sources such as industrial wastewater discharges, mining activities, wastewater treatment plants, commercial and residential land uses, and agricultural operations can affect erosion rates through increased stormwater velocity, disturbance of natural drainage patterns, and water discharges. Soil erosion can leave silt-choked streams, gullied hillsides, and damaged farmland.

Other Pollution Sources and Potential Hazards

Nonpoint sources of erosion and sedimentation can also degrade water quality by contributing excessive levels of organic nutrients and inorganic chemicals. These introduced materials can muddy water, and rob light and oxygen from plants and animals.

Regulatory Setting

Watersheds are protected by a number of federal, state and local laws and regulations, including, but not limited to:

- > Federal Water Quality Control Act
- > Porter-Cologne Water Quality Control Act
- > Regional Water Quality Basin Plans (Central Coast Basin – Region 3)
- > Rivers and Harbors Act

Under the authority of the Federal Clean Water Act and Porter-Cologne Act, the Central Coast Regional Water Quality Control Board (RWQCB) acts as the regional agency for the regulation of water quality on behalf of the State Water Resources Control Board. The RWQCB is responsible for the regional enforcement of water quality laws and coordination of water quality control activities. The Central Coast Basin Plan, prepared by the RWQCB, establishes water quality standards and

outlines a program for the control of nonpoint source pollution including erosion and sedimentation. Water quality standards and objectives relating to surface water include: color, taste and odor, floating/suspended material, settleable material, oil and grease, biostimulatory substances, sediment, turbidity, pH, dissolved oxygen, temperature, toxicity, pesticides, chemical constituents, other organics and radioactivity.

Existing Water Quality

The Port is operating under a number of National Pollutant Discharge Elimination System (NPDES) permits issued by the RWQCB in accordance with the Federal Water Quality Control Act. Potentially significant sources of water pollution are regulated to insure water quality standards in streams and other surface watercourses are maintained.

Thresholds of Significance

The *State CEQA Guidelines* state that a project will have a significant impact if it will:

- > Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level; or,
- > Substantially alter the existing drainage pattern of the site or area, through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; or,
- > Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or,
- > Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within such a zone structures which would impede or redirect flows; or,
- > Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.
- > Violate any water quality standards or waste discharge requirements; or,
- > Substantially degrade water quality (e.g., through runoff).

Impacts to water quality were determined to be significant if project implementation would not comply with surface water quality objectives established by the Regional Water Quality Control Board (RWQCB) in Chapter 3 of the Water Quality Control Plan, Central Coast Region.

Impacts

Impact W-1 Construction of the various facilities identified in the Draft Port Master Plan will increase the amount of impervious surfaces at the project site, thereby increasing the volume and velocity of runoff, and the potential for erosion on and off the site. The increased runoff could increase the potential for sedimentation in the Pacific Ocean. This impact is considered significant unless mitigated (Class II).

Implementing the Port Master Plan will involve the construction of parking and driveways, sidewalks, and buildings. All of these impervious surfaces will increase the amount and velocity of runoff leaving the site to surrounding drainage systems, which in turn could accelerate erosion of the soils at the project site. This is considered a significant adverse impact unless mitigated.

Degradation of water quality in San Luis Bay could occur from increased sediment load caused by erosion and from heavy metals and other hazardous substances washed from parking lots. Silt and sediment loads are deposited by storm water anywhere the water velocity slows. This might occur naturally in pools of the creek or at culvert entrances or outlets. Silt and sediments accumulating at these points could adversely affect creek habitat and the capacity of the creek to carry runoff. This is considered a significant adverse impact unless mitigated.

Impact W-2 Heavy metals and other hazardous materials washed from the surface of parking lots and roadways could enter the ocean during a rainstorm. This impact is considered significant unless mitigated (Class II).

When a site is developed with facilities for automobiles, the potential exists for pollution of storm water runoff is created. The sources of pollution are the hydrocarbons used by the automobiles and hydrocarbons in the asphalt. The primary concern in this case is the potential to increase pollutants entering San Luis Bay. According to Controlling Urban Runoff, published by the Metropolitan Washington Council of Governments, storm water sampled in the study area contained between 2 and 10 milligrams of pollutants per liter. The pollutant load generated at the project site will likely vary (be lower than) these factors because:

- The test sites used in the study were from highly urbanized areas with a higher potential for hydrocarbon pollution; and
- Vehicles utilizing the project's parking lots will be parked, thereby reducing pollutants emitted by the vehicle's exhaust.

When the extent of development exceeds five acres, a Stormwater Pollution Prevention Plan (SWPPP) is required which will further reduce the significance of these potential impacts. Nonetheless, the potential for hazardous materials entering San Luis Bay is considered a significant adverse impact unless mitigated.

Impact W-3 Activities associated with construction (including excavation and grading) of facilities associated with the Draft Port Master Plan would increase the potential for erosion. This impact is considered significant unless mitigated (Class II).

Excavation and grading activities will expose soil to wind and water, thereby increasing the potential for erosion, especially if construction activities occur during the rainy season. This is considered a significant adverse impact unless mitigated (Class II).

Impact W-4 Construction activities could result in the release of oil, engine fuel and other toxic substances into nearby San Luis Bay, adversely affecting water quality. This impact is considered significant unless mitigated (Class II).

Oil, fuel and other toxic substances have the potential to enter surface waters if construction equipment is improperly maintained and leaks occur at the site. Accidental spills may also result in the release of these substances. This impact is considered significant and adverse unless mitigated (Class II).

Mitigation Measures

Additional Mitigation Measures

- D-1 Measures to be considered for the mitigation of potential drainage, erosion, seepage and water quality impacts associated with new development include, but are not limited to:
- > The incorporation of on-site runoff collection systems which includes energy dissipation, berms, temporary settling basins, and/or a silt/hydrocarbon separator for the collection and removal of hazardous materials and sediments.
 - > The incorporation of on-site drainage systems to collect runoff from all impervious onsite services, including parking spaces, roads and buildings.
 - > The incorporation of offsite retention basins with appropriate water quality controls.
 - > Surface runoff should be collected by curbs, gutters and drainage swales and conveyed to an appropriate point of disposal. Discharges of greater than five feet per second should be released through an energy dissipator or outlet.
 - > The incorporation of sub-surface drains to intercept seepage and convey it to an acceptable point of disposal.
 - > Watering any construction sites at least twice per day during construction, or more frequently if determined necessary by the Harbor District.
 - > Re-vegetating portions of sites exclusive of paved areas as soon as reasonable following grading.
 - > Incorporating rain gutters and downspouts for buildings with adequate splash guard protection.
 - > Grading surfaces adjacent to buildings so that runoff is conveyed away from foundations and onto paved surfaces or underground collection pipes.
- D-2 Prior to the commencement of new construction activities, a General Construction Activity Storm Water Permit from the Regional Water Quality Control Board (RWQCB) shall be obtained. As part of this permit, a storm water pollution prevention plan shall be prepared specifying Best Management Practices (BMPs) for erosion control and stormwater pollutant discharge control during any construction activities. For all project components, grading and drainage plans shall incorporate BMPs for erosion control and stormwater pollutant

- discharge control. This may also serve to reduce non-project-related sediment loads further downstream.
- D-3 All newly constructed impervious surfaces, including parking spaces, streets and roads, and storage lots, shall drain to an underground storm drainage system or improved channel. Surface runoff will be collected by curbs, gutters and drainage swales to storm drain pipe inlets. Runoff will be kept underground until it is released to a graded or improved natural channel. Discharges greater than five feet per second will be released through an energy dissipator structure at the drainage system outlet.
- D-4 New roadside shoulders beyond the edge of pavement shall only be used for minor road embankment runoff and emergency overflows from underground pipe systems. Additional drainage swales, inlets and channels will be provided on grading plans in order to handle sheet flows that would otherwise be directed across roads.
- D-5 The following grading procedures shall be included in order to minimize the potential for drainage and erosion problems on slope banks:
- > Locate terrace drain ditches at the top of fill slopes greater than a gradient of 4 horizontal to 1 vertical. Allow only surface runoff which is incidental over the face of a fill slope.
 - > Include terrace drains and velocity dissipators on existing and proposed slopes greater than 35 feet in height.
 - > Install wicks, subdrains or other improvements, as necessary, to insure that groundwater seepage does not occur on man-made slopes.
- D-6 All areas disturbed by grading activities shall be seeded with native or naturalized grasses to reduce dust emissions and erosion.
- D-7 New storm drain inlets and pipe systems shall be added along the edge of the bluff to prevent flows from being released onto unprotected slopes.
- D-8 A site-specific erosion control and temporary revegetation plan shall be developed for all new grading. This plan shall include erosion control devices to be installed prior to the beginning of the rainy season (October 15).
- D-9 Prior to grading operations, application for a construction Storm Water Discharge General Permit shall be submitted to the Regional Water Quality Control Board. This permit request will be accompanied by an indication of construction site erosion control practices, soil tracking control methods and practices, and moisture control of surfaces for dust control.
- D-10 An erosion and sedimentation control plan as required by the National Pollution Discharge Elimination System permit shall be prepared for all new construction. This permit request will comply with all the drainage protection measures and procedures of the on-site Storm Water Pollution Prevention Plan (SWPPP).
- D-11 A Revegetation Plan shall be prepared for all newly graded areas. The goal of this plan is to (1) ensure that sediment is not eroded and transported off-site; and (2) upon completion of construction, to re-establish vegetation compatible with surrounding native plantings.

- D-12 Additional rock dissipator protection shall be provided at new culvert outlets along Avila Beach Drive and at the existing 5 foot diameter culvert for the Diablo Canyon Road channel.
- D-13 Additional rock protection along the shoreline (Avila Beach Drive) will be added to provide protection of the new and existing slopes during high surf conditions.
- D-14 Prior to approval of new grading plans or grading permits, the applicant shall show the following note on grading and drainage plans:

No construction work will be permitted in any flowing channel and no graded material or debris will be placed within existing storm drain channels. All work within seasonally dry streambeds shall be in accordance with permits issued by the County of San Luis Obispo and the Regional Water Quality Control Board.

Residual Impacts

Implementation of the mitigation measures described above will reduce potentially significant impacts to a less than significant level.

5.3 Cultural Resources

Issues

This section of the FEIR assesses the potential impacts to cultural and historic resources that could result from development of properties and facilities associated with the Draft Port Master Plan.

Setting

Pre-history

The project area lies within the historic territory of the Native American Indian group known as the Chumash. The Chumash occupied the region from San Luis Obispo County to Malibu Canyon on the coast, inland as far as the western edge of the San Joaquin Valley, and the four northern Channel Islands (Grant 1978). The Chumash are further divided into factions based on six distinct dialects: Barbareño, Ventureño, Purisimeño, Ynezeño, Obispeño, and Island. The Obispeño were the northernmost Chumash group, occupying much of San Luis Obispo County, including the Cal Poly area. The name Obispeño is derived from the mission with local jurisdiction, San Luis Obispo de Tolosa.

The archaeological record indicates that sedentary populations occupied the coastal regions of California more than 9,000 years ago. Several chronological frameworks have been developed for the Chumash region including Rogers (1929), Wallace (1955), Harrison (1964), Warren (1968), and King (1990). King postulates three major periods -- Early, Middle and Late. Based on artifact typologies from a great number of sites, he was able to discern numerous style changes within each of the major periods. The Early Period (8000 to 3350 Before Present [B.P.]) is characterized by a primarily seed processing subsistence economy. The Middle Period (3350 to 800 B.P.) is marked by a shift in the economic/subsistence focus from plant gathering and the use of hard seeds, to a more generalized hunting-maritime-gathering adaptation, with an increased focus on acorns. The full development of the Chumash culture, one of the most socially and economically complex hunting and gathering groups in North America, occurred during the Late Period (800 to 150 B.P.).

The Chumash aboriginal way of life ended with Spanish colonization. As neophytes brought into the mission system they were transformed from hunters and gatherers into agricultural laborers and exposed to diseases to which they had no resistance. By the end of the Mission Period in 1834, the Chumash population had been decimated by disease and declining birthrates. Population loss as a result of disease and economic deprivation continued into the next century. Today many people proudly claim Chumash ancestry and take an active interest in promoting their culture and protecting archaeological evidence of their ancestors.

The Avila Beach area has a large site (SLO-56) which was occupied for over 5,000 years. It was also the location of a Mission Period village, named *Sepjato*, which was occupied as late as 1804. Following an annual cycle of hunting, fishing, fowling and harvesting, the Chumash people adapted to changing environmental and social conditions and grew into a large complex society. Aboriginal society underwent major changes soon after Spanish contact in 1769, primarily due to the introduction of epidemic European diseases and the consequent high mortality rate. Most of the

Chumash from rancherias in the general area were baptized at San Luis Obispo Mission between 1772 and 1805.

History

In 1769 Gaspar de Portola and Father Junipero Serra departed the newly established San Diego settlement and marched northward toward Monterey with the objective to secure the port and establish five missions along the route. The Portola expedition passed through present day San Luis Obispo County that same year. The closest mission to the project site is Mission San Luis Obispo de Tolosa founded in 1772 (Krieger 1985).

The San Miguelito Rancho of 22,136 acres of land borders San Luis Bay. This area was granted in 1867 by the Mexican Government to Don Miguel Avila. The town of Avila was laid out by the Avila brothers on the lands adjacent to the sandy beach overlooking the bay. In 1868, John Harford and associates charted the People's Wharf Company to construct a deep water wharf to serve coastal shipping. At Avila Beach, near Point San Luis, the "People's Wharf" (located 400 feet east of the present pier), held two large warehouses, a hotel and a 2 ft. 6 in. narrow gauge horse-drawn railroad to connect the wharf with the County road at Avila. The railroad was completed in 1873. This became the first narrow gauge railroad in California. The San Luis Obispo Railroad was incorporated in 1873 to build a 3 foot narrow-gauge railroad from Avila to San Luis Obispo, but construction only progressed as far as Miles Station which was the homestead of W. Miles and then a stage stop and horse change on the County highway, before funds ran out. At this point, Charles Goodall of San Francisco bought out Harford and the San Luis Obispo Railroad, and in August 1876, completed the 10.75 mile line to San Luis Obispo. The railroad tracks were located along the general area of Avila Beach Drive immediately south of the Harbor Terrace project site.

Avila Beach has been a popular attraction for the residents of San Luis Obispo with structures being constructed as early as 1869. In 1908-1910, commercial establishments were constructed along Front Street. In 1924, electricity led to the rapid growth of the town of Avila Beach.

Passenger train service in 1930 was reduced to twice a week to Los Olivos; on the rest of the days the train turned around at Orcutt. By 1934, regular service had ended and all trains were "extras". Service was suspended between Los Alamos to Los Olivos in 1933 and the branch was abandoned in 1935. All passenger service was discontinued in 1937. The tracks all the way to Port San Luis were pulled up and salvaged in 1941-42. Many of the rails and much of the hardware were shipped to Hawaii and the Southwest Pacific for use at naval supply bases during World War II.

Site-specific Setting

A large Chumash village site located on the northwest side of San Luis Creek at about 50 feet above sea level has been recorded as SLO-56. This site contains artifacts spanning various time periods during the past 5,000 years.

In addition to the large site at SLO-56, a second cultural site was discovered off shore. As mapped in 1962, this underwater site varied in depth below the surface from six to about 18 feet. It was originally located on the northwest side of San Luis Obispo Creek.

Additional surveys have recorded a number of smaller prehistoric sites in the Wild Cherry Canyon, located immediately east of the Harbor Terrace project area and on the terraces just north of the

town of Avila Beach. Sites in these areas are much smaller and more specialized than the large sites observed at SLO-56 and SLO-773 (see description below).

An archival records search conducted for the Harbor Terrace site (including an area approximately one-half mile beyond its boundaries) indicated the existence of twelve recorded archaeological sites. Of this total, three sites were recorded near or within the Harbor Terrace site boundaries. These three sites have been previously recorded (from prior area surveys conducted in 1977 and 1991) as SLO-773, SLO-756, and SLO-757. Recent walkover surveys (1996) of the Harbor Terrace site and adjacent areas confirmed the location and mapped the boundaries of these three archaeological sites. No new historic or prehistoric archaeological sites were discovered on or adjacent to the Harbor Terrace site during these most recent on-site walkover surveys. These three archaeological sites are described below.

Site SLO-773. SLO-773 covers the entire terrace west of the intersection of Avila Beach Drive and Diablo Canyon Road. Its boundaries can be defined by the flatter landform of the terrace. Preliminary assessment of this site in 1977 indicated that it was a major village site, probably dating to post 1500 A.D. It contains evidence of a full range of cultural activities associated with a permanent Chumash village including one or more cemeteries.

This historic and prehistoric site is located immediately west of Diablo Canyon Road on a south sloping terrace. The top of the terrace measures approximately 115 meters N/S and 40 meters E/W and displays a dark gray to black sandy soil with abundant shell fragments and burnt rock. The terrace contains a least four levels with a prehistoric cemetery on the top level and former residential areas on the lower terraces. It was found to contain a wide range of ground stone and chipped stone artifacts and one Olivella bead fragment that may be a lipped bead dating to post 1500 A.D. It is probably a site occupied during the Mission Period. The site is probably the largest, deepest, and most significant remaining prehistoric site in the Avila Beach/Port San Luis area. The cemetery has also been used in the late 1970's (and possibly more recently) by Native Americans for reburials and ceremonial interments.

No cultural materials were observed along the west side of Diablo Canyon Road where the project boundary extends as much as 100 feet west of the existing pavement. This area contains dense vegetation and is at the bottom of the slope that contains SLO-773. A narrow stairway is located just northwest of the intersection of Diablo Canyon Road and Avila Beach Drive and extends part way up the slope towards SLO-773. This stairway leads to the Pecho Coast trail. Pursuant to a Special Use Permit issued in 1985 by the California State Coastal Commission, this trail is subject to "managed access" rather than being a public trail (one of the few "managed access" trails within the entire State of California). Only two hiking groups are allowed per week. The size of the group is restricted to a maximum of 20 persons. The group is accompanied by a minimum of two docents. The design and installation of the trail was completed with the involvement and supervision of a qualified archaeologist and representatives of the local Chumash tribe. Potential entry to the stairway is under constant supervision by the guard at the Diablo Canyon Road/PG&E entry gate located near the stairway entrance. These measures are intended to protect and preserve cultural resources within SLO-773. Previous road construction of Avila Beach Drive probably removed a portion of this cultural deposit and any modification of the cut slope could disturb the top of the slope and consequently impact SLO-773. Both of these areas, adjacent to the pavement could contain displaced cultural materials from upslope where the intact cultural deposit of SLO-773 is located.

Site SLO-756. This prehistoric site is located on top of a terrace overlooking San Luis Bay. It lies east of Diablo Canyon Road and north of a water tank at the north end of the Harbor Terrace project site. The surface of the site displays a dark gray sandy soil with light to moderate densities of shell fragments and occasional chert flakes, some pitted stones, and one mano. General shell types noted include turban shell, mussel, barnacles, slipper shells, chitons, bent noted clam, other clam species, and crab. The midden is estimated to be only about 40 cm. deep and is covered by grasses and coyote bush. Based on the surface distribution of the shell fragments, the site is estimated to measure approximately 80 meters by 100 meters. The site is located between 310 feet and 390 feet in elevation. From the north side of the existing water tank and top of the cut for the tank pad, this site is located approximately 15 meters upslope to the first shell fragments of SLO-756.

Site SLO-757. The prehistoric site is located on the same ridge as SLO-756 and lies approximately 150 meters to the southeast. It is located east-southeast of the water tank site and overlooks the existing trailer park to the south. This prehistoric site is similar in appearance to SLO-756 in that it also possesses a dark gray sandy soil with light to moderate densities of the same types of shell fragments and occasional chert flakes, some other chipped stone tools and one mano. The midden is estimated to be only about 50 cm. deep and is covered by a moderate dense cover of grasses and coyote bush. Based on the distribution of the shell fragments, the site is estimated in 1977 to be about 50 meters by 100 meters. This archaeological site is located between 340 feet and 380 feet elevation. The site is at least 200 to 300 feet north and east of the property line of the Harbor Terrace site.

The precise size and period of occupation of sites SLO-756 and SLO-757 cannot be fully defined. The extent of these two sites is defined by observed shell fragments and isolated stone flakes. These types of artifacts are indicative of two separate activity areas located adjacent to each other, a common pattern is Obispo sites. One is an area for food preparation and consumption associated with living areas and trash dumps. These areas are marked by shellfish fragments, burnt rock, ground stone tools, simple scraping and cutting tools, and some flakes. The other area is for tool manufacturing activities and is characterized by an absence of shell, bone, burnt rock and ground stone tools. More common are biface blanks, biface thinning flakes, hammerstones, and various stone tools. According to the project archaeologist, it is probable that both sites, SLO-756 and SLO-757 are much larger than originally mapped. They could be connected but based on landform probably do not extend south on the steeper slopes and into the Harbor Terrace site.

Based upon a comparison of resources found on other archaeological sites in the San Luis Bay area, these two sites display an absence of artifacts (native oyster shells) which would indicate that these sites pre-date the extinct lagoon which previously existed at the mouth of San Luis Creek. Otherwise, the precise period of occupation of these two sites, SLO-756 and SLO-757 is unknown.

All three of these prehistoric cultural sites identified during the surface survey of the Harbor Terrace site were largely intact cultural deposits. Guidelines for evaluation of cultural resources has been developed by the State of California as part of the California Environmental Quality Act (C.E.Q.A). Based on the surface information gathered from these three sites, SLO-773, SLO-756, SLO-757, and a general review of other information from sites in the Avila Beach and Port San Luis area, all three sites would fall within the following definitions of important archaeological resources. These sites:

- a. "are associated with an event or person of recognized scientific importance in prehistory;"
- b. "can provide information which is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable archaeological research questions;"
- c. "have a special or particular quality such as oldest, best, largest, or last surviving example of its kind;"
- d. "are at least 1000 years old and possesses substantial stratigraphic integrity;" or
- e. "involve important research questions that historical research has shown can be answered only with archaeological methods."

No evidence was noted along the southern edge of the Harbor Terrace project site of the Pacific Coast Narrow Gage Railroad. This historical resource was probably removed during the construction of Avila Beach Drive.

Harford Pier

In 1873, John Harford built the Harford wharf. Using horses, he offloaded schooners and imported cargo and sold the goods in San Luis Obispo and northern Santa Barbara County. Ships carrying supplies, mail and passengers laid alongside the Harford Pier. Harford eventually sold his enterprise to Charles Goodall for \$30,000 , including the land west of San Luis Creek all the way to the Port.

In 1876 the Marre Hotel was built to service waiting passengers. The federal breakwater, funded by congressional action, was built between 1893 and 1913 to provide a safe anchorage at the wharf. Cattle and agricultural goods were exported while lumber and dry goods were imported to the area.

In the 20's smugglers used the Port for illegal nighttime movement of liquor. Large quantities of liquor came ashore in the area now know as Pirates Cove. The local commerce fell on hard times at the onset of the Depression and the Port fell into disrepair. Harford Pier suffered from neglect and there was no money for necessary maintenance. The railroad and pier was sold to Elton Tognazzini in 1942 for \$17,265.

In 1954 the citizens of southern San Luis Obispo County voted to create and fund a Harbor District for the Port San Luis area. It was hoped that this action would provide for a method to fix up the old facilities and create some commerce for the south county. In 1955 the State Legislature granted the Harbor District the area's tidelands in trust. Tognazzini sold his property, including the Harford Pier, to the Harbor District for \$500,000 in the late 1950's. The Harbor District used a loan from the State Department of Boating and Waterways to purchase the property. Currently, Harford Pier is mainly used for launching and unloading fishing boats but also serves as a place for the public to visit and fish off of. Visitors can eat at The Olde Port Inn on the pier which serves fresh seafood.

Point San Luis Light Station

In 1867, President Andrew Johnson signed an executive order directing the Department of the Interior "to take the necessary steps to cause the reservation for Light House purposes of an area not exceeding twenty acres of land at each of the following named points on the Pacific Coast" including "Point San Luis". After several delays, work at the station was completed in June 1890, and the light

was officially lit for the first time on June 30, 1890. The completed Victorian structure with 40-foot tower and fourth-order Fresnel lens stands just outside the harbor. An assistant keeper's dwelling, fog signal building (a 10-inch steam whistle), and small wharf were built nearby. The site also contains an oil house, two cisterns, a privy, workshop, and dwellings added in the 1960s.

The station continued operations for more than 80 years with only minor changes. The steam fog signal system was replaced with a compressed air system in about 1915 and the kerosene lamp in the tower was replaced with an electric light in 1933. During World War II, a radio listening station was built in front of the lighthouse and a second duplex was built just east of the original double dwelling. In 1961 the original double dwelling was replaced with a modern wood-frame duplex. It was reported that the Coast Guard simply pushed the original building over the cliff and into the ocean with a bulldozer. In 1969 the Fresnel lens was retired and replaced by an automated electric light. In 1974 the Coast Guard closed the station.

After much work, in 1992, the Port San Luis Harbor District received the 30-acre site from the Federal Government with the requirement that the station be restored and opened to the public. In 1995, the Point San Luis Lighthouse Keepers non-profit corporation was formed to take on this responsibility. In 2000, the Lighthouse Keepers prepared a Historic Structures Report and Treatment Plan for the renovation of the station and conversion to a museum. All development within the Lightstation Planning Sub-Area must adhere to the National Park Service approved Treatment Plan and documents of Utilization and Acquisition, as well as all other applicable LCP standards.

Thresholds of Significance

The State of California has formulated laws for the protection and preservation of historic and archaeological resources. Generally, a cultural resource shall be considered to be "historically significant" if the resource meets the criteria for listing on the California Register of Historic Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:

- > Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- > Is associated with the lives of persons important in our past;
- > Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- > Has yielded, or may be likely to yield, information important in prehistory or history.

The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

If the project may cause damage to a significant archaeological resource, the project may have a significant effect on the environment. Section 15064.5 of CEQA pertains to the determination of the significance of impacts to archaeological and historic resources, and provides guidelines for administering to archaeological resources that may be adversely affected by project development in Section 151226.4. Achieving CEQA compliance with regard to treatment of impacts to significant

cultural resources requires that a mitigation plan be developed for the resource(s). Preservation in place is the preferred manner of mitigating impacts to archaeological resources.

Impacts

Impact C-1: Development of facilities in accordance with the Draft Port Master Plan could unearth or disturb previously undiscovered resources of cultural or historic significance. This impact is considered significant unless mitigated (Class II).

As discussed above, native peoples were known to inhabit the Port area and several archaeological sites have been documented by previous investigations. However, since an archaeological survey can only confidently assess the potential for encountering surface cultural resource remains, there is a possibility that buried cultural resources could be exposed during project construction.

Impact C-2: Development of facilities on Harford Pier could alter the historic character of the Pier. This impact is considered significant unless mitigated (Class II).

Harford Pier is an historic structure of local significance. New development could adversely affect the historic character of the Pier.

Impact C-3: Development of facilities near the Port San Luis Lighthouse could alter the historic character of the lighthouse and its setting. This impact is considered significant unless mitigated (Class II).

The San Luis Light Station is listed in the National Register of Historic Places, reference #91001093. New construction could adversely affect its historic character and significance.

Mitigation Measures

Response of the Final Master Plan

Chapter 3, the Policy Master Plan provides the following policies:

All development within the Lightstation Planning Sub-Area is to be in conformity with the approved National Park Service approved Treatment Plan and documents of Utilization and Acquisition, as well as all other applicable standards of the Local Coastal Program and the State Office of Historic Preservation. And,

Incorporate decisions and implementation measures that conserve cultural and historical resources in development of affected Port properties.

Maintain and improve Harford Pier in accordance with the historic character and use of the facility as well as the adopted Harford Pier Design Guidelines.

Design guidelines included in the Final Master Plan set forth the Harbor District's expectations for the qualities and character desired in new development and address such issues as structure location and design, lighting, signage, setbacks, aesthetics, screening and fencing, landscaping and transportation features.

Additional Recommended Measures

- C-1 In the event archaeological resources are unearthed during project construction, all earth disturbing work within the vicinity of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume. A Chumash representative should monitor any mitigation work associated with prehistoric cultural material.
- C-2 If human remains are unearthed, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC).

Residual Impacts

If cultural resources are unearthed during project construction, implementation of the above measures is anticipated to reduce any potential significant impacts to a less than significant level.

5.4 Noise

Issues

Construction activities associated with facilities accommodated by the Draft Port Master Plan could adversely impact nearby noise-sensitive uses.

Setting

Characteristics and Measurements of Noise

How Noise is Measured

Environmental noise is frequently measured in decibels (dB). The A-weighted decibel (dBA) refers to the human ear's sensitivity to sounds of different frequencies. On this scale, the sound level of normal talking is about 60 to 65 dBA. Because people are more sensitive to night time noise, sleep disturbance usually occurs at 40 to 45 dBA.

There are two measurement scales used to account for a person's increased sensitivity to nighttime noise: the Community Noise Equivalent Level (CNEL) and the day/night average level (Ldn). These scales apply the A-weighted decibel to measure the average level of noise that occurs throughout a 24-hour period. The CNEL and the Ldn apply a weighting factor to evening and night time values to account for greater sensitivity to noise during these times.

There are three variables considered when measuring sound: the magnitude, frequency and duration. The magnitude of sound is the apparent loudness, the frequency is the number of times per second an object produces the sound vibrates, and duration is how long a steady noise occurs. Different variations of magnitude, frequency and duration can influence how noise will affect a population.

Health Effects of Noise

Excessive noise cannot only be undesirable but may also cause physical and/or psychological damage. The amount of annoyance or damage caused by noise is dependent primarily upon three factors: the amount and nature of the noise, the amount of ambient noise present before the intruding noise, and the activity of the person working or living in the noise source area. Noise impacts can be characterized as auditory or non-auditory. Auditory effects include interference with communication and, in extreme circumstances, hearing loss. Non-auditory effects include physiological reactions such as change in blood pressure or breathing rate, interference with sleep, adverse affects in human performance, and annoyance (see Figure 5.4-1).

Generally, noise levels diminish as distance from the noise source increases. Some land uses are more sensitive to noise than others. Noise sensitive land uses are generally defined as residences, lodging, schools, hospitals, nursing homes, churches, meeting halls, office buildings and mortuaries.

Sensitive Receptors

Land uses that are listed in the San Luis Obispo County General Plan Noise Element are considered when measuring the effects of noise. "Sensitive receptors" include residences, recreational areas, transient lodging (hotels, motels, etc.), hospitals, nursing homes, convalescent hospitals, schools, libraries, houses of worship, and public assembly places. Noise receptors within the community of Avila Beach and along Avila Beach Drive and San Luis Bay Drive, with distance to the road indicated, are shown in Table 5.4-1.

Other sensitive receptors on Harbor District property are the five remaining mobile homes on the Harbor Terrace site.

Table 5.4-1: Sensitive Receptors in the Avila Beach Planning Area

Source: Arthur D. Little, Inc., 1997

Sensitive Receptor	Distance (Feet)	Distance From
Lodging/Businesses in Avila Beach	20	Front Street
Recreational beach areas	20	Front Street
Residences in Avila Beach	20-100	Front Street
Avila Hot Springs and RV Park	50	Avila Beach Dr.
Sycamore Hot Springs	150	Avila Beach Dr.
San Luis Bay Golf Course Club House	700	Avila Beach Dr.
Residences near San Luis Bay Drive	100	San Luis Bay Drive

Background Noise Sources

Existing noise levels in the project area due to transportation and stationary sources have been compiled as contours in the San Luis Obispo General Plan Noise Element (SLO, 1992a). The major source of noise in the region is traffic. Noise levels from traffic are detailed in the Noise Element with noise contours generated from the Federal Highway Administration (FHWA) traffic model and existing data on traffic volumes and types. Noise levels due to traffic are shown in Table 5.4-2 for the principal transportation routes in the area.

Table 5.4-2 Noise Levels Due To Traffic

Source: SLO, 1992a

	Distance to Noise Level, Feet					
	Existing dBA			Future dBA		
Road	70	65	60	70	65	60
Avila Beach Drive	48	103	222	70	151	325
San Luis Street	8	18	38	13	28	61
San Luis Bay Drive	25	53	114	42	90	193
Highway 101	212	457	986	300	645	1,391

Background noise levels were obtained both from the Noise Element Technical Reference Document and from in-field noise monitoring conducted as part of this study. The Noise Element Technical Reference Document conducted a community noise survey at 41 locations throughout San Luis Obispo County in 1990. One of these locations was on Avila Beach Drive 0.5 miles west of San Luis Bay Drive. The noise levels at this location during the noise survey are summarized in Table 5.4-3.

