

# Exhibit H

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## **Chapter 1. Introduction**

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### **PURPOSE**

The County of Monterey (County) is the Lead Agency in the preparation of this Supplemental Draft Environmental Impact Report to provide the public, responsible agencies and trustee agencies with information about the potential environmental effects of the proposed Potrero Area Subdivision (project). As described in California Environmental Quality Act (CEQA) Guidelines Section 15121(a), an EIR is a public information document that assesses potential environmental effects of the proposed project and identifies mitigation measures and alternatives that could reduce or avoid adverse environmental impacts. Public agencies are charged with the duty to consider and minimize environmental impacts of proposed development where feasible, and have an obligation to balance a variety of public objectives, including environmental, economic, and social factors.

CEQA requires the preparation of an environmental impact report prior to approval of any “project” that may have a significant effect on the environment. For the purposes of CEQA, the term “project” refers to the whole of an action, which has a potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]). With respect to the Potrero Area Subdivision project, the County has determined the action is a “project” within the definition of CEQA, which has the potential to result in significant environmental effects.

### **BACKGROUND AND CONTEXT**

In 1994, the Rancho San Carlos Partnership submitted the Comprehensive Development Plan for the 20,000-acre Rancho San Carlos, creating the Santa Lucia Preserve. The Comprehensive Development Plan outlined resource protection principles and identified the location of development and preservation areas throughout the Preserve. The Comprehensive Development Plan designated 18,000 acres of the Preserve’s most valuable environmental resources as open space to be retained permanently as “Preserve Lands” for grazing, recreation and resource conservation. The Potrero Area Subdivision is a part of the Comprehensive Development Plan.

In 1994-1995, the County prepared and circulated a Draft EIR for the entire Santa Lucia Preserve Comprehensive Development Plan (EIR No 94-005). In February 1996, the County certified the Final EIR and approved the Santa Lucia Preserve Comprehensive Development Plan, subject to Conditions of Approval (Resolution 96-059 and 96-060 for PC94067, and Resolution 96-059 for PC94218). In August 1997, the County re-approved the Santa Lucia Preserve Comprehensive Development Plan (Resolution No. 97-360), including certification of an addendum to the Final EIR.

The development potential for the Potrero Area, as part of the larger Santa Lucia Preserve Comprehensive Development Plan, was analyzed at a “programmatic” level within the environmental documents for the prior approvals. However, the Final EIR for the Santa Lucia Preserve acknowledged that the Potrero Area would require additional, site-specific

environmental review when a specific development plan was proposed. The preparation of this Supplemental EIR carries out the environmental review process as envisioned in 1995.

Additional information regarding the approval history of the project and project background are discussed within section 3.0, Project Description.

## **TYPE OF DOCUMENT (SUPPLEMENTAL EIR)**

CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. As identified above, this EIR has been prepared as a “Supplement to an EIR” (or “Supplemental EIR”), pursuant to CEQA Guidelines Section 15163. The purpose of this Supplemental EIR is to document additional information of substantial importance relevant to the Potrero Area which was not known and could not have been known at the time the previous EIR was certified (Santa Lucia Preserve Final EIR, State Clearinghouse No. 95023036).

This Supplemental EIR (SEIR) has been prepared to clearly present additional information to the public, affected agencies, and decision makers, and augment the environmental analysis contained within the certified Santa Lucia Preserve FEIR specific to the Potrero Area. This additional information does not change the environmental analysis contained in the certified EIR. Sections 15162 and 15163 (Subsequent and Supplemental EIRs) are the applicable statutes in this circumstance, and this Supplement has been prepared consistent with those Guidelines. The Guidelines prescribe preparation of a Supplemental EIR when new information of substantial importance shows that the project will have one or more significant effects not discussed in the previous EIR (Guidelines 15162[a][3][A]), and only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation (15163[a][2]).

The supplemental document need only contain the information necessary to make the previous EIR adequate for the project and current circumstances, and can be circulated by itself without recirculating the previously certified Draft EIR.

It is important to note that for this Supplemental EIR, all impacts identified within the Santa Lucia Preserve FEIR would still be expected to occur as forecasted, and all mitigation measures identified within the Final EIR are still required. This Supplement simply identifies any additional impacts and mitigation measures specific to the Potrero Area Subdivision. For these reasons, large sections of the Santa Lucia Preserve FEIR are incorporated by reference.

## **SCOPE OF THE EIR**

### **Notice of Preparation**

The County of Monterey prepared a Notice of Preparation (NOP) of an EIR on May 9, 2002. To accompany the NOP, an Initial Study was prepared to identify the anticipated environmental

concerns associated with the project. The NOP was circulated to the public, local, state, and federal agencies, and other interested parties to solicit comments on the scope of the EIR. The following agencies and individuals submitted comments on the NOP:

- U.S. Department of the Army, Army Corps of Engineers;
- U.S. Fish and Wildlife Service;
- Governor's Office of Planning and Research, State Clearinghouse;
- California Department of Toxic Substances Control;
- Monterey Bay Unified Air Pollution Control District;
- Monterey Peninsula Water Management District;
- Association of Monterey Bay Area Governments (AMBAG);
- Monterey County Local Agency Formation Commission;
- Monterey County Sheriff's Department; and
- Pacific Gas and Electric.

Concerns raised by Responsible, Trustee and Concerned Agencies, in response to the NOP were considered during preparation of the Draft EIR. The NOP and Initial Study are attached as Appendix A to this document

### **Scoping Meeting**

On June 19, 2002 the County sponsored a public scoping meeting at the Carmel Valley Community Center to gather additional public comments on the scope and content of the Potrero Area Subdivision SEIR. The meeting was publicly noticed in advance. No substantive comments were received at the scoping meeting.

### **Issues Addressed**

Based upon the responses to the NOP, the certified Santa Lucia Preserve EIR and scoping meeting, the following issues are addressed within this SEIR:

- Project consistency with relevant plans and policies (Carmel Valley Master Plan, Monterey County General Plan, Greater Monterey Peninsula Area Plan, Monterey County Board of Supervisors Resolution No. 93-115, and Monterey County Regional Transportation Plan).
- Socioeconomics, including issues associated with population and housing;

- Geology, minerals and soils, including seismic, grading, landslides and erosion impacts;
- Groundwater, including an overview of the approved ranch-wide water system;
- Surface waters, including effects associated with drainage, runoff and water quality;
- Biological resources, including effects on vegetation, wildlife, tree removal, fisheries and special-status species;
- Visual resources, including project visibility and potential changes to views to and from sensitive viewsheds;
- Traffic, focused upon the vehicle trips generated by the subdivision;
- Air quality, focused on construction impacts and effects upon the air basin;
- Noise, including any new noise sources created by the project;
- Public services, including water and wastewater service, schools, parks, recreation, utilities, fire protection and law enforcement;
- Cultural resources, including the potential effect on archaeological and historic resources;
- Cumulative impacts associated with all areas of study;
- Growth Inducing Effects;
- Alternatives to the Project; and
- Effects Found Not To Be Significant. For many of the areas of study listed above, the Potrero Area Subdivision SEIR will not change or otherwise affect the analysis as presented in the certified Santa Lucia Preserve EIR. This SEIR clearly identifies circumstances where the project will have no impact or significant effect beyond what was analyzed at the ranch-wide level.

## **ENVIRONMENTAL REVIEW AND PROJECT APPROVAL PROCESS**

The decision-making process for the proposed project involves four advisory or decision-making bodies. The Carmel Valley Land Use Advisory Committee (CVLUAC) is an advisory committee for projects within Carmel Valley and will conduct a hearing to consider the combined development permit, Preliminary Review/Vesting Tentative Map and EIR. The CVLUAC will make a recommendation to approve or deny the project to the Monterey County Planning Commission. The Monterey County Standard Subdivision Committee will also review the

Vesting Tentative Map and EIR. The Planning Commission will then hold a hearing to consider the combined development permit, vesting tentative map, and SEIR. The Planning Commission will then decide the following:

- Whether to certify the SEIR as legally adequate; and
- Whether to approve the project.

The Board of Supervisors would consider the project only on appeal.

Specifically, the review and certification process for the SEIR will involve the following steps:

### **Draft SEIR**

Upon completion of the DSEIR, the County will file a Notice of Completion (NOC), in accordance with Section 15085 of the CEQA Guidelines, with the State Office of Planning and Research (State Clearinghouse). This begins the public review period (Public Resources Code, Section 21161).

### **Public Notice / Public Review**

Concurrent with the NOC, the County will provide public Notice of Availability (NOA) of the DSEIR for public review in accordance with CEQA Guidelines Section 15087(a), and will invite comment from the general public, responsible agencies, organizations, and other interested parties. The review period in this case will be no less than 45 days. Although no public hearings on the EIR are required by CEQA, the County may hold a public review meeting during the review period. Public comment on the DSEIR will be accepted both in written form and verbally at any noticed public review meeting.

All comments or questions regarding the Draft SEIR should be addressed to:

Mike Novo  
Monterey County Planning and Building Inspection Department  
Coastal Office  
2620 1<sup>st</sup> Avenue  
Marina, CA 93933  
Phone: (831) 883-7518  
Fax: (831) 384-3261

### **Response to Comments / Final SEIR**

Following the public review and comment period for the DSEIR, a Final Supplemental EIR (FSEIR) will be prepared. The FSEIR will include responses to written comments received during the public review and comment period and to verbal comments made at any public meeting during the review period.

## **EIR Certification and Consideration of the Project**

If the County finds that the FSEIR is “adequate and complete”, the County may certify the document. The rule of adequacy generally holds that the EIR can be certified if:

- 1) It shows a good faith effort at full disclosure of environmental information, and
- 2) It provides sufficient analysis to allow decisions to be made regarding the project in contemplation of environmental considerations.

Upon review and consideration of the FSEIR, the Planning Commission may act upon the project. A decision to approve the project would be accompanied by written Findings in accordance with CEQA Guidelines Section 15091 and, if applicable, Section 15093 (Statement of Overriding Considerations).

## **Mitigation Monitoring**

The County must also adopt a Mitigation Monitoring and Reporting Program for mitigation measures that have been incorporated into, or imposed upon, the project to reduce or avoid significant effects on the environment (Public Resources Code, §21081.6(a)). This program will be designed to ensure that these measures are implemented during project development. Throughout the EIR, mitigation measures are clearly identified and presented in language that will facilitate establishment of a monitoring and reporting program. Any mitigation measures adopted by the County as part of the certified FSEIR will be considered as conditions for approval of the project and will be included in the Mitigation Monitoring and Reporting Program to ensure and verify compliance.

## **INTENDED USES OF THE EIR**

This EIR has been prepared in accordance with CEQA and is consistent with the most recent updates to the CEQA Guidelines and California planning law. This EIR, in accordance with CEQA Guidelines Section 15126, should be used as the primary environmental document to evaluate all subsequent planning and permitting actions associated with the project, including all discretionary approvals considered by the County of Monterey.

The EIR will be reviewed by the following responsible and trustee agencies for the issuance of permits and for comments on the project’s environmental impacts and mitigation measures:

- California Department of Transportation, which will review the EIR to assess impacts on state transportation facilities;
- California Regional Water Quality Control Board, Central Coast Region, which will review the EIR to assess impacts on water quality and the project’s

compliance with water quality standards and regulations for this proposal and in the context of prior approvals;

- California Department of Fish and Game (DFG), which will review the EIR to assess treatment of impacts on biological resources specific to this project and in the context of prior approvals and management plans;
- California Department of Toxic Substances Control, which will review the EIR to assess historic uses of the property and potential impacts associated with any prior use or control of hazardous substances on site;
- U.S. Army Corps of Engineers (Corps), which will review the EIR to assess impacts on jurisdictional wetlands;
- U.S. Fish and Wildlife Service (USFWS), which will review the EIR to assess impacts on any federally listed species, candidate species or species of special concern;
- Monterey Bay Unified Air Pollution Control District (MBUAPCD), which will review the EIR to assess the project's impacts on air quality and its consistency with the Air Quality Management Plan for the Monterey Bay region;
- Monterey Peninsula Water Management District (MPWMD), which will review the EIR to assess impacts on groundwater of the Carmel Valley;
- Monterey County Local Agency Formation Commission (LAFCO), which will review the project for consistency with its policies related to Community Service Districts;
- Monterey County Water Resources Agency (MCWRA), which will review the EIR to assess the treatment of impacts on the groundwater basin, water quality and surface water drainage;
- Monterey County Health Department, which will review the EIR to determine adequate water supply and comment on the proposed method of wastewater treatment and disposal;
- Monterey County Department of Public Works, which will review the EIR to assess traffic issues and proposed infrastructure systems;
- Monterey County Department of Parks, which will review the EIR to determine the impacts on parks and recreation specific to the Potrero Area Subdivision; and
- Monterey County Sheriff's Department, which will review the EIR to confirm the adequate provision of service to the area.

## IMPACT TERMINOLOGY

This Draft SEIR uses the following terminology to describe environmental effects of the proposed project:

- Standards of Significance: A set of criteria used by the lead agency to determine at what level, or “threshold”, an impact would be considered significant. Significance criteria used in this EIR include CEQA Guidelines and Statutes; factual or scientific information; regulatory performance standards of local, state, and federal agencies; and the Goals, Objectives and Policies of the Monterey County General Plan and Carmel Valley Master Plan; and applicable standards used within the certified Santa Lucia Preserve EIR.
- Less Than Significant Impact: A less than significant impact would cause no substantial change in the environment and no mitigation is required.
- Significant Impact: A significant impact would cause, or potentially cause, a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project effects using specified standards of significance. Mitigation measures and/or project alternatives are identified to reduce project’s negative effect upon the environment.
- Significant Unavoidable Impact: A significant and unavoidable impact would result in a substantial change in the environment that cannot be avoided or mitigated to a less than significant level if the project is implemented.
- Cumulative Significant Impact: A cumulative significant impact would result in a new substantial change in the environment from effects of the project when evaluated in the context of reasonably foreseeable development or anticipated growth in the surrounding area. This includes cumulative contribution to an existing environmental problem.

## **Chapter 2. Project Description**

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### **LOCATION**

#### **Regional Location**

The project site is located in western Monterey County, approximately five miles south of Monterey and three miles inland from the Pacific Ocean. The region contains dramatic and varied topography including steep ridges, rolling hills, valleys and flats. The regional project location is shown on **Figure 2-1**.

#### **Site Location**

The 1,286-acre Potrero Area Subdivision consists of a series of ridges and valleys in the general vicinity and on either side of Potrero Creek. The entire site is located south of Carmel Valley Road and the Carmel River. The environmental setting of the site contains dramatic topography, impressive views, a number of different micro-climates, a documented history and pre-history, and a diversity of biological communities. The project site is located in the northern section of the 20,000-acre Santa Lucia Preserve with the majority of the project site, including 1,146 acres and 26 of the project's 29 lots, located in the Carmel Valley Master Plan (CVMP) area. The remaining 140 acres with three lots are located within the Greater Monterey Peninsula Area Plan (GMPAP) area. The Santa Lucia Preserve is shown in **Figure 2-2**.

### **PROJECT OBJECTIVES**

The Rancho San Carlos Partnership is the project applicant. According to the applicant, a primary objective is to secure approval for a Combined Development Permit to create the Potrero Area residential subdivision within the greater Santa Lucia Preserve. The Partnership seeks to establish a permanent preserve for native plant and wildlife habitat while pursuing limited development of the least environmentally sensitive land. The applicant intends to create 29 additional homesites on 77 acres within the Santa Lucia Preserve, with open space ("preserve lands") comprising the remaining 1,209 acres of the 1,286-acre project site. It is an objective of the applicant to utilize and support the ranch-wide infrastructure that has already been constructed, and to support the activities and services of the Community Services District.

Another key objective of the Potrero Area Subdivision is to continue the phased implementation of the previously approved Santa Lucia Preserve Comprehensive Development Plan.

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Figure 2-1 Regional Location

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Figure 2-2 Santa Lucia Preserve and Site Location

backside of 2-2

## **BACKGROUND**

### **Prior Approvals**

In March 1993, the Monterey County Board of Supervisors adopted Resolution 93-115 and required that a Comprehensive Development Plan be prepared for the entire 20,000-acre Rancho San Carlos in Carmel Valley. Resolution No. 93-115 provided the legal and entitlement framework to guide the Rancho San Carlos Partnership and the County in their planning of the area, based on protection of the land's resources and identification of limited development areas. Specifically, the Board directed that particular attention be paid to siting and planning development to be compatible with existing resources and adjacent land uses, and that the total density of the entire Ranch not exceed 350 residential units and 150 visitor accommodation units.

In 1994, the Rancho San Carlos Partnership submitted the Comprehensive Development Plan for Rancho San Carlos, creating the Santa Lucia Preserve. The Comprehensive Development Plan outlined resource protection principles and identified the location of development and preservation areas throughout the Preserve. The Comprehensive Development Plan designated 18,000 acres of the Preserve's most valuable environmental resources as open space to be retained permanently as "Preserve Lands" for grazing, recreation and resource conservation. The remaining 2,000 acres were to be developed as "Settled Lands", for housing, a golf course, other recreation areas, and a community center. Together, the "Preserve Lands" and "Settled Lands" were to comprise the 20,000-acre Santa Lucia Preserve.

In 1994-1995, the County prepared and circulated a Draft EIR for the Santa Lucia Preserve (EIR No 94-005). In February 1996, the County certified the Final EIR and approved the Santa Lucia Preserve Comprehensive Development Plan, subject to specific Conditions of Approval. An EIR addendum was prepared to update portions of the environmental analysis based on the effects of passage of County Measure "M", a decision by the Superior Court on the County's approval of the project, and listing of the California red-legged frog as "Endangered" and the steelhead as "Threatened", under the federal Endangered Species Act. In August 1997, the County re-approved the Santa Lucia Preserve Comprehensive Development Plan (Resolution No. 97-360), including certification of the addendum to the Final EIR.

Final subdivision maps were recorded for all phases of the Preserve within the Greater Monterey Peninsula Area Plan (GMPAP) between 1998 and 2000.

### **Santa Lucia Conservancy**

Resolution No. 93-115 required the Comprehensive Development Plan to include an open space component describing the manner in which at least 14,467 acres of Rancho San Carlos would be retained for use as open space. The Comprehensive Development Plan fulfilled the requirement by establishing the Santa Lucia Preserve and its permanent management by the Santa Lucia Conservancy. The Conservancy is established as a non-profit public organization and independent corporation that oversees the resources of the Wildlands and the Openlands of the

Santa Lucia Preserve. The Conservancy currently owns approximately 9,600 fee title acres of the Wildlands and controls approximately 5,600 acres of Openlands through ownership of extensive conservation easements. The Conservancy will ultimately own fee title to all of the Wildlands created by the Santa Lucia Preserve, and will control all of the Openlands, through conservation easements ranch-wide, including all Preserve Lands within the Potrero Area Subdivision.