Table 5.4-3: Noise Levels at Avila Beach Drive

Source: SLO, 1992b

Location	Noise Level dBA				
	L _d	L _N	L _{max}	L _{min}	Estimated L _{dn}
Avila Beach Drive South of San Luis Bay Drive	41	42	59	32	46-50

Baseline noise data for this project involved monitoring noise levels for 10 minutes during the day and night at 12 locations in the Avila Beach area. The data collected included L_{eq}, maximum levels, and minimum levels. Noise sources associated with the maximum reading were generally produced by ocean surf and traffic on nearby roads. Background noise levels measured in the study area are shown below in Table 5.4-4.

Table 5.4-4 Baseline Noise Levels in the Avila Beach Planning Area

Source: Arthur D. Little, Inc., 1997

Location	Noise Level dBA					
	Day			Night		
	L _{eq}	L _{max}	L _{min}	L _{eq}	L _{max}	L _{min}
Beach, south of San Juan	65.2	81.1	56.7	64.4	72.2	49.6
Beach, south of San Miguel	67.7	83.0	59.6	66.3	72.0	49.8
Beach, south of San Antonio	66.8	74.4	61.4	67.8	74.5	54.4
Corner San Juan and First Streets	59.0	74.9	47.3	54.8	78.3	42.9
Corner San Miguel and First Streets				50.0	61.3	42.7
Corner San Miguel and Front Streets	61.7	79.2	53.6	58.3	69.8	47.3
Corner San Antonio and First Streets	54.1	75.4	44.5	46.0	54.3	40.4
San Miguel Street across from Civic Association Center	58.9	75.5	44.0	45.4	57.2	41.9
Corner San Antonio and San Luis Streets	64.1	82.6	41.6	46.3	69.0	30.7
Corner San Luis Bay Drive and Avila Beach Drive	70.4	88.8	44.0	57.0	79.4	29.9
Bellevue-Santa Fe School parking lot	52.9	67.9	38.0	40.3	54.7	31.6
Sycamore Hot Springs Resort parking lot	54.6	66.4	42.3	48.3	66.3	34.4

Ambient noise levels were measured on the Harbor Terrace site in 1995 and are considered representative of the Port/Harford Pier/Harbor Terrace planning areas. The results of these ambient noise measurement levels are presented in Table 5.4-5: Ambient On-Site Noise Measurement Results, and indicate that the project site lies within a fairly quiet environment. The ambient noise on the project site is approximately 49.8 dBA for an L_{eq} noise level and 67.3 dBA for a maximum (L_{max}) noise level. The L_{max} was due to a utility truck passing through the existing materials lay-down yard. Other noise sources influencing the on-site noise measurements were dredging operations at

the harbor, a high altitude aircraft overflight, an occasional car from the nearby Diablo Canyon Road, birds and other typical outdoor noise sources.

Table 5.4-5: Ambient Noise Levels on the Harbor Terrace Planning Area

Source: Douglas Wood & Associates, 1995

Percentile Noise Levels (dBA)		
Leq	Lmax	Lmin
49.8	67.3	32.4

Thresholds of Significance

County of San Luis Obispo.

The San Luis Obispo County Noise Element establishes land use compatibility guidelines as indicated below in Table 5.4-6 for transportation source activities. The guideline levels are a function of the sensitive receptor land use and indoor or outdoor receptors.

Table 5.4-6: Transportation Source Noise Exposure Guidelines

Source: SLO, 1992a

Receiving Land Use	Transportation Source: Maximum Allowable Noise Level		
	Outdoor Activity Ldn	Indoor Activity Ldn	Indoor Activity Max hour Leq
Residential, hotels, motels	60	45	--
Public assembly and entertainment	--	--	35
Offices	60	--	45
Churches, meeting halls	--	--	45
Schools, libraries, museums	--	--	45
Outdoor sports and recreation	70	--	--

The San Luis Obispo County Noise Element also establishes maximum allowable noise exposure levels for stationary activities. Unlike those for transportation sources, these maximum allowable levels are not a function of the land use of the sensitive receptor. During the daytime (7:00 a.m. to 10:00 p.m.), the hourly L_{eq} should not exceed 50 dB, the maximum level should not exceed 70 dB, and impulse noise should not exceed 65 dB at any sensitive receptor. Nighttime levels are reduced by 5 dB for all categories (see Table 5.4-6).

Table 5.4-7: Stationary Source Noise Level Standards

Source: SLO, 1995

Criteria	Maximum Allowable Noise Exposure	
	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Exterior Standards		
Hourly L_{eq}	50	45
Maximum Level	70	65
Maximum Level, impulse	65	60
Interior Standards		
Hourly L_{eq}	40	35
Maximum Level	60	55
Maximum Level, impulse	55	50

Exceptions to the noise standards are provided in Land Use Ordinance 23.06.042. They include, among others, noise sources associated with construction between the hours of 7:00 a.m. and 9:00 p.m. on weekdays and 8:00 a.m. and 5:00 p.m. on weekends; traffic on public roadways; and the use of any mechanical equipment related to emergency activities.

Under most circumstances, instances of perceptible or annoying vibration are limited to locations near railroad rights-of-way or specific types of industrial activity (forges, large punch presses, pile drivers, etc.). Guidelines are available to assist in preparation of vibration criteria (such as the American National Standard S3.29-1983, "Guide to the Evaluation of Human Exposure to Vibration in Buildings").

San Luis Obispo Land Use Ordinance 23.06.060 establishes vibration standards. It states that any land use conducted in or within one-half mile of an urban or village reserve line is to be operated to not produce detrimental earth-borne vibrations perceptible at the lot line for a residential or office source or the boundary of the industrial category for an industrial source.

Exceptions to the standard include construction between 7:00 a.m. and 9:00 p.m. and noise generated from moving sources such as trucks or railroads.

Overall Increase In Community Noise Levels

In addition to the criteria described above, the significance of long-term noise (24-hour) can be assessed by comparing existing noise levels with those predicted to result with implementation of a project. In assessing community noise (Ldn or CNEL), long-term increases in noise levels of greater than 3 dBA are identified as perceptible, while changes of less than 1 dBA are generally not discernible to local residents or sensitive land uses. For purposes of this EIR, an increase greater than 3 dBA is considered a significant impact.

Figure 5.4-1 Common Noise Levels and Human Response

Impacts

Impact N-1 Noise associated with construction activities on District properties may adversely impact nearby noise-sensitive uses. This impact is considered significant unless mitigated (Class II).

Estimates of construction-related noise levels were derived by applying a noise generation factor (see Figure 5.4-2) to a typical range of construction equipment for a typical range of activities. These activities include site preparation (primarily grading), foundation construction (which includes the construction of wooden forms; placement of reinforcing bars, and the pouring of concrete) and structural and finish work (framing of buildings, installation of plumbing, electrical, gas and other utilities; roofing; installation of irrigation and landscaping). Onsite construction operations were assumed to occur for a maximum of 8 hours per day.

Site Preparation

Noise impacts associated with construction activities would typically occur in several distinct phases each with distinguishing noise characteristics. The first and noisiest is site preparation and grading, but this phase generally is the shortest duration. Site preparation activities may include earthmoving, digging into the bedrock and compaction of soils. High noise levels are created during this phase because of the operation of rock drills; heavy-duty trucks; backhoe; diggers and front-end loaders. Noise levels typically range from 73 to 98 dBA fifty feet from individual pieces of equipment. The highest noise levels would be generated by rock drills.

Foundation Phase

During the next phase, foundation forms are constructed and concrete foundations are poured. Primary noise sources during this phase are heavy concrete trucks and mixers and other trucks with noise levels typically in the 70- to 90-dBA range at 50 feet.

Structural and Finish Work

The third phase consists of constructing the structure itself. Noise levels typical during this phase are in the 60 to 80-dBA range at 50 feet and are associated with hammering, diesel generators, compressors, and light truck traffic. The final construction phase involves site clean up and landscaping. Primary noise sources include trucks, landscape rollers, and compactors. General noise levels are in the 65- to 75-dBA range at 50 feet.

Noise associated with traffic was not assessed as part of this EIR. Cumulative traffic levels are not expected to increase significantly as a result of the project. Therefore, the associated noise is not expected to exceed the threshold described above.

Figure 5.4-2 Typical Construction Equipment Noise Levels

Construction activities would temporarily increase the overall ambient noise levels within and surrounding the construction site. Onsite excavation and construction operations, which occur primarily on the Harbor Terrace planning area, would require the use of rock drills, track-type tractors, motor graders, wheeled loaders, haul trucks, scrapers, cranes, a backhoe loader, and excavators. Construction noise levels would fluctuate depending upon the construction phase, equipment type and duration, and the location of onsite operations in relation to existing structures.

Total estimated construction-related noise from all sources is summarized in Table 5.4-8 for various reference distances from the source. An attenuation rate of 6 dBA is assumed for each doubling of distance from the source. The estimates represent a composite of total noise generated by a typical range of construction activities, accounting for deliveries, construction worker vehicle trips and other construction-related vehicles that travel to and from the site. Table 5.4-8 suggests that sensitive receptors within 3200 feet of the source will be subjected to temporary and intermittent noise that exceeds the City standard of 60 dBA for outdoor activity areas.

Residents of the remaining mobile homes would experience the most severe impact from construction activities on the Harbor Terrace site. Overall, noise levels due to construction activities within these areas (assuming no buffering from intervening structures) could exceed 75 dBA.

Table 5.4-8: Estimated Noise Levels from Construction

Source: US EPA (1971) and CM Harris (1991)

Construction Phase	Noise Levels Leq (dBA) without Noise Attenuation Controls				
	200 feet	400 feet	800 feet	1600 feet	3200 feet
Site Preparation	79	73	67	61	55
Foundation	89	83	77	71	65
Structure and Finish	82	76	70	64	58

Impact N-2 Noise associated with vehicle trips to and from the Port and associated facilities will increase. This impact is considered adverse but not significant (Class III).

Traffic levels are expected to increase as a result of buildout of the facilities contemplated by the Final Master Plan. Noise associated with these trips is considered adverse but not significant.

Mitigation Measures

- N-1 All construction equipment shall be in proper operating condition and fitted with factory standard silencing features.
- i. A haul route plan shall be prepared for review and approval by the Harbor District.
 - ii. Whenever practical, the noisiest construction operations shall be scheduled to occur together in the construction program to avoid continuous periods of noise generation. Scheduling of noisier construction activities shall also take advantage of summer sessions and other times when classes are not in session.
 - iii. Project construction activities that generate noise in excess of 60 dB at the project site boundary shall be limited to the hours of 7 a.m. to 6 p.m.
- N-2 All large construction equipment will be equipped with “critical” grade noise mufflers. Noise level reductions associated with the use of “critical” rather than “stock” grade mufflers can be as high as 5 dBA. Engines will also be tuned to insure lowest possible noise levels.

Mitigation for Construction Activities Involving Grading

- N-3 Detailed noise analyses shall be prepared when grading plans are developed to fully determine the need and extent of temporary and/or permanent noise barriers. Final noise barrier heights shall be determined with final grading plans indicating lot locations, trailer setbacks, and precise pad elevations are developed. The barriers may consist of a berm, wall, or a combination berm and wall. Walls should not contain holes or gaps, and should be constructed of slumpstone or other masonry material.
- N-4 Equipment lay-down areas, staging areas or those areas that are reserved for testing and repairing of construction equipment shall be located as far away from sensitive receptors..

Residual Impacts

Implementation of the mitigation measures described above would reduce noise impacts to less than significant levels.

5.5 Services

Issues

Buildout of the various facilities associated with the Draft Port Master Plan would increase the demand for services provided directly by the Harbor District, or through contractual arrangements with service providers. These services include police and fire protection, water supply, wastewater collection and treatment, and solid waste disposal.

Setting

Fire Protection

The CDF/San Luis Obispo County Fire Department provides fire protection and emergency medical services for the community of Avila Beach, Port San Luis Harbor District and unincorporated areas including the Diablo Canyon Nuclear Power Plant. The closest responding fire station is located less than 5 minutes away and is staffed with two full time professional fire fighters and a company of paid call firefighters. CDF/San Luis Obispo County Fire Department personnel are trained in cliff, swift water and surf rescue and the department has a Technical Rescue Team for complex rescues. The Department is a key participant in the County Hazardous Materials Team providing the majority of its members.

Diablo Canyon Nuclear Power Plant has an Industrial Fire Brigade for first response to an emergency at the Power Plant. Ambulance service is provided by a private ambulance company, San Luis Obispo Ambulance. The closest hospitals are located in San Luis Obispo, French and Sierra Vista.

Water distribution lines within the community of Avila Beach provide fire flows for fire suppression. Recently the County received a grant to fund the construction of a 500,000 – 600,000 gallon storage tank to ensure adequate fire flows throughout the community.

Police Protection

Police protection services for the Harbor District is provided by the San Luis Obispo County Sheriff's Department. The Avila area is covered by the Los Osos substation which has one sergeant, 20 to 22 full-time deputies, and two support staff. Backup is provided by the Arroyo Grande substation which has 20 full-time deputies. The California Highway Patrol (CHP) responds to traffic incidents (personal communication, Richard Powell and Rita Brandenburg, San Luis Obispo Sheriff's Department).

The Los Osos Substation serves the area between Avila Beach on the south, the Monterey County line on the north and Cuesta Grade to the east (excluding incorporated areas such as the cities of San Luis Obispo and Morro Bay.) This service area is estimated by the Sheriffs Department to contain approximately 30,000 people. The Los Osos Substation contains a total staff of 20 patrol deputies and one sergeant. A typical shift involves a maximum of two patrol cars during the morning and afternoon shifts and three cars on patrol during the evening and night shifts. The precise number of cars and officers on patrol varies from day-to-day depending on employee absences, jail check-ins,

and other administrative duties. Back-up is provided by the Arroyo Grande County Sheriff substation. The California Highway Patrol responds to traffic-related calls. On a Countywide basis, the Sheriffs Department maintains a ratio of approximately 0.6 officers per 1000 population. A ratio of 0.7 officers per 1000 population is maintained at the Los Osos Substation at this time. The desired ratio of officers per 1000 population is 2.26 which also represents the statewide average. The Sheriffs Department has indicated that the Los Osos substation has a shortfall of five to six deputies.

Emergency response times to the service area of the Los Osos Sheriffs Substation depends on a variety of factors which influence emergency and non-emergency calls. The location of the call and its priority (i.e. emergency status) determine the length of time for a law enforcement response. It is the Sheriffs Department objective to have a patrol car in the vicinity of the Avila Beach area most of the time. If a patrol car is in the vicinity, an emergency response time of three to five minutes can be expected. If a patrol car must be dispatched from a more distant location, increased response times of approximately 15 minutes (from Los Osos) to 30 minutes (from the north coast area) could be anticipated.

Water Supply

Avila Beach

Water services are provided to the community of Avila Beach by the Avila Beach Community Services District. Lopez Reservoir had been the only source of water for this district, however, the district is now also receiving state water. The District has 65 acre feet per year (an acre-foot is about 351,000 gallons) allocated from Lopez water to serve district residents. Another 100 acre feet of state water is available. With the addition of state water, water capacity is expected to be sufficient to support full build-out of the community. Water is also provided by private companies in some areas.

Port San Luis

Water service is provided to the Avila Beach/Port San Luis area through County Service Area Number 12, which acquires and distributes water supplies allocated from Lopez Reservoir. The Port San Luis Harbor District possesses an allotment of 100 acre feet per year of fresh water. Over the past eight years, annual water use at Port San Luis has averaged approximately 35.5 acre feet per year. During the early 1990's, water consumption declined with implementation of water conservation measures. Water intensive uses at the Port include restaurants, fish processing, boat washing, restrooms, and similar uses.

Water distribution to the Port is provided by an eight-inch water main located along Avila Beach Drive. At the intersection with Diablo Canyon Road, a four-inch water line runs to the existing 90,000 gallon water tank immediately north of the Harbor Terrace planning area. A second four-inch water line returns water from the storage tank to the water main on Avila Beach Drive.

The 14 remaining trailers on the Harbor Terrace site generate a portion of the existing water demand within the Port San Luis Harbor District's current water allotment. Of this total, five trailers are assumed to be occupied on a full-time basis and the remaining nine trailers are assumed to be occupied approximately one month out of the year. Based upon a water consumption rate of 0.14 acre-feet per year per trailer, the existing on-site trailer park is estimated to consume approximately 0.81 acre-feet of water per year. This represents approximately 2.2 percent of the current average annual water consumption total for the entire Port San Luis area.

Wastewater

The Avila Beach Community Services District provides sewer service to the developed portions of Avila Beach. The Avila Beach Treatment Plan has a capacity of 200,000 gallons per day (gpd) and discharges treated effluent into San Luis Bay via an ocean outfall. An upgrade was completed in 1998 that will improve the quality of the effluent stream. Current estimated wastewater flows at the plant are 50,000 gpd. Given these flows, the plant is expected to have adequate capacity for Avila Beach until about the year 2010 (SLO 1995b; personal communication, Kathy Richardson, Avila Beach County Water District). Areas outside the district are serviced by site-specific sewage treatment systems (e.g., San Miguelito Mutual Water Company) or individual septic tanks.

The Harbor District contracts with the Avila Beach County Water District for sewage disposal. The District has contracted for 70,000 gallons per day (gpd) of the treatment plant's capacity. According to pumping records, wastewater flows from Port San Luis have averaged approximately 5,315 gallons per day between January 1, 2002 and December, 2002.

Wastewater from the Port is collected by two four-inch sewer lines running along Avila Beach Drive to the Avila Beach Wastewater Treatment Plant. Wastewater is gravity-fed to a Sewer Lift (pump) Station #181 located adjacent to Avila Beach Drive, across from the Olde Port Beach which transports sewage to the Avila Beach Wastewater Treatment Plant and provides pre-treatment of sewage through a deep-well aeration system. This pretreatment system is intended to reduce sulfide levels prior to effluent being introduced into the regional wastewater transmission and treatment system.

The remaining 14 trailers on the Harbor Terrace site generate a portion of the total wastewater flows from the Port San Luis area. Of this total, five are assumed to be occupied on a full-time basis and the remaining nine trailers are assumed to be occupied approximately one month out of the year. Based upon a daily wastewater generation rate of 62.5 gallons per trailer, the existing on-site trailer park is estimated to generate approximately 368 gallons of wastewater on a daily basis. This represents approximately 2 percent of the average daily wastewater flows from the Port San Luis area.

Solid Waste

Municipal solid waste in the Avila Beach area is collected by a private company, South County Sanitary Services, and hauled to the Cold Canyon Landfill. The company collects solid waste from homeowners and commercial clients (personal communication, Sandy Wolfe, South County Sanitary Services).

The Cold Canyon Landfill is the closest to the Port/Avila Beach area and is undergoing expansion. Its expected closure date is 2025. Given increased efficiency using an alternative daily cover and a state-mandated reduction in solid waste streams, the likely closure date will be further in the future. The annual amount of waste received in 1995 and 1994 was 122,000 and 130,000 tons, respectively.

There are no hazardous waste treatment facilities in the area; hazardous waste is transported to the Los Angeles or San Francisco Bay areas. The McKittrick Waste Treatment Site in Kern County accepts petroleum-contaminated waste. Petroleum-contaminated soils have been noted on the Harbor Terrace planning area (see Section 5.10:Hazardous Materials).

The 14 remaining trailers on the Harbor Terrace site generate a minimal amount of solid waste. Of this total, five are assumed to be occupied on a full-time basis and the remaining nine are assumed

to be occupied approximately one month out of the year. It is estimated that the 14 trailers on the Harbor Terrace site generate a total of approximately 46 pounds of solid waste per day (based upon a generation factor of 8.0 pounds per unit per day). This solid waste generation equates to approximately 8.3 tons of solid waste on an annual basis.

Energy and Telecommunications

Energy and telecommunication utilities are provided by private companies. Southern California Gas Company provides natural gas; Pacific Gas and Electric Company provides electricity; Pacific Bell provides telephone service; and Sonic Cable Television provides cable service.

Capacity and limiting factors for the energy utilities were determined through discussions with utility personnel. Southern California Gas Company provides the Avila area with natural gas via a four inch line that runs along Avila Beach Drive. Capacity is constrained by the size of this line. If current capacity were to be significantly exceeded on a regular basis, a new line would need to be installed (personal communication, Robert Grossfield and Larry Petersen, Southern California Gas Company).

Pacific Gas and Electric Company supplies electricity to the Avila and Port San Luis areas from their San Luis Obispo substation located off Orcutt Road. The summer peak load averages 1.3 megawatts and the winter peak averages 1.1 megawatts. Capacity is limited by the size of the wires. The constraining section of Number 4 copper wire can handle a maximum of 134 amps and 12,000 volts for a capacity load of 2.9 megawatts. If this capacity were going to be exceeded, Pacific Gas and Electric would need to upgrade the limiting section of wire and/or install voltage regulation equipment (personal communication, Don Changala, Pacific Gas and Electric Company).

Recreation

Avila Beach

Avila Beach area is one of the primary recreation/tourist areas in San Luis Obispo County as well as providing one of the County's most popular beaches, partially due to its protected location and scenic features. The beach is accessible from Front Street which forms its northern edge. Permanent structures on the beach include a small Port office, restrooms, storage at the base of the pier, the San Luis Yacht Club building, a hot dog stand, a small restroom/shower building as well as playground equipment, fire rings and two lifeguard stations. Beach activities include sunbathing, sight-seeing, jogging, volleyball, picnicking and bonfires. Off-shore activities include swimming, jet skiing, recreational boating, ocean kayaking, surfing and diving. Recreational equipment and additional recreational opportunities are provided by retail stores and restaurants along Front Street and at Avila Pier.

In 1990, a survey was conducted by the Port San Luis Harbor District on April 13 and 14 (Friday and Saturday of Easter Week) to determine use levels of Avila Beach during holiday weekends. Data were collected from 245 respondents between 10:30 a.m. and 3:30 p.m. over the two-day period. The survey collected data on where visitors live, time of arrival and departure, and various questions regarding transportation and parking. The survey found that the majority of visitors to Avila Beach were from within San Luis Obispo County (50.2 percent). The average length of a visitor's stay was approximately four hours. Approximately 96 percent of survey respondents arrived at Avila Beach via car or truck. The average number of passengers per vehicle was 3.35 persons. Although free parking for visitors to Avila Beach and local businesses is provided along Front Street (a total of 194

spaces between Avila Beach Drive and San Rafael Street), approximately 46 percent of the respondents stated that they had trouble finding a parking space in Avila Beach.

Port San Luis

The coastal bluff along Avila Beach Drive within the Harbor Terrace planning area provides a recreational and passive open space function for travelers using this roadway and recreational visitors to the area. Two dirt turnout/parking areas are located on the south (ocean-facing) side of Avila Beach Drive near its intersection with Diablo Canyon Road. These areas are utilized for day-time parking for beach goers; overnight parking for recreational vehicles is also allowed.

Within the Harford Pier planning area, restaurants, a boat launching area, sport fishing, tours, and other recreation opportunities are available to the public. Limited improvements (restrooms, stairway and roadway access to the beach) have been made at the sandy beach area known as Olde Port Beach. The stretch of coast west of Port San Luis is rugged and currently inaccessible to the public. An inland dirt trail currently leads to the Port San Luis Lighthouse.

The Port currently provides parking for passenger vehicles and vehicle/boat trailer parking adjacent to Harford Pier. A recent count of parking spaces indicates there are 241 spaces, of which approximately 50 are striped for vehicles with boat trailers. According to the Harbor District staff, during summer weekends parking at the Port is almost totally utilized and the turnover of parking spaces is low. During the warm summer months, weekend parking demand is at its highest due to recreational fishermen, tourists, beach visitors and patrons of the local restaurants. During the winter months with cold or foggy weather, parking provided at the Port is generally adequate.

Thresholds of Significance

The significance criteria for the analysis of public services and utility impacts are listed below.

- > Project-induced population growth that creates the need for additional police and fire protection personnel to maintain the current level of service.
- > An increase of 5 percent or more of the expected average annual waste stream for a given municipal waste facility is significant; 1 percent or more is adverse.
- > Water usage that exceeds the 100 afy available to the Harbor District from its Lopez entitlement;
- > Water usage that results in inadequate water pressures for fire suppression.
- > Wastewater generation that exceeds available capacity owned by the Harbor District in the Avila Beach County Water District (community services district) wastewater treatment plant and/or such other facility as may be constructed.
- > Project-related damage to County or locally-maintained roadways that requires an increase in unscheduled repair activities to maintain road conditions.
- > Project-related damage to publicly owned or maintained structures and facilities that requires an increase in unscheduled repair activities to maintain conditions.
- > Accidents or incidents related to the proposed project or alternatives that result in demand for fire, police, emergency response, hospital, education, public utility, or other public health, safety, or public welfare services that exceed capacity.
- > Construction and operation of the proposed project or alternatives that could permanently displace, alter, or disrupt the existing public and private utility lines and services.
- > Emergency access to utility lines that is precluded during or after project construction activities.

- > Energy requirements of the proposed project or alternatives during construction or operation that would (1) exceed capacity of utility services or disrupt plans for providing service; (2) place a substantial burden on existing resources; or (3) involve inefficient and unnecessary consumption of energy and uses of nonrenewable resources. Project-related demand that is 5 percent or more of remaining capacity is significant; demand that is 1 percent or more of remaining capacity is adverse.

Impacts

Impact PS-1 Facilities associated with buildout of the Draft Port Master Plan would place additional structures, life and property at risk for damage or destruction from wildland fires and/or structural fires. In particular, development of the Harbor Terrace planning area will pose a risk to wildland fire. This impact is considered significant unless mitigated (Class II).

Development of the various facilities described in the Draft Port Master Plan will result in an increased demand for fire protection and emergency services which may, in turn, incrementally contribute to the need for additional fire fighters, additional equipment, and/or improvements to existing facilities.

The majority of Port facilities are located approximately two miles from the CDF/SLO County Fire Station 62 located at San Luis Bay Drive and Sparrow street. According to the California Department of Forestry/San Luis Obispo County Fire Department, response times to the Port are less than five minutes. The California Department of Forestry recommends that response times to urban development within a high fire hazard area should be a minimum of three to five minutes. Therefore, the Port lies within an acceptable response time distance from the nearest fire station.

Potential fire protection impacts may also occur due to vegetation in areas adjacent to the edge of proposed development, especially in the Harbor Terrace planning area which is adjacent to or within a short distance of coast live oak woodlands, annual grasslands, coastal sage scrub and chaparral habitats (see Section 5.6: Biological Resources). The County Fire Department requires the provision of Fuel Reduction Zones in areas where proposed development is contiguous to native vegetation. A Fuel Reduction Zone involves removal of all flammable vegetation and combustible growth within a specified distance from structures (single specimen trees such as oaks may be exempt, however, these trees must be cleared of limbs up to a level of six feet). A second Fuel Reduction Zone will extend beyond the first zone wherein flammable vegetation will be cut and maintained to a height not to exceed 18 inches. Specific requirements for the Fuel Reduction Zones will be determined in conjunction with the review and approval of site plans for development by the Fire Department.

Under Title 26 of the Growth Management Ordinance, future development will be required to pay a one-time Public Facilities Fee to the County of San Luis Obispo, a portion of which goes toward the funding of fire protection efforts. In addition to the payment of Public Facilities Fees, the CDF/San Luis Obispo County Fire Department will review project plans, water system plans and building plans to insure adequate fire protection is provided (see "Mitigation Measures").

Impact PS-2 Buildout of the Port Master Plan will increase the demand for police protection. This impact is considered significant unless mitigated (Class II).

With any increase in public use of visitor-serving, commercial and recreational facilities, it can be expected that criminal activity such as burglaries, thefts, assaults, vandalism, disorderly conduct, etc. will incrementally increase. Additional financing for equipment and personnel will be required to meet the increased law enforcement demands. Since the Sheriff's Department is currently experiencing a personnel shortfall and budgetary constraints, additional development at the Port would represent an addition to the regional demand on the currently limited resources of the County Sheriffs Department.

Under Title 26 of the Growth Management Ordinance, future development at the Port will be required to pay a one-time Public Facilities Fee to the County of San Luis Obispo. A portion of this fee goes toward the funding of the Sheriffs patrol efforts. Security from the Port San Luis Harbor Patrol will also oversee the operations of the Harbor District facilities (i.e. trailer boat and fisherman's gear storage).

Impact PS-3 A portion of the increased development accommodated by the Final Master Plan will increase the demand for water. This impact is considered adverse but not significant (Class III).

Table 5.5-1 provides an estimate of existing and future water demand from Port facilities based on buildout of the Draft Port Master Plan. As table 5.5-1 shows, future water demand will be about 84 percent of the Harbor District's total water allocation. Table 5.5-1 provides a conservative estimate (ie, overstates) of the likely future water demand. For example, water demand factors applied to the campsite components of the Harbor Terrace planning area are the same for each type of camping unit, when in fact, tent sites will likely consume much less water than a cabin/yert or an RV site.

Table 5.5-1: Projected Future Water Demand

Source: Draft Port San Luis Harbor District Master Plan, 2003

Planning Area	New Floor Area (square feet or units)	Water Use factor	Water Use (acre-feet per year)
Harford Pier			
Pod 1 redevelopment	3,000 sq.ft.	0.3 acre feet/1000 sq.ft. ¹	0.90
New lease space	1,500 sq.ft.	0.3 acre feet/1000 sq.ft.	0.45
Harford Landing			
Convert admin offices to lease space	1,716 sq.ft.	0.3 acre feet/1000 sq.ft.	0.51
Expand maintenance bldg; add lease space	4,000 sq.ft.	0.1 acre feet/1000 sq.ft.	0.40
Harbor Terrace			
Park	46,600 sq.ft.	2.1 acre feet per acre ²	2.25
Utility camp sites/RV sites	125 sites	0.11 acre feet per year per space ³	13.75
Tent camping sites	44 sites	0.11 acre feet/space	4.84
Yerts/Cabins	67 units	0.11 acre feet/unit	7.37
Harbor District Offices	16,000 sq.ft.	0.3 acre feet/1000 sq.ft.	4.80
Commissary/eating and drinking	22,000	0.5 acre feet/1000 sq.ft.	11.0
Avila Pier terminus			
New lease space	4,250	0.3 acre feet/1000 sq.ft.	1.28
Avila Beach Parking Lot			
New lease space	3000	0.3 acre feet/1000 sq.ft.	0.90
Sub-total Water Demand:			48.45
Existing Water Demand:			35.5
Deduction for existing trailers			0.81
Net Future Water Demand At Buildout:			83.09
Water Allocation:			100.00
Projected Surplus At Buildout:			16.91

Notes for Table 5.5-1:

1. Water demand based on City of San Luis Obispo water Demand Factors for similar types of uses.
2. Water demand based on City of San Luis Obispo water Demand Factors for similar types of uses.
3. San Luis Obispo County, Estero Area Plan

Impact PS-4 Buildout of the various facilities accommodated by the Port Master plan will generate additional wastewater that would be collected and treated by the Avila Beach wastewater treatment plant. Increased wastewater generation could adversely impact the wastewater collection system serving the Port, and could secondarily impact the capacity of the wastewater treatment plant. This impact is considered adverse but not significant (Class III).

Table 5.5-2 provides a summary of projected wastewater generation at buildout of the Draft Port Master Plan. As table 5.5-2 shows, wastewater generation at buildout will be about 50 percent of the Harbor District's allocation of treatment capacity from the Avila Beach Community Services District. Table 5.5-2 also provides a summary of cumulative impacts to the capacity of the treatment plant from wastewater generated by the Port as well as buildout of development accommodated by the Avila Specific Plan. As Table 5.5-2 shows, cumulative wastewater generation will be about 99,900 gallons per day, which is about 49 percent of the total existing plant capacity.

Table 5.5-2: Projected Future Wastewater Generation

Source: Draft Port San Luis Harbor District Master Plan, 2003 and CMCA, 2003

Planning Area	New Floor Area (square feet or units)	Wastewater Generation Factor (gallons per day)	Wastewater Generation (gallons per day)
Harford Pier			
Pod 1 redevelopment	3,000 sq.ft.	202 gallons per day/1000 sq.ft.	606.0
New lease space	1,500 sq.ft.	202 gallons per day/1000 sq.ft.	303.0
Harford Landing			
Convert admin offices to lease space	1,716 sq.ft.	202 gallons per day/1000 sq.ft.	346.6
Expand maintenance bldg; add lease space	4,000 sq.ft.	59 gallons per day/1000 sq.ft.	236.0
Harbor Terrace			
Park	46,600 sq.ft.	30 gallons per day	30.0
Utility camp sites/RV sites	125 sites	30 gallons per day peer site	3,750.0
Tent camping sites	44 sites	30 gallons per day peer site	1,320.0
Yerts/Cabins	67 units	30 gallons per day peer site	2,010.0
Harbor District Offices	16,000 sq.ft.	202 gallons per day/1000 sq.ft.	3,232.0
Commissary/eating and drinking	22,000	241 gallons per day/1000 sq.ft.	5,302.0
Avila Pier terminus			
New lease space	4,250	202 gallons per day/1000 sq.ft.	858.5
Avila Beach Parking Lot			
New lease space	3000	202 gallons per day/1000 sq.ft.	606.0
Sub-total Master Plan Wastewater Generation:			18,600.1
Existing Generation By Port:			5,315.0
Deduction for existing trailers			359.0
Net Future Wastewater Generation By Port At Buildout:			23,556
Wastewater Capacity Allocation:			70,000
Projected Surplus At Buildout:			46,443

Table 5.5-3: Cumulative Wastewater Flows

Sources: Avila Specific Plan, 1999 and CMCA, 2003

Source	Wastewater Flows (gallons per day)
Current Wastewater Flows	50,000
Future Development of Avila Specific Plan	26,378
Buildout of Draft Port Master Plan	23,556
Cumulative Total:	99,934
Capacity of Treatment Plant	200,000
Excess Capacity	100,065

Impact PS-5 Buildout of the Port in accordance with the Final Master Plan will generate additional solid waste which will adversely impact landfill capacity. This impact is considered adverse but not significant (Class III).

Additional development at the Port will increase overall solid waste to be disposed of at the Cold Canyon Landfill. The Landfill is currently undergoing a comprehensive expansion to meet the needs of the entire County for another 15 years. Therefore, impacts related to solid waste disposal are considered not significant.

Mitigation Measures

PS-1 New development shall not be allowed until adequate public services and facilities to serve such development are provided. Where existing facilities are inadequate, new development may only be approved when the following conditions are met:

- a. It can demonstrated that all necessary public facilities will be installed or adequately financed (through fees or other means); and
- b. The facilities improvements are consistent with applicable facility plans approved by the Harbor District, the County and/or such other agencies in which provides services to the Port.

PS-2 Future development shall be required to pay all applicable Public Facilities Fees to the County of San Luis Obispo to offset potential impacts to, among other County services, police and fire protection services.

- PS-3 Where determined by the Harbor District, plans for new development shall be submitted for review by the San Luis Obispo County Sheriffs Department to assess the adequacy in which a project's design addresses the following issues: emergency access, internal circulation and provision of "defensible space". The recommendations of the Sheriffs Department shall be considered by the Harbor District in deciding to approve such new development.
- PS-4 The Harbor District shall ensure that all proposed developments are reviewed for compliance with fire safety standards per the California Fire Code and other standards and ordinances of the CDF/San Luis Obispo County Fire Department. Issues to be considered in the review of future development include, but are not limited to, the following:
- a. Improved emergency access to Harford Pier;
 - b. Improved fire protection systems on the pier, including hydrants, sprinklers and standpipes to meet current fire codes;
 - c. The installation of grates on the pier for automatic ventilation to stop the spread of fire;
 - d. Improved access to the Lightstation for fire protection;
 - e. Development of an all-weather secondary access road from Port San Luis to San Luis Bay Drive;
- PS-5 The Harbor District shall promote the efficient use of water and reduced water demand by:
- a. Requiring water-conserving design and equipment in new construction;
 - b. Encouraging water-conserving landscaping and other conservation measures;
 - c. Encouraging the retrofitting of existing fixtures with water-conserving fixtures;
- PS-6 The Harbor District shall promote maximum use of solid waste source reduction, recycling, composting and environmentally-safe transformation of wastes.
- PS-7 The Harbor District shall require that all new development complies with applicable provisions of the San Luis Obispo County Integrated Waste Management Plan.
- PS-8 All water mains and fire hydrants shall provide required fire flows and shall be constructed in accordance with the specifications of the California Fire Code and CDF/San Luis Obispo County Fire Department. or other applicable standards.
- PS-9 Where determined by the Harbor District, plans for new development shall be reviewed by the CDF/San Luis Obispo County Fire Department to insure that building materials, access, brush clearance and water storage capacity provide adequate fire protection to the proposed project.
- PS-10 Prior to the approval of any site plans for development areas adjacent to open space, a Fuel Reduction Plan shall be submitted to the County of San Luis Obispo and the California Department of Forestry for approval. This Fuel Reduction Plan will provide for an acceptable level of risk in accordance with California Department of Forestry standards. Fuel reduction can be achieved through a gradual transition from native vegetation into irrigated landscape/building areas of the project. This fuel reduction program shall also establish

- parameters for the percent, age, extent, and nature of native plant removal necessary to achieve the accepted fire prevention standards required to protect human lives and property, while preserving as much natural habitat as possible.
- PS-11 The Harbor District or its designated assignee shall be responsible for maintenance of Fuel Reduction Zones where required of new development. Maintenance agreements shall be submitted to the County of San Luis Obispo and the California Department of Forestry for approval.
- PS-12 All water lines shall be designed and installed in accordance with requirements of the County of San Luis Obispo and County Service Area Number 12.
- PS-13 New development on the Harbor Terrace site shall comply with County of San Luis Obispo and County Service Area Number 12 requirements concerning the installation and use of reclaimed water systems for landscape irrigation.
- PS-14 New development shall incorporate native plant species and ornamental species which are drought-tolerant and/or have low irrigation requirements.
- PS-15 If available, reclaimed water shall be utilized to irrigate major landscaped and planted areas. The on-site water distribution system shall be designed and constructed in a manner to provide separate reclaimed water lines. Such a system shall comply with all County of San Luis Obispo and Regional Water Quality Control Board Requirements for the installation and operation of reclaimed water systems.
- PS-16 All wastewater collection lines shall be designed and installed in accordance with requirements of the County of San Luis Obispo and the Avila Beach County Water District.
- PS-17 No new development shall be approved without first providing assurance that adequate capacity exists in Sewage Lift Station #181 located adjacent to Avilla Beach Drive. Where necessary, plans for redesign or upsizing of this facility shall be submitted to the County of San Luis Obispo and the Avila Beach Community Services District prior to issuance of building permits.
- PS-18 Development plans shall delineate the number, location, and general design of solid waste enclosures and storage areas for recycled material.
- PS-19 Maintenance of all developed park, open space and recreation facilities on the Harbor Terrace site shall be the responsibility of either the Port San Luis Harbor District or its designee and/or another suitable entity or a combination of the above.
- PS-20 Where applicable all recreational facilities (bluff top parks, etc.) shall be landscaped and, where necessary, irrigated.
- PS-21 New development shall provide parking in accordance with standards established by the Port San Luis Harbor District, the County of San Luis Obispo and the California Coastal Act.

PS-22 New development shall provide signage to assist the public in locating and recognizing beach access points. The number and design of such signage must conform to standards established by the California Coastal Commission and shall be approved by the Port San Luis Harbor District and the County of San Luis Obispo.

Residual Impacts

With incorporation of the mitigation measures described above, impacts to public services are considered less than significant.

5.6 Biological Resources

Issues

This section of the Final EIR provides an analysis of potential impacts to biological resources associated with development of the Harbor District properties and facilities to biological resources. Impacts related to loss of rare plants and wildlife, and wildlife habitat are assessed.

Construction of the various facilities would result in the loss of wildlife habitat, and possibly rare plant or wildlife species. Increased human presence, noise and lighting may indirectly affect wildlife. Stormwater run-off from the project site may adversely affect the fauna of San Luis Bay. In addition, development of the Harbor Terrace site may interfere with wildlife movement.

Setting

The project area encompasses a wide range of habitat, from marine to terrestrial. The proposed pier improvements would affect primarily the marine environment, while improvements to port landing facilities would affect generally urban ruderal habitat. The Harbor Terrace site, although largely disturbed, is proximate to relatively intact coastal scrub and live oak stands.

Vegetation

Open Water. The bay bottom is predominantly sandy with benthic fauna typical of sand bottom habitats. Small isolated rock outcrops provide scattered hard-bottom habitat. There is evidence of kelp beds in association with the Cal Poly Marine Sciences pier. Various species of seaweed and algae have established on pier pilings.

Marine Intertidal. From the mouth of San Luis Obispo Creek westward, large rocks are present in the intertidal zone. These rocks are covered with red and green algae but are otherwise generally lacking in higher plants.

Estuarine. Vegetation between Avila Beach Drive and the lagoon formed by San Luis Creek on the road berm is coastal scrub dominated by coyote brush (*Baccharis pilularis*) with some California sage (*Artemisia californica*), black sage (*Salvia mellifera*), toyon (*Heteromeles arbutifolia*), and goldenbush (*Isocoma menziesii*). Along the edge of the lagoon is a narrow band of salt marsh where the banks are not riprap or otherwise cleared. The dominant plants present in the salt marsh are pickleweed (*Salicornia virginica*), fleshy jaumea (*Jaumea carnosa*), and alkali heath (*Frankenia grandiflora*).

Riparian. Wild Cherry Canyon and Harford Creek are located in the project vicinity, in addition to San Luis Obispo Creek. The project will not impact San Luis Obispo Creek; Harford Creek and Wild Cherry Canyon are both ephemeral waterways with limited riparian canopy. Ephemeral creeks in coastal San Luis County typically will contain grasses, rushes and sedges. Some potential species include: Dallis grass (*Paspalum dilatatum*), Italian ryegrass (*Lolium multiflorum*), spreading rush (*Juncus patens*), low bulrush (*Scirpus cernuus*), and flatsedge (*Cyperus involucratus*). Wetter areas may

additionally support woodier species such as sweet fennel (*Foeniculum vulgare*), mugwort (*Artemisia douglasiana*), and southern honeysuckle (*Lonicera subspicata*).

Sandy Beach. Bluffs range from being almost completely covered with iceplant (*Carpobrotus edulis*) to being barren in the vertical portions. No vegetation is present on the beach between the ocean and the bluff.

Coastal sage scrub. Species composition is highly variable in coastal scrub communities and is generally dependent on topography, soils and slope aspect. Plants occurring in coastal scrub communities are characterized as being aromatic, low growing and drought tolerant. Common plant species include California sagebrush, coyote brush (*Baccharis pilularis*), monkeyflower (*Mimulus* sp.), poison oak (*Toxicodendron diversilobum*), California buckwheat (*Eriogonum fasciculatum*), and black sage (*Salvia mellifera*). Understory within coastal scrub communities is generally sparse and includes forbs such as plantain (*Plantago* sp.) and yarrow (*Achillea* sp.).

Coast Live Oak Woodland. Coast live oak woodlands in the project area typically occur as a mosaic closely associated with communities such as coastal scrub and non-native grassland. Typical understory plant species where oaks provide a dense canopy include toyon, poison oak, bracken fern (*Pteridium aquilinum*), miner's lettuce (*Claytonia perfoliata*), bedstraw (*Galium aparine*), and coffeeberry. In drier areas, coast live oak woodland often integrates into other plant communities, such as chaparral and grassland, and understory becomes highly variable.

Annual Grassland. The majority of grasslands throughout California are dominated by non-native grasses that were accidentally introduced from the Mediterranean region during the Spanish Colonization period. Non-native grasses, native wildflowers and weedy annual forbs (broadleaf plants) dominate grassland areas. In addition, a few native species of grass may potentially occur infrequently as part of the non-native grassland association in the area. Typical non-native grass species in the project area include wild oat (*Avena* sp.), soft chess (*Bromus mollis*), red brome (*Bromus rubens*), Italian rye grass (*Lolium multiflorum*) and annual fescues (*Vulpia* spp.). Typical forbs associated with grassland communities in the planning area include native wildflowers such as California poppy (*Eschscholzia californica*), goldfields (*Lasthenia californica*), lupine (*Lupinus* sp.), owl's clover (*Orthocarpus densiflorus*), popcorn flower (*Plagiobothrys* spp.), blue-eyed grass (*Sisyrinchium bellum*) and clarkia (*Clarkia* sp.). Non-native forbs include wild mustard (*Brassica* spp.), redstem filaree (*Erodium cicutarium*), long-beak filaree (*E. botrys*), and burclover (*Medicago hispida*). Native species of grass, which may occur in scattered locations throughout the planning area, include purple needlegrass (*Stipa pulchra*) and slender needlegrass (*Stipa lepida*).

Ruderal (Disturbed). Ruderal vegetation has been disturbed by agriculture, landscaping, construction or other land clearing activities. Disturbed habitat occurs throughout the project area at the margins of parking areas, roadsides, and vacant lots (such as the Harbor Terrace site). Vegetation in these areas typically consists of low-growing grasses, forbs and weedy species. The primary difference between non-native grasslands and ruderal habitats are that the soil is often disturbed in ruderal habitats, and native wildflowers are often lacking. Characteristic uncultivated species recorded in disturbed habitat include non-native species such as wild mustard, cheeseweed (*Malva parviflora*), milk thistle (*Silybum marianum*), sow thistle (*Sonchus* sp.), scarlet pimpernel (*Anagallis arvensis*), and burclover (*Medicago* sp.). Landscaped areas can range widely in terms of species present.

Wildlife

Marine. Marine mammals, such as the Southern sea otter (*Enhydra lutris*), California sea lion (*Zalophus californianus*), and harbor seal (*Phoca vitulina*) utilize marine intertidal and estuarine habitats for feeding, and haul-out along rocky shore areas to rest. Marine species such as staghorn sculpin (*Leptocottus armatus*) will often enter coastal lagoons and estuarine habitats to feed and/or reproduce during the winter and spring when sand bars at the mouths of the streams have been breached.

Marine Intertidal. Some of the more common inhabitants of the intertidal zone are the rock lice (*Logia occidentalis*), periwinkles (*Littorina* spp.), and white acorn barnacles (*Chthamalus* spp.) Along with the green algae. Downward in progression are the upper and mid-intertidal zones. California Mussels (*Mytilus californianus*) form beds in these zones that are the basis of an array of fauna. The seastar, mostly *Pisaster ochraceus* is the hardiest predator in the middle intertidal. Other animals include the gooseneck barnacles (*Pollicipes* spp.); acorn barnacles (*Blanus* spp.); abalone (*Haliotis* spp.); limpets (*Lottia* spp.); chitons, and the anemones (*Anthopleura* spp.). A variety of algae provide shelter and protection from desiccation for many animals that otherwise could not exist so high up on shore (Ricketts *et al.*, 1985). Common invertebrate species within the low rocky intertidal zone are the sea urchin (*Strongylocentrotus*, spp.), and the limpet (*Acmaea* spp.).

Estuarine. The lagoon provides habitat for a variety of aquatic species. Invertebrates include amphipods and polychaete worms. Fish that inhabit or seasonally use the lagoon include tidewater goby, starry flounder (*Platichthys stellatus*), Pacific herring (*Clupea pallasii harengus*), topsmelt (*Atherinops affinis*), staghorn sculpin (*Leptocottus armatus*), striped bass (*Morone saxatilis*), steelhead trout, king salmon (*Oncorhynchus tshawytscha*), and Pacific lamprey (*Petromyzon tridentata*). Other primarily freshwater fish may enter the lagoon seasonally from upstream. Native species include threespine stickleback (*Gasterosteus aculeatus*), speckled dace (*Rhinichthys osculus*), and prickly sculpin (*Cottus asper*).

King salmon have been stocked in the ocean at Port San Luis Harbor by the Central Coast Salmon Enhancement (CCSE) project since 1984. Young salmon about 3 inches in length are raised in pens in the ocean for approximately 4 months and then released at a size of 6 to 9 inches. The number released has ranged from a low of 1,351 in 1984 to 135,000 in 2003.

Bullfrogs (*Rana catesbeiana*) and crayfish, both non-native species, inhabit lower San Luis Obispo Creek as well as the native Pacific treefrog (*Hyla regilla*) and western toad (*Bufo boreas*).

The fish and invertebrates in the lagoon attract wading birds such as the great blue heron (*Ardea herodias*) and great egret (*Casmerodius albus*) as well as several species of waterfowl including grebes, American coot (*Fulica americana*), and mallard (*Anas platyrhynchos*). Common shorebirds present at least seasonally include least and western sandpipers (*Calidris minutilla* and *C. mauri*), long-billed curlew, marbled godwit, sanderling, and terns. Flocks of gulls rest on the exposed sand flats near the lagoon mouth and on the waters of the lagoon.

Riparian. Except for San Luis Obispo Creek, riparian systems in the project are considered ephemeral, and exhibit little riparian canopy. Because of the limited area and seasonality of these channels, they are unlikely to support permanent wildlife habitat. Animals may visit these areas for

water and forage. These may include species such as Tri-colored blackbird (*Agelaius tricolor*), along with other avian species.

Sandy Beach. Several invertebrate species (predominantly crustaceans such as sand crabs and beach hoppers) are adapted to the wave action and shifting sands of the beach. These invertebrates attract numerous shorebirds such as willets (*Catoptrophorus semipalmatus*), sanderlings (*Calidris alba*), marbled godwits (*Limosa fedoa*), long-billed curlews (*Numenius americanus*), and black-bellied plovers (*Pluvialis squatarola*). These species are most abundant during the winter. Other common migrant species include Baird's and pectoral sandpipers (*Calidris bairdii* and *C. melanotos*), semipalmated plover (*Charadrius semipalmatus*), and terns (royal, elegant, Caspian, and Forster's) (*Sterna maxima*, *S. elegans*, *S. caspia*, and *S. forsteri*). Several species of gulls (*Larus* spp.) and the California brown pelican (see sensitive species below) rest and preen on the beach.

Coastal sage scrub. Coastal scrub areas provide resources for California quail, acorn woodpecker, brown towhee, and dark-eyed junco. Wading birds such as the snowy and great egret, and great blue heron frequent and utilize coastal saltmarsh and freshwater marsh habitats for feeding.

Coast Live Oak Woodland. Species which are expected to be present in oak woodland include, but are not limited to, western skink (*Eumeces skiltonianus*), California newt (*Taricha torosa*), southern alligator lizard (*Gerrhonotus multicarinatus*), western fence lizard (*Sceloporus occidentalis*), acorn woodpecker (*Melanerpes formicivorus*), western bluebird (*Sialia mexicana*), red-tailed hawk (*Buteo jamaicensis*), Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), pocket gopher (*Thomomys* spp), raccoon (*Procyon lotor*), mule deer (*Odocoileus hemionus*), bobcat (*Lynx rufus*) and coyote (*Canis latrans*).

Annual Grassland. Typical species that utilize open grassland areas and fields include red-tailed hawk, red-shouldered hawk, American kestrel, Cooper's hawk, white-shouldered kite, western meadowlark, Say's phoebe, and western bluebird.

Ruderal (Disturbed). Wildlife associated with ruderal habitat include species such as western fence lizard (*Sceloporus occidentalis*), southern alligator lizard (*Gerrhonotus multicarinatus*), gopher snake (*Pituophis melanoleucus*), Botta's pocket gopher (*Tomomys bottae*), northern mockingbird (*Mimus polyglottos*), Brewer's blackbird (*Euphagus cyanocephalus*), house finch (*Carpodacus mexicanus*), and gulls (*Larus* spp.). Domestic animals such as cats and dogs are also common.

Special-Status Plant Species

Special-status plant species are either listed as endangered or threatened under the Federal or California Endangered Species Acts, or rare under the California Native Plant Protection Act, or considered rare (but not formally listed) by resource agencies, professional organizations (California Native Plant Society [CNPS]), and the scientific community. For the purposes of this project, special-status plant species are defined below:

- > Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species).
- > Plants that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register Vol. 62, No. 182, pp. 49397-49411, September 19, 1997).

- > Plants that meet the definitions of rare or endangered species under the CEQA Guidelines (Section 15380).
- > Plants considered by the CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2, 2001).
- > Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Lists 3 and 4, 2001).
- > Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
- > Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- > Plants considered sensitive by other Federal agencies (i.e., U.S. Forest Service, Bureau of Land Management), state and local agencies or jurisdictions.
- > Plants considered sensitive or unique by the scientific community or occurring at the limits of their natural range (*State CEQA Guidelines*).

Special-Status Wildlife Species

Special-status wildlife species are defined below.

- > Animals listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species).
- > Animals that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register Vol. 62, No. 182, pp. 49397-49411, September 19, 1997).
- > Animals that meet the definitions of rare or endangered species under the CEQA Guidelines (Section 15380).
- > Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5).
- > Animal species of special concern to the CDFG (Remsen, 1978 for birds; Williams, 1986 for mammals).
- > Animal species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Table 5.6-1 lists the sensitive species for the project area and summarizes their status and local distribution.

Table 5.6-1: Sensitive Species Known or Expected to Occur within the Project Area

Common Name/Scientific Name	Status ¹ (Fed/State)	Distribution in Project Area
Invertebrates		
Monarch butterfly <i>Danaus plexippus</i>	TP	Possible wintering in Eucalyptus stand on Harbor Terrace.
Fish		
Southern steelhead <i>Oncorhynchus mykiss</i>	T/SSC	May occur in open water or estuarine habitats in the project area.
Tidewater goby <i>Eucyclogobius newberryi</i>	E/CSC	Resident in lagoon at the mouth of San Luis Obispo Creek.
Steelhead trout <i>Oncorhynchus mykiss</i>	PE/CSC	Migrates into San Luis Obispo Creek and its tributaries to spawn during the rainy season.
Amphibians		
California red-legged frog <i>Rana aurora draytonii</i>	T/CSC	Present in upper reaches of San Luis Obispo Creek; potentially present in lower reaches of the creek.
Coast range newt <i>Taricha torosa torosa</i>	CSC	Not expected within project area; no suitable habitat
Reptiles		
Southwestern pond turtle <i>Clemmys marmorata pallida</i>	CSC	Not expected within project area due to limited habitat, present in upper reaches of San Luis Obispo Creek.
Silvery legless lizard <i>Anniella pulchra pulchra</i>	CSC	Possibly occurring in coastal sage scrub or oak woodland adjacent to area.
California horned lizard <i>Phrynosoma coronatum frontale</i>	CSC	Possibly occurring in coastal sage scrub or grasslands in or adjacent to project area.
Birds		
Tri-colored blackbird <i>Agelaius tricolor</i>	CSC	May occur in open grasslands in project area and wetland habitats near the project area.
Prairie Falcon <i>Falco mexicanus</i>	CSC (nesting)	Foraging
American peregrine falcon <i>Falco peregrinus anatum</i>	FP/SE	Utilizes various habitat areas throughout the project area for hunting other species of birds.
White-tailed kite <i>Elanus leucurus</i>	CSC (nesting), FP	May forage in project area in open grasslands, oak woodlands, or riparian areas.
California brown pelican <i>Pelecanus occidentalis californicus</i>	E/SE	Forages over offshore waters; may rest on the beach and in the San Luis Obispo Creek lagoon.
Cooper's hawk <i>Accipter cooperi</i>	CSC (nesting)	Nesting and foraging in and near deciduous riparian areas, suitable habitat limited to San Luis Obispo Creek and hillside drainages.
Sharp-shinned Hawk <i>Accipter striatus</i>	CSC (nesting)	Riparian nester, woodland forager - may occur at outskirts of project area
California least tern <i>Sterna antillarum browni</i>	E/SE	Occasional visitor at the San Luis Obispo Creek lagoon in summer.
Northern harrier <i>Circus cyaneus</i>	CSC (nesting)	May occur in grasslands at outskirts of project area

Loggerhead shrike <i>Lanius ludovicianus</i>	CSC	May forage in project area; resident throughout the foothills and lowlands of California
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	T/CSC	A few individuals may winter on the beach at Avila.
Mammals		
Townsend big-eared bat <i>Corynorhinus (Plecotus) townsendii</i>	CSC	Not likely to occur in project area. May be located in nearby habitat and occasionally fly through area.
Pallid bat <i>Antrozous pallidus</i>	CSC	May occur in project area roosting in trees or structures or flying over grasslands.
San Diego Desert woodrat <i>Neotoma lepida intermedia</i>	CSC	Possibly occurring in coastal sage scrub adjacent to project area.
Southern sea otter <i>Enhydra lutris nereis</i>	T/FP	Shallow ocean waters, particularly in the vicinity of kelp beds. San Luis Bay is within range.
Plant Species		
Hoover's bentgrass <i>Agrostis hooveri</i>	List 1B	May occur at outskirts of project area in grassland communities.
Pecho manzanita <i>Arctostaphylos pechoensis</i>	Cat. 2/ 1B	Known from Pecho Hills area north of project area; unlikely to occur in project area
Edna (Well's) manzanita <i>Arctostaphylos wellsii</i>	1B	Known from areas west of Avila Beach; unlikely to occur in project area
Monterey paintbrush <i>Castilleja latifolia</i>	4	No specific occurrence in project area; known to inhabit low elevation coastal scrub
Pismo clarkia <i>Clarkia speciosa ssp. immaculata</i>	SR/FE/1B	Known from areas west of Avila Beach; no known occurrences in project area
Sand almond <i>Prunus fasciculata var. punctata</i>	4	May occur in outskirts of project area in coastal scrub

Notes:

Federal Status (determined by U. S. Fish and Wildlife Service):

E = Endangered. In danger of extinction throughout all or a significant part of its range.

T = Threatened. Likely to become endangered species within foreseeable future throughout all or significant portion of its range.

PE = Proposed for listing as endangered.

State Status (determined by California Department of Fish and Game):

SE = State Endangered

ST=State Threatened

FP=Fully Protected

CSC = California Species of Special Concern.

TP=Threatened Phenomenon

CNPS

1B = Rare or endangered

4 = Limited distribution - watch list

Southern steelhead. The Southern steelhead is a Federally Threatened species. Steelhead inhabit riparian, emergent, palustrine habitat. Perennial streams usually characterize spawning and rearing habitat with clear, cool to cold, fast flowing water with high dissolved oxygen content and abundant gravels and riffles. Steelhead are known to occur in San Luis Bay.

Tidewater goby. The Tidewater goby is a Federally Endangered species. The tidewater goby is a benthic species that inhabits shallow lagoons and the lower reaches of coastal streams, and "is

almost unique among fishes along the U.S. Pacific coast in its restriction to low-salinity waters in California's coastal wetlands." It differs from other species of gobies in California in that it is able to complete its entire life cycle in fresh or brackish water. The Tidewater goby is found in sandy and silty bottoms of shallow lagoons and lower stream areas where the water is brackish (salinities usually <10 ppt) to freshwater. The Tidewater goby is known from the lagoon.

California red-legged frog. The frog is listed as a Federally Threatened species. It can be found in grasslands and low foothill regions where lowland aquatic sites are available for breeding. The frog Occupies existing burrows during the dormant phase in the dry season. Habitats with the highest densities of frogs are deep-water ponds with dense stands of overhanging willows (*Salix* sp.) and a fringe of cattails (*Typha latifolia*) between the willow roots and overhanging willow limbs.

American peregrine falcon. The peregrine falcon is a State Endangered species, common along the coast north of Santa Barbara. Peregrines are not known to nest in the project area, but have been sighted foraging.

California Brown Pelican. The pelican is a federal and state endangered species. Brown pelicans dive from flight to capture surface-schooling marine fishes. It occurs in estuarine and marine habitats. It will most likely be found in the Open Water area.

California least tern. The least tern is listed as endangered federally and by the state. These terns forage in shallow estuaries and lagoons, diving head first into the water after a wide variety of small fish. San Luis Obispo County is homes to some of the last breeding sites of this species. These birds may occur in the project area in the open water and estuarine areas foraging.

Western snowy plover. The western snowy plover is listed as a Federally threatened species. It nests, feeds, and takes cover on sandy or gravelly beaches along the coast. This species may be found in the Beach Bluff and Intertidal Zone areas of the project area.

Southern sea otter. The otter is listed as a Federally threatened species. Otters are common along this stretch of coastline. Sea otters spend essentially their entire life in shallow ocean waters, particularly in the vicinity of kelp beds. They occur near land in protected coves and shallow intertidal waters. This species may be found in the Open Water area.

Plant Species

Pismo Clarkia. Pismo Clarkia is designated as a Federally endangered species. This species is endemic to San Luis Obispo County. It has only five known occurrences. It is unlikely to occur in the plan area. The plant communities where it might be found are woodlands and valley or foothill grassland on sandy soil.

Site Specific Setting

Harbor Terrace

Vegetation. The Harbor Terrace site supports limited vegetation due to historic grading. However, adjacent open space areas exhibit relatively intact stands. The Harbor Terrance site can generally be classified as ruderal/disturbed, annual grassland, while adjacent areas exhibit coastal sage scrub

and oak woodland, in addition to annual grassland. Scattered native shrubs and grasses are present on slopes between the terraces, including coyote brush, coast goldenbush, and needlegrass.

A stand of introduced blue gum (*Eucalyptus*) trees is located near the center of the site with a dense stand of needlegrass beneath, a native bunchgrass. Several toyon shrubs are growing beneath the stand of *Eucalyptus*. Various ornamental landscape species have been planted around the trailer park. Several individuals of these species including California pepper and myosporum have spread to other areas.

Non-native grassland habitat is found on the upper slopes of the Harbor Terrace site along the northern site boundary and is interspersed with coastal sage scrub and oak woodland habitats surrounding the site. The non-native grassland observed within and adjacent to the project property supports a variety of introduced annual grasses and weedy herbaceous species including wild oats, bromes, mustard, and tocalote.

Coastal sage scrub habitat is present in the northeastern portion of the property, on upper slopes in the area surrounding the existing water storage tank and on steep slopes at the northwestern property boundary. A small area of coastal bluff scrub can be found near the eastern limits of the property boundary on steep rocky slopes above Avila Beach Drive. Coastal sage scrub species, principally coyote brush and coast goldenbush, have also re-established as scattered individuals or small patches on previously graded and terraced portions of the Harbor Terrace site.

Areas dominated by Coast live oak as well as scattered oak trees occur at several locations around the periphery of the Harbor Terrace site. Oaks occur on-site near the northeastern property boundary and next to the water tank near the northern property boundary. They also occur outside of the property boundary in a deep canyon along the northwest side of the project site (near Diablo Canyon Road) and at scattered other locations surrounding the property. The oak woodland at the northeastern side of the project site is dense in spots with an understory composed of species common to the adjacent coastal sage scrub or non-native grassland habitats. One large Coast live oak tree was observed within the previously graded and terraced area among planted ornamental trees and shrubs at the northernmost corner of the upper level of the trailer park.

There are no riparian or wetland habitats on the Harbor Terrace site.

Wildlife. Animals expected or observed on site in literature include rodents, Audubon's cottontail, black-tailed jackrabbit, white-crowned sparrow, California towhee, Bewick's wren, wrentit, bushtit, California thrasher, house finch, scrub jay, mourning dove, and Anna's hummingbird. Winter visitors include the ruby-crowned kinglet, yellow-rumped warbler, golden-crowned sparrow, and lesser goldfinch. Reptiles include western fence lizard, side-blotched lizard, striped racer, gopher snake, common kingsnake and western rattlesnake. Foraging animals may include coyotes, raccoons, long-tailed weasels, bobcats and badgers as well as red-tailed hawk, northern harrier, merlin, red-shouldered hawk, barn owl and great-horned owl.

No rare, threatened or endangered plant species were found on the Harbor Terrace site during site surveys conducted for the Harbor Terrace EIR in 1996. Furthermore, inventories of sensitive species on Diablo Canyon lands in 1995 did not identify sensitive species on the property. However, based on occurrence in nearby areas in similar habitat, one sensitive plant species could exist on or near the site: Hoover's bent grass, a CNPS List 1B species, which is known to occur in grassy areas intergraded with oak woodlands. This species was identified during surveys for the San Luis Bay Estates project located approximately a mile east of the Harbor Terrace site, where it was found on

dry soils in grassy areas in association with Coast live oaks. The species was not found on the Harbor Terrace site during past on-site field surveys.

No rare, threatened or endangered wildlife species were observed in those same surveys or are expected to occur within the Harbor Terrace site boundaries, with the exception of endangered or threatened birds such as California brown pelican or American peregrine falcon that may occasionally fly over the site.

Light Station

The improvement proposed for the Light Station area as part of the Final plan is the possible extension of the pier at the site. Ensuring access is the primary goal for that sub-area.

Vegetation. The Light Station site is adjacent to the ocean and the open water and intertidal zone habitats. Terrestrial vegetation is mainly native and non-native grassland. There are no substantial impacts to terrestrial vegetation anticipated in this area.

Wildlife. The extension of the pier at this site could impact open water areas.

Other Port Facilities

This category includes piers, Harford Landing and the parking lot property in Avila Beach. The primary impacts to these areas would be adjacent to piers associated with work on the piers. These impacts could affect the Open Water and/or Intertidal Zone habitats. The reader is referred to previous discussions of these habitats.