## **EXISTING SITE IMPROVEMENTS**

The project site is currently undeveloped. Access to the site is provided by Rancho San Carlos Road and Robinson Canyon Road. Internal access is provided by three existing subdivision roads (Rancho San Carlos Road, Chamisal Pass & Potrero Trail) as well as two existing ranch roads (Goodrich Trail and Wild Boar Run). A complete system of private roads and emergency access roads within the Santa Lucia Preserve has been constructed or will be constructed concurrently with development to provide access to all Settled Lands and Preserve Lands.

Pacific Gas and Electric Company and Pacific Telephone easements cross the site, and power and telephone services are available on portions of the project site. Increased capacity for the project is planned and readily available. Utility mains have been placed underground throughout the project site as part of the approved infrastructure improvements connecting to a previously subdivided portion of the Santa Lucia Preserve.

The Santa Lucia Community Services District (SLCSD) provides domestic and fire flow water supply for all development at the Santa Lucia Preserve through a ranch-wide system of deep wells, and storage and distribution facilities constructed by the developer. Additional functions of the SLCSD are described elsewhere within this chapter.

## **EXISTING ZONING**

The Carmel Valley Master Plan portion of the Potrero Area Subdivision is currently zoned RG/10-D-S (Rural Grazing/10-acre per unit maximum density-Design Control-Site Plan Review). This zoning district allows for a density of one unit per 10 acres, with design control. The Greater Monterey Peninsula Area Plan portion of the project is currently zoned RC/40-D-S (Resource Conservation/40-acre per unit maximum density-Design Control-Site Plan Review overlay zoning). The uses proposed with the project are consistent with the allowable uses under the standards and applicable regulations established under Title 21.

## **PROJECT CHARACTERISTICS**

Proposed land uses within the Potrero Area Subdivision portion of the Santa Lucia Preserve include 29 individual residential lots with “clustered” building envelopes, also called “Homelands” as defined by Resolution No. 93-115 and depicted in the Santa Lucia Preserve Comprehensive Development Plan. Of the entire 1,286 acre Potrero Area Subdivision, 1,209

acres will be maintained as permanent open space (“Preserve Lands”) while the 29 home sites will be clustered within 29 lots on approximately 77 acres of the total project area (“Homelands”).

### **Vesting Tentative Map**

The Preliminary Project Review / Vesting Tentative Map would create 29 residential building sites and six open space parcels on 1,286 total acres. Twenty-six (26) of the lots are located in the CVMP area while three “remainder” lots are within the GMPAP area. The Potrero Area Subdivision represents formal approval of the three previously-created “remainder” lots in the GMPAP area and the creation of the 26 lots in the CVMP portion of the project area. Board Resolution 97-360 specifically required that the three “remainder” lots within the GMPAP area be deleted from the GMPAP Vesting Tentative Map and included within one or more clusters as part of the subdivision application for the CVMP area of the Santa Lucia Preserve. These lots have been added to the Potrero Area Subdivision as a result. The building envelopes, or Homelands, comprising 77 acres of the subdivision, are clustered in a series of “Settled Lands” in order to preserve environmentally sensitive resource areas.

### **Preserve Lands**

Preserve Lands are divided into two categories: Wildlands and Openlands. Within the Potrero Area, Wildlands consist of 521 acres on six large parcels. Due to a combination of natural resources and physical characteristics, the Wildlands are considered to have a high value for conservation and will be owned in fee by the Santa Lucia Conservancy. The Openlands consist of 688 acres of those portions of the 29 residential lots outside of the defined building envelopes (Homelands) for the home sites. These areas will be subject to permanent conservation easements in favor of, and managed by, the Santa Lucia Conservancy and maintained in a natural state. The Openlands may only be improved for utility and sanitary systems, access, agriculture and recreational uses. The conservation easements on privately held Openlands, together with the Conservancy-owned Wildlands, establish the open space acreage of the Potrero Area Subdivision. All Preserve Lands are subject to land use restrictions in perpetuity. **Table 2-1** provides a summary of each land use type proposed for the Potrero Area Subdivision. The Potrero Area Subdivision is shown in **Figure 2-3**.

**TABLE 2-1  
LAND USE SUMMARY**

Land Uses		Acreage	Environmental Sensitivity	Development Intensity
Settled Lands	Building Envelopes / Homelands	77	Least	Homes, most improvements
Preserve Lands	Openlands	688	Moderate	Utilities, sanitary systems, access, agriculture, recreation
	Wildlands	521	High	Kept in natural state
Total Acreage	Potrero Area Subdivision	1,286		

Figure 2-3 Vesting Tentative Map

Backside of 2-3

## Project Phasing

The original Comprehensive Development Plan and Resolution 93-115 for the Preserve indicated that “Implementation of the Santa Lucia Preserve will be accomplished in phases...” Two phases are proposed for the Potrero area, as identified on the Preliminary Project Review / Vesting Tentative Map (PPR/VTM). Phase I includes all of the area in the CVMP portion of the Potrero Area Subdivision, including its 26 lots, and Phase II includes the 140 acres and three “remainder” lots located in the northernmost portion of the GMPAP area. The project applicant, however, reserves the right to file one final map for the entire subdivision. **Tables 2-2 through 2-4** illustrate the proposed acreages of each parcel within the subdivision. The following pages provide additional description of the proposed residential areas and related improvements.

**TABLE 2-2  
PHASE I LOT ACREAGES**

Lot/Parcel	Homeland Area	Openland Area	Wildland Area
E1	3.29	17.07	
E2	2.61	11.86	
E3	3.03	15.55	
E4	2.46	17.62	
E5	2.64	20.92	
E6	2.92	30.19	
E7	2.38	12.78	
E8	2.68	29.80	
E9	2.36	25.91	
E10	2.54	20.86	
E11	4.17	12.86	
E12	2.10	21.60	
E13	2.11	25.32	
E14	2.16	19.38	
E15	1.94	28.86	
E16	2.97	34.08	
E17	2.38	17.74	
E18	1.88	15.89	
E19	2.21	19.15	
E20	2.15	21.10	
E21	2.49	13.83	
JJ-CE			62.72
HH-CE			86.10
KK-CE			28.65
LL-CE			86.90
Total	53.47 (7%)	432.37 (57%)	264.37 (35%)
Total Acres	750.21		

**TABLE 2-3  
PHASE II LOT ACREAGES**

<b>Lot/Parcel</b>	<b>Homeland Area</b>	<b>Openland Area</b>	<b>Wildland Area</b>
E22	2.36	16.40	
E23	2.67	22.90	
E24	3.09	31.86	
E25	2.72	35.62	
E26	2.35	16.03	
E27	3.41	63.80	
E28	2.28	45.49	
E29	4.28	20.42	
II-CE			26.51
MM-CE			230.27
Total	23.26 (4%)	255.52 (48%)	256.78 (48%)
Total Acres	535.56		

**TABLE 2-4  
TOTAL AREA ACREAGES**

<b>Phase</b>	<b>Homeland Area</b>	<b>Openland Area</b>	<b>Wildland Area</b>
1	53.47	432.37	264.37
2	23.26	255.52	256.78
Totals for Phase E	76.73	687.89	521.15
Total Acres	1285.77		

## **Residential Uses**

### Building Envelopes / Homelands

The project proposes 29 building envelopes, also known as “Homelands”, on 29 individual residential lots. The building envelopes will range in size from approximately 2 to 4 acres, based on considerations such as topography, vegetation, accessibility, views and visibility. Most

improvements, including buildings, structural and primary site improvements for each lot, exclusive of driveways and utilities, will be constructed within these building envelopes. **Figure 2-4** is a conceptual diagram showing a typical lot within the project area.

### Clusters / Settled Lands

Consistent with the direction of Board Resolution No. 93-115, the 29 building envelopes comprising the “Homelands” are proposed within clusters located in “Settled Lands”. The Settled Lands are those areas of the Santa Lucia Preserve that are considered the least environmentally sensitive and the most suited for development, based upon extensive analysis of natural resources on the site as described in the Santa Lucia Preserve Comprehensive Development Plan and EIR, and as approved by Monterey County. Settled Lands are defined only for the purposes of identifying cluster areas, and do not represent a stand-alone land use category within the subdivision. Within the clusters of Settled Lands, 77 acres are defined as Homelands for the development of the 29 residences. The design and location of the Homelands are intended to achieve the objectives of clustering, which are to:

- minimize the extensions of roads;
- avoid environmentally sensitive areas; and
- provide for large areas of contiguous open space.

The intent of the project is to achieve a scale sufficient to provide for a separation of individual Homelands within and between the clusters in order to maximize opportunities for wildlife movement and to create a sense of landscape continuity.

### Inclusionary Housing

The Santa Lucia Preserve includes all required inclusionary housing units as well as employee units on-site within the GMPAP area of the project. This requirement is satisfied through units constructed elsewhere within the Preserve; therefore, the Potrero Area Subdivision project does not propose inclusionary housing units on site.

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Figure 2-4 Conceptual Diagram of Typical Lot

Backside of 2-4

## **Services and Improvements**

Public services at the Santa Lucia Preserve will be provided either directly by a public utility, by the Santa Lucia Community Services District (SLCSD) or by the consolidated Carmel Valley Fire Protection District (CVFPD). All necessary improvements, including primary access roads, water distribution system, utilities, etc, have been or are currently being constructed within the Santa Lucia Preserve and Potrero Area Subdivision.

The SLCSD is a special district formed in 1998 to maintain infrastructure and provide services to property owners within the District. Its responsibilities include providing road and drainage maintenance, water services, wastewater treatment and security services. The SLCSD operations are governed by Community Services District law and are financially supported by annual assessments to all property owners within the Santa Lucia Preserve.

### Water Supply and Distribution

A Comprehensive Hydrological Study was prepared in support of the 1995 EIR for the Santa Lucia Preserve project. The water system constructed and currently operating within the Santa Lucia Preserve is based on this study. The Comprehensive Hydrological Study, in compliance with Resolution No. 93-115 Policy(h), and County Subdivision Ordinance Section 19.07.020, have undergone extensive third-party review.

The SLCSD provides domestic and fire flow water supply for all development at the Santa Lucia Preserve through a ranch-wide system of deep wells, storage and distribution facilities constructed by the developer. This arrangement fulfills the requirement of Resolution No. 93-115 Policy (h.3), specifying that water systems serving development in the Santa Lucia Preserve be coordinated and managed on a property-wide basis.

Wherever feasible the water distribution system will be located within existing and proposed road rights-of-way. Water demand for the Potrero Area Subdivision is reflected in the Comprehensive Hydrological Study and adequate supply to accommodate this demand has been documented as part of previous permit applications, as well as this SEIR.

### Wastewater System

All of the residential lots in the Potrero Area will be served by individual septic tank and leachfield systems. All sites have been individually tested for septic system use and approved by the Environmental Health Department. A Comprehensive Wastewater Disposal Plan, in compliance with Resolution No. 93-115 Policy (h) and County Subdivision Ordinance Section 19.07.020, is included in the Technical Appendix of this document.

### Fire Protection

Until recently, the SLCSO was responsible for fire protection within the Preserve. However, fire protection districts in Carmel Valley have now consolidated into a single fire protection district. The new district is known as the re-organized Carmel Valley Fire Protection District (CVFPD). Districts participating in the consolidation include the SLCSO, Carmel Valley Fire Protection District and the Mid-Carmel Valley Fire Protection District (MCVFPD). The district consolidation became effective January 1, 2001. The CVFPD is responsible for all community fire protection services in the consolidated district area, which includes the entire Santa Lucia Preserve. A CVFPD station is located approximately four miles from the Potrero Area Subdivision outside of Rancho San Carlos.

### Security and Communications

The Potrero Area Subdivision is within the jurisdiction of the Monterey County Sheriff's Department. The SLCSO also provides security patrols for the Santa Lucia Preserve. Telephone and radio communications are maintained between these agencies.

### Utilities

Power and telephone services are constructed on portions of the Santa Lucia Preserve, and increased capacity for the Potrero Area Subdivision is planned and readily available. Utility mains are currently being placed underground throughout the Potrero Area Subdivision as part of the approved infrastructure improvements connecting to a previously subdivided portion of the Santa Lucia Preserve. All new utility infrastructure in the Potrero Area Subdivision will be placed underground, in accordance with County policy, and located within road rights-of-way and driveways wherever feasible. Natural gas will not be provided within the Santa Lucia Preserve. Electrical power and telephone service will be provided within a common trench.

### Solid Waste

Solid waste collection will be managed by the SLCSO and delivered to the Monterey Regional Waste Management District (MRWMD) landfill facility located north of the City of Marina. SLCSO staff currently provide direct haul on "trash day" within the Santa Lucia Preserve, and solid waste is brought to a transfer station for removal to the Marina landfill at regular intervals. By the time residents occupy homes in the Potrero Area Subdivision, the applicant anticipates that the lots will be served by a contract waste hauler. MRWMD also operates a recycling program that will be incorporated within the collection system at the Santa Lucia Preserve.

### Circulation / Road Maintenance

A complete system of private roads and emergency access roads within the Santa Lucia Preserve has been constructed or will be constructed concurrently with development to provide access to all Settled Lands and Preserve Lands.

A number of roads and improvements within the Preserve, the Potrero Area and in the immediate vicinity of the project, have been constructed, or are approved for construction as part of the previously approved GMPAP Combined Development Permit and subdivision.

Rancho San Carlos Road has been improved as the primary access to the Santa Lucia Preserve. Within the Potrero Area, existing ranch roads will be improved to provide a secondary access loop beginning at the entrance gate and re-connecting with Rancho San Carlos Road at San Francisquito Flat. This road consists of a portion of the Potrero Trail and all of Chamisal Pass. These roads have been upgraded to provide two nine-foot travel lanes.

It should be noted that both Potrero Trail and Chamisal Road are approved and constructed access roads to the previously approved GMPAP subdivision area. The only additional secondary roads to be constructed within the Potrero Area Subdivision are Wild Boar Run and Goodrich Trail. Both of these roads are existing unimproved roads that serve as utility or access easements. All driveways will have a paved width of 12 feet.

Additional improvements have previously been made to the intersection of Rancho San Carlos Road and Carmel Valley Road to improve turning movement capacity and safety. These improvements were designed and constructed to mitigate impacts associated with the full build-out of the Santa Lucia Preserve including the Potrero Area, as evaluated in the certified FEIR for the Preserve. In the vicinity of the Potrero Area Subdivision, and as part of the improvements to Rancho San Carlos Road, a pedestrian and bicycle path has been added to Rancho San Carlos Road Bridge, providing pedestrian safety through separation from automobile traffic lanes on the bridge. The bridge deck and piers have been structurally upgraded.

Road maintenance services for all paved and unpaved roads will be provided by the SLCSO. Maintenance of private driveways will be the responsibility of individual lot owners.

## **USE PERMITS REQUIRED**

The Combined Development Permit application includes applications for Use Permits for tree removal and limited development on slopes in excess of 30 percent.

### **Tree Removal**

A Use Permit is required for tree removal. According to the Forest Management Plan prepared for the Santa Lucia Preserve, the entire preserve contains approximately 550,000 trees. The estimated population of all trees greater than 6 inches in diameter for the Potrero Area Subdivision is 62,660 trees. On the 25 lots surveyed, approximately 1,182 trees were identified by the Forest Management Plan (four lots had no trees and therefore were not surveyed). Of the trees surveyed, 96 percent were coast live oak (1,136) with the balance comprised of redwood (30), Monterey Pine (12), and Madrone (4). The Forest Management Plan identified tree species with girths greater than 6 inches (measured 24" above the ground). Of the 1,182 trees surveyed, approximately 1,054 (90%) are less than 24" in diameter and the remaining 128 (10%) are over

24 inches and considered in the landmark category (over 24" in girth measured 24" above the ground).

The Forest Management Plan estimates that approximately 260, or 25 percent, of the 1,182 surveyed trees may be removed for roads and driveways within the Potrero Area Subdivision. Tree removal will vary from lot to lot, depending upon existing tree density and ultimate locations of building pads for residences.

The Forest Management Plan includes a complete evaluation of tree removal necessary to accommodate all proposed roads and driveway improvements, and a site-by-site review of all proposed building envelopes. A number of subdivision roads which were previously approved have been constructed, including RSC Road, Chamisal Pass and Potrero Trail. According to the application materials, new roads, driveways, and building envelopes have been realigned or adjusted, in consultation with the author of the Forest Management Plan, to minimize the number of trees to be removed.

The Forest Management Plan also contains a detailed Reforestation Plan that will result in a 5:1 replacement ratio for all landmark trees removed, and a 3:1 replacement ratio for all other trees. Trees to be used in the Reforestation Plan will be provided from seeds collected on site and propagated in the Santa Lucia Preserve nursery.

### **Development on Slopes in Excess of 30 Percent**

Monterey County Zoning Ordinance Section 21.64.230 requires the issuance of a Use Permit for all development on slopes in excess of 30 percent. Section 21.64.230.E. of the Zoning Ordinance requires one of the following Findings to be made in order to grant a Use Permit for development on slopes in excess of 30 percent:

- a. Either there is no feasible alternative (per definition cited in Section 21.06.560 of Title 21) which would allow development to occur on slopes less than 30 percent; or,
- b. That the proposed development better achieves the goals, policies and objectives of the Monterey County General Plan and applicable area plan than other development alternatives.

Approximately 29,600 cubic yards of grading will be required for improvements within the Potrero Area Subdivision. The project design generally avoids development on slopes in excess of 30 percent and building envelopes have been sited to avoid 30 percent slopes. However, new access driveways will be designed and constructed as part of the subdivision improvements and, in some cases, driveways or roads must cross short distances of slope in excess of 30 percent to minimize grading or length of driveway, or to avoid sensitive resource areas.

There are four areas where it is not feasible to avoid slopes in excess of 30%, and therefore the applicant is requesting a permit to cross the following slope areas:

- Goodrich Trail immediately after the split from Potrero Trail running approximately 400 feet at 17 percent slope with an estimated earthwork quantity of 2,000 CY. The proposed road follows an existing dirt road that will be widened by a combination of ¾:1 cut slopes and retaining walls. The estimated area of disturbance would be 0.28 acres.
- Goodrich Trail near lots 13 and 16 running approximately 1,600 feet with an estimated earthwork quantity of 6,000 CY. The proposed road follows an existing dirt road that will be widened by a combination of ¾:1 cut slopes and retaining walls. The estimated area of disturbance would be 1.10 acres.
- The driveway to lot 15 running approximately 200 feet at 15 percent with an estimated earthwork quantity of 700 CY. The proposed driveway partially follows an existing dirt road that will require minor widening by ¾:1 cut slopes. The estimated area of disturbance would be 0.07 acres.
- The driveway to lot 17 running approximately 600 feet with an estimated earthwork quantity of 750 CY. The proposed road follows an existing dirt road that will require minor widening by ¾:1 cut slopes. The estimated area of disturbance would be 0.28 acres.

These alignments are proposed as the most feasible and would use existing ranch roads to the greatest extent possible. The improvement of these existing ranch roads are proposed and intended to require less grading, cut and fill, vegetation removal or visual impact than would be required to construct a new section of road on slopes of less than 30 percent. In other cases, the relocation of portions of the existing road to slopes of less than 30 percent may confront other physical or policy constraints, which would render the relocation infeasible or less desirable in meeting the goals of the General Plan. According to the application, the areas proposed are intended to avoid disturbance of riparian corridors, critical watersheds, landmark trees or redwoods and avoid visually sensitive areas.

## **APPLICABLE COUNTY PLANS AND ORDINANCES**

### **Monterey County General Plan**

The portion of the Potrero Area Subdivision that is located in the Carmel Valley Master Plan area (1,146 acres) is designated for “Rural Grazing” in the Monterey County General Plan. The Rural Grazing land use sub-category is applied to grazing lands which are located in the County’s developing areas, which are not restricted by a 20-year Williamson Act contract, and on which the County intends to allow mixed residential and agricultural use.

The remaining 140 acres that are located in the Greater Monterey Peninsula Area Plan area are designated “Resource Conservation” in the County Plan. This designation is intended to ensure conservation of a wide variety of resources while allowing for some limited use of the properties.

As discussed previously, Resolution No. 93-115 mandated that a Comprehensive Development Plan be implemented for the entire Rancho San Carlos area and amended the Monterey County General Plan to designate the Ranch as a Comprehensive Planned Use Area with specific policies. The Resolution specified the allowable uses for the Ranch which are to be limited to 350 residential units ranch-wide, 150 visitor accommodations, community shopping, and recreational uses. The Resolution stated that no less than 14,467 acres shall be retained for grazing, recreation and resource conservation purposes. The Santa Lucia Preserve Comprehensive Development Plan provides for grazing to occur within the 21,208 acres of Preserve Lands identified in the Plan, and for residential use to occur within the 1,393 acres designated as “Homelands”. The uses proposed with the project are consistent with the allowable uses under the standards and applicable regulations established by the Monterey County General Plan, the Carmel Valley Master Plan, the Greater Monterey Peninsula Area Plan and County Board Resolution No. 93-115.

### **Carmel Valley Master Plan**

The Carmel Valley Master Plan portion of the project is designated “Rural Grazing” in the Monterey County General Plan. This designation allows for mixed residential and agricultural use. Resolution 93-115 specifically included the portions of Rancho San Carlos located within the CVMP, making this area part of the ranch-wide Comprehensive Development Plan. The CVMP was amended in 1996, but there were no changes applicable to the proposed project.

### **Greater Monterey Peninsula Area Plan and Amendments**

The Greater Monterey Peninsula Area Plan was adopted in 1987. Resolution No. 93-115 was approved on March 19, 1993 amending the GMPAP land use map to designate Rancho San Carlos as “Resource Conservation/40 (subject to the Comprehensive Planned Use Overlay).”

### **Monterey County Zoning Ordinance (Title 21)**

The Carmel Valley Master Plan portion of the Potrero Area Subdivision is currently zoned RG/10-D-S (Rural Grazing/10-acres per unit maximum density-Design Control-Site Plan Review). The Greater Monterey Peninsula Area Plan portion of the project is currently zoned RC/40-D-S (Resource Conservation/40-acres per unit maximum density-Design Control-Site Plan Review overlay zoning). The uses proposed with the project are consistent with the allowable uses under the standards and applicable regulations established under Title 21.

### **Oak Tree Ordinance No. 3420**

Ordinance No. 3420 was established to preserve oaks and other protected trees. The ordinance was incorporated into Title 21 and specifically states that “No oak tree may be removed in any area of the County of Monterey designated in the applicable area plan as Resource Conservation, Residential, Commercial, or Industrial without the approval of permit(s) required in Section 16.60.040 of this ordinance.” Title 21, specifically Section 21.64.260D, requires the applicant to obtain a Use Permit for the removal of more than three specific trees.

### **Inclusionary Housing Ordinance No. 3149**

Ordinance No. 3149 was adopted in June 1994. The Inclusionary Housing Ordinance requires developers building seven or more units to set aside 15 percent of the units for low-and moderate income buyers or renters. Two amendments have been made to the Ordinance since 1994, neither of which affects the project.

## CITATIONS

County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including *Addendum to EIR*, August 1997).

Denise Duffy & Associates, *Potrero Area Subdivision of the Santa Lucia Preserve*, Project Description, April 2001.

Potrero Area Subdivision EIR Project File.

## Chapter 3. Land Use

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### INTRODUCTION

Details of existing land uses in the project area are described in *Santa Lucia Preserve Final Environmental Impact Report* prepared in 1995 (County EIR No. 94-0050), certified by the Monterey County Board of Supervisors in 1996. In 1997, the County re-approved the plan for the Santa Lucia Preserve (Resolution No. 97360), including certification of an addendum to the Final EIR. The EIR addressed the impacts of the Comprehensive Development Plan on the 20,000-acre Santa Lucia Preserve. The 1,286-acre Potrero Area Subdivision is a component of this Plan and a portion of the 2,000-acre area identified for development. Therefore, this analysis measures impacts specific to the Potrero area.

This section contains an analysis of land use issues associated with the Potrero Area Subdivision with an emphasis on potential impacts that may occur as a result of new land use information specific to the Potrero area, or obtained since the certification of the prior EIR and Addendum. Where issues or predicted environmental impacts remain unchanged since the certification of the prior EIR, the prior analysis is cited and incorporated by reference.

### SETTING

#### Regional Setting

The project site is located in western Monterey County, approximately five miles south of Monterey and three miles inland from the Pacific Ocean. The region contains dramatic and varied topography, including steep ridges, rolling hills, valleys and flats. (See Project Description and **Figures 2-1** and **2-2** for project location).

#### Local Setting (Project Vicinity)

The 1,286-acre Potrero Area Subdivision is located in the northwest portion of the 20,000-acre Santa Lucia Preserve, also known as Rancho San Carlos. The site is bounded on the north by Carmel Valley. The site constitutes a portion of the Santa Lucia Range southwest of the Carmel River. Outside of the Preserve, surrounding land uses include residential, ranching, public and private recreation and open space.

#### Relevant Plans, Policies and Land Use Regulations

The Santa Lucia Preserve Final EIR assessed the Comprehensive Development Plan's consistency with area plans and policies. This SEIR summarizes those plans and policies that are relevant to the Potrero Subdivision Area and the current regulatory environment, and assesses the project's consistency with any new or modified land use policies and plans that have been adopted since the certification of the Santa Lucia Preserve Final EIR. (See Appendix B).

The majority of the Potrero Area is located within the Carmel Valley Master Plan Area. Three of the project lots are located in the Greater Monterey Peninsula Planning Area. These Area Plans, together with the Monterey County General Plan and Zoning Ordinance, are the primary land use documents regulating development in this geographic area.

### Monterey County General Plan

The General Plan is a long range, comprehensive plan addressing all aspects of future growth, development and conservation within the county. The Monterey County General Plan was adopted by the Board of Supervisors in 1982 and subsequently amended on several occasions. At the countywide level, the plan designates all proposed major land uses by one of seven basic designations: residential, commercial, industrial, agricultural, resource conservation, public/quasi-public, and transportation.

Approximately 1,146 acres of the project area, located in the Carmel Valley Master Plan Area, are designated “Rural Grazing” by the Monterey County General Plan. The remaining 140 acres, located in the Greater Monterey Peninsula Area Plan, are designated “Resource Conservation.” Resolution No. 93-115, adopted by the Monterey County Board of Supervisors on March 19, 1993 amended the Monterey County General Plan to designate the entirety of Rancho San Carlos as a “Comprehensive Planned Use” area with specific policies and development thresholds. According to this designation, which is essentially an “overlay” to the base land use designation, allowable uses for Rancho San Carlos may consist of residential, visitor accommodation, community shopping, and recreational uses of 2,500 acres. The balance of no less than 14,467 acres are to be retained in grazing, recreation and resource conservation.

### Monterey County Draft General Plan Update

The County has recently prepared an update to the General Plan, which is under review by the public and the Planning Commission at the time of this report. The policies of the draft General Plan Update (including text and policy updates to the Carmel Valley Master Plan and the Greater Monterey Peninsula Planning Area Plan) are not yet approved. However, the 12 Objectives, intended to provide the framework for policy guidance on the General Plan Update, have been considered and approved by the Board of Supervisors. Recognition of the General Plan Update process is provided for information only; however, the Objectives are discussed within this EIR when relevant.

### Area Plans and Amendments

In Monterey County, there are eight Area Plans that provide policy direction and address local issues. Area plans are more specific than general plans because of their geographic focus. Development opportunities, constraints, and natural resource issues in each area plan are unlike those of other parts of the County, hence the policies for planning areas are more precisely adapted to the characteristics of the specific area than are the more generalized policies of the general plan.

The Carmel Valley Master Plan (CVMP) portion of the Potrero Area Subdivision project is designated “Rural Grazing” in the Monterey County General Plan. This designation allows for mixed residential and agricultural use. Resolution 93-115 specifically included the portions of Rancho San Carlos located within the CVMP, making this area part of the ranch-wide Comprehensive Development Plan. The Carmel Valley Master Plan was amended in 1996, but no changes to the Master Plan resulted from the Santa Lucia Preserve approvals.

The Greater Monterey Peninsula Area Plan (GMPAP) was adopted in 1987. Resolution No. 93-115 amended the GMPAP by amending the land use map to designate Rancho San Carlos as “Resource Conservation/40\*” (\*subject to the Comprehensive Planned Use Overlay).

### Monterey County Zoning Ordinance

The Monterey County Zoning Ordinance (Title 21) was adopted by the Monterey County Board of Supervisors in 1991 and amended in 1994. The zoning ordinance consists of the establishment of various districts, regulations and permit processes for the unincorporated territory of the County of Monterey. The districts were established to regulate land uses and to allow specific uses or allow uses subject to discretionary permit processes.

The Carmel Valley portion of the Potrero Area is currently zoned Rural Grazing/Design Control (RG-D). This zoning district allows for a density of one unit per 10 acres, with design control. The entire portion within the GMPAP is currently zoned Resource Conservation (RC) with a 40-acre per unit density and a Design Control (D)/Site Plan review (S) overlay zoning (RC/40-D-S).

### Measure M

The Board of Supervisors approval of the Santa Lucia Preserve included approval of Ordinance No. 03857 to allow rezoning of approximately 1,135 acres of the Preserve primarily for visitor accommodation and commercial development. The ordinance was subsequently nullified in a voter referendum (Measure M) during the November 5, 1996 general election, preventing rezoning at the project site. The changes to the Santa Lucia Preserve project that resulted from Measure M included :

- Portions of the Preserve within the GVMP would not be rezoned. Specific lots reverted to the original Resource Conservation - Design Control (RC-D) zoning.
- Lots 27, 28 and 29, among others, would not be rezoned to establish a height limit, but remain subject to the 30-foot height restriction under the original zoning.

An Addendum to the Santa Lucia Preserve EIR was prepared in August of 1997 evaluating the effects of Measure M and other events that had transpired resulting in project modifications. The Addendum determined that Measure M affected only a portion of the Preserve, and thus the comprehensive plan analyzed in the final EIR was unchanged.

For the Potrero Subdivision component, Measure M affected only three parcels: 27, 28 and 29 located in the GMPAP portion of the project. The Addendum found these changes insignificant to the final EIR environmental analysis.

Superior Court Decision Regarding the Santa Lucia Preserve Project and Monterey County Board of Supervisors Resolution No. 93-115

Within the Potrero Area Subdivision PPR/VTM, parcels 27, 28 and 29 are part of a clustered development in the GMPAP area. These parcels were originally approved as part of the Santa Lucia Preserve Subdivision as lots 220, 221 and 222. In compliance with a Superior Court decision in *Sierra Club, et al. v. County of Monterey, et al.* the Monterey County Board of Supervisors adopted Resolution No. 97-360 which required a limited number of building sites be withdrawn from the approved project because they were not considered to be part of the “clustered development” (development located in the least environmentally sensitive portions of the property) as required by the Board of Supervisors Resolution No. 93-115. Resolution No. 97-360 directed that Lots 220, 221, and 222 be combined into a single remainder parcel for future subdivision approval and development only if submitted within one or more clusters. The clusters have been defined through resource analysis on the site as described in the Comprehensive Development Plan for the Santa Lucia Preserve. The remainder lots are now proposed for creation as part of the clustered development concept within the Potrero Area Subdivision. **Figure 3-1** (page 3-9).

Resolution No. 01-133

On March 27, 2001, the Monterey County Board of Supervisors approved Resolution No. 01-133. The Board determined that CALTRANS had not developed an alternative project to increase capacity on State Highway 1 in the area of Carmel and additional units resulting from residential subdivisions in the area would increase daily traffic on already deficient segments of Highway 1 and Carmel Valley Road. The resolution provides policy direction to staff and guidance to the Planning Commission to disapprove residential subdivisions proposed within the Carmel Valley Master Plan Area.

The resolution also states that, “Applications for subdivisions submitted before October 19, 1999 and applications for subdivision on any property that has been designated a Comprehensive Planned Use Area for which a Comprehensive Development Plan has been accepted by the Board of Supervisors on or before October 19, 1999 may proceed.” The Potrero Area Subdivision is a component of the Santa Lucia Preserve Comprehensive Development Plan approved by the Board of Supervisors in the 1994 submittal. Therefore, the Potrero Area Subdivision is not subject to the subdivision restrictions.

Oak Tree Ordinance 3420

Ordinance No. 3420 was established to preserve oaks and other protected trees. The ordinance was incorporated into Title 21 and specifically states that “No oak tree may be removed in any area of the County of Monterey designated in the applicable area plan as Resource Conservation,

Residential, Commercial, or Industrial...without the approval of permit(s) required in Section 16.60.040 of this ordinance.” Title 21, specifically Section 21.64.260D, requires the applicant to obtain a Use Permit for the removal of more than three specific trees.

### Inclusionary Housing Ordinance

The County’s Inclusionary Housing Ordinance was originally adopted in 1980. An updated Inclusionary Housing Ordinance (#3149) was adopted June 7th, 1994. Since that time, at least two amendments have been made to the Ordinance (one dated July 9th 1996, the other dated June 6th 2000). Neither of the amendments subsequent to the Final EIR for the Santa Lucia Preserve are applicable to the proposed project. The Inclusionary Housing Ordinance requires developers building seven or more units to set aside 15% of the units for low-and moderate income buyers or renters. Inclusionary housing for the entire Santa Lucia Preserve plan area is provided elsewhere within the Preserve; therefore, the Potrero Subdivision proposes no inclusionary units.

### Development on Slopes in Excess of 30%

County policy and Comprehensive Development Plan Policies restrict, but do not prohibit, development on slopes in excess of 30%. These policies are implemented by Section 21.64.230 of the Monterey County Zoning Code that requires a Use Permit for all development on slopes 30% or more.

Section 21.64.230. E of the Zoning Ordinance requires one of the following findings to be made in order to grant a use permit for development on slopes in excess of 30%:

- Either there is no feasible alternative which would allow development to occur on slopes less than 30%; or,
- That the proposed development better achieves the goals, policies, and objectives of the Monterey County General Plan and applicable area plan than other development alternatives.

The project design for the Potrero Area of the Santa Lucia Preserve generally avoids development on slopes in excess of 30%. However, there are four road and driveway areas where it is not feasible to avoid slopes in excess of 30%.

### Water Quality Control Plan

California’s Porter-Cologne Water Quality Control Act of 1969 required preparation of regional plans formulating and adopting water quality control standards. The current version of the Water Quality Control Plan for the Central Coastal Basin, or Basin Plan, was published by the Central Coast Water Quality Control Board in 1994. There have been two amendments to the Basin Plan since publication. Both of these amendments were made in 1995 prior to the certification of the

Santa Lucia Preserve EIR. Water quality is discussed in Chapter 9, “Runoff, Flooding and Water Quality.”

### Air Quality Management Plan

Reducing air pollution throughout California is required by both the federal and the California Clean Air Acts. The California Clean Air Act of 1988 required preparation of a plan by 1991 showing how the State ozone standard would be met with subsequent updates every three years. The 2000 Air Quality Management Plan for the Monterey Bay Region (AQMP) adopted May, 2001 is the third update to the 1991 Plan. Attainment of the PM<sub>10</sub> standard is addressed in the "1998 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region." Air quality and current standards are discussed in Chapter 14, “Climate and Air Quality.”

### Regional Transportation Plan

The Transportation Agency for Monterey County (TAMC) is responsible for periodically completing a long-range transportation planning document known as the Regional Transportation Plan (RTP). The purpose of the RTP is to provide policy guidelines regarding planning and programming of transportation projects in Monterey County for the next twenty years. The RTP identifies existing and future needs, evaluates modes and alternatives, and determines what can be completed with anticipated funding.

As required by the California Transportation Commission Guidelines, each Regional Transportation Agency shall develop and update goals, objectives and policies for inclusion in the Policy Element of the RTP. The Santa Lucia Preserve EIR evaluated the 1994 RTP and found the Preserve Plan consistent with the goals, objectives and policies of transportation plan. Since the certification of the EIR, the TAMC has published the *2002 Monterey County Regional Transportation Plan*. The applicable goals of this plan are:

**Goal #1** Develop and maintain a multi-modal transportation network that preserves and/or enhances mobility and access of the transportation system.

**Goal #2** Develop and implement policies that are consistent with effective land use, congestion management and air quality processes;

**Goal #3** Implement and encourage projects that enhance safety; and,

**Goal #4** Ensure that the transportation system complements and enhances the natural environment of the Monterey Bay region.

### **Existing Land Uses Surrounding the Project Site**

The entire Santa Lucia Preserve is designated as a “Comprehensive Planned Use Area” subject to specific standards and policies as described in Board Resolution 93-115. This designation is specifically for properties where a mix of uses is permitted and/or where there are unique natural and scenic resources. In these areas, Resolution 93-115 directs that “Particular attention is to be

given towards siting and planning development to be consistent with existing resources and adjacent land use.” As part of the Comprehensive Development Plan for the Santa Lucia Preserve, land use compatibility has been considered in the design and planning of the Potrero Subdivision.

Lands surrounding the Potrero Area of the Santa Lucia Preserve include the more urbanized lands north of the Preserve within the Carmel Valley. In this area, residential and recreational uses predominate. Existing Carmel Valley land uses include three golf courses, recreational areas, destination resorts, ranch estates, commercial areas and single-family residential areas. The Carmel River flows through the Carmel Valley, approximately ½ mile north of the project site.