Beaches

No sensitive plant species occur in the sandy beach habitat. California brown pelicans (state and federally listed as endangered) are common in the area, especially during summer. They forage over offshore waters and rest on rocks, piers, and occasionally the beach. The number of pelicans resting on the beach in the project area is likely limited by the amount of recreational use by people. American peregrine falcons (endangered) occasionally may forage in the project area since nesting occurs in Diablo Canyon and has occurred at Shell Beach.

Figure 5.6-1 Vegetation

Figure 5.6-2 Occurrences of Sensitive Species

Wildlife Corridors

Wildlife corridors typically have two important criteria, connection and cover. These corridors serve to connect wildlife to important breeding areas, foraging sites, or water sources. Corridors typically need to exhibit sufficient cover to provide some protection for prey, but may also consist of relatively unobstructed access. In the project area, wildlife corridors are largely limited to the San Luis Creek corridor, secondary corridors include Harford Creek and Wild Cherry Canyon. Terrestrial open space bordering the port facilities to the north provides relatively uninterrupted movement opportunities for area wildlife.

Regulatory Setting

National Environmental Policy Act (NEPA) of 1969 (42 USC 4341 et seq.). NEPA was established to ensure that the environmental consequences of Federal actions were identified and considered in the decision-making process. NEPA requires an environmental impact statement (EIS) for actions that would have a significant effect on the environment. Regulations implementing NEPA are set forth in the Council on Environmental Quality Regulations (next paragraph).

Council on Environmental Quality (CEQ) Regulations Implementing the National Environmental *Policy Act (40 CFR Parts 1500-1508).* CEQ Regulations implementing NEPA establish the requirements of an EIS and the process by which Federal agencies fulfill their obligations under NEPA. The Regulations also define such key terms as “cumulative impact,” “mitigation,” and “significantly,” to ensure consistent application of these terms in environmental documents.

Endangered Species Act of 1973 (16 USC 1531 et seq.). Protects threatened and endangered species, as listed by the U.S. Fish and Wildlife Service (USFWS), from unauthorized take, and directs Federal agencies to ensure that their actions do not jeopardize the continued existence of such species. Section 7 of the Act defines Federal agency responsibilities for consultation with the USFWS. The Act requires preparation of a Biological Assessment to address the effects on listed and proposed species of a project requiring an EIS. Under Section 10 of the Act, the USFWS may issue permits, with conditions, that authorize the take (harm or harassment) of a listed species.

Executive Orders 11988 and 11990, Floodplain Management and Protection of Wetlands, respectively. These Executive Orders require Federal agencies to provide leadership to protect the natural and beneficial values served by floodplains and wetlands. Federal agencies are directed to avoid development in floodplains where possible, and to minimize the destruction or degradation of wetlands.

Clean Water Act of 1977, as amended (33 USC 1251 et seq.). Provides for the restoration and maintenance of the physical, chemical, and biological integrity of the nation’s waters. Section 404 of the Act prohibits the discharge of dredged or fill materials into waters of the United States, including wetlands, except as permitted under separate regulations by the U.S. Army Corps of Engineers (Corps) and U.S. Environmental Protection Agency. An important aspect of the regulations is that discharges into waters of the United States, and the placement of fill in wetlands in particular, should be avoided if there are practicable alternatives. A Section 404 permit application would have to be submitted to the Corps and approved prior to any discharge of fill or dredged material into San Luis Obispo Creek or the beach area below the high tide line. A Water Quality Certification is required under Section 401 of the Act before a Section 404 permit can be issued.

Rivers and Harbors Act of 1899 (33 U.S.C. 401 et seq.) Section 10 of the Rivers and Harbors Act authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for certain structures or work in or affecting navigable waters of the United States. The Pacific Ocean and San Luis Obispo Creek meet the definition of “navigable waters of the United States” in the implementing regulations. A Section 10 permit is required from the U.S. Army Corps of Engineers prior to initiation of construction.

Coastal Zone Management Act of 1972 (16 U.S.C. 1455 et seq.). The Coastal Zone Management Act regulates development and use of the Nation's coastal zone by encouraging states to develop and implement coastal zone management programs. California's Coastal Zone Management Program has been certified by the U.S. Department of Commerce. The California Coastal Commission reviews coastal development actions for consistency with the California Coastal Zone Management Plan.

California Coastal Act of 1976 (Public Resources Code Section 30000 et seq.). The California Coastal Act was established to provide for the conservation and development of California's coastline. It established the Coastal Commission as a permanent state coastal management and regulatory agency, with jurisdiction over the Coastal Zone. Cities and Counties, including San Luis Obispo County, have prepared, with the approval of the Coastal Commission, Local Coastal Programs (LCPs) that provide policies, land use plans, and zoning ordinances that guide development decisions through the issuance of Coastal Development Permits.

The central provisions of Chapter 3 of the Coastal Act provide guidance for the protection of sensitive resources. These provisions include Sections 30231, 30240, and 30250(a) as follows:

Section 30231 provides that the biological productivity of coastal waters, streams, wetlands, estuaries, and lakes must be maintained and, where feasible, restored. This is to be achieved by, among other means: minimizing adverse effects of wastewater discharges and entrainment; controlling runoff; preventing depletion of groundwater supplies and substantial interference with surface water flow; encouraging wastewater reclamation; maintaining natural buffer areas that protect riparian habitats; and minimizing alteration of natural streams.

Section 30240 prohibits any significant disruption of habitat values, and limits development within environmentally sensitive habitat areas (ESHA) to uses that are dependent on the resources. It also requires development adjacent to ESHA be sited and designed to prevent significant degradation and be compatible with the continuance of the habitat.

Section 30250 (a) directs new residential, commercial, or industrial development to existing developed areas. Where developed areas cannot accommodate new development, it is to be located in other areas where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

Under the Coastal Act, estuaries and other wetlands within the Coastal Zone are environmentally sensitive habitats, and are to be protected, enhanced, and, where possible, restored. The Master Plan does not propose direct impacts to estuaries and other wetlands in the Avila Beach area.

California Environmental Quality Act (CEQA) of 1970 (Public Resources Code Section 21000-21177; Guidelines at Section 15000 et seq.). CEQA Guidelines stipulate that a plant or animal that is not listed but can be shown to meet criteria for listing under the Endangered Species Act (see below) shall be given the same consideration as a listed species.

California Endangered Species Act of 1984 (Fish and Game Code Section 2050 et seq.). Provides for the protection of rare, threatened, and endangered plants and animals, as recognized by the Department of Fish and Game, and prohibits the taking of such species without authorization by the Department. State agencies are required to consult with the Department of Fish and Game on actions that may affect listed or candidate species. With regard to plants, the Endangered Species Act greatly expanded upon protection afforded to rare, threatened, and endangered plants under the earlier California Native Plant Protection Act of 1977.

California Fish and Game Code: Section 1603 (Streambed Alteration Agreement). Section 1603 requires that private entities obtain a Streambed Alteration Agreement from the Department of Fish and Game prior to undertaking any construction activity within streambeds, including all intermittent as well as perennial streams. Section 1601 imposes similar requirements on state and local government agencies. Through this agreement, the Department attempts to ensure that any approved construction activity is protective of stream resources through design, construction planning, and specific mitigation measures.

Porter-Cologne Water Quality Control Act (California Water Code, Section 13020). Under the authority of the Porter-Cologne Act and the Federal Clean Water Act, the Central Coast Regional Water Quality Control Board (RWQCB) acts as the regional agency for the State Water Resources Control Board and is responsible for the regional enforcement of water quality laws and coordination of water quality control activities. A *Compilation of Water Quality Goals* prepared by the RWQCB establishes water quality goals for protection of saltwater and freshwater aquatic life. These goals include maximum and average concentrations of organic and inorganic constituents in water.

Thresholds of Significance

According to the State CEQA Guidelines, the project would have a significant impact if it would:

- > Have a substantial adverse effect, either directly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or the US Fish and Wildlife Service
- > Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or the US Fish and Wildlife Service
- > Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- > Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

- > Conflict with any local policies or ordinances protecting biological resources, such as a tree protection policy or ordinance
- > Conflict with the provisions of an adopted Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP)

Further, impacts are considered significant if the proposed plan or its implementation would conflict with the resource protection sections of the Coastal Act.

Impacts

Impact B-1: Construction of facilities may result in the loss of habitat for special-status plant and animal species or the loss of individuals. This impact is considered adverse but not significant (Class III).

Grading of the Harbor Terrace site, along with activities proposed at the fringes of existing developed areas, may result in the removal of vegetation that may provide habitat for sensitive plant and/or animal species. No threatened or endangered species are known to occur in the terrestrial areas of the project area; however, at least one Class 1B plant species may occur on the Harbor Terrace site.

Extension of piers would impact sandy bottom habitat for marine species. Although threatened or endangered species may be present in the marine environment, extension of pier lengths and installation of pilings is not expected to contribute substantially to the loss of habitat for marine species. Extension of piers requires approval from the Army Corps of Engineers, and NOAA - Fisheries prior to construction. Impacts to the marine environment are considered less than significant.

Impact B-2: Implementation of the Final Master Plan would not adversely affect riparian habitat, but may impact needlegrass grassland, coastal tidal areas, and other sensitive natural communities. This impact is considered significant unless mitigated (Class II).

Development of the Harbor Terrace site may expand the fire clearance area required and result in removal of oaks, scrub, or other sensitive communities. A small stand of needlegrass grassland has been identified on site. Grading of the Harbor Terrace site would likely result in removal of the needlegrass. The Harbor Terrace EIR found this impact to be less than significant, because the population consisted of reintroduced individuals, not a remnant of a once larger population. Tidal areas may be impacted by extension of piers and landing improvements, however, the adverse effect to tidal zones will be limited to pier pilings, and therefore is not expected to have a long-term significant effect.

Impact B-3: Development of Harbor District facilities will increase the area of impervious surfaces, increasing stormwater run-off into San Luis Bay, which could indirectly affect sensitive species habitat. This impact is considered significant unless mitigated (Class II).

Increased sediment may be directly detrimental to fish and amphibians through abrasion of gills and skin, and may reduce habitat area (pools) through siltation.

Impact B-4 Development of the Harbor Terrace site may disrupt wildlife movement along the slope above the site. This impact is considered significant unless mitigated (Class II).

There are no topographic or manmade features inherent in the site or proposed under the plan that would restrict wildlife movement in the project area. The development of the Harbor Terrace site with recreational facilities would introduce additional human population into the area, with resulting increases in light and noise. Increased use of the site may have the secondary impact of deterring wildlife from nearing the area. Given the abundance of suitable, similar open space areas north of the project area, and the relatively disturbed nature of the project area at present, these impacts are considered less than significant.

Although there are no HCP's or NCCP's applicable to the project area, other regulatory framework exists to protect biological resources in the coastal zone. Of primary importance are the Coastal Act, and the standards and policies of the CZLUO.

The San Luis Bay Area Plan, along with the CZLUO and the proposed Master Plan set policy regarding protection of natural resources. Other policies that govern land use are largely contained in the body of the Coastal Act. Coastal Act Section 30240, ESHA's, was mentioned in the regulatory setting. No ESHA's are in effect for the project area. Other sections of the Coastal Act which apply to biological resources include, but are not limited to:

Section 30230. Marine Resources; maintenance. Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, and educational purposes.

The Final Master Plan contains policies that support the preservation and enhancement of marine resources, including through runoff reductions, and sensitive siting of new development. The main thrust of the plan is to enhance visitor, marine-related commercial and recreational use of the Port's facilities, while protecting the resource (pg 1-12). The Plan generally limits new development to existing developed or substantially altered sites.

Impact B-5 Construction activities and occupancy of facilities would extend existing human-related disturbance (human presence, wildlife predation by pets, noise, dust, lighting) further into open space areas. This impact is considered adverse but not significant (Class III).

The development of the Harbor Terrace site with recreational facilities would introduce additional human population into the area, with resulting increases in light and noise. Increased use of the site may have the secondary impact of deterring wildlife from nearing the area. Given the abundance of suitable, similar open space areas north of the project area, and the relatively disturbed nature of the project area at present, impacts are considered less than significant.

Mitigation Measures

Mitigation Provided By Existing Regulations

Construction of Piers is subject to regulation under Section 10 of the Rivers and Harbors Act. Processing of approvals under that act by the Army Corps of Engineers requires assessment of impacts to threatened and endangered species, and provides strict standards under which such activities can take place.

Coastal Zone Land Use Ordinance (CZLUO). Section 23.07.170 of the CZLUO provides standards and findings required for development proposed within Environmentally Sensitive Habitats (ESH), as defined by Chapter 23.11. To approve a land use permit for a project within or adjacent to an ESA, the review body must find that:

1. There will be no significant negative impact on the identified sensitive habitat and the proposed use will be consistent with the biological continuance of the habitat.
2. The proposed use will not significantly disrupt the habitat.

Section 23.07.170 (d) provides development standards for ESH that must be satisfied, which include:

1. New development within or adjacent to the habitat shall not significantly disrupt the resource.
2. New development within the habitat shall be limited to those uses that are dependent upon the resource.
3. Where feasible, damaged habitats shall be restored as a condition of development approval.
4. Development shall be consistent with the biological continuance of the habitat.
5. Grading adjacent to ESH shall conform to the provisions of Section 23.05.034c.

Section 23.07.178 speaks to the protection of marine habitats and provides the following standards for new development:

1. Protection of kelp beds, offshore rocks, reefs and intertidal areas. Development shall be sited and designed to mitigate impacts that may have adverse effects upon the habitat, or that would be incompatible with the continuance of such habitats.
2. Siting of shoreline structures. Shorelines structures, including piers, groins, breakwaters, seawalls, and pipelines shall be designed or sited to avoid and to minimize impacts on marine habitats.
3. Coastal access. Coastal access shall be monitored and regulated to minimize impacts on marine resources. If negative impacts are demonstrated, then the appropriate agency shall take steps to mitigate these impacts, including limitations of the use of the coastal access.

Local Coastal Program (LCP). The Local Coastal Program provides policies relating to the protection of environmentally sensitive habitats (ESA). These policies generally complement the standards described above by Section 23.07.170 of the CZLUO and address (among other things) the

development of land uses within or adjacent to ESH; the requirement to demonstrate no significant effect on ESH; and the need to restore such habitats where feasible. Other policies address the protection of coastal streams, terrestrial environments including native vegetation, and marine habitats.

Mitigation Included in the Project Description

Goal. A harbor with protected, maintained, and enhanced resources that balances the environmental, social, and economic needs of the various user groups.

Aquatic and Terrestrial Habitats

1. Marine Environments. No actions taken by the Board of Commissioners of Harbor District will result in significant and unavoidable decreases in water quality of San Luis Obispo Bay, including sensitive habitats in San Luis Creek.
2. Runoff Controls. Require implementation of effective runoff control strategies and pollution prevention activities by incorporating the most current best management practices for all new development.
3. Native Vegetation. Require landscaping plans to incorporate native plants and other coastal species appropriate to the site that reflect the Port's waterfront character.
4. Land-based Sensitive Resources. Incorporate decisions and implementation measures that protect environmentally sensitive resources.

Recommended Additional Mitigation Measures

- B-1. Oak trees removed or damaged by project activities shall be replaced by planting oak trees in areas adjacent to existing oak woodlands outside project grading limits. These oak trees should be grown from locally collected acorns. San Luis Obispo County recommends a 4:1 replacement of oak trees removed or damaged by development activities. Existing oak trees shall be beneficially incorporated where possible in the project landscaping along with other native species.
- B-2. Grading and construction in and adjacent to sensitive native habitat areas shall be minimized. Project grading activities shall generally avoid steep slopes and bluff areas.
- B-3. Construction limits shall be clearly defined and enforced. Oak tree protective measures shall be incorporated by installing construction fencing outside of the drip line of oak trees and preventing any construction or grading activities from damaging existing oak trees.
- B-4. Projects abutting open, natural areas, will incorporate a buffer zone incorporating fire clearance requirements, and transition zones between introduced and native landscaping. Maintenance of this buffer zone would include prevention of non-native vegetation in the project area from spreading into the native habitats surrounding the site.
- B-5. Initial land-clearing and grading activities shall be scheduled to avoid spring and early summer months in areas where oak woodland or dense coastal scrub border the site. If clearing must occur during this time period, preconstruction surveys shall be conducted to identify nesting birds in coastal scrub and oak woodland habitats within 500 feet of any

project grading or related activities (parking, equipment storage, construction office, etc.). If active nests of Cooper's hawk, northern harrier, white-tailed kite, or Bell's sage sparrow are found, construction or related activities shall be postponed within 500 feet of the nest until the young have fledged or the nest becomes inactive.

- B-6. Botanical surveys shall be conducted to determine the presence and distribution of special-status plant species on the Harbor Terrace site prior to project approval. Botanical surveys shall be conducted by a qualified botanist during known flowering periods of plant species listed in Table 5.6-1 and focus on vegetated areas that would be disturbed by the project. If special-status species would be adversely affected by the project, mitigation measures shall include:
- a. Relocating project components to avoid impacts;
 - b. Preservation of the majority of the population on the project site through a permanent conservation easement; and
 - c. Transplanting individual plants (perennials) or seeds (annuals) from impact areas to restoration areas.

Measure a. should be implemented if the plant is threatened or endangered or if a small percentage of the sensitive population on the project site would be affected. Otherwise, measures b. or c. may be implemented.

- B-7. Native landscaping shall be designed and installed to discourage pedestrian access from the Harbor Terrace site into adjacent native habitats. In addition, if pets are allowed, designated pet areas shall be incorporated into the design of new development so pets are not allowed into nearby habitat areas or buffer zones that support native wildlife.

- B-8. To approve a land use permit for a project within or adjacent to an Environmentally Sensitive Area, the Harbor District must find that:

1. There will be no significant negative impact on the identified sensitive habitat and the proposed use will be consistent with the biological continuance of the habitat.
2. The proposed use will not significantly disrupt the habitat.

- B-9. The Harbor District shall implement the following provisions of the Coastal Zone Land Use Ordinance in the review and approval of new development that may affect environmentally sensitive areas:

1. New development within or adjacent to the habitat shall not significantly disrupt the resource.
2. New development within a sensitive habitat shall be limited to those uses that are dependent upon the resource.
3. Where feasible, damaged habitats shall be restored as a condition of development approval.
4. Development shall be consistent with the biological continuance of the habitat.
5. Grading adjacent to Environmentally Sensitive Habitat Areas shall conform to the provisions of Section 23.05.034c of the Coastal Zone Land Use Ordinance.

B-10 The Harbor District shall implement the following provisions of the Coastal Zone Land Use Ordinance in the review and approval of new development that may affect marine, nearshore and beach habitats :

1. Protection of kelp beds, offshore rocks, reefs and intertidal areas. Development shall be sited and designed to mitigate impacts that may have adverse effects upon the habitat, or that would be incompatible with the continuance of such habitats.
2. Siting of shoreline structures. Shorelines structures, including piers, groins, breakwaters, seawalls, and pipelines shall be designed or sited to avoid and to minimize impacts on marine habitats.
3. Coastal access. Coastal access shall be monitored and regulated to minimize impacts on marine resources. If negative impacts are demonstrated, then the Harbor District shall take steps to mitigate these impacts, including limitations of the use of the coastal access.

Cumulative Impacts

Implementation of the Master Plan would result in increased development in largely developed or disturbed areas in Avila Beach. Due to the low likelihood of sensitive species to occur within Avila Beach, and the limited terrestrial habitat present, the implementation of the Plan is not expected to result in cumulatively considerable adverse impacts to the region's biota.

Residual Impacts

Residual impacts are considered less than significant due to measures identified above.

5.7 Traffic and Circulation

Issues

Construction of the various facilities associated with the Port Master Plan will increase the number of motor vehicle trips on streets and intersections serving the Port.

Background

Traffic in the Avila Beach area has been an important issue for many years. Analysis of the circulation system began in 1988 with the first comprehensive study of the existing and future traffic demand. That study, completed by DKS Associates, was initiated to address concerns over the ability of the existing and planned roadway system to accommodate increased traffic levels in light of development proposals in the area. It recommended a series of capacity enhancements for the county roads plus several transportation management strategies, such as park and rides, public transit, bicycle and parking management. It was used as the basis for the implementation of the County of San Luis Obispo's Avila Road Improvement Fee Program.

In 1992, a follow up study was completed to further refine the technical evaluation of the current and future roadway capacities and to affirm the improvement program. That study was authored by Wilbur Smith and Associates, and focused on development of moderate roadway capacity enhancement and additional detail on the non-street strategies. Finally, the 1992 document was the basis for an update of the Avila Road Improvement Fee Program.

In 2001, the Avila Beach community's remediation work was completed by Unocal. That same year, the Avila Beach Specific Plan was adopted by the County Board of Supervisors. The Specific Plan outlined the vision for Avila Beach and provided the primary impetus for the 2001 Avila Circulation Study, a comprehensive transportation evaluation of the Avila Beach and Avila Valley area. That Study, prepared by TPG Consulting, identified both the short-range and long-range circulation needs of the Avila Beach and Avila Valley area.

The 2003 Avila Circulation Study, Port San Luis Harbor Master Plan Update, attached as Appendix B is an update of the 2001 Circulation Study and serves as the basis for the analysis that follows. It builds on the information developed for the 2001 Study, updates the existing conditions and analyzes the future conditions with and without the proposed changes to the Master Plan.

Setting

Existing Street Network

The Avila area is served by two interchanges, which connect to U.S. 101. West of the freeway these two routes join into a single roadway leading to the area's beach activity center and residential areas. All local roadways in the study area have two through lanes and are classified by the County of San Luis Obispo into three general categories: arterial, collector, and minor roadways. U.S. 101 is classified by Caltrans as a freeway and has four lanes. The roadway network is shown in Figure 5.7-1.

The two arterial routes providing primary access to the study area are Avila Beach Drive and San Luis Bay Drive. Avila Beach Drive is a winding 4 1/2 mile long two-lane roadway from U.S. 101 to its terminus at Port San Luis. East of Cave Landing Road, Avila Beach Drive maintains minimal shoulders as the roadway width is constrained on the south by steep rocky slopes and on the north by the parallel San Luis Obispo Creek. Left turn bays exist on Avila Beach Drive at selected intersections. Parking is allowed on the portion of Avila Beach Drive west of San Luis Street.

San Luis Bay Drive begins east of U.S. 101 and terminates with a stop sign controlled approach at Avila Beach Drive. This arterial roadway is generally used by trips originating or terminating north of Avila Beach. Shoulders are provided along San Luis Bay Drive, however parking is not permitted.

The intersection of Avila Beach Drive at San Luis Bay Drive is the most critical intersection in the study area. As the juncture of the main access roads to Avila Beach, the highest turning volumes are experienced at this location.

A number of collector roadways are found in the area and they include Front Street, San Luis Street, San Miguel Street, Shell Beach Road, Cave Landing Road, See Canyon Road, and Monte Road. Front Street is located between the beach and the commercial/residential development to the north. San Luis Street and San Miguel Street provide access from Avila Beach Drive to the commercial and parking facilities in town. Shell Beach Road is a frontage road located west of U.S. 101 from Avila Beach Drive to Pismo Beach. Cave Landing Road is a narrow route providing access to Pirates Cove. See Canyon Road is a rolling narrow two-lane route that accesses agriculture and single-family homes and agricultural operations west of U.S. 101. This roadway extends as Prefumo Canyon Road into the City of San Luis Obispo. Finally, Monte Road provides a connection between San Luis Bay Drive and Avila Beach Drive east of U.S. 101. It also provides access to agricultural and residential areas to the east.

The remaining roads, which are not classified by the County of San Luis Obispo as either arterials or collectors, are deemed to be minor roadways.

The Avila area roadway network was inventoried to determine the roadway cross-sections, average daily traffic volumes, traffic control devices, and posted speeds. Those findings are provided below.

All roadway intersections in the study area are presently stop sign controlled or uncontrolled. Currently, no intersections are signalized. Posted speed limits in the area were also inventoried. Figure 5.7-2 depicts the locations of stop signs and the posted speed limits in the study area.

Figure 5.7-1 Roadway Network/Classification Map

Figure 5.7-2 Existing Traffic Controls

2003 Traffic Volumes

The County of San Luis Obispo has collected traffic volume data for a number of years. A permanent count station was established on Avila Beach Drive just west of San Luis Bay Drive which is counted annually in May. Traffic counts generally tally the number of vehicles on a per hour, per day, and per week basis. This information provides the basis for analyzing the current conditions of the roadway system. During the recent Unocal Beach clean-up efforts, the count station was discontinued and last counted in 1998. Regular traffic counting resumed this year (2003), and the current count is used in this Study.

The count station data was used to establish a growth factor for traffic from 1998 to 2003 for each of the locations shown on Figure 5.7-3. During the Unocal Beach clean-up, weekday traffic decreased from 1998, as many commercial and retail services were closed.

Traffic volumes for weekend/summer/holidays continue to grow. The 2003 count station data was used to establish a seasonal factor to adjust the weekday peak hour count to a summer weekend peak hour count for the 2003 conditions. A factor of 1.48 was used. This number reflects a large amount of weekend beach traffic with little weekend traffic entering Avila Beach for shopping since much of the retail and commercial land uses were closed during the Unocal clean-up.

For the future conditions, the 1998 count station data was used, because it more closely reflects conditions expected in the future: the commercial, retail and residential land use will reopen/rebuild replicating the pre-clean up densities. A factor of 1.18 was used.

Due to the number of outdoor facilities and activities available in the Avila area, it is a very attractive destination for recreational users. The beach and port facilities, in particular, generate their peak use during the summer season on weekends. Traffic to/from these sites during non-summer months is typically less than the summer traffic, usually on the order of 20 percent less during a weekend. The non-summer weekday traffic volumes are consistently lower than summer weekday volumes. While the above comparisons are solely made for the major roadways, seasonal variations may differ slightly for internal roadways.

Figure 5.7-3 2003 traffic volumes

Typically, traffic will vary during the week with Thursday and Friday being the busiest weekdays and Saturdays being the busiest weekend day. This trait consistently occurs at several locations for both summer and non-summer conditions. While the percentage increase in summer weekend traffic over summer weekday traffic is significant at the major access routes to the beach area, the largest changes occur on streets in the town.

In 2003, Avila Beach Drive, between San Luis Bay Drive and San Luis Street, carried the largest two-way traffic volumes in the area, ranging from 7,500 vehicles per day (vpd) during non-summer weekdays to just under 10,000 vpd on holiday/summer weekends. These volumes have decreased from 1998 because of the Unocal clean-up.

In 1998, two-way traffic volumes ranged from 8,800 vehicles per day (vpd) during non-summer weekdays to over 10,000 vpd on holiday/summer weekends. The 1998 daily volumes dropped from a peak in 1991. During non-summer weekdays the traffic volumes were approximately 12,000 vehicles per day and the summer volumes exceeded 14,000 vpd. This decrease in daily traffic can be attributed to changes in the operation of Diablo Canyon, the competition from other communities, and the overall economy of the area.

The distribution of traffic over a 24-hour period is a constraining factor on the transportation circulation system. The larger the peak condition for any time period, the greater the demand placed on roadway capacity. Twenty-four hour traffic volume profiles illustrate the directional peaking conditions for the study area. Although 2003 data was not available for both the summer and non-summer periods, the available historic data is useful in understanding the peaking patterns of the traffic. As observed by the profiles for San Luis Bay Drive and Avila Road, distinct inbound (westbound) and outbound (eastbound) peaks are prevalent during non-summer and summer periods. The inbound peak typically occurs between 11 A.M. and 1 P.M. while the outbound traffic peaks between 2 P.M. and 4 P.M.

Level of Service Methodology

The maintenance of acceptable levels of service (LOS) for the Avila Valley and Avila Beach area streets is important for balancing future development with the reasonable level and scale of roadway improvements in the community. The County of San Luis Obispo has established level of service “C” as the accepted level of service for roadways in the Avila area (Local Coastal Plan - San Luis Bay - Coastal Area Plan). Previous studies attempted to acknowledge the wide range of traffic volumes experienced in the area during the summer months. This prompted the establishment of a level of service of “D” for the summertime weekends.

Table 5.7-1 Roadway Capacity

2-lane roadway
(two-way volumes)

Level of Service	Service Flow Rate	Volume to Capacity
A	< 1,180	0.00 - 0.59
B	< 1,380	0.60 - 0.69
C	< 1,580	0.70 - 0.79
D	< 1,780	0.80 - 0.89
E	< 2,000	0.90 - 0.99
F	> 2,000	> 1.00

The 1992 Study laid the groundwork for a program to test the performance of the street system in the study area. By establishing a level of service standard more closely tied to the seasonality of the traffic demand, the County was able to focus on the normal demand. In February 1994, the County Board of Supervisors established a monitoring program for Avila area roads based on the average non-summer weekday peak-hour traffic volume. This monitoring program includes annual traffic counts during the month of May. These annual traffic counts are used to calculate the current level of service.

Peak hour capacity was calculated for roadway segments using the 1997 Highway Capacity Manual methodology for two-lane roadways. This calculation was then compared against the previously adopted capacity contained in the 1992 Study. The 1997 Highway Capacity Manual is based on substantial research on the carrying capacity of roadways and represents the current industry standard for evaluation of level of service on a 2-lane roadway. That comparison showed that the 1997 Highway Capacity Manual yielded a significantly higher capacity. In discussing the applicability of this latest information to the Avila Circulation Study, it was determined that a blending of the 1992 study capacity and the 1997 Highway Capacity Manual capacity would be appropriate. That process yielded the roadway capacities shown in Table 5.7-2 for use in this Study.

Freeway Level of Service

The levels of service for U.S. 101 were calculated using the Highway Capacity Manual software for basic freeway segments. Information used in the analyses included peak hour traffic volumes, and existing roadway conditions including terrain, lane and shoulder widths, vehicle mix and direction of flow.

Intersection Level of Service

For analysis purposes, the 2000 Highway Capacity Manual defines six levels of service (LOS). They are given letter designations from "A" to "F", with "A" representing the best operating conditions, and "F" the worst. Table 5.7-2 contains a complete description of each level of service category for signalized and unsignalized intersections. The intersection levels of service calculations were completed using 2000 Highway Capacity Manual (unsignalized and signalized) software packages. In the future scenarios, the intersection of Avila Beach Drive and San Luis Bay Road is analyzed as two-way stop controlled (unsignalized) and signalized.

Table 5.7-2: Intersection Level Of Service Description

Source: 2000 Highway Capacity Manual, Transportation Research Board.

¹ Unsignalized intersections include TWSC and AWSC

			Intersections	
			Signalized	Unsignalized ¹
Level of Service	Conditions	Signalized Intersection Description	Delay (secs/veh)	Delay (secs/veh)
"A"	Free Flow	Users experience very low delay. Progression is favorable and most vehicles do not stop at all.	≤ 10.0	≤ 10.0
"B"	Stable Operation	Vehicles travel with good progression. Some vehicles stop, causing slight delay.	>10.1 to 20.0	>10.0 to 15.0
"C"	Stable Operations	Higher delays result from fair progression. A significant number of vehicles stop, although many continue to pass through the intersection without stopping.	>20.0 to 35.0	>15.0 to 25.0
"D"	Approaching Unstable	Congestion is noticeable. Progression is unfavorable, with more vehicles stopping rather than passing through the intersection.	>35.0 to 55.0	>25.0 to 35.0
"E"	Unstable Operations	Traffic volumes are at capacity. Users experience poor progression and long delays.	>55.0 to 80.0	>35.0 to 50.0
"F"	Forced Flow	Intersection's capacity is over saturated, causing poor progression and unusually long delays.	> 80.0	> 50.0

Weekday Traffic/LOS

Traffic volumes for the study area were developed from the ongoing County traffic-monitoring program. On an annual basis the County collects traffic counts on Avila Beach Drive just west of the San Luis Bay Drive intersection. This count station is used to monitor overall traffic volumes in the Avila Valley area. Traffic volumes for 2003 were estimated using this control station to adjust previously collected count information at a number of locations in the study area. The 2003 data was used as the basis for the existing conditions. This baseline data was used to estimate the non-summer traffic volumes shown in Table 5.7-3.

Seasonal/Holiday Traffic/LOS

To better understand the relationship between typical weekday traffic patterns and the traffic volumes experienced on summer weekends and holidays, traffic volumes were estimated for summer and weekends. These volumes were established using data collected by the County, which showed the relative difference in traffic volumes at several key locations. From these volumes, factors were developed to adjust the weekday traffic to reflect the typical summer weekend or holiday traffic volumes.