Preserve areas to the east, south and a small portion to the north of the project site are currently in various stages of development as other phases of the Santa Lucia Preserve Plan. These phases will consist of residential and recreational uses. To the west of the project is the Coastal Zone (CZ) portion of the Preserve.

Open space in the vicinity of the project site include parks and open space easements, ranch lands and undeveloped private property. Garland Park is located southeast of the project site adjacent to the northeastern boundary of the Santa Lucia Preserve. This 2,300 acre park is a passive recreation area designated for hiking and equestrian uses. East of the project site, adjacent to the Preserve boundary, is Carmel Valley Ranch. Approximately 1,100 acres of scenic open space on the Ranch are available to the public by trail easements granted to the Monterey Peninsula Regional Parks District. **Figure 3-2** illustrates existing land uses surrounding the project site.

### **Zoning Designations on Lands Surrounding the Preserve**

Zoning designations for lands surrounding the Santa Lucia Preserve include RG, RC, Permanent Grazing (PG) and Public-Quasi Public. These designations are defined below:

Rural Grazing (RG) The purpose of the RG zoning district is to preserve and enhance the productive grazing lands of the County while providing the opportunity to establish support facilities for grazing uses and clustered residential uses. Allowed uses include soil-dependent agricultural uses; single-family dwellings accessory to the agricultural use of the property, not to exceed three units per lot; necessary, appurtenant agricultural structures; and similar uses. Additional uses, such as public or quasi-public uses, airports and public or private riding or hiking clubs, may be allowed with a discretionary permit.

Resource Conservation (RC) The purpose of the RC zoning district is to allow development in the more remote and mountainous areas of the County while protecting the significant and highly sensitive resources of Monterey County such as viewsheds, plant and wildlife habitat, streams and riparian corridors. Allowed uses include one single-family dwelling per lot; limited animal husbandry and livestock farming; accessory structures and uses to any permitted use; and other

similar uses. Additional uses allowed with a discretionary permit include public or quasi-public uses, golf courses, and public or private riding or hiking clubs.

Permanent Grazing (PG) The purpose of the PG zoning district is to preserve, protect and enhance those productive exclusive grazing lands in the County. Uses allowed in the PG district include soil-dependent agricultural uses; single-family dwellings accessory to the agricultural use of the property, not to exceed three units per lot; accessory structures such as barns and stables; and similar uses. Additional uses, such as the division of property to create a one-acre minimum lot for family members who earn their livelihood from agricultural use of contiguous land, public or quasi-public uses, agricultural support facilities, and public or private riding or hiking clubs may be allowed with a discretionary permit.

Public Quasi-Public (PQP) The purpose of the PQP district is to allow public/quasi-public uses such as schools, parks, regional parks, recreational areas and uses which serve the public at large. Allowed uses in PQP districts include crop and tree farming, and the grazing of sheep, cattle and goats; water system facilities including wells and storage tanks serving four or fewer connections; home occupations; and similar uses. Additional uses may be allowed with a permit including caretaker facility for providing on-site security; accessory structures; public recreational uses; golf courses and country clubs; airports; hospitals, churches and similar facilities.

Figure 3-1: Homeland Clusters

Backside of 3-1

Figure 3-2: Surrounding Land Use

**Backside of 3-2**

## IMPACTS AND MITIGATION MEASURES

### Approach and Methodology

This section discusses potential land use impacts that may result from implementation of the proposed project. Any applicable new information related to land use conditions since certification of the Santa Lucia Preserve EIR was assessed. Updated information was drawn from the Monterey County 2001 Draft General Plan and EIR, 2000 Air Quality Management Plan for the Monterey Bay Region, 2002 Regional Transportation Plan, AMBAG 1997 Population and Employment Projections (2001-2002 updates) and personal communication with Monterey County staff.

### Significance Criteria

The following significance criteria for measuring a project's environmental impacts are based on current CEQA Guidelines, standards used in the Final EIR, and standards used within the County's environmental checklist for establishing significant impacts. For the purposes of this SEIR, impacts are considered significant if any of the following would result from implementation of the proposed project:

- a) result in the substantial alteration of the present or planned land use of an area;
- b) disrupt or divide the physical arrangement of an established community;
- c) conflict with established recreational, educational, religious or scientific use of the area;
- d) convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land;
- e) create land uses that are incompatible with existing or planned land uses or inconsistent with community goals;
- f) conflict with local general plans, community plans or zoning; or,
- g) conflict with the adopted environmental plans and goals of the community where it is located.

### Alteration of Present or Planned Land Use

**Impact 3.1:           The project will alter the present land use of the site, but is consistent with the planned land uses of the Comprehensive Development Plan. (Less than Significant)**

The Potrero Area Subdivision will change the land use at the site from rural grazing and ranching to include a limited number of residential lots (29). Since the majority of the site (94%) will be maintained in open space as Preserve Lands, the introduction of limited residential use does not constitute a substantial alteration. More importantly, as the site has been planned for residential

use as part of the Board of Supervisor's findings and approval of Comprehensive Development Plan for the Santa Lucia Preserve (Resolution 93-115), the site is consistent with planned land uses. For these reasons, the impact is considered **less than significant**.

**Mitigation: None Required.**

### **On-Site and Adjacent Land Use Compatibility**

**Impact 3.2: The project raises the issue of compatibility of the proposed residential land use with current and historic land uses on-site. (Less than Significant)**

Land at the project site has historically been used for grazing and recreation. Future land uses are deemed compatible if they would facilitate a continuation of ranching and open space uses, while preserving or restoring natural resources.

The Potrero Subdivision is Phase E of the Santa Lucia Preserve Plan and is a component of the approved Comprehensive Development Plan for the entire Santa Lucia Preserve. As directed by Board Resolution No. 93-115, the Comprehensive Development Plan paid particular attention towards siting and planning development to be compatible with existing resources. The approved Comprehensive Development Plan identified areas appropriate for residential development and designed residential land use to be clustered in areas where grazing does not occur and would not be disturbed. Clustering development fosters compatibility between residential and open space uses by reducing impacts and by maximizing the amount of open space available for grazing and recreation. The potential for conflict is considered to be **less than significant** because the proposed land use is compatible with the existing or planned land use as described in the approved Comprehensive Development Plan for the Santa Lucia Preserve.

**Mitigation: None Required.**

**Impact 3.3: The project raises the issue of compatibility of the proposed residential land use with adjacent land uses. (Less than Significant)**

The Potrero Subdivision is located in the northwest portion of the Santa Lucia Preserve. The project is surrounded on most sides by Preserve lands. As a phase of the Preserve Plan, the Potrero Subdivision is compatible with the adjacent residential and recreational land uses of the Preserve.

Outside of the Preserve, the Potrero area is adjacent to single-family residences to the north and northeast, and the Quail Meadows subdivision to the northwest. Planned residential uses would be compatible with these existing residential uses.

The Comprehensive Development Plan for the Santa Lucia Preserve was required by Resolution 93-115 to ensure that development was compatible with adjacent land uses. As a component of

the approved Development Plan, the Potrero Area Subdivision is compatible with adjacent land uses. The potential for incompatibility is therefore considered to be **less than significant**.

**Mitigation: None Required.**

**Impact 3.4: The project will introduce residential land uses in areas of rural grazing and resource conservation zoning, raising the issue of compatibility of the proposed residential land use with existing land use and zoning designations. (Less than Significant)**

The Carmel Valley portion of the Potrero Area is currently zoned Rural Grazing/Design Control (RG-D). This zoning district allows for a density of one unit per 10 acres, with design control. The portion within the GMPAP is currently zoned Resource Conservation (RC) with a 40-acre per unit density and a Design Control (D)/Site Plan review (S) overlay zoning (RC/40-D-S).

Resolution 93-115 designated the entire Santa Lucia Preserve as a Comprehensive Plan area with specific policy requirements including: development of a Comprehensive Development Plan for the entire Preserve; allowed development of up to 350 residential units Preserve-wide, and retention of no less than 14,467 acres of the Preserve for grazing, recreation and resource conservation.

The approved Comprehensive Development Plan for the Santa Lucia Preserve provided grazing and permanent open space on 18,000 acres and residential use on 1,393 acres. The 1,286-acre Potrero Area Subdivision is a part of the Comprehensive Development Plan and a portion of the residential area identified for development within the plan. The residential units within the subdivision consist of twenty-six lots ranging in size from 15 to 27 acres in the CVMP and three lots ranging in size from 20 to 48 acres in the GMPAP.

The uses proposed are within the 350-unit maximum and meet the 14,000 acre open space test. They are consistent and identified as allowable uses under the standards and applicable regulations established by Board Resolution and the Monterey County Zoning Code (Title 21); therefore, this impact is considered to be **less than significant**.

**Mitigation: None Required.**

### **Project Consistency with Regional and Local Plans**

**Impact 3.5: The project raises the issue of consistency with goals of the 2002 Regional Transportation Plan. (Less than Significant)**

Since the certification of the EIR, the TAMC has published the *2002 Monterey County Regional Transportation Plan (RTP)*. Most of the goals set forth in the 2002 RTP are very similar to those evaluated and found to be consistent in the 1995 Santa Lucia Preserve EIR. There are no new objectives or policies under these goals related to the Potrero Area Subdivision project that have not been previously analyzed for impacts.

Goal # 4 in the 2002 RTP states: “ensure that the transportation system complements and enhances the natural environment of the Monterey Bay region.” There are no specific policies identified for Goal #4, but the stated objective is to “encourage the preservation of the existing environment or make improvements where possible and necessary.”

The majority of the Potrero project area (94%) will be maintained as permanent open space while the remaining 6% will be used as homesites. As a component of the 1994 Comprehensive Development Plan for the 20,000-acre Santa Lucia Property, the Potrero Subdivision has placed particular attention towards planning and siting development to be compatible with existing resources. The Comprehensive Development Plan included:

- a complete study of the natural and scenic resources of Preserve area, together with a list of guiding principles and policies for their conservation and protection;
- identification of approximately 18,000 acres of lands to be preserved, along with a mechanism for their perpetual conservation and protection;
- identification of approximately 2,000 acres of lands suitable for development; and,
- a system of development standards to guide the design, siting and construction of all buildings, roads, landscape and infrastructure improvements in response to the unique natural and scenic resources of the ranch.

Through identification of lands to be preserved along with mechanisms for protection, the Comprehensive Development Plan encourages the preservation of the existing environment where possible and necessary. The guidelines and standards set forth in the plan ensures that the transportation system complements and enhances the natural environment. As a component of the Comprehensive Development Plan, the Potrero Subdivision is consistent with Goal #4 of the 2002 RTP. Therefore, the potential of the proposed project to conflict with the 2002 Regional Transportation Plan is considered to be **less than significant**.

**Mitigation: None Required.**

**Impact 3.6:           The project raises the issue of consistency with relevant area land use plans and policies, particularly the General Plan and related Area Plans. (Less than Significant)**

The Potrero Subdivision proposes residential development and associated grading, tree removal, road construction and other aspects of the project that must be tested against the adopted goals and policies of the relevant General Plan and Area Plan documents. The purpose of such a review is to determine if the proposal has any potential conflict with relevant environmental plans and policies of the area. **Appendix B** within this document contains a detailed consistency analysis in support of this Chapter. Based upon that analysis, the project is considered consistent and therefore will have a **less than significant** effect based upon the standards of significance.

The three lots within the GMPAP are “remainder lots” from previous entitlements and were analyzed within the prior EIR. Since the County adopted previous findings that the portion of the development within the GMPAP is consistent with GMPAP policies, and no new policies have been adopted since that time, the Potrero Area Subdivision project is not re-examined for consistency with GMPAP policies in Appendix B. Therefore, the impact is considered **less than significant**.

**Mitigation: None Required.**

## CITATIONS

California Regional Water Quality Control Board Central Coast Region, *Resolution No. 95-04 Amending the Water Quality Control Plan*, 1995.

California Regional Water Quality Control Board Central Coast Region, *Resolution No. 95-53 Amending the Water Quality Control Plan*, 1995.

County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including Addendum to EIR, August 1997).

Denise Duffy & Associates, *Potrero Area Subdivision of the Santa Lucia Preserve*, Project Description, April 2001.

Denise Duffy and Associates, *Santa Lucia Preserve Mitigation and Monitoring Plan*, Prepared for the Rancho San Carlos Partnership, Carmel, California, 1994.

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County of Monterey, *Draft Monterey County General Plan*, 2001.

Monterey County, Clerk to the Board of Supervisors Office, Personal Communication, May 23, 2002.

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Ralph Osterling Consultants, *Forest Management Plan for the Potrero Area Subdivision of the Santa Lucia Preserve*, Prepared for: the Rancho San Carlos Partnership, 2000.

Transportation Agency for Monterey County (TAMC), *2002 Monterey County Regional Transportation Plan*, 2002.

## Chapter 4. Population and Housing

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### INTRODUCTION

This section of the Supplemental Environmental Impact Report (SEIR) focuses on the population and housing impacts that may occur as a result of implementation of the proposed project. Impacts are assessed by determining whether the project causes an increase in population exceeding future population projections, or whether the project causes the need for affordable housing in the project area. Population and housing for the Santa Lucia Preserve Comprehensive Development Plan is detailed in the *Santa Lucia Preserve Final Environmental Impact Report*, certified in 1996, which addressed the impacts associated with development of the 20,000-acre Santa Lucia Preserve. Comprehensive Development Plan approval provided an entitlement framework for up to 350 residential units over approximately 2,000 acres of Settled Lands ranch-wide. The Potrero Area Subdivision, a component of the Santa Lucia Preserve Comprehensive Development Plan, consists of 29 lots on 1,286 total acres. Residential development within the Potrero Area would occur within building envelopes totaling 77 acres.

This section contains a summary of population and housing issues associated with the Potrero Area Subdivision as previously analyzed, with an emphasis on potential impacts that may occur as a result of new information obtained since the certification of the EIR. Sources of new information include Monterey County Inclusionary Housing Ordinance, the Association of Monterey Bay Area Governments (AMBAG) *1997 Regional Population and Employment Forecast* and updates and the federal 2000 Census information.

### SETTING

#### Population

Currently, there are no residential units developed on the Potrero portion of the Santa Lucia Preserve. The site is located in the unincorporated County of Monterey. According to the 2000 Census, the population for the unincorporated County was 100,252. The population for Carmel in 2000 was 4,081. **Table 4-1** identifies the historical, present and future population forecasts for the unincorporated portions of the County and Carmel, as prepared by AMBAG.

**TABLE 4-1**  
**POPULATION FIGURES**

Jurisdiction	1990*	1995**	2000***	2005****	2010****	2015****	2020****
Carmel	4,241	4,409	4,081	4,151	4,230	4,292	4,412
Unincorporated Monterey County	94,254	100,841	100,252	104,720	111,905	118,714	126,623

\* 1990 CENSUS

\*\* 1995 State Department of Finance Estimate

\*\*\* 2000 Census

\*\*\*\* Adjusted by AMBAG Board 11/14/01 and 1/19/02

The proposed project includes 29 housing units. According to the 2000 Census, the average number of persons per housing unit is approximately 1.79 persons in the city of Carmel and 3.14 persons in Monterey County. With this range, the project is expected to generate a population of 52-91 persons.

## **Housing**

Currently, there are no dwelling units on the Potrero portion of the Santa Lucia Preserve. AMBAG estimates that the total number of housing units in the unincorporated area of the County was approximately 30,000 in 2000. Based on AMBAG's *Draft Regional Housing Needs and Determinations*, February 2002, the unincorporated area of the County is expected to gain approximately 4,500 residents by 2005 and will need an estimated 3,481 new housing units by 2007. AMBAG estimates that 72% of these housing units will be needed by moderate and lower income residents. Because of the County's water constraints, environmental preservation goals, and the competition for available land for agriculture, providing that quantity of housing will be difficult.

In response to this need the Monterey County Board of Supervisors has had an Inclusionary Housing Ordinance in effect since 1981. The Ordinance requires that developers of projects that are seven or more units in size designate 15% of all housing units on site for low and/or moderate-income households.

The Santa Lucia Preserve project included 350 dwelling units ranch-wide. Of these units 297 would be market-rate single-family residences and 53 units would be occupied by project employees. Development of the project would occur in phases over a 20-year period. According to the Monterey County Housing Ordinance 15% of the total units proposed (15%) must be set aside for low- to moderate-income households. The Santa Lucia Preserve project satisfied the Housing Ordinance requirement and the certified EIR found that there would be no significant impact to housing.

## **IMPACTS AND MITIGATION MEASURES**

### **Approach and Methodology**

This section discusses population and housing impacts that may result from implementation of the proposed project. Any applicable new information related to population and housing since certification of the Santa Lucia Preserve EIR was assessed. The primary sources for updated information were AMBAG and the 2000 U.S. Census.

## Significance Criteria

The significance criteria used in this section uses two parameters identified by Monterey County. Impacts on population are considered significant if growth from the project substantially exceeds AMBAG population projections for the unincorporated area of Monterey County. Impacts to housing are considered significant if the project creates a need for affordable housing yet does not comply with the Monterey County Inclusionary Housing Ordinance.

## Population

**Impact 4.1:           The project will contribute to countywide and AMBAG population projections. (Less than Significant)**

Population impacts resulting from the certified Santa Lucia Preserve EIR were found to be less than significant. The Potrero Area Subdivision is expected to generate a population of 52-91 persons. This number is well within the current AMBAG population and employment projections for the unincorporated area of Monterey County. Since impacts resulting from the proposed project (as a component of the Santa Lucia Preserve EIR) were found to be less than significant, and the population associated with the proposed project was anticipated in the prior analysis and is consistent with current AMBAG population projections, this impact is considered **less than significant**.

**Mitigation: None Required.**

## Housing

**Impact 4.2:           The project is a subdivision that will result in new housing. Subdivisions are subject to the Monterey County Inclusionary Housing Ordinance. (Less than Significant)**

Housing impacts resulting from the certified Santa Lucia Preserve EIR were found to be less than significant. There have been no applicable changes to the project description or the Monterey County Inclusionary Housing Ordinance since certification of the Santa Lucia Preserve EIR. Inclusionary housing based upon buildout of the entire Santa Lucia Preserve is already provided elsewhere within the Preserve; therefore, the Potrero area proposes no inclusionary units. Housing impacts as a result of the implementation of the Potrero Area Subdivision are therefore considered to be **less than significant**.

**Mitigation: None Required.**

## CITATIONS

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Ingram, Al. California Department of Transportation (CALTRANS), District 550 Higuera Street San Luis Obispo, CA 93401-5415. *Personal Communication*. May 21, 2002. (805) 549-3111.

Potrero Area Subdivision EIR Project File.