Table 5.7-2 shows the 2003 summer weekend and holiday traffic volumes along with the non-summer weekday volumes. Table 5.7-3 also includes the volume-to-capacity ratio (v/c) calculation and the resulting level of service (LOS) for each road segment. The analyses were based on both existing weekday and summer/holiday peak hour traffic volumes. Additional factors such as terrain, roadway lane and shoulder width, vehicle mix, and direction of flow were used to establish the capacity threshold shown in Table 5.7-3.

Both Caltrans and the County of San Luis Obispo use a LOS "C" as their acceptable standard for traffic impact studies. The County policy was established in 1995 through the adoption of an ordinance (Co. Ord. 2702). The ordinance calls for the level of service to be based on the average weekday two-way volume for Avila Beach Drive and San Luis Bay Drive between the hours of 3pm and 6pm during the second week in May. All County segments currently operate above the adopted LOS criteria. U.S. 101 however, currently is operating at a level of service of "D" or worse, falling below Caltrans LOS standards.

Table 5.7-3: Existing Conditions (2003)

Road	Segment	Non-Summer Weekday Peak Hour			Summer/Holiday Weekend Peak Hour		
		Volume	V/C ¹	LOS	Volume	V/C ¹	LOS
Avila Beach Drive	Ontario Road to San Luis Bay Dr.	318	0.16	A	470	0.23	A
	San Luis Bay Dr. to Cave Landing Road ²	713	0.36	A	1057	0.53	A
	Cave Landing Road to San Luis St.	1022	0.51	A	1513	0.76	C
	San Luis St. to San Miguel St.	587	0.29	A	869	0.43	A
	San Miguel St. to Port San Luis	409	0.20	A	605	0.30	A
Cave Landing Road		91	0.05	A	135	0.07	A
Front Street		235	0.12	A	348	0.17	A
Highway 101 ³	N of San Luis Bay Dr.	8700		F ⁴	9831		F ⁴
	San Luis Bay Dr. to Avila Beach Dr.	7100		D ⁴	8023		E ⁴
	S of Avila Beach Dr.	8200		E ⁴	9266		F ⁴
Monte Road		9	0.00	A	13	0.01	A
Ontario Road		52	0.03	A	77	0.04	A
Palisades Road		191	0.10	A	283	0.14	A
San Luis Street		157	0.08	A	232	0.12	A
San Luis Bay Drive	US 101 to Blue Heron Dr.	461	0.23	A	682	0.34	A
	Blue Heron Dr. to Avila Beach Dr.	318	0.16	A	470	0.23	A
See Canyon Road		70	0.03	A	103	0.05	A
Squire Canyon Road		13	0.00	A	19	0.01	A
Intersection							
Avila Beach @ San Luis Bay ⁵							
Eastbound Left			8.4	A		9.6	A
Southbound Left-Right			38.0	E		766.8	F

¹ V/C = volume-to-capacity ratio

² County count station

³ Counts from Caltrans 2002 Count book

⁴ LOS calculated using HCS Freeway Module

⁵ LOS calculated using HCS Unsignalized Module

A controlling location, or “bottleneck,” for traffic flow in the study area is the intersection of San Luis Bay Drive at Avila Beach Drive. This critical intersection is controlled by a stop sign on San Luis Bay Drive. Based on existing volumes, Avila Beach Drive traffic at the intersection experiences an acceptable level of service of A. However, southbound vehicles on San Luis Bay Drive, representing about 15 percent of all traffic at the intersection, experience congestion during the weekday/end peak hour. The southbound left-right movement from San Luis Bay Drive shares a single lane, delaying right-turning vehicles onto westbound Avila Beach Drive.

The County of San Luis Obispo, as part of its continuing monitoring program, maintains and reviews accident data for the study area roadways. In 2001, all intersections in the study area are at or below the system average collision rate of 0.32 collisions per million entering vehicles. All road segments were at or below the systemwide collision rate average of 1.76 collisions per million vehicle miles except for the segment of Avila Beach Drive between Route 101 and San Luis Bay Drive. This segment has a series of curves with limited shoulders and the County continues to

monitor for delineation improvements. The entrance to Sycamore Mineral Springs constructed a left turn pocket for their entrance within this section, which should enhance safety.

In the past, higher than average collision rates have been seen at the Avila Beach Drive/San Luis Bay Drive intersection. These higher rates occurred prior to the construction of a left turn pocket at that location in 1989. Also, higher rates were seen at the Avila Beach Drive/Cave Landing Road intersection prior to constructing the left turn pocket in early 1990's. Finally, the Ontario Road/San Luis Bay Drive intersection had frequent collisions involving failure to stop at stop sign. Since improved delineation at this location was completed in 1998, there has been a reduction in accident frequency.

Transit Service

Since 1990, transit service to and from Avila and Avila Valley has been provided in various forms. Beginning in 1990 the San Luis Obispo Regional Transit Agency (SLORTA) operated direct daily service to Avila during the summer. Three round trips per day were provided and the ridership generated a fare box return of less than 1%. This service was not continued in 1991 because of this limited performance.

Again in the summer of 1995, service to Avila was attempted. Similar results occurred: the ridership generated a fare box ratio of less than 2%.

Currently, service to the Avila Valley is limited to daily service from the Central Coast Area Transit (CCAT) service between San Luis Obispo and Pismo Beach. A flag stop is provided at the P.G. & E. information center for those riders wishing to travel to or from the Valley. No service is provided to the town of Avila.

In 2001, the Avila Beach Community Foundation received a shuttle bus grant from the San Luis Obispo Air Pollution Control District (SLOAPCD) in the amount of \$140,000. The Foundation approved a matching grant of \$50,000 for a total project cost of \$190,000. The demonstration project provided for shuttle bus service to and from Avila Beach and Avila Valley. It began operation in January 2002 and ended in June 2003. The Foundation applied to the San Luis Obispo Council of Governments (SLOCOG) to continue the service. In July 2003, SLOCOG found this to a reasonable to meet un-met transit need, and directed the County to secure 90% of the funding. The Foundation is responsible for the 10% match.

The Foundation has a contract with a private transit provider. The shuttle service is free and runs year round, every weekend. In the summer of 2003, approximately 2,500 people used this service.

Parking

Public parking is currently supplied in a number of locations within Avila Beach. Specifically, the Earl's Alley parking lot, on-street parking in the commercial area of town and parking along Avila Beach Drive are the primary locations.

With the recent completion of the Unocal Project, the parking supply was increased slightly from 935 to 952 overall spaces. With the new parking scheme the balance among the specific locations shifts somewhat. Front Street has less parking in order to accommodate the park and the street closure area. There is additional parking on the side streets and in the Earl's Alley lot. To the extent possible, Front Street parking spaces eliminated by the street closure were replaced by increasing the

number of spaces on the side streets, immediately north of Front Street. The capacity of the public lot has been increased from 305 stalls to 355 by a more efficient layout of parking spaces. Additional key points about the public parking supply are as follows:

Front Street Diagonal Parking. Parking along Front Street has historically been in a diagonal parking arrangement. The remodeled streetscape re-installed the historic parking pattern along Front Street. Spaces have been laid out at 45 degrees and 30 degrees on the two sides of the street, in order to make it possible to provide wider sidewalks.

CURRENT PARKING DEMAND in AVILA BEACH	
Retail parking demand (@ 3 spaces per 1000 square feet)	
Proposed Retail (70,000 square feet) = 210	
Total Potential Retail Parking Demand	210
Beach demand (1 person per 80 square feet of beach; 3.35 persons per car; 95.9% auto use)	
Usable Beach Area = 6.4 acres	
Total Number of Possible Beach Users = 3,485	
Parking Spaces Required = 998	
Total Potential Beach Parking Demand	998

Side Street Parking. Parking on some side streets has been changed from parallel parking in some locations to diagonal parking. These locations include both sides of San Juan Street and San Francisco Streets.

Residential Neighborhood Parking. Residential neighborhood on-street parking is planned to continue to be uncontrolled, with residents and beach goers able to use these stalls.

Currently, all new development in Avila Beach must supply its own on-site parking to meet County standards. This requirement has been identified as an unnecessary burden on restaurant and retail

development. In most cases, commercial development in Avila relies on the beach itself to generate its customers; visitors park for the beach and then walk to retail and restaurant locations. Parking for dinner restaurants is readily available since many beach-goers have vacated their spaces by late afternoon.

As shown in the table above, primarily beach users generate parking demand in Avila Beach. When the beach is full, beach goers create a demand for approximately 1,000 parking spaces. In addition, the commercial uses also create a demand for parking. On busy summer days, that commercial demand is somewhat shared with the beach parking demand. People visit these local businesses as a part of a trip to the beach, so most parking demand for the commercial uses is contained within the beach demand. At less busy times, those trips made to visit the Avila Beach businesses are not necessarily shared trips to the beach.

Figure 5.7-4 Parking

Port San Luis Parking

Parking use at the Port is largely dependent on the weather. During the warm summer months, weekend parking demand is at its highest with recreational fishermen, tourists, beach visitors and patrons of the local restaurants. The available parking at the Port begins to fill early in the morning with vehicles carrying customers of the sport fishing boats, commercial fishing crews and recreational fishermen with their vehicles and boat trailers. By mid-morning, tourists begin to arrive. By mid-afternoon, the fishermen have returned to the port and the parking lot is usually entirely full. A moderate percentage of fishermen patronize the restaurants and shops at the pier before loading up their boats and leaving. However, the afternoon is also the peak time for beach and pier use and a portion of these beach visitors use the port parking lot as well. Thus, even though the early arrivals at the port are beginning to leave by mid afternoon, these spaces are almost immediately occupied by these visitors. In the evenings, the beach users and most tourists are gone, leaving ample parking for the dinner business at the local restaurants. This scenario is replayed on any given weekend from May through October, depending on the weather. During the winter months and on weekends with cold or foggy weather, parking provided at the port is more than adequate.

In addition to port visitors, parking is occupied by employees of tenant businesses. In the summer, when port visitorship is highest, the fish processing plant located on the pier is usually operating at full capacity with about 25 employees. Fish processing can occur around the clock and on weekends whenever a load of fish is delivered. In addition, the restaurants employ about 20 people during the day shift. Lastly, the three recreation fishing boats can hold as many as 180 fishermen, plus crew members. Together, the employees and boat fishing patrons can occupy as much as two-thirds of the available weekend parking spaces. On high-use days (weekend summer holidays, for example), vehicles with boat trailers currently use empty spaces in the northern dirt parking lot.

Bicycles

The Avila Beach Specific Plan proposes a number of improvements to bicycle facilities in the Avila Beach area. An extension of the existing Bob Jones Bicycle Path is proposed to terminate at the Front Street Park, with the path crossing under the Avila Beach Drive Bridge. If the crossing under the bridge is shown to be infeasible for structural, environmental or other reason, the bike path will cross Avila Beach Drive at the intersection of San Miguel Street, and terminate at the Earl's Alley parking lot or some other location where bicycle racks can be provided.

Bicycle storage facilities are proposed to be located in the town of Avila Beach at several key locations. There would be bicycle racks installed in the Front Street park, at both ends of the Front Street Plaza, at the post office and Community Services District building, and at the foot of the pier.

A bicycle-pedestrian path between Avila Beach and Shell Beach via Cave Landing Road could be constructed, as well. When the existing landslide damage along Cave Landing Road is repaired, the right-of-way could be designed to accommodate a recreational trail facility. A right-of-way would be needed to extend the bicycle/pedestrian path through the Tank Farm site to connect with Front Street.

Figure 5.7-5 Bike Circulation System

Future Conditions

Between 1980 and 2000, the population in Avila and the Avila Valley increased from approximately 1,300 to 2,100. Both the County General Plan and the Avila Specific Plan permit further growth. If similar growth patterns persist within the study area in the future, the population is expected to reach approximately 2,900 by build-out of the planned land uses. The need for future transportation improvements will depend upon the intensity and location of this future growth. In 2001 as an initial step in assessment of future transportation needs, a computer traffic forecast model was developed to translate future land uses into projected roadway volumes. This analysis tool formed the technical basis for identifying potential system deficiencies and possible land use or transportation enhancements. For the purpose of this analysis the term “future” means the date when the planned land uses as defined in the General Plan and Specific Plan are fully constructed.

Avila Traffic Model

The current transportation model is a TP+ software model. The model links land use plans and densities to future traffic projections. The TP+ model was developed from existing 1998 (base year) data. A future year, based on the build-out of the Avila Specific Plan and the associated San Luis Obispo County General Plan was also created. For the purposes of this study “build-out” refers to the completion of planned land uses as defined by the adopted County General Plan or Avila Beach Specific Plan. This represents a future condition where all planned residential, commercial and office development is constructed.

Modeling Process

The Avila Traffic Model follows the standard four-step travel demand forecasting process: trip generation, trip distribution, mode choice, and route assignment. The trip generation and distribution models were originally developed by Caltrans and converted to the County’s model. The remainder of the modeling process was developed and applied using the TP+ model.

Database

Four databases of information are maintained for use in the model: socio-economic data, roadway network data, traffic counts and a database of codes for street names and districts. Each database contains information for a particular year or time horizon.

Travel Demand

The travel demand forecasting model estimates trip productions and attraction, trip generation, zone-to-zone trips in trip distribution, and traffic volumes in trip assignment. The trip generation model estimates person trips. It has been assumed that modes other than auto are a negligible percentage of the total, and are not included in the modeling process.

The trip generation model estimates the number of trips to and from each zone in the region, given the population and employment estimates for any particular year, for each of seven trip purposes:

- 1) *Home-to-Work*
- 2) *Home-to-Shop*
- 3) *Home-to-Other*
- 4) *Other -to-Other*
- 5) *Work-to-Other*
- 6) *Internal-External*

7) External-Internal

The trip production model applies trip production rates to a distribution of households by auto ownership and housing type. The trip attraction model applies trip attraction rates to population and employment data by zone and trip purpose to estimate the number of trips attracted

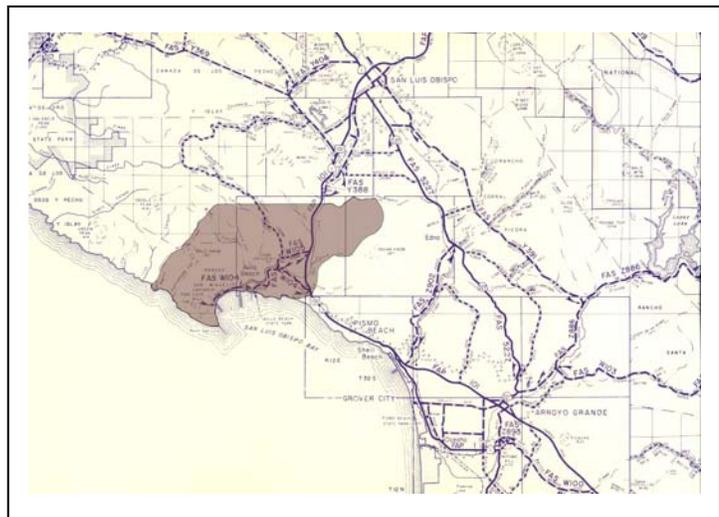
The trip distribution model links productions and attractions, estimated by the trip generation model, using the physical separation between two zones and the relative attractiveness of the zone. This method of trip distribution uses the gravity model estimation technique. The trip distribution model produces a vehicle trip table for each zone pair in the system by trip purpose.

The trip assignment model estimates the number of vehicles on each roadway segment in the mode, given the total number of vehicle trips to and from each Traffic Analysis Zone (TAZ) in the model and the physical characteristics of the road. Volumes are estimated for a 24-hour (daily) period.

Model Applications

The Avila model is a sub-regional model and is designed to meet local planning needs. Local or site-specific planning studies have different requirements and are often not well suited for direct applications of the model. Generally, local planning studies require additional detail beyond the scope of the regional model. There are three other types of model applications that can meet these additional needs: regional or corridor models, citywide models, and site impact models. There are four types of agencies that share responsibility for developing and maintaining the various models and databases developed. The agencies responsible for developing and maintaining data in the regional model include the regional transportation planning agency, local jurisdictions (cities or counties), Caltrans and the Air Pollution Control District.

Avila’s socio-economic database for build-out of the General Plan was developed using the County’s projections for population and employment for Avila and Avila Valley. The population and employment estimates were then assigned to the appropriate Traffic Analysis Zone based on the known parameters of the County General Plan and the Specific Plan. The resulting estimates of population and employment make the best use of available data, bounded and controlled by the estimates made by the County for the study area.



It is important to note that the socio-economic data has changed slightly since the 2001 model run. The “other” employees category had been zeroed out in the 2001 model run. In the current model run, these employees have been added back in. This change places an additional 3,805 employees in the 1998 base-year scenario and an additional 1,650 employees in the future year.

Figure 5.7-6 Traffic Analysis Zones

Future Traffic

Future average daily traffic (ADT) volumes for the Study area were developed from the TP+ model. A percentage of 10% was applied to the daily volumes to arrive at a peak hour weekday volume. That volume was then converted to a summer peak hour volume for the road segments and the key intersection. The weekday/weekend volumes were established using data collected by the County, which showed the relative difference in traffic volumes at several key locations. From these volumes factors were developed to adjust the daily traffic to reflect the typical summer weekend or holiday traffic volumes.

Table 5.7-4 shows the future summer and holiday traffic volumes along with the non-summer volumes. The volume-to-capacity ratios (v/c) and the resulting level of service (LOS) for each road segment are also presented. The analyses were based on projected future weekday and summer/holiday peak hour traffic volumes.

Table 5.7-4: Future Conditions Without Final Master Plan

Road	Segment	Non-Summer Weekday Peak Hour			Summer/Holiday Weekend Peak Hour		
		Volume	V/C ¹	LOS	Volume	V/C ¹	LOS
Avila Beach Drive	Ontario Road to San Luis Bay Dr.	1116	0.56	A	1317	0.66	B
	San Luis Bay Dr. to Cave Landing Road	1482	0.74	C	1749	0.87	D
	Cave Landing Road to San Luis St.	1447	0.72	C	1708	0.85	D
	San Luis St. to San Miguel St.	920	0.46	A	1085	0.54	A
	San Miguel St. to Port San Luis	553	0.28	A	652	0.33	A
Cave Landing Road		99	0.05	A	116	0.06	A
Front Street		150	0.07	A	177	0.09	A
Highway 101	N of San Luis Bay Dr.	6721		F ²	7931		F ²
	San Luis Bay Dr. to Avila Beach Dr.	5393		F ²	6364		F ²
	S of Avila Beach Dr.	6910		F ²	8154		F ²
Monte Road		13	0.01	A	16	0.01	A
Ontario Road		690	0.35	A	814	0.41	A
Palisades Road		497	0.25	A	587	0.29	A
San Luis Street		528	0.26	A	623	0.31	A
San Luis Bay Drive	US 101 to Blue Heron Dr.	1017	0.51	A	1201	0.60	B
	Blue Heron Dr. to Avila Beach Dr.	1086	0.54	A	1282	0.64	B
See Canyon Road		248	0.12	A	293	0.15	A
Squire Canyon Road		39	0.02	A	46	0.02	A
Intersection							
Avila Beach @ San Luis Bay (unsignalized ²)							
	Eastbound Left		11.9	B		15.1	C
	Southbound Left-Right			F			F
Avila Beach @ San Luis Bay (signalized ³)							
			8.7	A		11.3	B

¹ V/C = volume-to-capacity ratio² LOS calculated using HCS Modules³ LOS calculated using Synchro

No arterial segments are projected to operate below the adopted level of service. State Route 101 is projected to operate at LOS "F". The unsignalized intersection of San Luis Bay Drive at Avila Beach Drive is projected to operate at LOS "F" in the future. With the addition of the planned traffic signal and intersection improvements at this location, the intersection is anticipated to operate at a level of service "A" during the week and "B" during the weekend.

Figure 5.7-7 Future peak hour volumes

Regulatory Setting

The transportation system requirements for the project are subject to the policies and plans of San Luis Obispo County and the California Department of Transportation (CalTrans). San Luis Obispo County outlines traffic and circulation standards and guidelines in the Circulation Element of the County General Plan. The Circulation Element includes general planning guidance as well as specific development “standards” to address problems and conditions in individual communities. The existing standards apply to area-wide development plan projects, driveways for new land divisions, equestrian, pedestrian, and bikeways for new land divisions, and road design and construction for new land divisions.

1995 Regional Transportation Plan (RTP). The RTP examines transportation issues, opportunities and needs of the San Luis Obispo region. It also identifies the goals, policies and objectives to guide planning and implementation of improvements for all transportation modes (public transit, highways, streets and roads, bikeways, rail, harbor, aviation and pedestrian). The primary purpose of this plan is to guide the development of a coordinated and balanced transportation system that meets the basic transportation needs of all social groups, businesses and industries in the region. A secondary purpose is to satisfy federal and state requirements for a regional transportation plan and an ongoing regional planning process.

San Luis Obispo County Clean Air Plan (CAP) The CAP provides strategies designed to achieve and maintain compliance with state and federal ambient air quality standards.

County Bikeways Plan. The Bikeways Plan identifies bicycle circulation routes as well as bike path design and improvement standards.

Thresholds Of Significance

A project would have a significant effect on the environment if:

- The addition of project-related traffic to a local roadway increases the volume to capacity (V/C) ratio by the value provided below or sends at least 5, 10, or 15 trips to a LOS of D, E, or F.

Level of Service	Increase In V/C Greater Than
A	0.20
B	0.15
C	0.10
	<i>or the addition of:</i>
D	15 trips
E	10 trips
F	5 trips

- Notwithstanding the criteria described above, Avila Beach Drive shall not be subjected to traffic levels exceeding Level of Service “C”. The level of service shall be based on the average hourly weekday two-way 3:00 PM to 6:00 PM traffic counts to be conducted during the second week in May of each year (Co. Ord. No. 2702, 1995).

- Project activities would increase the demand for and/or reduce the supply of parking spaces with no provisions for accommodating the resulting parking deficiencies.
- Project activities would result in safety problems for vehicular traffic, pedestrians, or bicyclists.

Impacts

Impact T-1 Vehicle trips generated by buildout of the Port in accordance with the Final Master Plan could adversely affect the operation of surrounding streets and intersections. This impact is considered significant unless mitigated (Class II).

The Port San Luis Harbor District is broken down into seven planning areas: Harford Pier, Harford Landing, Beach and Bluffs, Harbor Terrace, Avila Pier Terminus, Avila Beach Parking Lot and Lighthouse. Improvements in the Draft Port Master Plan are broken down by each planning area and by timing: short-term (0-2 years), mid-term (2-5 years) and long-term (5-10 years), as described in the project description. Table 5.7-4 shows the Future Conditions with Final Master Plan summer/holiday traffic volumes along with the non-summer volumes. The volume-to-capacity ratios (v/c) and the resulting level of service (LOS) for each road segment are also presented. The analyses were based on projected future weekday and summer/holiday peak hour traffic volumes.

Impact T-2 Cumulative vehicle trips generated by buildout of the Port in accordance with the Final Master Plan in addition to trips associated with regional development, will adversely affect the level of service of Highway 101. This impact is considered significant and unavoidable (Class I).

As Table 5.7-4 illustrates, future traffic levels on Highway 101 both north and south of the interchange with Avila Beach Drive will continue to operate at an unacceptable level of service. Although the contribution of trips to this section of the Highway by buildout of the Port is a small fraction of the total, these trips contribute to a cumulative adverse impact to the roadway which is considered significant and unavoidable.

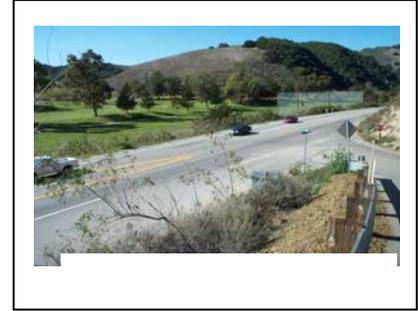
Table 5.7-5: Future Conditions with Final Harbor Master Plan

Road	Segment	Non-Summer Weekday Peak Hour			Summer/Holiday Weekend Peak Hour		
		Volume	V/C ¹	LOS	Volume	V/C ¹	LOS
Avila Beach Drive	Ontario Road to San Luis Bay Dr.	1126	0.56	A	1329	0.66	B
	San Luis Bay Dr. to Cave Landing Road	1508	0.75	C	1779	0.89	D
	Cave Landing Road to San Luis St.	1475	0.74	C	1740	0.87	D
	San Luis St. to San Miguel St.	951	0.48	A	1122	0.56	A
	San Miguel St. to Port San Luis	598	0.30	A	705	0.35	A
Cave Landing Road		99	0.05	A	116	0.06	A
Front Street		156	0.08	A	184	0.09	A
Highway 101	N of San Luis Bay Dr.	6724		F ²	7935		F ²
	San Luis Bay Dr. to Avila Beach Dr.	5394		F ²	6365		F ²
	S of Avila Beach Dr.	6913		F ²	8158		F ²
Monte Road		13	0.01	A	16	0.01	A
Ontario Road		687	0.34	A	811	0.41	A
Palisades Road		498	0.25	A	588	0.29	A
San Luis Street		524	0.26	A	618	0.31	A
San Luis Bay Drive	US 101 to Blue Heron Dr.	1022	0.51	A	1206	0.60	B
	Blue Heron Dr. to Avila Beach Dr.	1095	0.55	A	1292	0.65	B
See Canyon Road		248	0.12	A	293	0.15	A
Squire Canyon Road		38	0.02	A	45	0.02	A
Intersection							
Avila Beach @ San Luis Bay (unsignalized ²)							
	Eastbound Left		12.1	B		15.5	C
	Southbound Left-Right			F			F
Avila Beach @ San Luis Bay (signalized ³)							
			9.2	A		12.1	B

¹ V/C = volume-to-capacity ratio² LOS calculated using Synchro³ LOS calculated using HCS Modules

Figure 5.7-8 Future peak hour volumes with Final Harbor Master Plan

No arterial segments are projected to operate at below the adopted level of service. SR 101 is projected to operate at LOS "F". The unsignalized intersection of San Luis Bay Drive at Avila Beach Drive is also projected to operate at LOS "F" in the future. With the addition of the planned traffic signal and intersection improvements at this location, the intersection is anticipated to operate at a level of service "A" during the week and "B" during the weekend.



The Final Master Plan does not adversely impact any of the segments or the intersection.

Freeway Interchange Improvements

Peak hour traffic increases are projected at the State Route 101 at Avila Beach Drive and SR 101 at San Luis Bay Drive interchanges. Projected ramp volumes at build-out are below typical ramp capacities. However, the traffic increases would potentially degrade operations at the intersections within and immediately adjacent to these interchanges. Future traffic operational problems will require improving the two interchanges as described below.

Avila Beach Drive Interchange. Based on the projected build-out traffic volumes, major improvements to this non-standard interchange do not appear necessary for capacity. However, the Project Report for this interchange outlined geometric modifications for the southbound ramps to improve the alignment of their intersection with Avila Beach Drive. This plan should be expanded to include traffic signalization at the intersections if warranted along with the widening from two to four lanes on Avila Beach Drive between the northbound ramps and Ontario Road. This can be accomplished by adding a second westbound lane extending to Ontario Road to improve traffic flow from the northbound off-ramp into the Avila area, and an eastbound right turn lane onto the southbound on-ramp. Costs for these improvements have yet to be determined by Caltrans.

San Luis Bay Drive Interchange. Again, major interchange improvements do not appear needed in order to accommodate future traffic levels. However, Ontario Road should be relocated to the west to provide at least 150 feet of spacing between the intersections. The two intersections are currently too close together to permit left turn storage for vehicles turning from westbound San Luis Bay Drive to southbound Ontario Road. Under the current configuration it would not be possible to signalize the two intersections when warranted in the future. In addition a separate right turn lane should be added to the southbound off-ramp.

At such time that State Route 101 is widened consideration should be given to widening the San Luis Bay Drive structure to three lanes. This would provide end-to-end left turn lanes and increase left turn capacity onto the northbound and southbound on-ramps.

Impact T-3 Additional trips associated with buildout of the Port in accordance with the Final Master Plan could conflict with emergency evacuation plans associated with Diablo Canyon Nuclear Power Plant. This impact is considered adverse but not significant (Class III).

As part of the operations plans for the Diablo Canyon Nuclear Power Plant, an Emergency Response Plan has been prepared. Consistency of the Final Plan with the Emergency Response Plan is

provided in Section 4 of this FEIR: Consistency With Adopted Plans and Policies. According to that analysis, the additional transient population accommodated by buildout of Final Master Plan will increase the evacuation times for the twelve Emergency Planning Zones established by the County. The following table provides an estimate of evacuation times for different conditions with buildout of the facilities accommodated by the Final Master Plan.

Table 5.7-6: Estimated Evacuation Times of EPZ

Source: Wilbur Smith & Associates, 2002 and CMCA 2003

Condition	Transient Population	Estimated Evacuation Time
Non-summer weekday	31,224	13 hours 17 minutes
Non-summer weeknight	16,599	11 hours 27 minutes
Summer weekday	37,175	12 hours 44 minutes
Summer weekend day	36,117	12 hours 44 minutes

As Table 5.7.6 suggests, evacuation times could increase by as much as one-half hour over 2002 estimated times. This increase in projected evacuation time is considered adverse but not significant.

Figure 5.7-9 Recommended Roadway Improvements

Impact T-4 Development of a 3,000 square foot commercial lease space on the Avila parking lot would remove no more than 17 parking spaces while increasing the demand for parking. In addition, development of a new 4,250 square foot lease space on the Avila Pier terminus will increase the demand for parking. This impact is considered adverse but not significant (Class III).

A new 3,000 square foot lease space is proposed for the Avila Parking lot as part of the Final Master Plan which would remove no more than 17 spaces from the lot. This lease space would be occupied by commercial retail businesses or similar uses that would require parking in accordance with relevant provisions of the Coastal Zone Land Use Ordinance, which requires parking for commercial businesses at a ratio of one space per 300 square feet. Thus, parking demand would increase by 10 spaces, while 17 spaces are being removed. The Avila Beach parking lot provides 353 spaces, of which the port is obligated by a deed restriction to provide 300 to serve beach and pier users. Thus, the removal of 17 spaces to accommodate the lease space combined with the parking demand associated with commercial use would reduce the number of spaces available to beach users from 353 to about 326, which still exceeds the total the Harbor District is obligated to set aside for beach users (assuming no shared parking between commercial business patrons and beach users).

Construction of a new lease space on the Avila Pier terminus will increase the demand for parking by another 14 spaces. If this total is subtracted from the surplus provided by the Avila parking lot for beach users, the balance, 312, still exceeds the 300 spaces required to be reserved for beach users.

As a result of the modifications made during the rehabilitation of Avila, the parking supply in the community has been expanded. While there has been a decrease in on-street parking, this was offset by an increase in off-street parking. The resulting supply profile is shown in the chart below.

Substantial parking is supplied within the town area. However, it is projected that during the busiest summer demand, there will be a shortage of parking in the community. Assuming a parking occupancy rate of 85%, which accounts for vehicle turn-over and commercial parking activities, the available supply at any given moment is approximately 800 stalls. With demand projected to be approximately 1,000 vehicles, it is estimated that during the busiest summer days the community will fall short by about 200 stalls.

PARKING SUPPLY SUMMARY	
Location	Supply
<i>Front Street</i>	<i>140</i>
<i>Side Streets</i>	<i>132</i>
<i>First Street</i>	<i>61</i>

In addition to these parking resources within the town, several additional locations within the study area provide parking. Included in this inventory is the Bob Jones Park and Ride facility located on Ontario Road. This 27-stall facility was developed by the County of San Luis Obispo and serves a dual role. During the week it provides a venue for park-and-ride activity along the SR101 corridor, while on weekends it acts as a trailhead for the bicycle/pedestrian trail running between Ontario

Road and the town. The second major facility is the P.G. & E. building, also located on Ontario Road. This former information center for the Diablo Canyon Power Plant currently has 76 stalls.

Impact T-5 Development of uses accommodated by the Final Master Plan will increase the demand for parking at Port facilities. This impact is considered adverse but not significant (Class III).

Table 5.7-6 provides an estimate of additional parking spaces needed to accommodate buildout of the Port in accordance with the Master Plan. Parking generation factors were taken from the County Land Use Ordinance where a standard was available. Parking demand for other uses was derived from discussions with Harbor District Staff regarding the nature of the use and its expected parking demand. Table 5.7-7 concludes that 333 additional spaces will be needed to accommodate all of the expected new facilities. This figure does not account for the possibility that parking will be shared by more than one use (boaters who patronize one of the restaurants, for example). Thus, the actual parking demand is somewhat lower. The additional parking required can be accommodated if the existing Harford Landing parking lot is re-configured, which will provide an additional 86 spaces for a total of 352 spaces (308 for vehicles, plus 44 boat trailer spaces), without counting the additional parking that may be available at the Harbor Terrace project, or the potential benefit of having employees park there.

Table 5.7-7: Parking Demand Associated With New Development

Use	Quantity/Floor Area/Acreage	Parking Standard	Net Future Parking Demand ¹
Harford Pier	Pod 1 redevelopment	1/300	5
	New lease space	1/300	5
Harford Landing	Convert admin. Building to lease space	1/300	3
	Expand maintenance bldg lease space	1/500	8
Sub-total:			29
Harbor Terrace	Commissary	1/1000	22
	Harbor District Offices	1/employee	20
	Park/open space	5	5
	Utility camp sites/RV sites	1 per space	125 ²
	Tent sites	1 per space	44
	Cabins/yerts	1 per unit	67
	Material storage	5	5
Sub-total:			288
Avila Pier Terminus			
	New lease space	1/300	14
Avila Beach Parking lot			
	New lease space	1/300	10
Sub-total;			24
Total:			333

1. Net future demand after deducting for parking provided for existing use. For example, the Pod 1 redevelopment involves an expansion of an existing use by about 1,500 square feet. Parking is currently provided for the existing lease space.
2. Each campsite/RV site is expected to consist of one parking space.

As table 5.7-7 suggests, new development accommodated by the Final Master Plan would require as many as 333 spaces. It should be noted that development of the Harbor Terrace site is expected to accommodate required parking on-site in the design of the visitor-serving facilities. In addition, the parking demand associated with the new lease spaces on the Avila pier terminus and parking lot can be accommodated by the existing spaces which exceed the number required to be reserved for beach users. And lastly, the Final Master Plan recommends reconfiguring the parking area at Harford Landing to increase the supply of parking to meet the parking requirement of new development.

The resource standard for parking contained in the LCP states that future uses at the port will only be approved when it may be found that sufficient parking exists or be made available with the use, in accordance with the parking requirements contained in the County Land Use Ordinance. Thus, to satisfy the standard, all new uses must provide the required parking or it must be “available” before such uses may be approved. The County Land Use Ordinance does not assign a specific parking requirement for port-related facilities. Instead, the parking requirement is determined through deliberations by the Planning Commission. As described above, the variability in parking demand makes it difficult to determine an overall parking ratio for land uses at the port other than conventional commercial businesses.

Mitigation Measures

The updated Avila Circulation Study suggests that buildout of the Port in accordance with the Final Master Plan and other reasonably foreseeable development will not result in an unacceptable level of service on area roadways and intersections. The study recommends a number of improvements over time to maintain this level of service and future development will be required to participate in the fair share funding of these improvements. A number of additional measures can be implemented to help reduce peak traffic and parking impacts experienced in the Avila/Port area, as described below and as illustrated by Figure 5.7-10.

Transportation System Management

Over the past 20 years, transportation systems management (TSM) programs have been established in many areas to help reduce traffic and parking congestion while avoiding the need for high capital cost improvements. Most TSM programs are oriented toward commute travel, with policies and promotional activities implemented at major employment sites, downtown areas, or on regional highways with large volumes of commute trips. TSM programs can involve a wide variety of policy actions, promotional activities, and physical improvements.

The Avila area, as primarily a recreational and relatively low-density residential area, is not well suited to many of the standard TSM activities implemented elsewhere. Its one major employer, the Diablo Canyon Nuclear Power Plant, is large enough to warrant an on-site TSM program. Its residential based commute travel is relatively low and directionally counter to the peak flow of traffic into or out of the area. The focus of TSM strategies would therefore need to address recreational travel to and from the beach. Since this is of limited duration during summer weekends and holidays, TSM measures should be considered to reduce auto trips into the town and associated parking congestion.

The following strategies have been evaluated:

- Public transit service improvements
- Intercept parking with shuttle transit service
- Bicycle facilities

Public Transit Improvements

Because the study area is a relatively isolated location and has a limited resident population base, it is not likely that public transit could play a major role in reducing traffic levels during typical weekdays. However, during summer weekends or holidays improving transit service will in the future play a key role in reducing peak traffic to and from the beach areas in Avila. It is recommended that, as parking becomes more difficult in the town area a regional transit strategy be implemented. Operation of a direct route on weekends during the summer season, with service from

Transportation Systems Management options:

- *Public transit service improvements*
- *Ride-sharing incentives*
- *Bicycle/transit facilities*
- *Parking management (as an alternative to constructing new parking facilities)*
- *Travel demand management (e.g., flexible work hours to reduce peak period travel)*
- *Spot roadway improvements to remove localized bottlenecks (e.g., channelization or signalization at intersections)*

the Five Cities area directly into Avila Beach and then on to downtown San Luis Obispo will be warranted.

This service should be operated between 10 A.M. and 6 P.M. for approximately 32 weekend days per summer. In addition to the summer schedule, this service should be considered for any special event where the demand for parking is projected to exceed the supply of stalls in town.

Intercept Parking and Shuttle Service

Long range, the concept of providing intercept parking facilities near State Route 101 with a shuttle bus into the beach areas is warranted for several reasons. As noted previously, the growth in demand for use of beach facilities is projected to be greater than the anticipated parking supply. Parking in Avila Beach is already at or near capacity during summer weekends and holidays. Once the available parking is taken, any excess demand can only be served by off-site parking. Avila Beach has only two entry points along SR 101 and all visitors must use these for access. This makes it relatively easy to sign and route drivers to intercept parking facilities. This is especially true for out-of-town visitors. Remote parking would be substantially easier and less costly to develop than parking in the town of Avila and the Harbor areas.

In the long term, there is an opportunity to also establish these intercept parking facilities as park-and-ride lots for weekday commuters into San Luis Obispo. Generally, they are most likely to attract riders when parking and traffic congestion is severe, and the shuttle service itself is convenient and low in cost. As noted above, some of the necessary conditions will exist in the future in the Avila area. Assuming the shuttle only operates on summer weekends and that existing SLORTA, SLO Transit or other available buses are used for the service, costs of the shuttle operation would be relatively small.

As described previously in this report, it is estimated that with development of the planned land uses in the Town of Avila parking demand will exceed the supply by about 200 stalls. Two locations are suggested for development of the needed parking stalls. Use of the existing parking area at the PG & E visitor center on Ontario Road would greatly minimize the capital cost associated with parking lot development. This 75 stall lot could be used to provide an intercept facility for traffic arriving from the north. A lease agreement for use of the lot during the summer and holidays would have to be completed between the County and P. G. & E. The second location is near the Avila Beach Drive interchange. A 100-125 stall lot would need to be constructed at this location to intercept traffic from the south.

A shuttle bus would be used to transport riders from the intercept lots to the town, beaches and Harbor. The shuttle bus would also operate from 10 A.M. until 6 P.M. Changeable message signs would be constructed at each of the interchanges to inform travelers of alternative parking options whenever the parking lots in town were nearing capacity. This shuttle system should also be used for any special event where the demand for parking is projected to exceed the supply of stalls in town. As part of the development of the park-and-ride lots message signs would be installed at the freeway off ramps to inform motorists that the parking in town was full and that the travelers should use the intercept lots. These message signs could also be used during special events at the Harbor or in Town to inform visitors of parking availability.

Alternative parking options also exist for consideration. These include augmentation of parking within the core of the town. This could be accomplished through the purchase of additional land

adjoining the Harbor District lot on First Street. A second option is to develop a new lot within the town. One option that has recently been proposed is to use the Unocal property along Avila Beach Drive just west of Cave Landing Road. This property could be developed to provide for intercept parking and would need to be tied to a shuttle bus into town. Additional road improvements would also be needed along Avila Beach Drive to accommodate both right turns and left turns into the site and to safely address the sight distance along the curve.

The goal of these options is to add the 200 stalls necessary to eliminate the shortfall as close to town as possible. The difficulty with this strategy is that the traffic accessing the community would continue to use the critical segment of Avila Beach Drive between San Luis Bay Drive and San Luis Street. The option to expand the Harbor lot would also use very valuable land and could be quite expensive. The Unocal lot option would necessitate additional road improvements and operation of a shuttle bus.

Bicycle Provisions

Bicycling should be encouraged as an alternative means of access. The provision of bike lanes on Avila Beach Drive and San Luis Bay Drive should be included as an element of any roadway widening. The completion of the bicycle path from San Luis Bay Drive to San Miguel Street along San Luis Creek will greatly enhance bicycling as an alternative mode of travel within the study area.

While it is not anticipated that a significant shift in traffic demand will be shifted to bicycles, this alternative mode can play a role in increasing the accessibility to and from the study area. Furthermore, the completion of the bike path will encourage the relocation of bicyclists from the congested segment of Avila Beach Drive between San Luis Bay Drive and San Luis Street.

One option would be to have visitors travel to the area via automobile and park in one of the intercept parking lots. Then using bicycles and the bike trail travel into the beach area. This would also assist in relieving some traffic demand on Avila Beach Drive and San Luis Bay Drive.

Residual Impacts

Although traffic is expected to increase through buildout of the Final Master Plan and other development in the Avila Valley, residual effects are expected to be less than significant on area roadways and intersections. However, Highway 101 north and south of Avila Beach Drive will continue to operate at an unacceptable level of service at buildout of the Port and other development anticipated in the region.

Figure 5.7-10

Emergency Access Plan

5.8 Air Quality

Issues

This section of the Final EIR provides an analysis of the impacts associated buildout of the Port in accordance with the Final Master Plan upon local and regional air quality. Impacts related to emissions from construction activities, motor vehicle use and energy consumption are assessed.

Construction and operation of facilities would result in air emissions from heavy equipment and motor vehicles. In addition, dust generated by construction-related soil disturbance may cause localized exceedances of the State particulate matter standard. Vehicle trips associated with occupancy of the project would also generate air emissions. These emissions may result in higher regional ozone concentrations and exacerbate existing exceedances of the State 1-hour ozone standard.

Setting

Climate and Meteorology

San Luis Obispo is characterized by mild weather throughout the year. Due to its location near the coast, the Pacific Ocean plays a key role in moderating temperatures. Summers are mild and often characterized by early morning and afternoon fogs. Winters are usually cool and wet with the rainy season extending from late November to early April.

Airflow plays an important role in the movement and dispersion of air pollutants in the San Luis Obispo region. The speed and direction of local winds are controlled by 1) the location and strength of the Pacific High pressure system and other global patterns, 2) topographical factors, and 3) circulation patterns resulting from temperature differences between the land and sea.

During the spring and summer, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during the day. As evening approaches, onshore winds die down, and the wind direction reverses with weak winds flowing down the coastal mountains and valleys to form light easterly breezes.

In the fall, onshore surface winds decline and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This along with the diurnal alteration of land-sea breeze circulation, can sometimes produce a "sloshing" effect. Under such conditions, pollutants may accumulate over the Pacific Ocean and subsequently be carried back onshore with the return of sea breezes.

In the atmosphere, air temperatures normally decrease as altitude increases. At varying distances above the earth's surface, however, a reversal of this temperature gradient can occur. Such a condition, which is called an inversion, is simply a warm layer of air over a layer of cooler air. Inversions can have the effect of limiting the vertical dispersion of air pollutants, trapping them near the earth's surface.

Several types of inversions are common to the San Luis Obispo area. Weak surface inversions are caused by radiational cooling of air in contact with the cold surface of the earth at night. In valleys and low lying areas, this condition is intensified by the addition of cold air flowing down from hills and pooling on valley floors. Surface inversions are common throughout the County during winter months, particularly on cold mornings. As the morning sun warms the earth and air near the ground, the inversion lifts, gradually dissipating throughout the day.

During the summer, subsidence inversions can occur when the summertime presence of the Pacific high pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms the air to a higher temperature than the air below. This highly stable atmospheric conditioning can act as a nearly impenetrable lid to the vertical mixing of pollutants. Subsidence inversions can persist for one or more days, causing air stagnation and the buildup of pollutants.

Air Pollution Control

Air pollution control is administered on three governmental levels in the project area. The United States Environmental Protection Agency (EPA) has jurisdiction under the Federal Clean Air Act to develop Federal air quality standards and require individual states to prepare State Implementation Plans (SIPs) to attain these standards.

The California Environmental Protection Agency, Air Resources Board (ARB) has jurisdiction under the California Health and Safety Code and the California Clean Air Act to develop California air quality standards, to require regional plans to attain these standards, and to coordinate the preparation by local air districts of plans required by both the Federal and State Clean Air Acts. ARB is also responsible for the development of state emission standards for mobile and stationary emission sources.

The San Luis Obispo County Air Pollution Control District (APCD) shares responsibility with the ARB for ensuring that all State and Federal ambient air quality standards are attained within the County. The APCD has jurisdiction under the California Health and Safety Code to develop emission standards (rules) for the County, issue air pollution permits, and require emission controls for stationary sources in the County. The APCD is also responsible for the attainment of State and Federal air quality standards in the County.

Air Quality Standards

Air quality standards are specific concentrations of pollutants that are used as thresholds to protect public health and the public welfare. The U.S. Environmental Protection Agency (EPA) has developed two sets of standards; one to provide an adequate margin of safety to protect human health and the second to protect the public welfare from any known or anticipated adverse effects. At this time, sulfur dioxide is the only pollutant for which the two standards differ.

ARB has developed air quality standards for California, which are generally lower in concentration than the Federal standards. California standards exist for ozone, carbon monoxide, PM₁₀, visibility, sulfates, lead, hydrogen sulfide and vinyl chloride.

In July 1997, EPA implemented new health-based ozone and particulate matter (PM) standards. The new Federal ozone standard is based on a longer averaging period (8-hour vs. 1-hour), recognizing that prolonged exposure is more damaging. The new Federal PM standard is based on finer particles (2.5 microns and smaller vs. 10 microns and smaller), recognizing that finer particles may have a higher residence time in the lungs and cause greater respiratory illness. However, on May 14, 1999, the U.S. Court of Appeals for the District of Columbia reached a decision to prohibit EPA from enforcing the 8-hour ozone standard. Table 5.8-1 lists the applicable State and Federal air quality standards.

Table 5.8-1: Air Quality Standards

Pollutant	Averaging Time	State Standard	Federal Standard
Ozone	1-Hour	0.09 ppm	--
	8-Hour	--	0.08 ppm
Carbon Monoxide (CO)	1-Hour	20 ppm	35 ppm
	8-Hour	9.0 ppm	9.0 ppm
Nitrogen Dioxide (NO ₂)	1-Hour	0.25 ppm	--
Inhalable Particulate Matter (PM _{2.5})	24-Hour	--	50 ug/m ³
	Annual Arithmetic Mean	--	15 ug/m ³
Inhalable Particulate Matter (PM ₁₀)	24-Hour	50 ug/m ³	150 ug/m ³
	Annual Geometric Mean	30 ug/m ³	--
	Annual Arithmetic Mean	--	50 ug/m ³
Sulfur Dioxide (SO ₂)	24-Hour	0.04 ppm	0.14 ppm

Effects of Air Pollution

The primary chemical compounds that are considered pollutants emitted into or formed in the atmosphere include ozone, oxides of nitrogen, sulfur dioxide, hydrocarbons, carbon monoxide, and particulate matter.

Ozone is formed in the atmosphere through a complex series of chemical reactions generally requiring light as an energy source. Ozone is a pungent, colorless gas that is a strong irritant and attacks the respiratory system. Respiratory and cardiovascular diseases are aggravated by exposure to ozone. A healthy person exposed to high concentrations of ozone may experience nausea, dizziness, and burning in the chest. Ozone also damages crops and other vegetation.

Oxides of nitrogen (NO_x) which are considered pollutants include nitric oxide (NO) and nitrogen dioxide (NO₂). NO is colorless and odorless and is generally formed by combustion processes combining atmospheric oxygen and nitrogen. NO₂ is a reddish-brown irritating gas formed by the combination of NO and oxygen in the atmosphere or at the emission source. Both NO and NO₂ are considered ozone precursors because they react with hydrocarbons and oxygen to produce ozone. Exposure to NO₂ may increase the potential for respiratory infections in children and cause difficulty in breathing even among healthy persons and especially among asthmatics.

Sulfur dioxide (SO₂) is a colorless, pungent, irritating gas which affects the upper respiratory tract. Sulfur dioxide may combine with particulate matter and settle in the lungs, causing damage to lung tissues. Sulfur dioxide may combine with water in the atmosphere to form sulfuric acid that may fall as acid rain, damaging vegetation.

Hydrocarbons include a wide variety of compounds containing hydrogen and carbon. Many hydrocarbons (known as reactive organic compounds [ROC]) react with NO and NO₂ to form ozone. Generally, ambient hydrocarbon concentrations do not cause adverse health effects directly, but result in ozone formation.

Carbon monoxide (CO) is a colorless, odorless gas generally formed by incomplete combustion of hydrocarbon-containing fuels. Carbon monoxide does not irritate the respiratory tract, but does interfere with the ability of blood to carry oxygen to vital tissues.

Particulate matter consists of a wide variety of particle sizes and composition. Generally, particles less than 10 microns (PM₁₀) are considered to be pollutants because they accumulate in the lung tissues and may contain toxic materials which can be absorbed into the system.

Baseline Air Quality

San Luis Obispo County has been identified as a non-attainment area for both ozone (1-hour standard) and PM₁₀ by the ARB. Final recommendations as to the attainment status of the County relative to the Federal 8-hour ozone standard were issued by the ARB on April 28, 1999. San Luis Obispo County is considered "too close to call" by ARB, and the air quality monitoring results of the 1999 ozone season will determine the attainment status. Maximum concentrations of other criteria pollutants are currently within federal and state standards.

Air quality in San Luis Obispo County is currently monitored at eight public agency and private sector monitoring stations located throughout the County. The nearest station is located in Grover Beach about five miles from the project area. This station monitors ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, and PM₁₀ levels. Table 5.8-2 presents the maximum pollutant concentrations that were recorded at this station from 1996 through 1998. Maximum ozone levels have not exceeded the State standard at the Grover station since 1989.

Table 5.8-2: Air Quality Standards Exceedances

Source: California Air Resources Board (www.arb.ca.gov)

Year	1996	1997	1998
Ozone (ppm)			
Worst Hour	0.083	0.067	0.070
Number of State Exceedances (Days > 0.09 ppm)	0	0	0
Number of Federal Exceedances (Days > 0.12 ppm)	0	0	0
Carbon Monoxide (ppm)			
Worst Hour	2.91	2.56	2.34
Number of State Exceedances (Hours>20 ppm)	0	0	0
Number of State Exceedances (8 hours>9 ppm)	0	0	0
Nitrogen Dioxide (ppm)			
Worst Hour	0.060	0.065	0.061
Number of State Exceedances (Hours>0.25 ppm)	0	0	0
PM ₁₀ (micrograms/cubic meter)			
Worst Sample	39	55	32
Number of State Exceedances (Samples>50)	0	2	0
Annual Geometric Mean (Standard is 30)	15	17	14
Annual Arithmetic Mean (Standard is 50)	17	18	15

High ozone levels in San Luis Obispo County have occasionally been traced to air pollutants transported from other air basins, such as the South Coast Air Basin, the San Francisco Bay Area, and the San Joaquin Valley. The frequency with which long-range transport of pollutants affects local air quality has not been definitively established. However, most exceedances of the State ozone standard measured in the County are the result of local emissions and adverse meteorology.

Air Quality Management

The California Clean Air Act (CCAA), adopted in 1988, requires all air pollution control districts and air quality management districts in the state to adopt and enforce regulations to achieve and maintain air quality that is within the State air quality standards. Based on a design value of 0.10 ppm ozone (1-hour), San Luis Obispo County has been declared a "moderate" nonattainment area for the State ozone standard. The County did not meet the December 31, 1997 deadline to attain the State 1-hour ozone standard; therefore, should have reclassified as a "serious" nonattainment area. However, the ARB determined that a change in classification would not result in a more expeditious attainment of the standard. The County is also considered a nonattainment area for the State PM₁₀ standard.

In response to the requirements of the CCAA, the San Luis Obispo County APCD prepared the 1991 Clean Air Plan (CAP) to provide a framework for the attainment of State air quality standards by the earliest practicable date. The CAP is a comprehensive planning document intended to facilitate attainment and maintenance of the State ozone standard. The 1995 CAP was developed as a

comprehensive update to the 1991 CAP and was expected to bring the County into attainment of the State ozone standard by the end of 1997.

The 1995 CAP described the pollutants that affect County air quality, the sources of those pollutants, and future year emissions that are anticipated under current growth trends. Based on this information, the 1995 CAP also provides a control strategy for reducing emissions of ozone precursors. Included in the 1995 CAP are a number of land use and circulation management policies and programs that have already been implemented to reduce vehicular air emissions. Additional measures recommended for adoption include trip reduction programs and telecommuting.

A second update to the 1991 CAP was developed in 1998, as a continuation of the 1995 CAP and proposes no new control measures for adoption. The 1998 CAP is expected to bring the County into attainment with the State 1-hour ozone standard by 2003.

Overall, full implementation of the control measures contained in the 1995 CAP will result in a 33 percent reduction in ROG emissions and a 45 percent reduction in NO_x emissions compared to 1991 levels. These reductions are in excess of that required by the CCAA, but appear to be necessary to attain the State ozone standard by the year 2003.

In March of 2002, the 2001 Clean Air Plan was adopted as the third update to the 1991 CAP. The 1991 Plan contained a comprehensive set of control measures designed to reduce ozone precursor emissions from a variety of stationary and mobile sources. The 1995 CAP was an extensive update of the 1991 Plan, but with fewer control strategies recommended for adoption in response to changes in State law. This 2001 CAP, similar to the 1998 CAP, is primarily a continuation of the 1995 Plan and proposes no new control measures for adoption. Ongoing implementation of the control measures adopted through previous plans is expected to bring the county into attainment of the State ozone standard within a three year timeframe.

San Luis Obispo County is in attainment of the Federal air quality standards and is not subject to the planning requirements of the Federal Clean Air Act.

Thresholds of Significance

Significance thresholds have been developed by the San Luis Obispo County APCD and contained within the *CEQA Air Quality Handbook* (San Luis Obispo County APCD, 1997). Specifically, project emissions are considered significant impacts if any of the following thresholds are exceeded:

Operational Impacts:

Reactive Organic Gases (ROG), NO _x , SO ₂ , PM ₁₀	10 lbs/day
--	------------

The APCD requires more stringent environmental review requirements for projects exceeding 25 lbs/day of ROG, NO_x, SO₂ and PM₁₀ emissions, or 550 lbs/day CO emissions.

Construction Impacts:

ROG and NO _x	185 lbs/day or 2.5 tons/quarter
PM ₁₀	2.5 tons/quarter

The APCD requires Best Available Control Technology for construction equipment (CBACT) for projects with ROG or NO_x emissions between 2.5 and 6.0 tons per quarter and requires CBACT plus further mitigation for projects with emissions exceeding 6.0 tons per quarter.

In addition, large projects must be found to be consistent with the District's Clean Air Plan (CAP). The APCD notes that a consistency analysis is required for the following types of projects: general plan updates and amendments, specific plans, area plans, large residential subdivisions and large commercial/industrial developments. The proposed project is not one of the types listed; therefore, a CAP consistency analysis is not required.

Impacts

Impact A-1 Motor vehicle and other long-term emissions associated buildout of the Port facilities in accordance with the Final Master Plan would contribute to the lack of attainment of the State ozone and PM₁₀ standards. This impact is considered significant unless mitigated (Class II).

Assessing the potential air quality impacts of a plan or program such as the Draft Port Master Plan involves answering the following three questions:

Are the population projections used in the plan or project equal to or less than those used in the most recent CAP for the same area?

Discussion. The Final Master Plan does not accommodate housing or significant employment growth that would induce additional population growth beyond that anticipated by the relevant plans for the San Luis Bay Area Plan.

Is the rate of increase in vehicle trips and miles traveled less than or equal to the rate of population growth for the same area?

Vehicle trip generation associated with buildout of the Port in accordance with the Final Master Plan is provided in Section 5.7: Transportation and Circulation. As Chapter 5.7 shows, the increase in vehicle trips is expected to be a fraction of existing traffic and well below the expected rate of population growth in San Luis Obispo County. Population in the San Luis Bay planning area grew at an average annual rate of about 2.4 percent between 1979 and 2000, according to Chapter 2 of the Plan. By comparison, traffic on Avila Beach Drive is expected to increase by 5 percent at buildout of the Port and other reasonably foreseeable development in the area.

Have all applicable land use and transportation control measures and strategies from the CAP been included in the plan or project to the maximum extent feasible?

Chapter 6 of the 2001 Clean Air Plan provides transportation and land use planning measures to be incorporated into the design of projects and the policies of planning documents to help reduce vehicle trip usage and vehicle miles traveled. The following is a discussion of the relevant control measures as they pertain the Draft Port Master Plan.

T-1B Campus Trip Reduction Program. This program is designed to reduce student commute trips to Cal Poly State University and Cuesta Community College. This measure is not applicable to the Harbor District.

T-1C Voluntary Commute Options Program. This measure is designed to reduce the number of commute and other trips made with single occupant vehicles (SOVs) through an outreach effort to employers to encourage voluntary participation in a worksite trip reduction program. The primary goal of the measure is to achieve an average AVR of 1.35 at 20% of facilities in the county with 50 or more employees. The Harbor District employs about 15 full time employees which is far less than the target identified in the measure.

T-2A Local Transit System Improvements. The focus of this measure is on improving local transit service and infrastructure to increase ridership by enhancing the convenience and overall viability of the system. Key elements of the measure include an ongoing improvements to bus boarding areas, development of multi-modal centers, service expansion, and replacement of older diesel transit buses with new diesel-powered vehicles.

The Final Master Plan provides for improved access to transit by including a trolley stop/bus drop-off in the Harford Landing planning area, and Bluff and Beach planning area.

T-2B Regional Public Transit Improvements. San Luis Obispo Regional Transit Authority (SLORTA) operates the regional fixed route system, Central Coast Area Transit (CCAT). The focus of this measure is to improve regional transit service and infrastructure with the goal of increasing ridership rates in excess of countywide population growth rates.

As stated above, the Final Master Plan provides for improved access to transit by including a trolley stop/bus drop-off in the Harford Landing planning area, and Bluff and Beach planning area.

T-3 Bicycling and Bikeway Enhancements. The goal of this measure is to achieve a county-wide average bicycle mode share of 5% by 2005.

The Draft Port Master recommends the installation of bike racks and bike paths to connect the different planning areas and to connect the Port with Avila Beach.

T-4 Park and Ride Lots. Park and Ride (P&R) lots provide a staging area for ridesharing activities. The most common use of P&R lots in San Luis Obispo County is as a meeting point for car- and vanpoolers. Transit connections are available at some lots within a short walk, and bike lockers are available at most lots; however, the primary use is for automobile parking.

No park and ride lots are recommended as part of the Final Master Plan.

T-6 Traffic Flow Improvements. This control measure focuses on traffic flow improvements and "traffic-calming" to improve the flow of all transportation modes. Traffic-calming refers to a full range of methods designed to improve the flow of nonmotorized transportation by slowing down the speed of motorized traffic. Traffic-calming is generally used in residential areas on non-arterial local streets and roads.

The goal of this measure is to improve the road system and infrastructure in a way that increases its efficiency, reduces emissions, and supports the other Transportation Control Measures in this Plan. Traffic flow improvements help keep traffic moving smoothly during peak hours when the road system is near its capacity, such as during commute periods or on holidays. The County and local jurisdictions can implement changes that may reduce stop-and-go conditions and associated vehicle emissions on roads lacking efficient channelization, signalization, one-way streets, and/or synchronized signals. Peak hour traffic management should also increase pedestrian and bicyclist safety.

As described in Section 5.7: Traffic and Circulation, future traffic on Avila Beach Drive is expected to be within acceptable operating standards as defined by the San Luis Bay Area Plan. Therefore, no congestion is expected to occur through buildout. However, the Harbor District in conjunction with the County may wish to implement a shuttle service to and from the 101 freeway to help alleviate peak traffic associated with peak beach usage that occurs on summer weekends.

T-8 Teleworking, Teleconferencing, and Telelearning. Rapid advances in personal computer capability and the advent of video and on-line services have made these technologies ideal trip reduction strategies. As more homes have personal computers, and more businesses provide information services to their customers, it has become practical for employees to work from their homes or a satellite facility near their home. The strategy of “moving the work, not the worker” will have far-reaching and positive effects on air quality and congestion. This control measure seeks to reduce emissions by promoting telecommuting for any employee whose job can accommodate working from home.

The nature of the work done by the Port does not lend itself to telecommuting.

L-1 Planning Compact Communities.

Policies:

Cities and unincorporated communities should be developed at higher densities that reduce trips and travel distances and encourage the use of alternative forms of transportation.

Urban growth should occur within the urban reserve lines of cities and unincorporated communities.

Rural areas of the county should be maintained as open space, agricultural lands and very low density residential development (20 acre or larger parcel size).

Local planning agencies should encourage transit use by planning neighborhoods and commercial centers at densities to allow for convenient access to and use of local and regional transit systems.

Although the Draft Port Master Plan does not apply to a city or a community, it does advocate infill development on existing Harbor District properties and facilities, and encourages the use of transit and alternate forms of transportation.

L-2 Providing for Mixed Land Use. Segregation of land uses often increases reliance on the private vehicle, unless the segregated uses are in close proximity and safe pedestrian and bicycle paths exist. Locating residential, commercial and service facilities in close proximity to one another encourages walking and other nonpolluting forms of transportation.

Policy:

- The mixing of compatible commercial and residential land uses should be encouraged when it will

reduce dependence on the automobile, or it improves the balance between jobs and housing.

The Harbor District does not accommodate housing or significant new employment. However, the range of uses recommended for Port properties is intended to be complementary in terms of serving the needs of Port visitors. For example, the harbor Terrace planning area is recommended for camping and RV uses and will incorporate a food service/cafeteria use. The new lease spaces provided on Harford Pier and elsewhere will accommodate retail and food service uses to serve the visiting public which in turn should help reduce vehicle trips.

L-3 Balancing Jobs and Housing. Travel from home to work accounts for about one-quarter of all private vehicle trips in a typical urban area; in rural areas this travel component is even higher. The length and location of these trips are important factors in determining the type of transportation alternatives available to the commuter and the quantity of air pollutants generated. If the average travel distance between the home and workplace is relatively long, emissions from private vehicles increase and non-motorized travel alternatives are less viable.

The port does not provide housing, so this measure is not applicable.

L-4 Circulation Management. The primary goal of the recommended Circulation Management Policies and Programs is to encourage the design and construction of the county's transportation system in a manner that supports alternative travel modes and decreases reliance on single occupant motor vehicles. To this end, improving accessibility for all travelers, not just drivers, is the primary transportation objective.

Policies:

- *Jurisdictions should adopt the concept of improved accessibility as a planning goal and as a means to coordinate land use and transportation planning efforts.*
- *Agencies should focus transportation funds on facilities and promotional programs that support transit, ridesharing, bicycling, and walking before focusing funds on capacity expansion for congestion relief.*
- *Local planning agencies should encourage walking by planning for existing and new residential and commercial areas to include a safe and interconnected street system with adequate sidewalks and/or pedestrian trails.*
- *Local planning agencies should develop pedestrian- and bicycle-friendly design standards that apply to all residential and commercial projects.*
- *Local planning agencies should endorse the concept of managing the supply of automobile parking as a means to support and promote the use of alternative transportation modes.*
- *Jurisdictions should support actions to reduce single occupant vehicle trips by adopting programs which encourage or require new commercial and industrial development projects to provide facilities and amenities which reduce reliance on private vehicle use and support the use of alternative transportation.*
- *Local jurisdictions, the APCD and the Council of Governments should coordinate actions and cooperate in pursuing the implementation of the land use and circulation management programs proposed in this document. The Clean Air Plan and local General Plans should be used as a means to achieve coordinated implementation of these programs.*

The Draft Port Master Plan provides for improved pedestrian, bicycle and transit access within Harbor District properties and connecting the Port with the community of Avila Beach.

L-5 Communication, Coordination and Monitoring. Changes in land use and circulation planning will be necessary to maintain clean air in the county over the long term. These same changes, however, will also provide benefits in reduced traffic congestion. It is very important to the long-term success of the Clean Air Plan that local and regional jurisdictions and the District work together to achieve these mutual goals. The measures in this section provide a framework for reducing the growth of VMT and maintaining clean air. Implementing them requires close coordination and cooperation among jurisdictions.