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## Chapter 5. Economics

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### INTRODUCTION

Economic effects of a project are not generally considered environmental effects under CEQA; however, the effects may be considered under two conditions. If the economic effects of a project may result in a physical change in the environment, the physical change (not the economic effect) must then be evaluated to determine the significance of the change. For example, the economic effects of the project (i.e., generation of on-site employment, income and housing demand) could result in traffic, air quality, and housing related impacts. The significance of these potential changes are evaluated in other sections of the EIR. Second, the adverse economic effects resulting from a project-related physical change may be used to judge the significance of the physical change.

A lead agency may, at their discretion, include relevant discussions of project-related economic effects within an EIR. Economic issues addressed in the *Santa Lucia Preserve Final Environmental Impact Report* included: the generation of direct employment through project-related construction, operations and maintenance; the creation of a secondary economic activity within the region through project-related expenditures on goods and services; and the effect of the project on the region's existing jobs/housing balance. No significant effects were identified.

This section of the Supplemental Environmental Impact Report (SEIR) evaluates the potential economic effects specific to the Potrero Area Subdivision component of the Santa Lucia Preserve focusing on any significant changes that may have occurred since the certification of the prior EIR in 1996. New information for this section was provided by the 2000 Census, the California Employment Development Department (EDD) and the County of Monterey. An independent assessment of the project's impact on Monterey County's fiscal conditions was not conducted as part of this supplemental EIR. As discussed in the previous EIR, most of the public services provided to the project site would be financed through a Community Service Agreement (CSA). The financial feasibility of the proposed project was also not addressed, as this is considered privileged information and is not normally considered in an EIR.

### SETTING

#### Employment

Historically, Monterey County's economy centered on agriculture and tourism. Recent economic trends in the County include the closure of the Fort Ord Military Base (troop transfers and civilian layoffs began in mid 1993) and the broad reuse of the base for educational, commercial, residential, light industrial and governmental use. Reuse of Fort Ord is expected to improve employment rates and provide a broader economic base for the County; however, full redevelopment of the base is expected to take many years.

Monterey County's economy has become stronger since the certification of the Santa Lucia Preserve EIR. The EIR noted only a 3% employment growth rate between the years 1988 and 1993 in Monterey County. Since the preparation of the EIR, between the years 1996 and 2000,

Monterey County added 18,200 new jobs, an employment growth factor of 12.4%. In the year 2000, the recorded growth was 4,000 new jobs or 2.5% over the previous year. (California Employment Development Department 2001).

Typically, in counties such as Monterey, where a large number of agricultural and tourism jobs are produced, there is substantial seasonal employment and, as a result, higher unemployment rates. This trend hasn't changed; however, the unemployment rate has decreased since the certification of the EIR. The EIR for the Santa Lucia Preserve reported an average 12.3% County unemployment rate for the year 1994, compared with 9.2% in California. Since 1996, Monterey County's annual average unemployment rate has dropped 1.4%, indicative of increasing employment opportunities in the area. The County's annual average unemployment rate in 2000 was 9.7%. The State's rate for the same year was 4.9%. (California Employment Development Department 2001).

### **Jobs/Housing Balance**

The adequacy of an area's housing supply can be generally characterized by evaluating the ratio of jobs to housing in an area. Achieving a regional jobs/housing balance is believed to reduce excessive commute distances, reduce automobile-related air pollution and traffic congestion, and decrease upward pressure on housing prices.

As discussed in the Santa Lucia Preserve EIR, jobs/housing ratios provide an indication of whether a local area provides a sufficient supply of housing to meet the needs of the local workforce. Characteristics such as the average number of workers per household, average household size, and the mix of housing in an area help determine the ratio of jobs that reflect a realistic balance in an area; however, communities are generally considered to be in balance when the ratio of jobs to housing lies within the range of 0.75-1.25.

The EIR determined the overall Monterey County jobs/housing ratio was 1.11 in 1993, based on 138,299 jobs and 124,170 housing units in the County, indicating a generally balanced relationship between jobs and housing in the County. The jobs/housing balance has not changed substantially since the previous EIR. The Monterey County jobs/housing ratio was 1.47 in 2000, based on 193,200 jobs (California Employment Development Department 2001) and 131,708 housing units (Census 2000). The current jobs/housing ratio indicates a slight imbalance between jobs and housing in the County; however, the change from 1.11 in 1993 to 1.47 in 2000 is not highly significant and likely reflects the employment growth in the County in recent years.

## IMPACTS AND MITIGATION MEASURES

### Approach and Methodology

The primary economic effect of the proposed project (i.e. the generation of employment, both onsite and offsite) has not changed since the previous EIR. The previous EIR estimated temporary and permanent employment generated by the operation of the Santa Lucia Preserve in its entirety. The Potrero subdivision represents a portion of the entire plan as analyzed. This supplemental EIR evaluates employment and the number of housing units to be generated by the project for changes that may have occurred since the previous EIR.

### Significance Criteria

As discussed previously, economic effects alone are not generally considered significant impacts to the environment under CEQA. Economic effects are typically described as either beneficial or adverse.

The proposed project's effect on the County's jobs/housing balance is characterized by how the addition of housing and jobs resulting from the project changes the area's overall/jobs housing ratio. As mentioned previously, the increase of environmental effects such as decreased air quality that may result from an adverse change in the balance of jobs and housing are discussed in other sections of this SEIR.

### Employment

**Impact 5.1:           The project will generate employment opportunities in the area. (Beneficial)**

The *Santa Lucia Preserve EIR* determined that construction-related employment generated by the Preserve project would be considered a beneficial economic effect of the project because it provides new employment opportunities for construction workers and generates income in the construction industry and related sectors. This supplemental EIR has evaluated the employment estimates used in the EIR and determined that there have been no significant changes to employment trends or to the project description that would cause significant changes to estimates previously used. Therefore, as a component of the Preserve Plan, construction-related employment generated by the Potrero Subdivision Project would be considered a **beneficial** economic effect of the project.

**Mitigation: None Required.**

## **Jobs/Housing Balance**

**Impact 5.2:**            **The proposed project will incrementally impact the County's overall jobs/housing balance. (Less than Significant)**

Implementation of the project would result in the construction of 29 housing units. The addition of project-related housing would have little effect on Monterey County's existing jobs/housing ratio; the County's ratio would remain at approximately 1.47. This is considered a **less than significant** impact on the area's job/housing balance. This issue was previously addressed within the Santa Lucia Preserve EIR for complete buildout conditions. No measurable changes have occurred.

**Mitigation: None Required.**

## CITATIONS

California Employment Development Department, Labor Market Information Division, *County Snapshot Monterey 2001*.

County of Monterey, *Draft Monterey County General Plan*, December 2001.

County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including *Addendum to EIR*, August 1997).

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U.S. Census Bureau, Maintained By: Laura K. Yax (Population Division), last revised: May 10, 2002, *2000 Census*. <http://www.census.gov> (May 29, 2002).

## Chapter 6. Geology and Minerals

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### INTRODUCTION

This chapter addresses the geologic hazards and mineral resources of the Potrero Area Subdivision, and evaluates the corresponding impacts associated with the project, and also identifies mitigation measures to avoid or reduce the identified impacts to less-than-significant levels.

The previous discussion of geology and minerals in the Preserve EIR addressed only the GMPAP portion of the Santa Lucia Preserve project, which included the three remainder lots which are now part of the Potrero Area Subdivision (Lots 27, 28, and 29). The Carmel Valley Master Plan (CVMP) portion of the Preserve, including the 26 new parcels in the Potrero Area Subdivision, was not addressed in the Preserve EIR. Therefore, this chapter represents the first evaluation of geologic and mineral resources impacts associated with the CVMP portion of the Potrero Area Subdivision. This evaluation is largely based on the geologic and geotechnical investigation report prepared for the project by Cleary Consultants in August 2000. For purposes of this SEIR, a third party peer review of the Cleary report was conducted by Dr. G.E. Weber in June 2002. The Cleary report was then supplemented based on the findings and recommendations of the peer review report. A second peer review letter prepared by Dr. Weber concluded that, with the addition of the supplemental information and analysis presented in the second Cleary report, the information contained in the two Cleary reports, taken as a whole, is complete and adequate for purposes of this SEIR. The full titles of the relevant documents produced during this process are listed below, in the order prepared:

- Cleary Consultants, Inc., *Geological and Geotechnical Investigation, the Potrero Area Subdivision of the Santa Lucia Preserve, Monterey County, California*, August 2000.
- G. E. Weber Geologic Consultant, *Review of: "Geological and Geotechnical Investigation, the Potrero Area Subdivision of the Santa Lucia Preserve, Monterey County, California, dated August 2000*, June 29, 2002.
- Cleary Consultants, Inc., *Focused Geotechnical Response to EIR Review Comments, the Potrero Area Subdivision (Lots No. 1-29), Santa Lucia Preserve, Monterey County, California*, July 24, 2002.
- G. E. Weber Geologic Consultant, *Review: "Focused Geotechnical Response to EIR Review Comments, the Potrero Area Subdivision (Lots No. 1-29), Santa Lucia Preserve, Monterey County, California (July 24, 2002),"* August 13, 2002.

These documents are included within the appendices to this SEIR.

## SETTING

### Regional Geology

#### Bedrock and Surface Geology

The project site is located near the northern end of the Santa Lucia Mountain Range, just south of Carmel Valley. The Santa Lucia Range extends for about 150 miles along the California coast, between Monterey and San Luis Obispo, and lies within the Salinian block portion of the Coast Range Geomorphic Province. In the vicinity of the project site, the Range is composed primarily of Cretaceous age granitic rocks overlain by younger, Tertiary age marine and non-marine sedimentary deposits. The sedimentary deposits on the project site consist of Upper Miocene age Monterey Formation shale and sandstone which is underlain by Middle Miocene Unnamed Sandstone. The regional geology of the site and surrounding areas is shown in **Figure 6-1**.

The most important surficial process affecting the makeup of the Santa Lucia Range is landsliding. During late Pleistocene or early Holocene time (10,000 to 20,000 years before present) regional climatic conditions were significantly wetter than today, resulting in prolonged periods of intense rainfall. In addition, a worldwide increase in glaciation and subsequent lowering of sea level resulted in downcutting of Carmel Valley by as much as 300 feet, which undermined the slopes above the valley. These conditions resulted in large-scale landsliding throughout the region, particularly within the Monterey Formation shale. Landsliding still affects the area today, but the scale and frequency of landslide activity are largely reduced. Continued erosion of the Santa Lucia Range has resulted in accumulation of sediments in the drainages and basins, as well as erosion of upland areas and recent shallow landsliding on the steeper hillslopes.

#### Faulting and Seismicity

The Salinian block is bounded on the west by the active San Gregorio-Palo Colorado fault and on the east by the active San Andreas fault (see **Figure 6-2**). Between these two faults lies a zone of intensely faulted terrain that is characterized by sub-parallel strike-slip and thrust faults. These faults include the Monterey Bay, Navy, Tularcitos, Chupines, Berwick Canyon, and Hatton Canyon. The active faults which pose the most significant groundshaking hazard to the project site are the San Gregorio-Palo Colorado fault (7 miles southwest) and the Monterey Bay-Navy-Tularcitos faults (2.8 miles northeast), with maximum credible earthquakes of Magnitude of 7.1 and 7.0, respectively. Faults within the Santa Lucia Preserve which are not currently considered active include the Potrero, Robinson, and San Francisquito faults, and the San Clemente and San Jose thrust faults (see **Figure 6-1**). None of these faults are found within the Potrero Area.

## Site Geology

The Potrero Area is underlain by bedrock of the Monterey Formation which is predominantly composed of shale, with lesser amounts of siltstone and sandstone. Surficial deposits include alluvium (stream deposited sediments) and landslide debris. Alluvial deposits mantle the valley bottoms, such as Potrero Canyon, and consist of unconsolidated gravel, sand, silt and clay. Landslide deposits are made up of displaced bedrock material and surficial soil that mantles the hillsides (landsliding is discussed in detail below).

### Faulting

As mentioned above, there are no faults within the Potrero Area Subdivision site. The Preserve EIR included a geology map that shows the Potrero fault extending into the site along Potrero Canyon, which the Cleary Consultants' supplemental report states was not accurate and not in keeping with their analysis at the time (Cleary, 2002). Dr. Weber agrees that this fault trace does not exist and that the feature in question "...appears not to be a fault but the erosional exposure of the regional nonconformity at the base of the stratigraphic section" (Weber, 2002b). No portion of the project site is located within a State of California Earthquake Fault Zone (formerly Alquist-Priolo Special Studies Zone).

### Liquefaction

Soil liquefaction is the phenomenon in which a saturated, cohesionless soil loses structural strength during an earthquake as a result of induced shearing strains, which essentially transforms the soil to a liquid state resulting in ground failure or surface deformation. Conditions required for liquefaction include fine, well-sorted, loose sandy soil, high groundwater, higher intensity earthquakes, and particularly long duration of ground shaking. The homesites of the Potrero Area Subdivision are in an uplands area which is mapped as having a low to very low potential for liquefaction. The Cleary investigation found that the homesites are in areas underlain either by intact bedrock or at-rest older landslide deposits that are not susceptible to liquefaction. The narrow alluvial deposits within the Potrero Canyon drainage have a moderate susceptibility to liquefaction due to the presence of fine-grained sediments and a water table which is relatively near the ground surface.

### Landsliding

The Potrero Area contains five old landslides upon which 20 of the 26 proposed new parcels are located (see **Figure 6-3**). (Note: Of the three remainder lots located in the GMPAP portion of the Preserve, Lot 29 is also located on a small landslide, discussed subsequently.) Landslides are classified into three categories according to their level of activity: active, dormant, and old. Active landslides show recent movement and are not suitable for development. Dormant landslides show no evidence of current movement but are potentially unstable, so development on these landslides should be avoided. Old landslides are currently not moving and are moderately stable to stable. They are generally suitable for development under static and dynamic conditions (i.e., ground accelerations during a seismic event), and have a low potential

for renewed movement under existing geomorphologic and climatological conditions. However, prior to development on or near old landslides, their stability should be confirmed through detailed geologic and geotechnical investigations.

The landslides on the project site are believed to have originated during late Pleistocene time when the climate was much wetter. These are all old landslides which are generally considered to be “at rest,” that is, at equilibrium with their present topography. The landslides range in length from 1,200 to 2,400 feet, in width from 800 to 3,800 feet, and in maximum depth from 50 to 220 feet. Two of the landslides lie in the northern portion of Potrero Canyon, along the east and west flanks of the canyon, and extend downslope to the floor of the canyon. The third landslide is located just east of Potrero Canyon, and is part of a large landslide complex that extends from the floor of Carmel Valley south to Saddle Mountain. The fourth landslide is located to the south of the first three landslides on the plateau east of Potrero Canyon. The fifth landslide is located to the west of the fourth landslide. (For a detailed description of each landslide, see the geologic report by Cleary Consultants (2000), in the appendices to this SEIR.)

The geotechnical investigation by Cleary Consultants included detailed geologic mapping and subsurface investigations of the five landslides, which included the drilling of exploratory borings, laboratory soils analysis, and measurement of groundwater levels. The landslide stability analysis considered static conditions and seismic conditions under the maximum credible earthquake event. The analysis concluded that the old landslides are unlikely to reactivate under existing and post-development conditions, provided care is taken to avoid adversely impacting them during grading and construction. The possibility of a slope edge failure was found in Landslide No. 3 adjacent to the steep slope near the homesites on Lots 17, 20 and 21. In addition, there is a potential for localized debris flow hazard in Landslide No. 2 on Lots 13 and 14. (See “Impacts and Mitigation Measures” below for a full discussion.)

The proposed Homeland area on Lot 29 is located within the remnants of an old landslide which has been largely eroded away and is considered stable for residential development (Cleary, 1994).

## **Mineral Resources**

The only source of mineral resources in the vicinity of the Potrero Area is the active stone quarry located near the Rancho San Carlos Road entrance to the site. This quarry was formerly located within the Preserve but it has been severed and sold and is no longer within the Potrero Area. The quarry is located in Monterey Formation siliceous shale, and has been used since the turn of the 20<sup>th</sup> century to extract Carmel Stone for on-site use (County of Monterey, 1995). This dimension stone has been used in the Santa Lucia Preserve project in the construction of the main gate house at the Rancho San Carlos Road entrance, as well as the clubhouse, fitness center, and ranch gates within the GMPAP area of the Preserve. No dimension stone from this quarry is planned to be used in the Potrero Area Subdivision (Panzer, pers. comm.). See the Preserve EIR for a discussion of the mineral resources in other portions of the Santa Lucia Preserve.

Figure 6-1: Regional Geology

Backside of 6-1

6-2: Regional Fault Map

Backside of 6-2

6-3: Landslide Map

**backside of 6-3**

## IMPACTS AND MITIGATION MEASURES

### Approach and Methodology

The following evaluation of impacts related to geology and minerals is primarily based on the technical reports listed in the Introduction to this chapter, as well as the Preserve EIR and its technical supporting documents on geology.

### Significance Criteria

The following thresholds for measuring environmental impacts of the project are based on CEQA Guidelines Appendix G and previous standards used by the County for similar projects. For purposes of this EIR, impacts are considered significant if the project would result in the following:

- a) Expose people or structures to potential substantial adverse effects including the risk of loss, injury, or death involving:
  - i. Rupture of a known earthquake fault, as delineated on the most recent State of California Earthquake Fault Zone maps (formerly Alquist-Priolo Special Studies Zone maps) issued by the State Geologist for the area or based on other substantial evidence of a known fault;
  - ii. Strong seismic ground shaking;
  - iii. Seismic-related ground failure, including liquefaction;
  - iv. Landslides.
- b) Be 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.
- c) Destroy, cover, or modify any unique geologic or physical feature, such as a paleontological resource.
- d) Substantially deplete a limited mineral resource, or preclude the economic extraction of a substantial amount of extractable mineral resource which is of limited abundance regionally.

### Paleontological Resources

**Impact 6.1: Possible disruption and destruction of a limited paleontological resource resulting from site grading. (Less than Significant)**

Paleontology is the science of life forms existing in former geological periods, as represented by their fossils, and encompasses the study of vertebrate, invertebrate, and paleobotanical fossils. The Temblor/Chamisal formation is known to be locally fossil-bearing, and is present elsewhere on the Santa Lucia Preserve but not within the Potrero Area. The sedimentary deposits on the project

site consist of Upper Miocene age Monterey Formation shale and sandstone, which are not known to be fossil-bearing (County of Monterey, 1995). Therefore, the potential project impact to paleontological resources would be **less than significant**.

**Mitigation: None required.**

### **Seismic Ground Shaking**

**Impact 6.2: Potential structural damage and threat to public safety resulting from ground shaking during a seismic event. (Less than Significant)**

Strong ground shaking caused by large-magnitude earthquakes centered on an active regional fault could result in severe damage to structures and utilities and pose a significant threat to public safety. Unless constructed to withstand the shaking caused by an earthquake, structures could collapse or be shifted off their foundations, utilities could fail, and loss of life or injury could occur. However, because all structures would be designed and built in accordance with the Uniform Building Code criteria for seismic Zone IV, and therefore should respond well except during the most severe potential ground shaking, this impact would be **less than significant**. The review of individual home proposals within the Potrero Area will occur with building permit applications and through the building inspection process. Since there is no evidence indicating the presence of faults on the site, the potential for fault rupture at the site is very low.

**Mitigation: None required.**

### **Liquefaction**

**Impact 6.3: Potential structural damage and threat to public safety resulting from liquefaction during a seismic event. (Less than Significant)**

All of the proposed homesites are in areas underlain either by intact bedrock or at-rest older landslide deposits that are not susceptible to liquefaction. Therefore, the impact to the residential development would be **less than significant**.

The narrow alluvial deposits within the Potrero Canyon drainage have a moderate susceptibility to liquefaction due to the presence of fine-grained sediments and a water table which is relatively near the ground surface. Should liquefaction occur in the Potrero Canyon sediments during a period of strong ground shaking, the resulting impact on roadways and utilities is expected to be minor and localized based on the limited extent of the alluvial deposits and their generally flat gradient. Damage to pavements and utilities resulting from liquefaction would be repaired as necessary following a seismic event. This impact is considered to be **less than significant**.

**Mitigation: None required.**

## **Landsliding**

### **Impact 6.4: Potential structural damage and threat to public safety resulting from landsliding and other slope failure. (Potentially Significant)**

As discussed under “Setting” above, the Potrero Area contains five old landslides upon which 20 of the 26 proposed new parcels are located (see Figure 6-3). These are all “old” Pleistocene era landslides which are generally considered to be “at rest,” that is, at equilibrium with their present topography. They are generally suitable for development under static and dynamic conditions (i.e., ground accelerations during a seismic event). Prior to development on or near old landslides, it is generally recommended that their stability be confirmed through detailed geologic and geotechnical investigations.

The detailed stability analysis by Cleary Consultants concluded that the on-site landslides are unlikely to reactivate under existing and post-development conditions, provided care is taken to avoid adversely impacting them during grading and construction. Factors that could adversely affect slope stability of the landslide deposits include removal of landslide toe support by grading or rapid erosion, or major changes in the groundwater regime that could permanently raise the water table. There are no excavations planned in conjunction with the project that would remove support below the landslides, and permanent rise in the water table is unlikely to occur. The water introduced from landscape irrigation and individual leachfields installed on the landslides is not expected to affect stability since the volume of water introduced would be slight in comparison to that produced by rainfall. Potrero Creek is located near the toe of Landslides No. 1 and 2. However, given the gentle existing gradient of the creek in the reach adjacent to these landslides, significant creek downcutting is unlikely to occur over the lifetime of the project. In general, the impact of siting homes and appurtenant structures on the old landslides would be **less than significant**.

The possibility of a slope edge failure was found in Landslide No. 3 adjacent to the steep slope near the proposed homelands on Lots 17, 20 and 21. This shallow slope failure occurs within 75 feet of the steep break in slope. Therefore, any structures placed within 75 feet of the steep break in slope could be damaged by localized slope failure. This would represent a **potentially significant impact**.

**Mitigation 6.4:** For development proposed within landslide No. 3, the final subdivision map shall demonstrate that building envelopes on Lots 17, 20, and 21 provide building setbacks of at least 75 feet from the steep break in slope on that landslide. Subsequent development proposals on these lots shall include mapping to demonstrate the location of slope edge and break in slope and the proposed setback. This setback requirement shall be demonstrated at the time of application submittal.

**Significance after Mitigation: Less than significant.**

**Impact 6.5: Potential structural damage and threat to public safety resulting from localized debris flow hazard. (Potentially Significant)**

Debris flows are shallow, rapid, muddy landslides that occur during or following extended periods of high rainfall. They often originate in natural soil near the top of steep slopes, particularly along the flanks of steep, narrow drainages, and are most likely to occur after wildfires, which remove vegetative cover. Debris flows often travel hundreds of feet and impact areas well below the unstable hillsides where they originate. They are most hazardous to public safety because they are fast moving and occur with little or no warning. There is a potential for debris flows to occur in Landslide No. 2 on the steep slope above the homesites on Lots 13 and 14. This is considered a **potentially significant** impact.

**Mitigation 6.5: The final subdivision map and improvement plans shall indicate that a debris flow barrier has been designed to protect the new home areas on lots 13 and 14. The details of the barrier location and design shall be determined during the homeowners' geotechnical investigation and site planning. The investigation and barrier details shall be submitted with residential development applications on these lots for review and approval by the County.**

The protective barrier could take the form of a debris flow wall or an earth berm constructed near the toe of the slope and upslope of the two affected homesites. The barrier should be five feet high, with maximum side slopes (for a berm) of 2:1 (horizontal to vertical). The actual dimensions and type of debris flow protection structure required at the two homesites should be analyzed during the building design stage based on the final structure siting and findings of the homeowners' geotechnical investigations for building design purposes.

**Significance after Mitigation: Less than significant.**

### **Mineral Resources**

**Impact 6.6: Extraction of aggregate mineral resources. (Less than Significant)**

The aggregate required for base rock in roadway and building construction will be obtained from the existing borrow site located in the GMPAP area. The aggregate requirements of the project would not result in a substantial depletion of the borrow site. (The impacts associated with operation of the borrow site are addressed in the Preserve EIR.) Because the aggregate would be used only on the project site, its extraction would be exempt from the requirements of the State Mining and Reclamation Act (SMARA).

A quarry producing Carmel Stone is located just off site near the project entrance on Rancho San Carlos Road. This quarry is no longer owned by Rancho San Carlos. Stone from this quarry has been used in the past for facilities within the GMPAP area of the Santa Lucia Preserve. The Potrero Area Subdivision will not affect the current or future use of this off-site quarry.

**Mitigation: None Required.**

## CITATIONS

- Cleary Consultants, Inc., *Focused Geotechnical Response to EIR Review Comments, the Potrero Area Subdivision (Lots No. 1-29), Santa Lucia Preserve, Monterey County, California*, July 24, 2002.
- Cleary Consultants, Inc., *Geological and Geotechnical Investigation, the Potrero Area Subdivision of the Santa Lucia Preserve, Monterey County, California*, August 2000.
- Cleary Consultants, Inc., *Geological and Geotechnical Investigation, Vesting Tentative Map Submittal, Rancho San Carlos, Monterey County, California*, February 1994.
- County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including Addendum to EIR, August 1997).
- G. E. Weber Geologic Consultant, *Review: "Focused Geotechnical Response to EIR Review Comments, the Potrero Area Subdivision (Lots No. 1-29), Santa Lucia Preserve, Monterey County, California (July 24, 2002),"* August 13, 2002a.
- G. E. Weber Geologic Consultant, *Review of: "Geologic and Geotechnical Investigation, the Potrero Area Subdivision of the Santa Lucia Preserve, Monterey County, California, dated August 2000,* June 29, 2002b.
- Panzer, Joel, Santa Lucia Preserve, Personal Communication, September 25, 2002.

## Chapter 7. Soils

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### INTRODUCTION

This chapter addresses the soil conditions of the Potrero Area Subdivision, and evaluates the corresponding impacts associated with the project, and also identifies mitigation measures to avoid or reduce the identified impacts to less-than-significant levels.

The previous discussion of soils in the Preserve EIR addressed only the GMPAP portion of the Santa Lucia Preserve project, which included the three remainder lots which are now part of the Potrero Area Subdivision (Lots 27, 28, and 29). The Carmel Valley Master Plan (CVMP) portion of the Preserve, including the 26 new parcels in the Potrero Area Subdivision, was not addressed in the Preserve EIR. Therefore, this chapter represents the first evaluation of soils-related impacts associated with the CVMP portion of the Potrero Area Subdivision. This discussion of soils conditions and related impacts is based on the following reports:

- Cleary Consultants, Inc., *Geological and Geotechnical Investigation, the Potrero Area Subdivision of the Santa Lucia Preserve, Monterey County, California*, August 2000.
- Cleary Consultants, Inc., *Focused Geotechnical Response to EIR Review Comments, the Potrero Area Subdivision (Lots No. 1-29), Santa Lucia Preserve, Monterey County, California*, July 24, 2002.
- Thompson-Hysell Engineers, *Preliminary Drainage and Erosion Control Report, Potrero Canyon Area*, June 2000.

These documents are included in the Appendices to this SEIR.

### SETTING

#### Soil Characteristics

The Potrero Area is underlain by soils of varying thickness, ranging from a depth of a few feet in Monterey Shale bedrock to areas of 10 feet or more on the old landslide deposits. The soil types found in the Potrero Area generally correlate with the underlying geologic units. These units and the corresponding soil types are identified in **Table 7-1**.

Since 20 of the 26 new homesites are located on old landslides, the soil types at these sites would generally consist of silty to sandy silts and clays with occasional gravel. The remaining six new homesites, and the three remainder sites from the GMPAP area are located on the Monterey Formation where soils generally consist of sandy silt with silty sand and gravel.

According to Soil Conservation Service soils classifications and mapping, most of the Potrero Area is underlain by the Junipero and Santa Lucia soil series. The Junipero soils may be up to 30 inches deep over granitic and schistos rock on upland slopes ranging from 30 to 70 percent. These are well drained, sandy loam soils with moderately rapid permeability and generally high

erosion potential. The Santa Lucia series soils are approximately 24 inches deep over hard, fractured shale on slopes ranging from 2 to 50 percent. These are well drained, shaley clay loam soils with moderate permeability and high erosion potential (Thompson-Hysell, 2000).

**TABLE 7-1  
GENERAL SOIL TYPES IN THE POTRERO AREA**

Geologic Unit	Soil Type
Alluvium	Fine to coarse sands and silts with clay and gravel lenses.
Active/Dormant Landslides	Mostly sandy to silty loam with some coarse bedrock fragments.
Old Landslides	Silty to sandy high liquid limit silts and clays with occasional gravels.
Monterey Formation	Low to high liquid limit sandy silt with silty sand and gravel.

Source: Cleary Consultants (2000).

### **Watershed Conditions and Land Management Practices**

Over the past 100 years, livestock grazing occurred over much of the Santa Lucia Preserve including the Potrero Area. The ranch was subject to overgrazing and cattle grazing occurred in sensitive areas not suitable for livestock resulting in adverse effects to natural resources. Overgrazing decreased vegetative cover that stabilized and aerated the soil. It also compacted the soil and caused increased stormwater runoff and erosion of the soil exposed. Access roads cut along steep slopes resulted in localized erosion and gullyng. Sensitive habitats such as wetlands and riparian habitats historically were not protected from cattle grazing resulting in physical and biological degradation through trampling and mucking resulting in sedimentation and adverse water quality impacts.

The grazing management plan being implemented at the Preserve confines cattle grazing to the most suitable 3,000 acres within 21 grazing pastures on the Santa Lucia Preserve property (compared to 17,000 acres historically grazed). Of this total, approximately 130 acres of pasture are located within the Potrero Area. The majority of the on-site pasture land is in the “Goodrich Pasture” located south of Goodrich Trail in the central portion of the Potrero Area. The remaining on-site pasture land includes four small areas along the southern Potrero Area boundary, which consist of the northern extensions of pastures located primarily in the adjacent GMPAP area of the Preserve (Panzer, pers. comm.). Grazing management practices employed to minimize watershed and habitat impacts include grazing within carrying capacity and rotational grazing to allow pastures to revegetate, exclusion fencing to prevent cattle from entering wetlands, riparian zones and other sensitive habitats, and prohibition of grazing on slopes of over 30 percent, among other things (Sage Associates, 1994).

Horsekeeping within the Potrero Area Subdivision would take place in accordance with a Livestock Management Plan and would be permitted at 16 designated lots, and would be closely managed in keeping with the carrying capacities of each lot. All elements of the horsekeeping plan have been designed to avoid environmental impacts. Designated parcels were selected based on slope, soil type, vegetation, drainage, erosion control, suitability of access, and natural

resource constraints. Depending on the sensitivity and resources present at any given parcel, horsekeeping may be permitted on a full time basis within the entire lot, or it may only be permitted on a part-time basis within the Homeland area only. Horse grazing will be not permitted in the Wildland areas, although horse riding will be permitted on the approved trail system within the Wildland areas. The Livestock Management Plan specifies performance standards and grazing limits, as well as measures for the control of erosion, animal waste, wastewater, and vectors.

## **IMPACTS AND MITIGATION MEASURES**

### **Approach and Methodology**

The following evaluation of impacts related to soils is primarily based on the technical reports listed in the Introduction to this chapter, as well as the Preserve EIR and its technical supporting documents on geology and soils.

### **Significance Criteria**

The following thresholds for measuring environmental impacts of the project are based on CEQA Guidelines Appendix G and previous standards used by the County for similar projects. For purposes of this EIR, impacts are considered significant if the project would result in any of the following:

- a) Substantial soil erosion or loss of topsoil;
- b) Substantial risk to life or property due to location of structures on expansive soils;
- c) Substantial failure of underground utilities due to soil corrosion; or
- d) Hazard to health or creation of objectionable odors due to inadequate soils for support of septic systems.

### **Slopes Greater than 30%**

**Impact 7.1:                   The project could cause accelerated erosion, sedimentation, including erosion on slopes over 30 percent. (Potentially Significant)**

The project involves vegetation removal and grading to construct or widen roads, driveways, building pads, utility lines, and other project elements. The resulting loosening and exposure of soil makes it susceptible to erosion by rainfall and wind. Soil particles are carried by stormwater to receiving water bodies such as streams and lakes resulting in sedimentation. The effects of increased sediment loading could include increased turbidity and reduced light penetration, resulting in the reduction in prey capture by predators, reduction of light available for photosynthesis, clogging of gills and filters of fish and aquatic invertebrates, reduced spawning

and juvenile fish survival, smothering of bottom-dwelling organisms, changes in substrate composition, and reduction in aesthetic values.

The sloping nature of the terrain and the high erodibility of the soil types in the Potrero Area Subdivision increases the project's potential for erosion. Along four road or driveway segments, it is not feasible to construct the traveled portion on slopes of less than 30 percent. Construction of roadway and driveway segments on steep slopes over 30 percent could result in accelerated soil erosion and sedimentation at these locations. Unless proper erosion control measures are implemented, the project's potential for erosion and sedimentation would result in a **potentially significant** impact.

**Mitigation 7.1:**      **The applicant shall implement erosion control plans as set forth within the Preliminary Drainage and Erosion Control Report, Potrero Canyon Area. Specific recommendations from the Report shall be reflected on final subdivision maps and application submittals for individual building permits.**

The basis for erosion control planning in the Santa Lucia Preserve is the *Rancho San Carlos Preliminary Drainage and Erosion Control Report (1994)* which established the goal of achieving a net Preserve-wide reduction in sediment yield to meet watershed and stream protection goals. The report addressed the short-term objective of controlling erosion and sedimentation associated with project development, as well as the long-term goals of controlling post-development erosion and of rehabilitating upland watersheds through revegetation and stabilization of exposed slopes and disturbed areas. As discussed under "Setting" above, the latter objective is being partially achieved through the implementation of the Preserve-wide *Cattle Grazing and Livestock Management Plan (1998)* which provides for improved grazing practices (e.g., grazing within carrying capacity, rotational grazing), and a reduction in the overall acreage being grazed, including exclusion from environmentally sensitive areas and slopes over 30 percent.

To address the Potrero Area Subdivision, the *Preliminary Drainage and Erosion Control Report, Potrero Canyon Area (2000)* was prepared which sets forth erosion control guidelines for the Potrero Area Subdivision. These guidelines, which are summarized below, will form the basis of site-specific erosion control plans required under the County's Erosion Control Ordinance, as well as the Storm Water Pollution Prevention Plans (SWPPPs) required by the State Water Resources Control Board (see Chapter 9. *Runoff, Flooding, and Water Quality* for further discussion of SWPPPs).

The following is a summary of selected construction-related erosion control guidelines contained in the preliminary drainage and erosion control report for the Potrero Area Subdivision.

#### Grading and Drainage

- Minimize the Duration of Land Disturbing Activities - Mass grading operations should be restricted to periods of minimal rainfall.

- Minimize the Extent of Land Disturbance - Grading operations and heavy equipment access should be limited to only those necessary.
- Control Drainage from Disturbed Areas - Mass grading operations should include runoff capture and controlled release. Flow velocities should be controlled through use of temporary detention ponds, berms, sediment traps, check dams, and vegetative buffers.
- Confine Runoff from Impervious Areas - Runoff from impervious areas shall be conveyed by closed conduit to existing drainages without passing over exposed slopes or channels.
- Design Drainage Structures to Minimize Disturbance - Drainage culverts shall be located to minimize erosion potential at inlet and outlet structures. Excess outlet velocities shall be controlled through energy dissipaters and/or rock riprap protection.
- Protect Existing Channels - Minimize disturbance to existing creek channels and provide a vegetative buffer from all streams.
- Use Erosion Control Materials - Provide silt fencing at the toe of disturbed slopes. Provide environmental fencing to prevent encroachment into vegetative buffer areas. Use straw, jute netting and hydroseeding to stabilize soils on completed grading areas.
- Maintain Topsoil for Revegetation - Topsoil that is removed from disturbed areas shall be stockpiled for future finish grading and revegetation.

#### Roadways

- Minimize Cut Slope Exposure - Cut slopes should be as steep as practicable to minimize exposure of soil. Surface flow above cuts should be intercepted by swales, temporary berms, or drainage systems to minimize flow down cut slope faces, thereby reducing potential for unnecessary erosion or slope failures.
- Minimize Fill Slope Erosion Potential - Fill slopes should be compacted to minimize erosion potential.
- Revegetation - Cut and fill slopes should be hydro-mulched and seeded with native grasses. A woven jute or excelsior matting should be employed on steeper slopes to provide immediate stabilization.

#### Dust Control

- On-site Dust Control - Water trucks and/or temporary sprinkler systems should be used to prevent dust from blowing from the site or onto adjacent native vegetation.
- Access Road Dust Control - Water trucks should sprinkle all access roadways at a frequency necessary to preclude dust formation and transport.
- Revegetation - Provision of soil binders, watering, and revegetation of disturbed areas should proceed as quickly as possible after disturbance.

## Grading and Drainage Design

- Minimize Roadway Cuts and Fills - Minimize roadway cut and fill prisms while achieving an earthwork balance to the greatest extent practicable.
- Roadway Drainage - Control roadway drainage through the use of vegetative swales, berms, check facilities, silt traps, and frequent culvert installations for control of flows and their related erosion/scour energy.