Policy:

- Local jurisdictions, the APCD and the Council of Governments should coordinate actions and cooperate in pursuing the implementation of the land use and circulation management programs proposed in this document. The Clean Air Plan and local General Plans should be used as a means to achieve coordinated implementation of these programs.

The Draft Port Master Plan encourages a coordinated planning effort for the use of Harbor District property and facilities.

Conclusion: The Draft Port Master Plan incorporates the relevant transportation and land use policies of the Clean Air Plan to the extent feasible.

Impact A-2 Construction activities associated with uses accommodated by the Final Master Plan could generate emissions that may adversely impact local and regional air quality. This impact is considered significant after mitigation (Class I).

New construction involving grading or other heavy construction equipment and vehicles would produce pollutant emissions that would be short-term and consist of fugitive dust and exhaust. These activities generally consist of site preparation and the installation of facilities and structures. Site preparation emissions are much greater due to the larger size and number of emission sources present as well as the amount of dust generated. Heavy equipment assumed to be used for site preparation include tracked tractors (Caterpillar D8), elevating scrapers (Caterpillar 623E), tandem scrapers (Caterpillar 637E), motor graders (Caterpillar 140G), and wheeled loaders (Caterpillar 966E). Construction emissions have been estimated for the uses contemplated for the Harbor Terrace planning area using emission factors from EPA documents *Compilation of Air Pollutant Emission Factors (AP-42)* (1995) and *Nonroad Engine and Vehicle Emission Study* (1991).

In the case of the uses recommended for Harbor Terrace, because of the extent of grading anticipated, construction emissions would likely exceed the APCD's significance thresholds for NO_x and PM₁₀ and are considered a significant impact to regional air quality. Combustion emissions generated by construction would degrade local air quality and contribute to exceedances of the nitrogen dioxide (NO₂) 1-hour state air quality standard. Construction of the proposed project would result in the emission of air pollutants exceeding the APCD significance thresholds for NO_x and PM₁₀. Given the amount of grading expected to accommodate the uses anticipated for Harbor Terrace, this impact cannot be mitigated to a level of less than significant and is therefore considered Class I, significant and unavoidable.

Impact A-3 Dust generated by construction activities may be considered a nuisance adjacent to the project site. This impact is considered significant unless mitigated (Class II).

Dust generated by construction activities could result in nuisance impacts to nearby sensitive receptors. Should a considerable number of persons be affected, a violation of APCD Rule 402 would result. Violation of Rule 402 is considered a significant impact unless mitigated (Class II).

Mitigation Measures

- AQ-1 The Harbor District shall, to the extent feasible, separate sensitive land uses from significant sources of air pollution.
- AQ-2 The Harbor District shall submit environmental documents to the San Luis Obispo County Air Pollution Control District for review and comment in accordance with the California Environmental Quality Act prior to consideration for approval.
- AQ-3 The Harbor District shall promote and encourage the use of alternate modes of transportation by incorporating public transit, bicycle, and pedestrian modes in new development.
- AQ-4 The following measures shall be applied to reduce impacts related to PM₁₀ and NO_x emissions from project construction to the extent feasible.
- c. Equipment Emission Control Measures. To the extent feasible, newer construction equipment (manufactured after 1990) shall be used that produces fewer emissions, especially for the highest emitting piece of diesel-fired heavy equipment. In any case, all equipment shall be properly tuned and maintained. Additional measures that would reduce construction-related emissions include, but are not limited to:
 - Maintain all construction equipment in proper tune according to manufacturer's specifications.
 - Fuel all off-road and portable diesel powered equipment, including but not limited to bulldozers, graders, cranes, loaders, scrapers, backhoes, generator sets, compressors, auxiliary power units, with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).
 - Maximize to the extent feasible, the use of diesel construction equipment meeting the ARBs 1996 or newer certification standard for off-road heavy duty diesel engines.
 - Should project emissions exceed the APCD's CEQA significance threshold for quarterly emissions, construction equipment shall be retrofitted with the appropriate number of catalyzed diesel particulate filters (CDPF) or diesel oxidation catalysts (DOC). This determination must be conducted in consultation with the APCD.

- d. Dust Control Measures. Dust generated by construction activities shall be kept to a minimum by full implementation of the following measures:
- > During clearing, grading, earth moving, excavation, or transportation of cut or fill materials, water trucks or sprinkler systems are to be used when necessary to prevent dust from leaving the site and to create a crust after each day's activities cease;
 - > During construction, water trucks or sprinkler systems shall be used to keep all areas of vehicle movement damp enough to prevent dust from leaving the site. At a minimum, this would include wetting down such areas in the morning and after work is completed for the day and whenever wind exceeds 15 miles per hour;
 - > Stockpiled earth material shall be sprayed as needed to minimize dust generation.
 - > During construction, the amount of disturbed area shall be minimized.
 - > Onsite vehicle speeds should be reduced to 15 mph or less;
 - > Exposed ground areas that left exposed after project completion should be sown with a fast-germinating native grass seed and watered until vegetation is established;
 - > After clearing, grading, earth moving, or excavation is completed, the entire area of disturbed soil shall be treated immediately by watering or revegetating or spreading soil binders to minimize dust generation until the area is paved or otherwise developed so that dust generation will be minimized;
 - > Grading and scraping operations shall be suspended when necessary to minimize dust generation;
 - > All roadways, driveways, and sidewalks associated with construction activities should be paved as soon as possible. In addition, building and other pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
 - > 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.
 - > Install wheel washers or rumble pads where vehicles enter and exit unpaved roads onto streets, or wash off trucks and equipment leaving the site.
 - > Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.

Residual Impacts

Construction related emissions for the Harbor Terrace site will exceed the short-term emissions threshold for particulates and construction equipment emissions even after mitigation measures are applied. Accordingly, construction related impacts are considered Class I, unavoidable and significant.

5.9 Visual Resources

Issues

Development of Harbor District property and facilities will alter the visual character of the project area by introducing or expanding buildings, parking, lighting, landscaping and other features.

Setting

A visual resource is the aggregate of characteristic features imparting visually aesthetic qualities to the environment. The setting for the visual resource may be natural (i.e., formed by nature with no apparent human intervention), rural, or urban. In describing the visual quality of an area or region, three attributes are relevant: visual condition, visual sensitivity, and scenic variety.

The scenic variety of an area is a descriptive inventory of the distinguishing features of the landscape. Visual sensitivity indicates where adverse visual effects would be expected to generate the greatest controversy. Relevant factors include public concern, and the frequency with which the resource is viewed. Visual condition is the overall attractiveness of the resource and is a function not only of the appeal of inherent characteristics, but also of the effects of features that have been introduced and which appear incongruous.

Visual Context

The project area is located at the base of the Irish Hills of the southern Coast Ranges Province of California. The community of Avila Beach is located on the southern flank of the Irish Hills. These gently rounded hills provide an attractive backdrop to the Avila Beach area as well as panoramic views of San Luis Obispo Bay, Port San Luis and the ocean. The open hillsides give way to the coastal terrace. The coastal terrace has an average elevation of about 100 feet; nearly vertical sea cliffs and narrow beaches border its edge.

San Luis Obispo Bay is enclosed on the west by the southward jutting Point San Luis. The bay's coastline consists of a rocky coastal terrace with a series of sandy pocket beaches. Fossil Point, a wave-cut rock point, forms the eastern edge of Avila Beach. Port San Luis sits at the western end of San Luis Obispo Bay just west of the town of Avila Beach along Avila Beach Drive. Prominent visual features of the land within the project area include the area adjacent to Fossil Point and the Harbor Terrace area. The major public vantage points are Avila Beach Drive, distant views from Highway 101, the beaches, and the piers and open water areas.

For purposes of this analysis, the Harbor District properties are grouped into four distinct areas: (1) Harford Pier and Landing, (2) Harbor Terrace and the bluffs and beach immediately fronting Harbor Terrace, and (3) the Avila Beach area. The Lightstation is specifically omitted from this discussion as no significant structural changes are proposed in this area.

Scenic Variety

Scenic variety is evaluated based on relative variations in natural characteristics such as landscape character, landforms, vegetation, drainage, and urban components, if applicable. In general, areas of steeper topography, with a wide variety of vegetation types, are considered "distinctive" and

therefore more valuable aesthetically, while areas of relatively low relief and more homogenous vegetation are considered "common" or of "minimal" value. Determination of scenic variety for the project area will be based on factors in the following table, which are based on guidance provided in the San Luis Bay Area Plan EIR (1995).

In general, landform in the project area would be considered *common* to *distinctive* under the criteria presented. Outside of developed portions of the Avila Beach community, vegetation and shorelines are likewise considered common to distinctive, as well as the general landscape character. The urban design character has changed substantially with the reconstruction efforts after the Unocal cleanup. A viewed from the beaches, the community now presents a common to distinctive urban character, with areas of strong unity and proportion.

Table 5.9-1: Scenic Variety Classes

Area	Distinctive	Common	Minimal
Landform	>60 % slope w/exposed ridges; steep, highly dissected canyons	20-60% slope, small ridges, knolls, canyons	<20% slope; level to rolling terrain
Vegetation/ Drainages	High variation in vegetative types; such as mixture of trees, shrubs, and grassland forming edges	Some variation in vegetative types, height, and density	Graded areas, bare soils
Shorelines/ Rivers (where applicable)	Perennial streams, pools, falls, vegetated shorelines	Intermittent streams, diversified shoreline	Gullies
General Landscape Character	Variety in detail, with many unique boundaries between different units	Some variation, with indistinct boundaries	No variety boundaries
Urban design character	Powerful sense of unity and proportion with design variation. Strong design linkages provided by: Building silhouette Spacing between buildings Setbacks from street property line Proportion of windows, bays, doorways and other features Massing of building form Location and treatment of entryways Surface material, finish and texture Shadow patterns Building scale Style of architecture and Landscaping, if any	Some sense of unity and proportion. Moderate design linkages	No sense of unity and proportion. Design linkages absent, or strong unity with no design variation (monotonous).

Harford Pier and Landing. In general, the Harford Landing area is considered to have common to minimal value in terms of scenic variety. The area exhibits relatively level slope, little vegetation, and an unvegetated shoreline. The Harford Pier is visually distinctive and possesses a unique historic character.

Harbor Terrace. Within the boundaries of the Harbor Terrace site, the land and vegetation have been highly disturbed and present little value in terms of scenic variety. Bordering the Harbor Terrace site, however, are steeper slopes, defined canyons, and varied vegetation, which, although common in the project area, provide higher value in terms of variety.

Avila Beach Property, Piers and Beaches. The area proposed for development of potentially leaseable space is located on a level, paved parking lot within the established community of Avila Beach and on the Avila Pier. At present, the site provides little value. Piers and beaches likewise present little value in terms of scenic variety, although their inherent characteristics are visually important for other reasons that are described below.

Visual Sensitivity

Visual sensitivity is the relative degree of public interest in the visual resource and concern over changes in the quality of that resource. The degree of interest and concern has not only to do with public attitudes, but also the frequency of viewing. Factors that affect visual sensitivity reflect the viewer’s awareness of the scenic resources of the site, including the level of public concern, and frequency and level of detail at which the resource is viewed. Table 5.9-2 provides the criteria for sensitivity levels from 1 to 3 with a rating of 1 being the most sensitive with assumed frequent viewing by a highly concerned public. Greater concern over visual quality is assumed to be felt by those driving for pleasure or those engaged in recreational activities. Conversely, less concern is assumed for those driving to and from work or during work.

Table 5.9-2: Criteria for Rating Sensitivity Levels

Travel Route or Use Area	Sensitivity Level		
	1	2	3
Primary Travel Route and Use Area	At least 25% of users have major concern for visual quality	Less than 25% of users have major concern for visual quality	N/A
Secondary Travel Routes and Use Areas	At least 75% of users have major concern for visual quality	Between 25 and 75% of users have major concern for visual quality	Less than 25% of users have major concern for visual quality
<p>Note: The proportion of users indicated is approximate. These user ratios indicate a relationship between the number of travelers and their appreciation for aesthetics while en route to a destination. In accordance with the U.S. Forest Service methodology, a greater sensitivity is assumed to be felt by those driving, walking and bicycling for pleasure and those engaged in recreation activities than those commuting for work-related purposes.</p> <p>Definitions of Sensitivity: Level 1 - highly sensitive Level 2 - moderately sensitive Level 3 - low sensitivity</p>			

The community of Avila Beach is a major tourist destination within San Luis Obispo County. Inherent to its recreational value is the scenic quality of the area. Sensitivity to change is therefore considered high (1).

Visual Condition

The overall visual attractiveness of a region is defined as the visual condition. The determination is based on the inherent characteristic variety of the resources and the degree to which introduced features appear uncharacteristic or incongruous with their surroundings, thereby disrupting the continuity of the scene. Visual condition is termed *high*, *moderate* or *low*. Areas with high visual condition may have some incongruities, but they would be overlooked by the casual observer. Areas with moderate visual condition have incongruities that would compete with the inherent features of the site and may obscure such features to some degree. Areas with low visual condition have substantial incongruities that obscure natural features such that the inherent qualities of the area cannot be determined.

San Luis Obispo Bay is characterized by a variety of highly scenic features and includes well-known landmarks such as Avila Beach, the Avila Beach Pier, and Port San Luis/Harford Pier. The scenic elements of San Luis Bay include the small-scale development of Avila Beach as well as commercial fishing and pleasure boats moored in the bay.

Port San Luis provides a small-scale harbor for the local commercial fishing community as well as recreational boaters. Services available in the Pier area include boat repair and maintenance and supply facilities, other marine-related businesses and restaurants. Scenic views of the bay, moored boats and the community of Avila Beach and backdrop of hills can be viewed from Harford Pier. The San Luis Bay Inn, a multi-storied structure is visible on a hill immediately west of San Luis Obispo Creek. Views to Avila Beach are partially screened by the Cal Poly Marine Sciences Facility pier. The visual condition varies among the sub-areas of the Port Facilities. Each is discussed in the following paragraphs.

Areas surrounding Port San Luis are characterized visually by highly scenic natural features combined with a variety of man-made elements. Visually significant elements in the area include: the developed portions of the Avila Beach community; the former Unocal tank farm located above the Avila Beach community; three piers which extend into San Luis Obispo Bay, and the San Luis Bay Inn. These features are set amongst a visual backdrop of sloping hillsides surrounding an open bay. Views of the bay often include commercial fishing and recreational boats moored in proximity to the coastline. Views from Port San Luis, particularly from its higher elevations, include many of these visual elements.

Harford Pier and Landing. Harford Pier and ancillary facilities are the identifiable features of Harford Landing and the Pier area. The pier, in particular can be seen from a number of points within the area. Generally, Port San Luis facilities are located on coastal hillsides facing San Luis Obispo Bay and the Pacific Ocean. These hillsides are part of a continuous set of ridgelines which trend westward from Avila Beach to Montana de Oro State Park. Most of the hillsides near Port San Luis are undeveloped with the exception of the San Luis Bay Inn, approximately three-quarter miles east of the Port. Port facilities therefore occupy a visually prominent portion of the viewshed of the San Luis Obispo County and the San Luis Bay coastline, particularly from vantage points to the southeast, south and southwest of the site.

Views of Port San Luis from other directions and from portions of Avila Beach Drive are mainly shielded by surrounding hillsides, higher elevations or other topographic barriers. Motorists, bicyclists and pedestrians utilizing Avila Beach Drive are provided views of the landing as they approach the site from the east (Avila Beach). Views of the Port begin as travelers pass by the Cal Poly Marine Sciences Facility pier approaching the site from the east.

Given the nature and extent of previous site alteration, however, most of the unique or significantly attractive natural features within the existing viewscape of the Port San Luis area have been eliminated. Development is incongruous and competes for attention with the natural landscape, but does not obscure the features inherent to the area. The facilities therefore exhibit a moderate visual condition.

Harbor Terrace. The Harbor Terrace area originally consisted of rolling hills but has been altered to form a series of graded, relatively-level terraces that ascend the hillside to an elevation of

approximately 180 feet above sea level and steep slopes that support limited plant species. Because of this past grading, much of the native vegetation as well as the natural topography of the site has been significantly degraded as compared to the natural condition of adjacent hillsides. The cut slopes are mainly bare and highly visible. Boat and equipment storage areas are not landscaped rendering them visually prominent. South of Avila Beach Drive and facing San Luis Bay is an ocean bluff protected by rock revetments. The Harbor Terrace site currently contains a few residential trailers along with boat trailer and boater's gear storage areas. A 90,000-gallon water storage tank is located above the northern boundary of the site. These manmade elements are prominent features when viewed from vantage points to the southeast, south and southwest. The Harbor Terrace site is also visible at a greater distance from vantage points in Avila Beach as well as from U.S. Highway 101 (near Spyglass Drive) and from San Luis Obispo Bay. The areas surrounding the site (including areas above the site at higher elevations) contain oak woodland, grassland, and sage scrub habitats containing native vegetation.

Human-made structures and earthwork on site provide features that are incongruous with the natural features and topography. The structures and benches compete for attention and eliminate most indications of the natural character of the site. The visual condition is therefore considered moderate to low.

Avila Beach Property, Piers and Beaches. The protected beach is the main tourist attraction in the community and runs the length of Front Street. The commercial and visitor-serving facilities are concentrated in the Front Street area within walking distance of the beach. The beach side of Front Street has few structures, allowing wide views of the beach, Avila Pier, bay, and surrounding hills. The rest of the town is primarily residential with the majority of structures being single family residences or duplexes. The topography of the town rises to the east, affording views of the beach, bay, ocean, and surrounding hills from many spots along local streets.

Manmade structures compete for attention with the hillsides, beaches and creek, therefore, visual condition is considered moderate to low.

Figure 5.9-1 Visual Setting

Regulatory Setting

California Coastal Act

The California Coastal Act of 1976 was adopted after state voters approved the Coastal Conservation Act (Proposition 20) in 1972. The Act was intended to protect a range of coastal resources.

Section 30251 states:

"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, 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."

The Coastal Act places priority on the protection of ocean and coastal views from public areas including highways, roads, beaches, parks, coastal trails and accessways, vista points, and other public vistas.

San Luis Obispo County Local Coastal Program

As required by the California Coastal Act, San Luis Obispo County developed the San Luis Obispo Land Use Element - Local Coastal Program (LCP)/Coastal Plan Policies. The LCP contains policies and implementation programs aimed at protecting visual resources.

Coastal Zone Framework for Planning

The Framework for Planning document of the Land Use Element/Local Coastal Plan contains baseline information and policies that are further refined and applied through the area plans. Additionally, it contains information pertaining to visual and scenic resources, including circulation design considerations, allowable uses within land use categories, and the combining designations program description and definitions.

Coastal Zone Land Use Ordinance (CZLUO)

The CZLUO contains a number of standards designed to protect visual resources in the Coastal Zone. This ordinance is Title 23 of the San Luis Obispo County Code. The CZLUO provides consistency between the County General Plan and the County Local Coastal Program as pertains to land use.

Thresholds of Significance

The *State CEQA Guidelines* states that a project will have a significant impact if it will:

- > Have a substantial adverse effect on a scenic vista; or,
- > Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; or,
- > Substantially degrade the existing visual character or quality of the site and its surroundings; or
- > Create an additional source of light and glare

Impacts

Impact V-1 Development of the various projects under the Master Plan will alter the visual character and/or quality of the project area. This impact is considered significant unless mitigated (Class II).

Development of the Harbor Terrace Site, leasable space in the Avila Beach parking lot and Avila Pier, and redevelopment of piers and port facilities will be highly visible from the beaches, open water, and roadways of the Avila Beach area. Although the plan proposes limiting new facilities to currently developed or altered areas, such new development will alter the visual qualities of the area (Figures 5.9-2 and 5.9-3).

Although the visiting public is considered highly sensitive to changes in the visual environment of Avila Beach, the character and quality of the areas proposed for development is considered moderate to low. The Plan does not propose changes to more natural and open space areas, or the beaches, which are of higher visual quality. For example, the current uses of the Harbor Terrace site, trailers and boat storage, are arranged on stepped benches with largely denuded slopes. The uses are not adequately screened and are highly visible. Grading, redevelopment, and landscaping of the site may be beneficial in this case. Likewise, development of a portion of the parking lot into a small-scale leasable space is not expected to reduce the quality of the visual environment in that area below existing conditions. Overall, impacts to character and quality are considered less than significant.

Impact V-2 Grading and construction activities and the storage of construction materials may be visible from public vantage points. This impact is considered adverse but not significant (Class III).

Short term impacts associated with construction activities would include grading of sites and the storage of construction equipment and vehicles. On all but the Harbor Terrace and parking lot site, such activities would not be visually prominent, due to relatively level topography, and the existing presence of industrial and commercial equipment and activity, and would therefore be less than significant. Impacts on the Harbor Terrace and parking lot sites are considered potentially significant.

The majority of development proposed under the Master Plan would take place in portions of the project area that are currently developed or disturbed to a great degree. The area proposed for development is largely devoid of trees, rock outcroppings, historic buildings or other sensitive features. The exception is the Harbor Terrace site, where at least one stand of eucalyptus has established. Grading of the site may require removal of existing vegetation. New construction on Harford Pier could alter its historic character.

Figure 5.9-2 Avila Parking Lot Visual Assessment

Figure 5.9-3 Harbor Terrace Visual Assessment

Impact V-3 **Development of the various projects under the Master Plan may result in additional sources of light and glare. These new sources will be visible from adjoining areas and may be visible from areas beyond the Port. This impact is considered significant unless mitigated (Class II).**

Glare is produced when sunlight is reflected from surface materials of buildings and other structures associated with a developed site. Examples of sources of glare include asphalt parking lots, glazed surfaces (windows) and metallic roofing materials. Large expanses of flat building surfaces with lighter building colors would also produce glare. Impacts associated with glare resulting from the project are considered potentially significant.

Projects such as parking lot improvements, and the Harbor Terrace development, may introduce additional lighting into the area. Impacts are considered potentially significant.

Mitigation Measures

Mitigation Provided by Existing Regulations

Local Coastal Plan (LCP)

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.

Site Selection for New Development. Permitted development should 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.

Development On Coastal Bluffs. New development on bluff faces shall be limited to public access stairways and shoreline protection structures. Permitted development shall be sited and designed to be compatible with the natural features of the landform as much as feasible. New development on bluff tops shall be designed and sited to minimize visual intrusion on adjacent sandy beaches.

Coastal Zone Land Use Ordinance (CZLUO)

- *Parcel Size for Highly-visible sites.* New land divisions where the only feasible building site would be on a slope or ridgetop where a building would be silhouetted against the skyline as viewed from a public road shall be prohibited as required by Visual and Scenic Resources Policy 4 of the Local Coastal Plan. [p.4-7]
- *Blufftop Setbacks.* New development or expansion of existing uses proposed to be located adjacent to a beach or coastal bluff shall be located in accordance with the setbacks provided by this section instead of those provided by Sections 23.04.110 or 23.04.112. The required setback shall be the larger of the two required by subsections a. and b. of this section.

Stringline setback method:

Bluff retreat setback method:

- *Landform alterations within public view corridors.* Grading, vegetation removal and other landform alterations shall be minimized on sites located within areas determined by the Planning Director to be public view corridors from collector or arterial roads. Where feasible, contours of finished grading are to blend with adjacent natural terrain to achieve a consistent grade and appearance.
- *Final contours.* Contours, elevations and shapes of finished surfaces are to be blended with adjacent natural terrain to achieve a consistent grade and natural appearance. Border of cut slopes and fills are to be rounded off to a minimum radius of five feet to blend with the natural terrain.
- *Revegetation.* Where natural vegetation has been removed through grading in areas not affected by the landscape requirements, and that are not to be occupied by structures, such areas are to be replanted.
- *Tree removal within public view corridors.* Tree removal within public view corridors (areas visible from collector or arterial roads) shall be minimized in accordance with Visual and Scenic Resources Policy 5.
- *Underground utilities.* Utilities serving new development shall be installed underground rather than by the use of poles and overhead lines, and where applicable shall be installed in accordance with California Public Utilities Commission rules and regulation. This requirement applies to electrical service and telecommunications (including cable TV, telephone and data transmission) connections between utility company distribution lines and all proposed structures on a site, and all new installations that distribute utilities within a site.
- *Camping facilities.* Density will be set by the Review Authority where Development Plan or Minor Use Permit approval is required, to a maximum of one unit per acre, which is also to be the maximum density for incidental camping of less than 10 units. All camping facilities and activities are to occur no closer than 1,000 feet from any property line or public road. [8-50]

Measures Included in the Project Description

Harford Pier

- All new development shall abide by the adopted Harford Pier Design Guidelines (Appendix F of the Port San Luis Harbor District Master Plan).
- Private enterprises shall maintain the appearances of structures, fencing, signage, and areas around buildings to enhance appearance.

Harford Landing

- Screen storage, dumpster, recycling stations, and service areas from public view with a combination of fencing, walls, roof structure, and landscaping.
- Phase out chain link fencing. Where chain link fencing is needed for security purposes, it shall be designed with wood poles instead of the standard metal poles.
- Construct buildings and other structures with quality design materials that reflect an attractive rural maritime character. Use native or other appropriate coastal vegetation for landscaping.

- Consider judiciously adding signage, paving, or striping to indicate pedestrian connections between the East Parking Lot, restaurant, Administration building, Harford Pier to the water's edge, and other Port properties.
- Incorporate amenities such as lighting, benches, bike racks, trash, and recycling containers.

Beach and Bluff Planning

- If fencing is needed for safety or to delineate areas at either overlook, it should be compatible with the maritime character or the Port and have minimal view obstruction.
- When landscaping is used it should be native, durable, compatible with marine climate, and control soil erosion.
- Incorporate modest amenities such as benches, trash containers, and picnic tables.

Harbor Terrace

- Construct buildings and other structures with quality design and materials that are compatible with the waterfront character of Port San Luis.
- Use primarily native and other appropriate coastal vegetation for landscaping.
- Screen as recommended in the Harford Pier sub-area section above.
- Site structures, uses utilities, and roads to reduce visual impacts.
- Minimize visual impacts of new buildings by allowing uses to be divided into smaller components on the site and by incorporating variation in wall plane, wall height, and roof forms.
- Consider views to the site from public roads and offshore areas.
- Site harbor uses with sensitivity to visitor views from upper terraces to lower areas.
- Use latest lighting technology to decrease brightness.
- Discourage the use of chain link fencing. If chain link fencing is necessary, incorporate design elements such as landscaping and wooden posts to make it more attractive.

Additional Recommended Measures

- V-1. Grading shall be designed to conserve natural topographic features and appearances by means of land sculpturing to blend graded slopes and benches with natural topography.
- V-2. Construction equipment and staging areas for the development of the Harbor Terrace and Avila parking lot sites shall be stored and located in the least visually prominent location on site, and/or screened from public view.
- V-3. Lighting shall be hooded and designed to shine downward. To the extent practical, parking lot lighting shall be confined to the project site and shall be designed and oriented to ensure safety within the parking lots, access and pedestrian walks. Lighting will be installed with the minimum foot-candles necessary to ensure safety.

Residual Impacts

With incorporation of the above mitigation measures, visual impacts will be reduced to a less than significant level.

5.10 Hazardous Materials

Issues

This section of the Final EIR assesses the potential impacts associated with the use, storage and disposal of hazardous materials. According to the US Department of Transportation, a hazardous material is defined as "...a substance or material, which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated". Portions of the San Luis Port Harbor District properties have been known to contain hazardous materials.

Setting

Portions of the community of Avila Beach have recently been rebuilt after an oil spill remediation effort was completed by Unocal in 2001. The Avila Beach area was historically a major terminus for crude oil on the Central Coast. Years of leaking pipelines led to contamination of beach and commercial district, including the soils under the beach managed by the Harbor District. The contamination has either been extricated or stabilized, and Unocal continues to monitor the progress of the effort.

Port San Luis facilities and the community of Avila Beach are located just east of the PG&E Diablo Canyon Nuclear Power Plant. The Plant poses hazards to the community associated with accidental release, spill, or other exposure of the public to radioactive materials. PG&E maintains an extensive public information and evacuation program to inform and organize the public in response to exposure events.

No hazardous materials sites are listed by the County in Avila Beach.

Harbor Terrace Site

Although the Harbor Terrace site is currently used for boat and materials storage and as a trailer park site, previous use of the site included storage of crude oil in aboveground oil storage tanks, which were removed in or around 1938. Oil storage activities on site resulted in crude oil releases. Soil assessments conducted on the Harbor Terrace in 1998 detected soils contaminated by crude oil. It was recommended at that time that the existing contaminated soils be left in place.

In order to leave these contaminated soils in place, a Tier 1 RBCA Assessment (incorporated by reference and available for review at the Harbor District offices) was completed on the Harbor Terrace site. The Assessment identified potential contaminant sources, environmental impacts, including potentially impacted human and environmental resources, and the potential for significant transport pathways of the contaminants. Based on sources and impacts identified, conservative risk based screening levels were determined. The screening levels were calculated based on exposure scenarios and toxicological parameters as recommended by the U.S. EPA. A total of 22 soil borings were drilled on the Harbor Terrace site. The locations of the borings were designed to assess the footprints of the former aboveground crude oil storage tanks and the locations of other features, such as the crude oil pump house and previously identified locations of crude oil contamination.

Contaminants identified in soil borings consisted of low levels of crude oil derived hydrocarbons. No volatile organic compounds were found on-site. No free-phase hydrocarbons were identified in any of the soil borings or groundwater seeps. No hydrocarbons were identified seeping from the property into creeks or the ocean.

Risk-based screening levels for BTEX (benzene, toluene, ethylbenzene, and xylene), naphthalene, and benzo(a)pyrene in soil did not exceed the thresholds for exposure from soil ingestion, inhalation, or to sensitive habitat.

Based on results of soil analysis, the Harbor Terrace site was classified as a Class 4 site. This classification is applied to sites that possess “no demonstrable long-term threat to human health or safety or sensitive environmental receptors.” Such a classification is considered appropriate for the Harbor Terrace site because potable water is not impacted, sensitive species are not affected, and the toxicity of the chemicals do not appear to pose an immediate or long term threat to human and environmental health and safety. Groundwater wells are not located in the area and the potential for groundwater production from this property is low. The nearest sensitive species habitat is the San Luis Obispo Creek estuary. The habitat is located more than 4,000 feet from the site, a sufficient distance from the project area to avoid contamination.

Landings and Piers

Uses on landings and piers with the potential to result in hazardous materials release include vehicle and boat parking, wash areas, boat and facility maintenance areas, laboratories (Cal Poly pier), sewer pump-out facilities, boat fueling facilities, and the hazardous waste collection facility. The Harbor District has already installed water quality protection devices in existing vessel haul out washdown areas.

Beach and Bluffs

Passive uses on beaches and bluffs (general visitor activity) do not generally pose a significant source of hazardous materials. Vehicle parking is spread out along the roadway; runoff from roadways and parking areas may include fuel and oil.

Lightstation

Existing and planned uses at the lightstation are not a significant source of hazardous materials.

Regulatory Setting

A number of agencies are responsible for the regulation of hazardous materials, including:

- Environmental Protection Agency (EPA)
- Occupational Safety and Health Administration (OSHA)
- Nuclear Regulatory Commission (NRC)
- Department of Transportation (DOT)
- National Institutes of Health (NIH)
- California Health and Welfare Agency (HWA)
- California Office of Emergency Services (OES)

The following federal laws are most applicable to harbor activities:

- Clean Air and Clean Water Act
- Occupational Safety and Health Act
- Comprehensive Environmental Response Compensation and Liability Act (CERCLA)
- Guidelines for Carcinogens and Biohazards
- Superfund Amendments and Reauthorization Act Title III
- Resource Conservation and Recovery Act

Applicable state laws include:

- Public Safety/Fire Regulations/Building Codes
- Hazardous Waste Control Law
- Hazardous Substances Information and Training Act
- Hazardous Materials Release Response Plans and Inventory Act
- Air Toxics Hot Spots and Emissions Inventory Law

The transport of hazardous materials is locally governed by Caltrans and the California Highway Patrol (CHP). Federal regulations mentioned above are contained primarily in Titles 29, 40, and 49 of the Code of Federal Regulations (CFR); state laws have largely been consolidated into Title 26 of the California Code of Regulations (CCR).

Thresholds of Significance

The impacts of the project are considered significant if the construction or occupation of the project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials,
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, or
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school

Impacts

Impact HAZ-1: Construction and operation of Port facilities and improvements may involve the routine use, storage or transport of limited amounts of hazardous materials which may pose a risk to the environment. This impact is considered adverse but not significant (Class III).