In addition, the erosion control plan emphasizes the importance of training staff and contractors in the implementation of the erosion control measures, and specifies proper maintenance and frequent inspections of erosion control elements.

**Significance after Mitigation: Less than significant.**

## **Expansive Soils**

**Impact 7.2: Potential damage to structures and underground utilities caused by soil expansion-contraction or poor load-bearing capacity. (Less than Significant)**

The expansion (or swell) of certain soils occurs during the rainy season as these soils swell as water is absorbed, and then shrink during the dry season as water is removed by percolation or evapotranspiration. Soil expansiveness is generally correlated with clay content, which gives the soil the capacity to absorb and release large amounts of moisture with associated volume changes. Highly expansive soils are evident during the dry season by the formation of open shrinkage cracks on the ground surface.

The expansion potential of the on-site soils is highly variable and ranges from low potential in alluvial soils, to high potential in soils associated with the old landslides which have a relatively high clay content. Since 20 of the 26 new homesites are located on old landslides, these sites would be subject to high soils expansion potential. The remaining nine homesites are underlain by Monterey Formation soils which have a low to moderate expansion potential.

The expansion of soils exerts pressure on foundation elements, and on sloping areas it can result in soil creep. The shrinking of soils can result in consolidation beneath foundation elements. Structures built on foundations that are not designed for such soil movements can be deformed and damaged. Driveways and sidewalks can shift or crack due to the movement of the underlying soil. Additionally, underground utilities such as water lines and storm drains can be damaged due to expansive soils and also due to poor load bearing capacity of the soil. However, because all underground utilities and above-ground structures must comply with the Uniform Building Code requirements to withstand such soil conditions, these impacts would be **less than significant**.

Design techniques (recommended from the geotechnical investigation) that can be used to mitigate the effects of expansive soil movement on the future homes include the use of drilled

pier and grade beam foundations obtaining support below the zone of seasonal moisture change, structural concrete mats or post-tensioned slabs, the over-excavation and replacement of expansive soils with select non-expansive fill, soil subgrade moisture treatment and direction of water away from foundations.

**Mitigation: None required**

### **Corrosive Soils**

**Impact 7.3: Possible failure of structures and utilities due to soil corrosion. (Less than Significant)**

Above-ground and underground structures and utilities could be damaged or fail if unprotected metals or concrete are exposed to soils with high corrosivity. However, because all underground utilities and above-ground structures must comply with the Uniform Building Code requirements to withstand such soil conditions, these impacts would be **less than significant**.

Typical precautions would include increasing the amount of concrete cover over reinforcing steel and providing a moisture barrier below concrete floor slabs. Although the feasibility of corrosion prevention is well established, the specific engineering techniques to be employed will depend on subsequent soil testing and analysis to be undertaken in conjunction with geotechnical investigations for building design purposes at each individual homesite.

**Mitigation: None required.**

### **Septic System Failure**

**Impact 7.4: Potential water quality degradation or human health hazard due to on-site septic system failure. (Less than Significant)**

Soil suitability for on-site septic systems is influenced by such factors as slope, depth to bedrock, permeability, and drainage. Failure of an individual wastewater disposal system can result in effluent seeping onto the soil surface or reaching groundwater without adequate treatment. Effluent seepage to the soil surface could threaten human health if contact is made with the effluent or could create objectionable odors. The migration of untreated or incompletely treated effluent to the groundwater table could result in contamination of drinking water supplies if domestic supply wells are located in the vicinity.

The septic tanks and leach field systems must be designed in accordance with Monterey County Standards, which consider the size of the dwelling, expected effluent flow, and soil percolation capability. Percolation tests were conducted by Cleary Consultants (and inspected by the County Division of Environmental Health) in August 2000 to determine the location and design requirements for the leach field systems for 26 of the proposed lots (the septic systems for the three lots located in GMPAP area were previously approved by the County). All residential lots planned for the Potrero Area Subdivision have received field approval from the County Division of Environmental Health for septic system disposal (Cleary, 2000). Lots 5 and 6 will require

final leachfield locations to be confirmed and approved by additional test pits. Most of the leach field systems will consist of conventional trenches, except for Lots 9 and 24 which will require deep seepage pits due to low soil percolation rates. In addition, each residential lot will include a second leach field area for backup. The Percolation Testing Summary Report by Cleary Consultants is included in the appendices of this SEIR. The Cleary report has been subject to a third party peer review conducted by Weber, Hayes & Associates, which concurs with its findings (Weber Hayes, 2002).

The Santa Lucia Community Services District will be responsible for undertaking systematic monitoring and maintenance of individual septic tank and leach field systems, including regular pumping and disposal of septic tank effluent.

Due to the very low density of development proposed (i.e., an average of one residence per 40 acres), the nitrate loading rate from the individual septic systems is expected to be low. (See Chapter 9 for a discussion of water quality impacts.)

The final septic system leach field and seepage pit locations must meet all Monterey County and Regional Water Quality Control Board standards for setbacks from creeks, drainages, wells, trees, groundwater and slopes. With applicable septic system siting guidelines being met, wastewater treatment and disposal impacts of the project will be **less than significant**.

**Mitigation: None required.**

## CITATIONS

Cleary Consultants, Inc., *Focused Geotechnical Response to EIR Review Comments, the Potrero Area Subdivision (Lots No. 1-29), Santa Lucia Preserve, Monterey County, California*, July 24, 2002.

Cleary Consultants, Inc., *Geological and Geotechnical Investigation, the Potrero Area Subdivision of the Santa Lucia Preserve, Monterey County, California*, August 2000.

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Panzer, Joel, Santa Lucia Preserve, Personal Communication, September 30, 2002.

Sage Associates, *Revised Rancho San Carlos Cattle Grazing and Livestock Management Plan*, April 1998.

Thompson-Hysell Engineers, *Preliminary Drainage and Erosion Control Report, Potrero Canyon Area*, June 2000.

Weber, Hayes & Associates, *Review of Hydrogeologic and Wastewater Studies for Potrero Area Subdivision of the Santa Lucia Preserve*, May 29, 2002.

## Chapter 8. Groundwater Hydrology

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### INTRODUCTION

As discussed in the Project Description, domestic water for the Potrero subdivision project will be provided from an integrated water supply system to serve the entire Santa Lucia Preserve. This water system has been largely completed and includes a network of deep groundwater wells, as well as interconnected distribution pipelines, storage tanks, a booster station, and a water treatment plant. Since the water supply system for the Potrero Area Subdivision is integral to the larger system, it cannot be separated from the larger water supply system for purposes of analysis. Thus impacts resulting from the overall water supply system will also be partially attributable to the Potrero Area Subdivision, since it will place consumption demands on the system. As discussed in *Chapter 2: Project Description*, the Santa Lucia Preserve project received complete environmental review through the preparation a full environmental impact report that was certified in 1995 (this document is referred to herein as the “Preserve EIR”). The Preserve EIR also covered the Potrero subdivision for purposes of water supply, so the potential water supply impacts and corresponding mitigations identified in that EIR also apply to the Potrero Area Subdivision.

In 1994, a Comprehensive Hydrological Study was prepared by Camp Dresser & McKee (CDM) and peer reviewed by Ogden Environmental and Energy Services, in support of the Preserve EIR. The existing water system was constructed and is currently operating based on that study. Although the Comprehensive Hydrological Study included extensive groundwater exploration through a series of test wells, there remained some uncertainty as to the long-term yield of groundwater from the fractured bedrock aquifer that serves as the sole water source for the project. Consequently, the certified Preserve EIR included a series of applicant-proposed measures and County-imposed conditions that required maintaining groundwater supplies to meet incremental demand, a monitoring program for groundwater levels, the siting of wells away from protected baseflow reaches of streams within the Preserve, and continued monitoring of baseflows at specified locations on those streams (with water augmentation required if baseflows drop below specified levels). With the construction and operation of the water supply system in conjunction with the initial phases of development, commencing in 1999, well and baseflow monitoring data and information on consumption patterns have been collected which have allowed an evaluation of whether the system is functioning in accordance with initial projections, and whether the system has resulted in any impacts. The findings of these studies and ongoing monitoring are summarized in the *Hydrological Study for Development Application for the Potrero Area Subdivision of the Santa Lucia Preserve* prepared by CDM in 2001.

In conjunction with the preparation of this SEIR, the 1994 Comprehensive Hydrologic Study by CDM, the subsequent Potrero Area Subdivision hydrologic study by CDM, as well as the monitoring data and reports have been subject to a third party peer review conducted by Weber, Hayes & Associates in 2002. In summary, the peer review concurred with the finding of project hydrologists CDM that information generated since the completion of the Preserve EIR has resulted in the identification of no new or previously unknown significant impacts with respect to water supply or hydrology (CDM, 2001; Weber Hayes, 2002).

CEQA provides that “[t]he supplement to the EIR need contain only the information necessary to make the previous EIR adequate for the project as revised” (CEQA Guidelines §15163(b)). The findings of the CDM studies and the Weber Hayes peer review report serve as supporting documentation for the determination that there are no environmental changes or new information concerning the project that could give rise to new, previously unidentified water supply impacts. Chapter 8 of the Preserve EIR contains a thorough and comprehensive analysis of water supply feasibility issues and potential hydrological impacts resulting from groundwater pumping. As discussed below, that evaluation is still valid and is not repeated here.

Since there are no new significant project impacts associated with water supply, the following discussion is provided to update the information contained in the Preserve EIR, particularly as it pertains to the Potrero Area Subdivision, and does not follow the standard “setting, impact, mitigation” format. This approach is consistent with the County’s Initial Study for this SEIR, in which ‘No Impact’ was expected for this topic, but which indicated that new information generated since the completion of the Preserve EIR would be reviewed and summarized.

The following discussion is intended to describe the current water supply conditions at the Santa Lucia Preserve, and to summarize the findings of the updated evaluations of the water supply system. This discussion is primarily based on the following reports, which are augmented by other sources as appropriate for this discussion:

- Camp Dresser & McKee, Inc. (CDM), *Hydrological Study for Development Application for the Potrero Area Subdivision of the Santa Lucia Preserve*, April 2001.
- Weber, Hayes & Associates, *Review of Hydrogeologic and Wastewater Studies for Potrero Area Subdivision of the Santa Lucia Preserve*, May 29, 2002.

These documents are included in the Appendices to this SEIR. Additional references are cited at the end of this section.

## **SETTING**

### **Existing Water Supply System**

The existing Santa Lucia Preserve water supply system includes a network of 60 water production wells, located throughout the 20,000-acre Preserve (two of the existing wells are within the Potrero Area). However, these wells are located outside of the Monterey Peninsula Water Management District (MPWMD). Of these, 56 wells are active and 4 wells are inactive. The treated water system is currently built and operational (D. Wilcoxon, 2003). This interconnected water system includes multiple pressure zones with two storage tanks with a combined storage capacity of 1.925 million gallons. There is also one recently completed major water treatment plant (of a planned total of 3 new plants) to remove iron and manganese from groundwater pumped from some of the wells. The system currently includes approximately 100 miles of completed water mains, including a water main that runs through the Potrero Area Subdivision along Potrero Trail and Chamisal Pass (Utegaard, Pers. Comm.). The water system

is operated by the Santa Lucia Community Services District, under a water system permit from the Monterey County Division of Environmental Health. The County's conditions of approval for the Santa Lucia Preserve restrict the project to on-site water sources only, with no connection to other public or private water sources.

The water system has a currently permitted capacity of 84 connections, with 49 connections currently active. These include 34 active connections for market rate residential, 5 connections for employee housing, and the remaining connections serving other facilities such as the golf course and clubhouse, sport center, equestrian center, and services and operations (Santa Lucia Community Services District Annual Water Report, 2003).

In 2002, the water system had a combined "approved yield" (based on Monterey County requirements for well yield estimation for fractured rock aquifers) of 598 gallons per minute (gpm), with maximum daily pumping of 12 hours per well, followed by 12 hours of recovery. The total system demand on the maximum day in 2002 was 281 gpm (well below existing system capacity) with an average daily demand of 130 gpm (Santa Lucia Community Services District Annual Water Report, 2003).

### **Water Demand and Availability of Supply for the Potrero Area Subdivision**

The projected additional maximum day demand for the Potrero Area Subdivision will be 1 gpm per dwelling, or 29 gpm. This incremental demand can be readily accommodated by the existing water system without additional source capacity (i.e., current maximum day demand of 281 gpm plus project maximum day demand of 29 gpm adds to 310 gpm, which is well within the existing system capacity of 598 gpm). The average annual net groundwater demand from the Potrero Area Subdivision is estimated to be approximately 11 acre-feet, an additional 8 percent of the total Preserve-wide annual net demand of 270 acre-feet anticipated at buildout.

The peer review report by Weber, Hayes & Associates concurs that based on the projected water demand and demonstrated and permitted capacity of the existing water system, there is sufficient water supply from the existing network of completed water wells to supply the domestic and fire flow supplies required for the Potrero Area Subdivision. The Santa Lucia CSD has provided a "can and will serve" letter for water supply for the Potrero Area Subdivision. Water quality testing shows that water quality meets the State Drinking Water Standards.

In September 2000, the Monterey County Board of Supervisors adopted Ordinance 04082 requiring proof of water quality and quantity prior to a subdivision application being deemed complete. According to the peer review report by Weber, Hayes & Associates, and Monterey County Environmental Health, the applicant has complied with the requirements of Ordinance 04082 (Weber Hayes, 2002).

Water service to the Potrero Area Subdivision will be provided from the existing water mains that run through the project area along Potrero Trail and Chamisal Pass. Additional mains will be installed along Goodrich Trail and Wild Boar Run in conjunction with the construction of

those roadways. Water service laterals to individual home sites will be installed as part of driveway construction for each residence (Panzer, Pers. Comm.).

### **Validation of Projected Water Demand for Santa Lucia Preserve**

In order to evaluate the validity of the previous water demand projections for the overall Santa Lucia Preserve project, Weber, Hayes & Associates compared the projected demand from the 2001 CDM Hydrology Study for the Potrero Area Subdivision to actual demands for 2001 as documented in the 2002 Annual Water Report for Santa Lucia Preserve (Carmel Lahaina Utility Services, 2002). Information from the 2003 Annual Report is also referenced as applicable.

The projected annual demand of the Santa Lucia Preserve project at buildout is 270 acre-feet per year (CDM, 2001). A total of approximately 225 acre-feet was actually produced by the water system in 2001, representing 83 percent of projected annual demand (Carmel Lahaina Utility Services, 2002). The 2003 Annual Report shows usage of 210 acre feet. Since only a small number of planned residences are currently built and occupied, the major portion of the current water demand is for the golf course. In 2001, the golf course used 159 acre-feet of groundwater. The projected water demand for the golf course at buildout is 207 acre-feet per year, with 106 acre-feet per year to be provided from a combination of reclaimed wastewater from the package plant in San Francisquito Flat and stormwater runoff from the golf course, and 101 acre-feet per year to be supplied from groundwater (CDM, 2001). (Note: All of the treated effluent ultimately produced by the wastewater treatment plant will be recycled for golf course irrigation.) Thus the total groundwater use by the golf course in 2001 was about 58 acre-feet greater than projected for buildout conditions. Currently, overall groundwater use is significantly less than proposed for full buildout. This groundwater use is not representative of long-term demand because the full volume of reclaimed water supply for the golf course will not be available until completion of the residential development. Currently, stormwater runoff collected at the golf course is applied as irrigation water, along with the initial increment of recycled effluent from the wastewater treatment plant. As residential demand increases, it is expected that increased supplies of reclaimed wastewater will result in corresponding reductions in groundwater use for the golf course until projected consumption levels are reached at buildout (Panzer, Pers. Comm.).

### **Water Availability and Groundwater Recharge**

The aquifer beneath the Preserve is considered to be a single hydrogeologic unit of fractured granitic bedrock. The groundwater flow system is subdivided into separate flow units corresponding to the various creek watersheds. Extensive groundwater analysis and monitoring has been conducted for the entire Preserve as a requirement of the approved and constructed water system. However, there is still some uncertainty regarding the long-term yield of any given well, even after sustained pumping, because all of the wells draw from the fractured-rock aquifer system, with widely varying well yields (e.g., from 1 gpm to 192 gpm). A given well in fractured bedrock may have a significant decline in yield over time, if total water withdrawn from a given network of fractures exceeds the recharge. However, as discussed below, the overall water balance for the Santa Lucia Preserve shows that the overall groundwater withdrawals projected for the Preserve at buildout, including the Potrero Area Subdivision, can

be replenished on a yearly basis by recharge. Therefore, if sustained pumping causes a decline in production in existing wells, continued development of new water supply wells would be required. On a Preserve-wide basis, given a sufficient number of wells, the water demands of the overall project, including Potrero Area Subdivision, can be met (Weber Hayes, 2002).

The Preserve EIR presented a water balance for the Santa Lucia Preserve based on an overall project demand estimate of 400 acre-feet per year. (This estimate was subsequently revised to 270 acre-feet per year, partially reflecting a small reduction in the total number of dwellings, but primarily due to the downward revision of golf course groundwater demand due to partial conversion to reclaimed wastewater and stormwater runoff sources which are expected to supply approximately one-half of the golf course demand at buildout). With an average annual rainfall at the Preserve of 53,000 acre-feet, the potential average annual recharge to groundwater is estimated to be 6,800 acre-feet, much larger than the Preserve's annual average groundwater demand of 270 acre-feet at buildout. The total water in groundwater storage is estimated to be 65,000 acre-feet. Based on this overall water balance, groundwater withdrawn for the overall project at buildout, including the Potrero Area Subdivision, can be replenished on an average yearly basis by recharge (i.e., at buildout, the project will utilize 4 percent of annual recharge). Water for years with less than average recharge can be provided from groundwater storage (County of Monterey, 1995). In their third party review, Weber, Hayes & Associates determined that this analysis is still valid (Weber Hayes, 2002).

## **REVIEW OF POTENTIAL IMPACTS**

### **Review of Potential Impacts to Stream Baseflows**

The wells at the Santa Lucia Preserve have generally small zones of influence (from 50 feet to 250 feet in diameter)(CDM, 2001). Because of these small impact zones and the very low density of development, there are abundant potential sites for additional wells throughout the 20,000-acre Preserve. Therefore, any future wells can and should be sited to avoid impacts on streams, springs, and seeps. Existing County conditions for mitigating the effects of wells near streams (including stream baseflow monitoring and limitations on pumping from those wells) should mitigate pumping impacts on surface water to a less-than-significant level (Weber Hayes, 2002). Streamflow monitoring undertaken to date (2000 and 2001) indicated that measured baseflows at all specified streams within the Preserve exceeded October 1990 flows, which represent the baseline flows established in the Preserve EIR (Santa Lucia Conservancy, 2000, 2001).