Port facilities and associated activities are generally commercial and industrial in nature; therefore, materials stored on site will generally be limited to those typically used in these applications, including janitorial and maintenance supplies. However, materials used for construction and maintenance of boats, including lead-based paint, and solvents may pose a hazard. Continued operation of the hazardous materials collection facility on Port property will involve routine storage and transport of hazardous materials.

Impact HAZ-2: Development of the Harbor Terrace site may result in the exposure of existing contaminants in the soil. This impact is considered significant unless mitigated (Class II).

Based on studies performed in 1998, remediation of site contamination is not necessary prior to construction. The site has not been used to store crude oil for over 60 years; moreover, crude oil typically is lower in volatile hydrocarbons than refined oil products. Therefore, elevated levels of BTEX, naphthalene, and benzo(a)pyrene at this site were not expected or observed. In its current state, therefore, the site poses a minimal risk of exposure to the public (either on- or off-site) as well as to off-site streams or the ocean.

Grading of the site may result in the need to overexcavate the site, increasing the potential for surface exposure of contaminants and volatilization of hydrocarbons. Excavated soil may need to be exported and disposed of off-site.

No schools are located within a one-mile radius of the project area. Existing hazardous materials on the Harbor Terrace site will be remediated through methods identified in the mitigation section such that long-term risk of exposure or release will be minimized or eliminated.

Impact HAZ-3 Serpentine soils are reportedly present on the Harbor Terrace site and may occur elsewhere throughout the project area. Construction on sites containing serpentine soils poses the risk of release of naturally occurring asbestos. This impact is considered significant unless mitigated (Class II).

The San Luis Obispo Air Pollution Control District regulates the release of naturally occurring asbestos by requiring special studies and construction practices for sites with the potential for occurrence of serpentine soils. Prior to any grading or digging, a soil report will be required to more accurately determine the potential risk on a site by site basis.

Impact HAZ-4 Demolition of structures in the project area may result in hazards associated with lead-based paint and asbestos containing materials. Demolition of these structures poses risk of release of these hazardous materials into the environment. This impact is considered significant unless mitigated (Class II).

Structures on site may contain lead-based paint and/or asbestos-containing materials (ACM). Proper documentation and abatement of such materials is mandated by several laws at the state and federal level. Impacts are considered potentially significant. Mitigation is required to reduce risks to a less than significant level.

Impact HAZ-5 Fluorescent light ballasts and removal of any electrical transformers in the project area may pose hazards to the public associated with the release of PCBs. This impact is considered significant unless mitigated (Class II).

Proper abatement and disposal of these materials is regulated by law at the state and federal level. Impacts are considered potentially significant. Mitigation is required to reduce risks to a less than significant level.

The potential impacts of the Final Master Plan upon emergency access to and evacuation from the Diablo Canyon Nuclear Power Plant are discussed in Section 5.7, Traffic/Circulation.

Mitigation Measures

Mitigation Provided By Existing Regulatory Framework

A number of state and federal laws govern the use and disposal of hazardous materials. The Hazardous Materials Collection Facility on site as well as transfer of hazardous materials is subject to local and state regulation.

Mitigation Incorporated into the Project Description

Aquatic and Terrestrial Habitats

(2). Clean Boating. Work with other entities in efforts to educate and encourage boaters and boating facility operators to use best management practices.

(3). Runoff Controls. Require implementation of effective runoff control strategies and pollution prevention activities by incorporating the most current best management practices for all new development.

Recommended Additional Mitigation

- | | |
|-------|--|
| HAZ-1 | The use, transport, storage and disposal of hazardous materials on all Harbor District property shall be carried in accordance with the provisions of all applicable federal, State and local laws and regulations. |
| HAZ-2 | During project grading in areas known to contain contaminants, monitoring of earthwork shall be performed to determine if levels of BTEX or other compounds of interest to the APCD (lead, volatile organic compounds such as gasoline and solvents, and asbestos exceed established exposure thresholds. |
| HAZ-3 | Grading shall either be performed during the dry season or will be subject to specific erosion control measures (see "Mitigation Measures" in Drainage and Watershed Resources) to prevent erosion of the soil and possible transport of contaminated soils into off-site watercourses. |
| HAZ-4 | Any oil-contaminated soil discovered during construction shall be disposed off-site at an appropriate facility or used as fill in parking lots or roadways. Areas of finished grade shall not have any surface exposures of oil-contaminated soils. Any activities involving remediation or the handling and disposal of hazardous materials or waste shall comply with all relevant regulations and permitting requirements of the Air Pollution Control District prior to the commencement of such activities. |
| HAZ-5 | Vapor barriers shall be placed below the foundation of all new structures in order to eliminate the potential for vapors entering any buildings. |

- HAZ-6 Where new construction may occur on soils expected to contain asbestos, an Asbestos Health and Safety Program for project construction activities shall be developed and submitted to the San Luis Obispo APCD for review and approval prior to the commencement of project grading. This program shall include the following elements:
1. Preparation of a sampling and survey work plan. Elements of this work plan should include, but are not limited to: geologic mapping of the site, sampling strategy, and lab analysis methodology.
 2. Conduct sampling and survey activities and perform the required lab analysis. Results of these activities shall be submitted to the District for review 30 days prior to start of construction.
 3. If ACM is determined to be present, an Asbestos Health and Safety Program for construction activities in serpentinite to comply with State and Federal law will be required. Work plan elements should include, but are not limited to:
 - construction and project strategy to *prevent* emissions to ambient air
 - notice to APCD of project start date ten working days in advance;
 - protection methods used to prevent worker exposure; and
 - a California certified asbestos environmental monitor or registered geologist with asbestos certification to be present on-site during construction activities to identify potential unmapped or subsurface serpentinite and to initiate APCD contractor/worker emergency procedures, if required.
- The Asbestos Health and Safety Program must reduce potential impacts associated with naturally-occurring asbestos to a less than significant level.
4. If ACM is determined to be present, no ACM is to be used as surface layer material on any part of the project (road beds, house pads, landscaped areas,
 5. If ACM is determined to be present, notification to employees and patrons that ACM is present shall be required.
 6. If ACM is not found in the serpentine deposits on-site, the following items are required:
 - the preparation of an emergency work plan to address potential unmapped or subsurface serpentinite.
 - a certified asbestos environmental monitor or registered geologist with asbestos certification shall be present during construction activities to initiate emergency work plan if necessary, and
 - APCD shall be notified of project start date.
- HAZ-7 A demolition asbestos survey will be conducted prior to any modifications or demolition of the on-site buildings or storage yards, in accordance with federal

NESHAP regulations. The asbestos survey will be conducted by a California-licensed asbestos consultant. If asbestos-containing materials (ACM) are found in the on-site buildings or storage yards, the ACM must be abated prior to the commencement of demolition activities. Abatement activities will be conducted by a California-licensed asbestos abatement contractor. ACM wastes will be disposed at a properly licensed disposal facility.

- HAZ-8 A lead-based paint survey will be conducted prior to commencement of demolition activities. The survey will be conducted by a California-licensed lead consultant. If lead-based paint is identified on the building materials, the paint may be required to be abated prior to demolition if found to be in poor condition. Waste materials containing lead-based paint will be properly characterized for disposal to determine if the material exceeds state or federal hazardous waste thresholds.
- HAZ-9 On-site electrical transformers will be inspected prior to commencement of demolition activities to determine whether they may contain PCBs. Any unlabeled transformer shall be assumed to contain PCBs unless proven otherwise through testing or information from the manufacturer. PCB-containing transformers will be disposed as federal hazardous wastes.
- HAZ-10 Fluorescent light ballasts will be inspected prior to commencement of demolition activities to determine if the ballasts could contain PCBs. Unlabeled ballasts shall be considered PCB containing unless proven otherwise through testing or information from the manufacturer. PCB-containing ballast will be disposed as federal hazardous wastes.

Cumulative Impacts

All potential hazardous materials impacts are largely confined to the project boundaries given implementation of mitigation measures listed above. Since significant existing levels of hazardous materials are not in evidence on Harbor District properties, implementation of the Master Plan will not significantly alter any regional or cumulative hazards or hazardous waste conditions.

Residual Impacts

Impacts are considered less than significant due to mitigation incorporated above.

5. Growth Inducing Impacts/ Significant Irreversible Changes

Section 15126(g) of the State CEQA Guidelines requires that an EIR assess a project's potential to induce additional economic or population growth or the construction of additional infrastructure or housing beyond that anticipated for the project itself. The *Guidelines* state that a project will have a significant growth-inducing impact if:

- > It directly or indirectly fosters economic or population growth or additional housing; or,
- > It removes obstacles to growth; or,
- > It taxes community service facilities; or,
- > It encourages or facilitates other activities that cause significant environmental effects.

Clearly, the Final Master Plan accommodates additional development of Port facilities aimed at serving the boating public, consistent with the purpose and intent of the Coastal Act. However, it does not recommend removing barriers to new development such as the expansion of infrastructure capacity beyond what is necessary to accommodate the uses contemplated by the Final Plan. As the topical sections of this FEIR demonstrate, impacts to the Harbor District's water supply, wastewater collection and treatment capacity, roads, drainage, police and fire protection services, will be less than significant both individually (relating to the Port Master Plan) and cumulatively. In this respect, the Final Master Plan is not growth inducing.

Significant Irreversible Changes

The State CEQA Guidelines require an EIR prepared for a plan or policy document to address significant irreversible changes to the environment that may result from implementation. For example, the use of non-renewable resources during the initial phases of a project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely.

Implementation of the Draft Port Master Plan will result in the following irreversible Changes:

- The commitment of construction materials such as lumber, metals, concrete, asphalt, roofing materials, and plumbing;
- Fuel consumption for construction equipment and vehicles;
- Consumption of electricity for construction activities and subsequent occupation and use of facilities;

Given the scope and nature of the facilities contemplated by the Final Master Plan within the context of the continued development of the County and region, the irreversible commitment of these resources is considered less than significant.

7. Cumulative Impacts

Section 15126 of the CEQA Guidelines requires an EIR to assess the cumulative impacts of a project, recognizing that the impacts of an individual project may be insignificant, but when taken together with one or more other projects or activities, may be considerable or may compound or increase other environmental effects. The Guidelines require the discussion of cumulative impacts to reflect the severity of the impacts and their likelihood of occurrence. However, the discussion need not be as detailed as the analysis of impacts associated with the project, and should be guided by the rule of reason.

Other reasonably foreseeable projects in the vicinity of the Port are summarized on Table 7-1 and illustrated by Figure 7-1. Cumulative impacts associated with development of the projects in conjunction with the Final Master Plan are assessed in the individual topical sections of this FEIR and summarized below.

Geologic Resources

Development in accordance with the Final Master Plan will result in additional buildings and people exposed to potential hazards associated with seismic events, tsunamis, and slope instability. However, as described in the topical sections of this FEIR, recommended mitigation measures, together with existing regulations, reduce these impacts to a less than significant level.

Drainage and Watershed Resources

Cumulative drainage and watershed impacts could result from additional impervious surfaces which in turn increase the total volume and velocity of stormwater reaching San Luis Bay. In addition, increased this additional runoff could worsen erosion and introduce more sediment and hazardous materials to the Bay. However, the measures recommended by this FEIR, together with existing regulations, reduce these impacts to a less than significant level.

Cultural Resources

Construction activities could damage or otherwise disturb additional archaeological resources that were previously unknown. Taken together with the potential for disturbance at other construction locations in the region, this could result in cumulative impact to cultural resources that are not quantifiable.

Noise

Noise will increase in the project vicinity over the long term as a result of increased activities at the Port and surrounding land uses. However, the cumulative effect will be adverse but not significant.

Public Services

Cumulative impacts of the increased demand for public services is discussed in Section 5.5 of this FEIR. In sum, the capacity of water, wastewater collection and treatment, police and fire protection, and storm water drainage is sufficient to accommodate buildout of the Port in accordance with the Final Master Plan along with other reasonably foreseeable development.

Biological Resources

The development of vacant land under the Harbor District's jurisdiction, and the Harbor Terrace site in particular, will result in the cumulative loss of degraded, low-quality biological resources

and habitat. Mitigation recommended with this FEIR will reduce these cumulative effects to a less than significant level.

Traffic and Circulation

Cumulative traffic impacts are discussed in Section 5.7 which concludes that buildout of the Port and other reasonably foreseeable development in the region will not reduce the level of service of streets and intersections under local jurisdiction (the County). The cumulative effect of additional traffic on Highway 101 will be significant and unavoidable.

The demand for parking will increase at the Port and in the community of Avila Beach as a result of development under the Final Master Plan. However, existing and proposed parking resources will meet this future demand consistent with the standards contained in the Coastal Zone Land Use Ordinance.

Air Quality

Emissions of pollutants will increase regionally as a result of development in accordance with the Final Master Plan. However, as Section 5.8 concludes, the Final Master Plan incorporates all of the relevant provisions of transportation and land use planning strategies of the Clean Air Plan to help minimize these impacts. Accordingly, the Final Master Plan is consistent with the Clean Air Plan which is expected to demonstrate attainment of the State and federal air quality standards.

Visual Resources

New development associated with the Final Master Plan, along with other development in the Avila Beach area will result in a cumulative impact to the visual quality of the area. The Final Master Plan contains design guidelines to ensure that the size, scale and character of new development is consistent with the visual qualities of the Port and the community of Avila Beach.

Table 7-1: Cumulative Projects

<u>Project</u>		<u>Location</u>
1.	Widen SLO Creek Bridge	SLBD/ABD
2.	Ice Cream Building 2000 sq.ft.	ABD/Ontario
3.	24 homes	ABD/AB
4.	3 units	AB
5.	54 room hotel	AB
6.	Wine Tasting 3250 sq.ft.	Ontario Rd
7.	12 apts	2 nd Street
8.	Rest. Expansion 48 seats + 2000 sq.ft.	Front St
9.	Devincenzo Hotel (125)	ABD/Ont Rd
10.	Grocery Store/Res 3500 sq.ft.	Front St
11.	3 unit PUD	San Luis St
12.	28 unit motel	1 st St
13.	17 condo units	SL Street Tract 2535
14.	USL Exp (5 lots)	Pirate's
15.	10 unit condo	2 nd Street T-2355
16.	10 units + Comm 3000 sq.ft. Comm.	1 st Street T-2553
17.	6 lots	SLBE T-2390
18.	PG&E Fuel Storage	AB D010153D
19.	Stocker Oil Field Exp 16 new wells	Price Canyon D010386D

SLBD = San Luis Bay Drive
 SLBE = San Luis Bay Estates
 ABD = Avila Beach Drive
 AB = Avila Beach

Figure 7-1A Cumulative Projects

Figure 7-1B Cumulative Projects

8. Alternatives

Section 15126 of the CEQA Guidelines requires that an EIR consider a range of reasonable alternatives or alternative locations to the proposed project that are capable of avoiding or substantially reducing its associated significant effects. The range of alternatives must be capable of achieving the basic objectives of the project, and guided by the “rule of reason”. Accordingly, an EIR need analyze only those alternatives necessary to permit a reasoned choice.

In addition, alternatives considered by a project EIR should include those that reduce or minimize the environmental effects associated with the project. However, the alternatives considered in a program EIR for a policy document are aimed more toward the assessment of a broad range of policy alternatives so that decision makers have a better understanding of the environmental implications of those different choices.

Each alternative is discussed below along with a brief discussion of selected environmental impacts associated with each. Tables 8.4 and 8.5 provide summary comparisons of the alternatives.

No Project

The No Project alternative is required by Section 15126.6 (e) of the CEQA Guidelines. Under the No Project Alternative, the Port would continue to develop in accordance with the existing Port Master Plan adopted in 1983. Table 8-1 provides a summary of the existing (2003) Harbor District improvements and those remaining to be constructed as recommended by the 1983 Master Plan. It should be noted that many of the improvements have been constructed, as summarized in Table 3.1 -- Inventory of Existing Port Facilities.

In general, the amount of coastal-related uses accommodated by the 1983 Plan is somewhat less than that proposed under the 2003 Final Master Plan. The following is a summary of selected potential environmental impacts associated with buildout in accordance with the 1983 Master Plan.

Water Demand. Water demand at buildout of the 1983 Plan would be about 61.5 acre feet per year, which is considerably less than that associated with the Final Master Plan. This is due to the absence of the commissary/restaurant proposed under the Final Master Plan. However, it should be noted that this is still well below the Harbor District’s water allocation of 100 acre-feet per year.

Wastewater Generation. Likewise, wastewater generation is estimated to be about 30,000 gallons per day at buildout of the 1983 Plan, which is considerably less than would be experienced under the Final Plan but less than the District’s 70,000 gallons per day allocation of capacity in the Avila treatment plant.

Trip Generation. Trip generation during the weekday afternoon peak hour is estimated to be about 193 trips which is comparable to that associated with the Final Master Plan and could be expected to result in comparable impacts to traffic and circulation.

Emergency Response Plan. The time estimated to evacuate the emergency planning zones following an emergency on a non-summer weekday is about 13 hours 15 minutes, which is comparable to that associated with the Final Master Plan.

Coastal Act Consistency. Since the Final Master Plan has been incorporated into the Local Coastal Program it must by definition be considered consistent with the Coastal Act.

**Table 8-1: Inventory of Existing (2003) and Proposed Uses
By the 1983 Port Master Plan**
(See also Table 3.1 for existing facilities in 2003)

Coastal Dependent Land Uses			
	Existing	Proposed	TOTAL:
Harbor Operations			
Auxiliary office/storage	400 sq.ft.	300 sq.ft.	700 sq.ft.
Patrol boat moorings	2 moorings		2 moorings
LCM Mooring	1 mooring		1 mooring
Maintenance Yard Area	11,246 sq.ft.	1,736 sq.ft.	13,000 sq.ft.
Shop Buildings	2,500 sq.ft.		2,500 sq.ft.
Harbormaster's Office	3,150 sq.ft.		3,150 sq.ft.
Commercial Fishing			
Floating work dock	3 docks		3 docks
Transient mooring (seasonal)	35 moorings		35 moorings
Fishing support area	7,885 sq.ft.	665 sq.ft.	8,550 sq.ft.
Skiff Storage	90 spaces	90 spaces	180 spaces
Off-load area	360 lin.ft.		360 lin.ft.
Diesel Dock (with bilge pump)		1 bilge pump	1 bilge pump
Boat Repair Yard	35 spaces		35 spaces
Mobile Boat Hoist	1 hoist		1 hoist
Boat Repair Lockers		400 sq.ft.	400 sq.ft.
Showers/laundry	100 sq.ft.	650 sq.ft.	750 sq.ft.
Diesel Storage Tank (underground)	12,000 gallon tank	Replace with double wall tank	12,000 gallon tank
General Public			
Marine Supply/sport launch	920 sq.ft.	1,165 sq.ft.	2,085 sq.ft.
Open Pier/fishing	1,720 lin.ft.		1,720 lin.ft.
Restricted Frontage	1,470 lin.ft.		1,470 lin.ft.
Fish Cleaning Station	20 lin.ft.		20 lin.ft.
Recreational Boat Parking	35 spaces	9 spaces	44 spaces
Sport Fishing	3 boats	1,000 sq.ft.	3 boats + 1,000 sq.ft.

**Table 8-1: Inventory of Existing (2003) and Proposed Uses
By the 1983 Port Master Plan (cont'd)**

Coastal Related Land Uses			
	Existing	Proposed	TOTAL:
Harford Pier -- Visitor Serving			
Pod 1		2,600 sq.ft.	2,600 sq.ft.
Pod 2		6,000 sq.ft.	6,000 sq.ft.
RV Park		151 units	151
Commercial/Restrooms (pier)	4,821 sq.ft.	4,679 sq.ft.	9,500 sq.ft.
Commercial/Restaurant (land)	2,922 sq.ft.	2,922 sq.ft.	5,844 sq.ft.
General Public			
General Parking	241	111	352
Other Land Uses			
Landscaping	4,356 sq.ft.	11,824 sq.ft.	16,180 sq.ft.

Alternative I -- Coastal Dependent Emphasis Alternative

Section 30255 of the Coastal Act states:

Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

Clearly the Coastal Act favors the development of coastal-dependent uses in proximity to the ocean. Unfortunately, these uses traditionally do not generate sufficient revenues to keep pace with the rising cost of providing these services and facilities. On the other hand, coastal-related uses, such as retail shops and restaurants, are generally financial “winners”. The Draft Port Master Plan seeks a balance between the two that will enable the Harbor District to meet its obligations to the public while satisfying the provisions of the Coastal Act.

If the Harbor District applied Section 30255 without consideration of its revenue implications it would emphasize coastal-dependent uses and either reduce the level of service and facilities it provides or develop some other revenue source to make up the shortfall. Conversely, the Harbor District could seek to maintain the level of service implied by the 2003 Final Master Plan by emphasizing coastal-related uses such as retail and restaurants with the notion that increased revenues could be used to subsidize and expand coastal-dependent uses. These two ends of the continuum between coastal-dependent and coastal-related represent the range of choices for decision-makers in balancing these seemingly competing interests.

Under the Coastal Dependent Emphasis alternative, all of the new lease spaces recommended by the Final Master Plan would be occupied by marine-related uses such as boat repair, fish processing and sport fishing, and exclude non-coastal dependent retail, food establishments or other coastal-related uses. For the Harbor Terrace site, the campgrounds/RV/cabins would be replaced by expanded boater storage facilities, boat repair and other coastal-dependent uses. Table 8-2 provides a summary of the floor area/acreage that would be devoted to these types of uses under this alternative.

The following is a summary of selected potential environmental impacts associated with buildout in accordance with Alternative I, the Coastal Dependent Emphasis Alternative.

Water Demand. Water demand at buildout of Alternative I would be about 76.5 acre feet per year, which reflects the absence of an RV park on the Harbor Terrace site in favor of boat storage and fisherman support areas. In addition, the lease spaces under this alternative are assumed to be occupied by uses such as marine supply and repair activities rather than retail and food service businesses. Projected water demand under this alternative is well below the Harbor District’s water allocation of 100 acre-feet per year.

Wastewater Generation. Wastewater generation is estimated to be about 9,347 gallons per day at buildout of Alternative I, again reflecting the absence of water-intensive uses. Future wastewater generation is considerably less than the District’s 70,000 gallons per day allocation of capacity in the Avila treatment plant.

Trip Generation. Trip generation during the weekday afternoon peak hour is estimated to be about 47.2 trips during the weekday PM peak hour which reflects the less intensive use of the Harbor

Terrace site and the de-emphasis on retail and restaurant uses. The associated trip generation is considerably less than that associated with the Final Master Plan. Accordingly, traffic impacts associated with this alternative would be considered less than significant and less than those associated with the Final Master Plan.

Emergency Response Plan. The time estimated to evacuate the emergency planning zones following an emergency on a non-summer weekday is about 13 hours 10 minutes, which is still less than significant and slightly less than that associated with the Final Master Plan.

Coastal Act Consistency. This alternative favors coastal-dependent uses over coastal-related uses. As described in Table 8-2, this alternative would eliminate the potential for development of low-cost visitor serving uses on the Harbor Terrace site. Accordingly, this alternative would be more consistent with policies of the coastal act that favor coastal-dependent uses over coastal-related uses, but would be inconsistent with policies that encourage the protection and encouragement of low-cost visitor-serving and recreational facilities.

Table 8-2: Coastal-Dependent Emphasis

Improvements Recommended	Floor Area/Acreage	Emphasis
Harford Pier Pod 1 redevelopment New lease space	3,000 sq.ft. 1,500 sq.ft.	Marine related uses such as equipment repair, sales and rental
Harford Landing Convert admin. Building to lease space Expand maintenance bldg lease space	1,716 sq.ft. 4,000 sq.ft.	
Harbor Terrace Trailer boat storage Boater storage facilities Trailer boat parking	15 acres 5 acres 10 acres	(as described)
Avila Pier Terminus New lease space	4,250 sq.ft.	Marine related uses such as equipment repair, sales and rental
Avila Beach Parking lot Maintain as parking, no new lease space		

Alternative II – Near-Term Emphasis of Coastal-Related Uses

In meeting its obligations to the public, one of the issues faced by the District is the fact that coastal-dependent uses do not typically generate sufficient revenues to cover the cost of providing these services to the public. As a result, revenues to the District have declined in the face of continually increasing costs.

There are essentially two approaches to correcting this problem: 1) increase revenues and/or 2) decrease services and the cost of those services. In the past, the District has pursued a strategy aimed at managing costs and increasing revenues by developing more coastal-related (ie, revenue generating) land uses with the goal of subsidizing the coastal-dependent uses. Accordingly, Alternative II would emphasize the development of coastal-related uses in the near term (2 to 5 years) and phase in more coastal-related uses in the long-term (10 or more years) to meet the expected demand. Under this alternative, all of the lease spaces would be occupied by general retail, food service and other coastal-related businesses with no expansion of the coastal-dependent uses described above until such time as they could be subsidized without resulting in a financial hardship to the District. For example, on the Harbor Terrace site, a 147-room hotel and 22,000 sq.ft. restaurant would be constructed instead of the park, camp sites, and cabins. Table 8-3 provides a summary of the floor area/acreage associated with this alternative, followed by a brief discussion of the selected impacts.

Table 8-3: Near-Term Emphasis of Coastal-Related Uses

Improvements	Floor Area/Acreage	Near-Term Emphasis	Long-Term Emphasis
Harford Pier Pod 1 redevelopment New lease space	3,000 sq.ft. 1,500 sq.ft.	Retail sales of items catering to tourism, such as T-shirts, postcard, beach items, film, etc.; restaurants and food service. Phased addition of coastal-dependent uses.	Greater balance between coastal-related and coastal-dependent uses when District is more financially stable.
Harford Landing Convert admin. Building to lease space Expand maintenance bldg lease space	1,716 sq.ft. 4,000 sq.ft.		
Harbor Terrace Hotel Restaurant Boat storage facility Trailer boat parking	147 units 22,000 sq.ft. 2 acres 5 acres	(as described)	
Avila Pier Terminus New lease space	3000 sq.ft.	Retail sales of items catering to tourism, such as T-shirts, postcard, beach items, film, etc.; restaurants and food service	
Avila Beach Parking lot New lease space	5,000 sq.ft.	Retail sales of items catering to tourism, such as T-shirts, postcard, beach items, film, etc.; restaurants and food service.	

Water Demand. Water demand at buildout of Alternative II would be about 109 acre feet per year, which reflects the development of 147 unit hotel and 22,000 square foot restaurant on the Harbor Terrace site. In addition, the lease spaces under this alternative are assumed to be occupied mostly by retail and food service businesses. Projected water demand under this alternative would exceed the Harbor District's water allocation of 100 acre-feet per year and would be considered a significant and unavoidable impact.

Wastewater Generation. Wastewater generation is estimated to be about 24,079 gallons per day at buildout of this Alternative, again reflecting the more water-intensive uses. Future wastewater generation is still considerably less than the District's 70,000 gallons per day allocation of capacity in the Avila treatment plant.

Trip Generation. Trip generation during the weekday afternoon peak hour is estimated to be about 208 trips during the weekday PM peak hour which is greater than that associated with the Final Master Plan. Nonetheless, with the traffic improvements recommended by the Avila Circulation Study, the additional twenty PM peak hour trips can be accommodated on Avila Beach Drive while maintaining level of service "C" or better. Impacts associated with this alternative would be considered worse than those associated with the Final Master Plan, but still less than significant.

Emergency Response Plan. The time estimated to evacuate the emergency planning zones following an emergency on a non-summer weekday is about 13 hours 19 minutes, which is still less than significant and slightly greater than that associated with the Final Master Plan.

Coastal Act Consistency. This alternative favors the development of more coastal-related uses in the near term with the goal of generating sufficient revenue so that the District could subsidize the future development of coastal-dependent uses. Accordingly, this alternative could be considered inconsistent with policies of the coastal act that favor coastal-dependent versus coastal-related uses, but would be consistent with policies that encourage the protection and encouragement of low-cost visitor-serving and recreational facilities. In the long-term, the generation of additional revenues by these coastal-related uses would enable the District to subsidize the development of coastal-dependent uses and remain financially solvent.

Mitigated Project

The term Mitigated Project refers to the project as modified by the mitigation measures identified in the topical analyses (Section 5) of this FEIR. The conclusion of this FEIR is that the recommended mitigation measures reduce the potential environmental impacts associated with the project to a less than significant level, with the exception of construction-related air quality impacts.

Environmentally Superior Alternative

Section 15126 of the CEQA Guidelines requires that an EIR identify the "environmentally superior" alternative from among the alternatives analyzed. In spite of the fact that not all of the objectives associated with the 2003 Plan would be achieved, the Coastal Dependent Emphasis Alternative is considered the environmentally superior alternative for CEQA purposes. The next most environmentally superior alternative is the No Project alternative.

Table 8-4: Quantitative Comparison of Alternatives

Alternative	Net Future Water Demand (acre-feet)	Wastewater Generation (gallons per day)	Weekday PM Peak Hour Trip Generation	Estimated Non-summer Weekday Evacuation Time
Coastal Dependent Emphasis	76.44	9,347	47.2	13 hours 10 minutes
Coastal Related Emphasis	109.4	24,079	208.0	13 hours 19 minutes
No Project (Buildout of 1983 Master Plan)	61.5	17,727	192.8	13 hours 15 minutes
Final Master Plan	83.0	23,556	189.0	13 hours 17 minutes

Notes:

Coastal Dependent Emphasis

1. Lease spaces are assumed to be occupied predominantly by marine-related businesses with little or no retail or food service.
2. Water demand is estimated at 0.1 acre-feet per 1000 square feet for lease spaces.
3. Wastewater generation is assumed to be 90 percent of water demand.
4. Trip rates for lease spaces are 1.62 trips per 1000 square feet.
5. Evacuation time assumes 1:1 relationship between transient occupation and time needed for evacuation.

Coastal Related Emphasis

6. Lease spaces are assumed to be occupied predominantly by retail or food service.
7. Water demand is estimated at 0.3 acre-feet per 1000 square feet for lease spaces.
8. Wastewater generation is assumed to be 202 gallons per day per 1000 square feet..
9. Trip rates for lease spaces are 4.0 trips per 1000 square feet.
10. Evacuation time assumes 1:1 relationship between transient occupation and time needed for evacuation.

No Project (1983 Master Plan)

11. Water demand is estimated at 0.3 acre-feet per 1000 square feet for lease spaces.
12. Wastewater generation is assumed to be 202 gallons per day per 1000 square feet..
13. Trip rates for lease spaces are 4.0 trips per 1000 square feet.
14. Evacuation time assumes 1:1 relationship between transient occupation and time needed for evacuation.

Final Master Plan

(analysis as provided in the topical sections of FEIR)

Table 8-5: Qualitative Comparison of Alternatives

Impact Topic	No Project (1983 Master Plan)	Coastal Dependent Emphasis	Coastal Related Emphasis	2003 Final Master Plan (mitigated project)
Watershed/Drainage	=	=	>	Class II
Biological Resources	=	=	>	Class II
Cultural Resources	=	=	>	Class II
Geologic Hazards	=	<	>	Class II
Public services	<	<	>	Class II
Traffic and Circulation	<	<	>	Class II (Class I for Highway 101)
Air Quality	<	<	>	Class I for construction
Noise	<	<	>	Class II
Land Use Compatibility	=	=	>	Generally consistent
Views/Aesthetics	=	<	>	Class II
Overall	<	<	>	

- > Greater impact than associated with the project site.
- < Less impact than associated with the project site.
- = Comparable impact to that associated with the project site.

9. Report Preparation/Persons Contacted

Report Preparation

This Environmental Impact Report was prepared by Crawford Multari & Clark Associates, under contract to the Port San Luis Harbor District. Persons involved in data gathering, analysis, project management, and quality control include:

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10. References

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- Zeiner, David C., William F. Laudenslayer, Jr., Kenneth E. Mayer, and Marshall White. 1990b. California's Wildlife, Volume III, Mammals. California Department of Fish and Game. Sacramento, CA.

Appendix

Incorporated By Reference and available for review at the Harbor District office located at Pier 3 Avila Beach (Harford Pier):

Port San Luis Harbor District 2003 Master Plan

Harbor Terrace Final EIR, 1998

Gibson Archaeological Consulting, 1996, *Results of Phase I Archaeological Surface Survey of the Harbor Terrace Project*

Rincon Consultants, 1996, *Limited Health Risk and Environmental Risk Assessment Report*

Scientific Applications International Corporation, 1997, *Biological Resources Evaluation for the Harbor Terrace Project*

NOTE: Copies of the above-referenced documents are available for public review at the Port San Luis Harbor District, Pier 3 Avila Beach California. The Final Master Plan can be viewed in its entirety at the following web site: www.portsanluis.com.

Appendix A. Notice of Preparation and Responses to Notice

Appendix B: 2003 Avila Circulation Study