### **Review of Off-Site Impacts Resulting from Groundwater Pumping**

Project water supplies will be drawn from water which would otherwise have gone to groundwater recharge and offsite groundwater outflows, to dry season plant use, or to groundwater which would have become streamflow. Less than 5 percent of the overall Preserve water demand is expected to come from groundwater outflow, and 95 percent of the overall water demand is expected to be met from groundwater which would have flowed into streams during wet periods. The majority of groundwater outflow from the Santa Lucia Preserve is

toward the Carmel Valley alluvium. The estimated reduction in flow toward the Carmel Valley alluvium under worst-case drought conditions is estimated to be less than 100 acre-feet per year. Reductions in groundwater flow as a result of Preserve water demand during average years would be far less at 10 acre-feet and would not be measurable within the accuracy of standard hydrogeologic practice (CDM, 1994, 2001). The peer review report by Weber, Hayes & Associates concurs that this level of reduction in groundwater flow would not result in any significant off-site impacts, including impacts to any off-site wells (Weber Hayes, 2002).

## **SUMMARY**

The 2001 report by CDM and subsequent peer review by Weber, Hayes & Associates found no changed conditions which would result in new hydrologic or water supply impacts which were not addressed in the certified Preserve EIR, or which would amplify previously identified impacts to levels that had not been addressed in the Preserve EIR. It was also concluded that the existing water supply system in operation at the Preserve has sufficient capacity to supply the Potrero Area Subdivision project with domestic water.

## CITATIONS

- Camp Dresser & McKee, Inc. (CDM), *Comprehensive Hydrological Study*, March 1994 (as supplemented through 1997).
- Camp Dresser & McKee, Inc. (CDM), *Hydrological Study for Development Application for the Potrero Area Subdivision of the Santa Lucia Preserve*, April 2001.
- Carmel Lahaina Utility Services, Inc., *Santa Lucia Preserve (PC94067) Condition of Approval #52: Annual Water Report*, February 29, 2001.
- Carmel Lahaina Utility Services, Inc., *Santa Lucia Preserve (PC94067) Condition of Approval #52: Annual Water Report*, February 7, 2002.
- County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including *Addendum to EIR*, August 1997).
- Monterey County Board of Supervisors, *Ordinance 04082, Monterey County Code Title 19*, adopted September 5, 2000.
- Ogden Environmental and Energy Services, Letter to Monterey County Division of Environmental Health, January 30, 1996.
- Panzer, Joel, Santa Lucia Preserve, Personal Communication, August 8, 2002.
- Santa Lucia Community Services District, *Annual Water Report*, February 28, 2003.
- Santa Lucia Conservancy, *Annual Baseflow Monitoring Report, Monterey County Conditions 14 & 15*, October 2000.
- Santa Lucia Conservancy, *Annual Baseflow Monitoring Report, Monterey County Conditions 14 & 15*, September 2001.
- Utegaard, Leif, Carmel Lahaina Utility Services, Inc., Personal Communication, August 8, 2002,
- Weber, Hayes & Associates, *Review of Hydrogeologic and Wastewater Studies for Potrero Area Subdivision of the Santa Lucia Preserve*, May 29, 2002.
- Wilcoxon, Don, General Manager, Santa Lucia Preserve Community Services District, "Can and Will Serve Letter" for Potrero Area Subdivision, addressed to Monterey County Health Department, November 30, 2000.

## **Chapter 9. Runoff, Flooding and Water Quality**

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### **INTRODUCTION**

The Santa Lucia Preserve EIR includes a comprehensive discussion and analysis of runoff, flooding, and water quality issues that apply to the entire Preserve project, including the Potrero Area Subdivision. The information and analysis contained in the Preserve EIR is still valid and is not repeated here apart from brief summaries as appropriate. This SEIR discussion focuses on new information generated since the certification of the Preserve EIR, particularly on project-specific information and analysis pertaining to the Potrero Area Subdivision.

### **SETTING**

#### **Hydrology**

The general hydrologic characteristics of the Santa Lucia Preserve, including climate and rainfall, descriptions of drainage courses, water features and watersheds, and annual runoff data, are adequately described in the Preserve EIR and are not repeated here. The following discussion is focused on conditions within the Potrero Canyon Area.

The Potrero Canyon watershed has a total area of 3,779 acres, of which 3,533 acres (93 percent) lie within the Santa Lucia Preserve. Average annual rainfall in the Potrero Area is 17 inches, compared to an average of 27 inches of annual rainfall for the entire Preserve. Total annual runoff from the watershed is 900 acre-feet (County of Monterey, 1995).

The Potrero Area is currently developed with utilities, roads, and drives from previous phases. Potrero Trail and Chamisal Pass are paved roads providing subdivision access and access for cattle grazing. Nearly 10 miles of existing paved and dirt roads, varying in width from 10 feet to 30 feet, traverse the Potrero Canyon area. Many of these roads are cut into cross slopes, resulting in cut and fill slopes ranging from 1 to 15 feet in height. Some of the roadways exhibit erosion damage, producing sediments during high storm events (Thompson-Hysell, 2000).

#### **Flooding**

Flows from the project area are carried by Potrero Creek downstream to the Carmel River which is subject to catastrophic flooding during major storm events. Peak 10-year flows in Potrero Canyon are 382 cubic feet per second (cfs) at the confluence with Carmel River, which represents approximately 4 percent of the peak 10-year flow rate in Carmel River at Robles del Rio. Peak runoff data for greater return events such as the 100-year storm are not available for Potrero Canyon (County of Monterey, 1995).

#### **Regulatory Environment**

The description of applicable statutes, regulations, plans, and policies contained in the Preserve EIR is still valid and is not repeated here.

## IMPACTS AND MITIGATION MEASURES

### Approach and Methodology

The assessment of potential runoff, flooding, and water quality impacts is primarily based on the following reports:

- Camp Dresser & McKee, Inc. (CDM), *Comprehensive Hydrological Study*, March 1994 (as supplemented through 1997).
- Thompson-Hysell Engineers, *Preliminary Drainage and Erosion Control Report, Potrero Canyon Area*, June 2000.
- Weber, Hayes & Associates, *Review of Hydrogeologic and Wastewater Studies for Potrero Area Subdivision of the Santa Lucia Preserve*, May 29, 2002.

### Significance Criteria

The following thresholds for measuring environmental impacts of the project are based on CEQA Guidelines Appendix G and previous standards used by the County for similar projects. For purposes of this EIR, impacts are considered significant if the project would result in the following:

- a) Substantially increase the rate or amount of surface runoff in a manner which would exceed the capacity of existing or planned stormwater drainage systems or result in flooding on- or off-site;
- b) Expose people or structures to a significant risk or loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- c) Create or contribute runoff water which would result in substantial erosion or siltation on- or off-site, or which would substantially degrade water quality through the generation of urban runoff pollutants;
- d) Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade water quality; or,
- e) Increases or reductions in flows, or changes in temperature regime, that substantially diminish habitat for fish, wildlife, or plants.

### Increased Water Temperatures

**Impact 9.1: Increased temperatures in base flow reaches as a result of groundwater pumping. (Less than Significant)**

As discussed in detail in the Preserve EIR, reduced flows in streams may result in changes to the temperature regime which can have adverse effects on fish and amphibian species. The

conclusion of the Preserve EIR was that base flow reaches have acceptable temperatures and the project includes mitigation measures to ensure that adequate flows (and hence temperatures) will be maintained. Streamflow monitoring conducted since the completion of the Preserve EIR indicates that base flow reaches, including Potrero Creek, continue to have acceptable flows and water temperatures (Santa Lucia Conservancy, 2000, 2001). Therefore, this impact is considered **less than significant**.

**Mitigation: None required.**

### **Increased Runoff**

**Impact 9.2: The project will result in increased stormwater runoff. (Potentially Significant)**

The planned development of homesites and roadway improvements within the Potrero Area Subdivision will create new impervious surfaces that will reduce infiltration of runoff into the ground and increase the rate and volume of stormwater runoff. It is estimated that these improvements would increase 10-year flows by approximately 37 cfs, an increase of approximately 9.6 percent over the existing peak flow rate of 382 cfs in Potrero Creek at the Carmel River confluence (County of Monterey, 1995).

The increased flow rate and volume of runoff resulting from project development would increase flood risks to downstream property located on-site and off-site. This would represent a **potentially significant** impact.

**Mitigation 9.2: The applicant shall implement required Best Management Practices (BMPs) to attenuate increased runoff. BMPs shall be demonstrated on final subdivision improvement plans and on applications for individual building permits.**

The Monterey County Erosion Control Ordinance and the Monterey County Water Resources Agency (MCWRA) require that runoff from development be limited to the pre-development rate. As stated in the Preserve EIR, it is the applicant's intent to implement Best Management Practices (BMPs) to attenuate flood flows. This would be accomplished through the use of detention basins and/or percolation basins and/or by using porous pavement or other permeable materials for roads and parking areas, or using infiltration or dry wells. The general permeability of the ground surface would also be increased through grazing management practices.

The Preserve EIR indicates that several road crossings within the Potrero Creek watershed could be designed with undersized culverts to create detention ponds that would restrict the rate of stormwater runoff. The *Potrero Canyon Preliminary Drainage and Erosion Control Report* states that in four of the 12 drainages the increased runoff would be substantial enough to warrant such detention facilities (Thompson-Hysell, 2000). The basins would be created by raising the elevation of the roadbed to create storage capacity on the upstream side of the road. All detention basins would be sized and designed during final design and development within

each watershed, and would be subject to review and approval by Monterey County. New drainage facilities would be required to be sited to avoid sensitive biological and cultural resources described in this SEIR.

Increased percolation would be accomplished by land stewardship practices outlined in the Cattle Grazing Plan. These practices include grazing within carrying capacity and rotational grazing which allow pastures to revegetate. Previous overgrazing removed vegetative cover resulting in reduced aeration and soil compaction thus diminishing percolation of rainwater into the soil.

**Significance after Mitigation: Less than significant.**

### **Flooding**

**Impact 9.3: The project could incrementally increase the potential for flooding on the Carmel River. (Potentially Significant)**

As stated in the Preserve EIR, the measures to attenuate peak stormwater runoff, described above, would reduce the increase in volume of flood flows that would be generated by development. However, the timing of the flood flows within each watershed would also be altered. Depending on the timing of the peak flows in the Carmel River downstream, the increased flows from Potrero Creek could result in greater peak flows in the Carmel River. Since this could increase maximum water surface elevations in Carmel River and thus increase the risk of flood damage, this would represent a **potentially significant** impact.

**Mitigation 9.3: The applicant shall design and implement stormwater runoff BMPs to ensure that peak flooding is not aggravated on the Carmel River. BMPs shall be demonstrated on final subdivision improvement plans and on applications for individual building permits.**

This is a mitigation measure identified in the Preserve EIR, which would also apply to the Potrero Area Subdivision. It would be accomplished by having the applicant generate flood flow hydrographs for the 100-year storm event with the attenuating effects of the planned detention basins and other BMPs factored into the computer model. The resultant flood flows would be compared to the Carmel River hydrograph to determine whether flooding would be aggravated by the project. If the analysis determines that flooding would be aggravated, modifications to the BMPs would be necessary to eliminate this flooding impact.

**Significance after Mitigation: Less than significant.**

### **Water Quality**

**Impact 9.4: Degradation of surface water and groundwater due to individual septic systems. (Less than Significant)**

As discussed in the Preserve EIR, the primary water quality constituent of concern at the Santa Lucia Preserve is nitrogen. The potential sources of nitrogen from activities at the Santa Lucia

Preserve project include fertilizer applications and the use of reclaimed wastewater at the golf course, septic system effluent, horse keeping, and continued cattle grazing. The greatest potential sources of nitrogen (i.e., golf course fertilizer applications and turf irrigation with recycled wastewater) would not occur within the Potrero Area Subdivision.

A nitrogen loading study conducted in conjunction with the Preserve EIR evaluated the potential water quality impacts and identified mitigations as appropriate. The study estimated that under buildout conditions the Preserve-wide average nitrogen concentration of recharge to groundwater would be about 2.6 milligrams per liter (mg/l), compared with a pre-development level of 1.5 mg/l. The study concluded that compared with the drinking water standard of 10 mg/l nitrogen, the increase in total concentration would be small. A supplemental study was conducted for the Las Garzas and San Clemente watersheds (located outside the Potrero Area) which would be subject to higher localized loading rates from the golf course. No proposed land uses were identified within the Potrero Area Subdivision which could result in increased localized loading rates.

Based on these analyses, mitigations were identified requiring monitoring of nitrate concentrations in the Las Garzas and San Clemente watersheds, and at the golf course, with changes to be made in golf course management and/or grazing practices in the event elevated nitrate levels are detected.

The Potrero Area Subdivision reflects a very low density of residential development within (i.e., an average of one dwelling per 40 acres), which is substantially lower than the one unit per half acre permitted for individual septic systems by the State Water Resources Control Board. Considering also the absence of land uses such as a golf course and equestrian center which would increase nitrogen loading on a localized basis, the nitrogen loading rate within the Potrero Area Subdivision would be very low (Weber Hayes, 2002). Since the individual septic systems that would be the primary source of nitrates in the Potrero Area Subdivision are not expected to result in elevated nitrogen levels, the water quality impacts resulting from the project would be **less than significant**. (See *Chapter 16. Public Services and Utilities* for a detailed discussion of wastewater treatment and disposal proposed for the Potrero Area Subdivision.)

**Mitigation: None required.**

**Impact 9.5:                    Degradation of surface water quality due to construction activities.  
(Potentially Significant)**

As described in detail in the Preserve EIR, grading and construction activity involves removal of vegetative cover and disturbance of soil which can result in erosion and sedimentation of downstream water bodies. In addition, construction activity involves the use of toxic materials such as gasoline, oils, grease, solvents, lubricants and other petroleum-based products, and also generates concrete, soap, trash, and sanitary wastes. These substances can be released by leaks or spills or inadequate containment and be transported in runoff to nearby watercourses. The resulting degradation of water quality may adversely affect fisheries and other aquatic organisms and therefore represents a **potentially significant** impact.

**Mitigation 9.5: Prior to issuance of building permits, the applicant shall develop and implement stormwater pollution prevention plans (SWPPPs). SWPPPs shall be prepared and subject to review and approval by the Regional Water Quality Control Board, County Water Resources Agency and County Planning and Building Inspection. The SWPPP shall address both construction and post-construction periods.**

Since the project will involve the disturbance of more than five acres, it must comply with the federal EPA's National Pollutant Discharge Elimination System (NPDES) requirements for construction runoff. This will involve the filing of a Notice of Intent (NOI) to comply with the General Permit for Discharges of Storm Water Associated with Construction Activity to the State Water Resources Control Board. As part of the General Permit requirements, a Storm Water Pollution Prevention Plan (SWPPP) would be prepared. The SWPPP must address water quality mitigation for both the construction and post-construction periods, and include provisions for monitoring of discharges to stormwater systems. The SWPPP is to be kept on-site during construction, and is to be updated as site development proceeds. The state has published a set of Best Management Practices (BMPs) for both construction and post-construction periods. The developer is responsible for implementing appropriate BMPs. To date, several SWPPPs have been prepared which address discrete phases of development and infrastructure improvement within the Santa Lucia Preserve. These have included development phases such as the golf course, as well as phased roadway and driveway improvements. The SWPPPs were prepared in accordance with erosion control guidelines established in the Drainage and Erosion Control reports prepared for the Santa Lucia Preserve. The SWPPP for Phase C Roadway Improvements includes BMPs to be implemented in conjunction with the construction of the segments of Potrero Trail and Chamisal Pass traversing the Potrero Area Subdivision. The primary erosion/sediment control measures specified in the SWPPP include the use of silt fencing, straw bales, sand bags, and rip-rap, with soil stabilization measures to include jute netting, hydroseeding and mulching. The SWPPP also contains provisions for avoiding work during rain, vegetation protection, dust and mud control, hazardous materials management, monitoring and repair, and post-construction BMPs, among other things (Sage Associates, 2000). A subsequent SWPPP will be prepared for the remaining roadway and driveway improvements within the Potrero Area Subdivision. The SWPPP will be prepared in accordance with the erosion control guidelines contained in the Preliminary Drainage and Erosion Control Report for the Potrero Canyon Area, and will be subject to review by the Regional Water Quality Control Board, the County Water Resources Agency, and the County Planning and Building Inspection Department. (See *Chapter 7. Soils* for a summary of erosion control measures included in the preliminary drainage and erosion control report.)

In addition, the improvement and grading plans for the subdivision improvements will be subject to the County's Erosion Control Ordinance which requires plans to include provisions for the control of erosion, siltation and dust during and immediately following construction. The plans are subject to the approval of the Directors of Planning and Building Inspection, Public Works, and the Water Resources Agency prior to issuance of permits.

The development of individual homesites by individual property owners will involve a total disturbance area of up to 50,000 square feet for each unit, driveways, and other improvements such as landscaped areas. (Thompson-Hysell, 2000). While individual home construction would not require the preparation of a SWPPP (i.e., since the disturbance areas would be less than five acres), the building and improvement plans would be required to include provisions for erosion, siltation and dust control, in accordance with the County's Erosion Control Ordinance.

**Significance after Mitigation: Less than significant.**

**Impact 9.6: Degradation of surface water quality due to removal of riparian vegetation. (Less than Significant)**

None of the proposed homeland areas (or their associated driveways) are located closer than 200 feet from Potrero Creek or its tributaries and will not result in the removal of riparian vegetation. The replacement and widening of the Wild Boar Run bridge over Potrero Creek will involve work adjacent to the creek channel but will not involve the removal of riparian vegetation. The area directly under and adjacent to the existing bridge has been subject to repeated disturbance as a historic ranch crossing and is dominated by weedy non-native species (DDA, 2002). The construction of the bridge will be accomplished by placement of a pre-fabricated pressure-treated wood structure on concrete abutments constructed outside the creek channel (Panzer, pers. comm.). Thus bridge construction is proposed to take place entirely outside the creek channel itself, thereby minimizing the potential to disturb bottom sediments. Bridge construction will take place during the summer months when the creek is dry, so there will be no need for dewatering and its potentially erosive effects. Erosion and sedimentation of the creek will be further minimized through implementation of conditions required under the Streambed Alteration Permit which may be required from the California Department of Fish and Game for construction of the bridge.

**Mitigation: None required.**

## CITATIONS

- Bestor Engineers, Inc., *Rancho San Carlos Final Drainage and Erosion Control Report* February 27, 1998.
- Camp Dresser & McKee, Inc. (CDM), *Comprehensive Hydrological Study*, March 1994 (as supplemented through 1997).
- Camp Dresser & McKee, Inc. (CDM), *Supplemental Nitrogen Loading Study*, 1994.
- County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including *Addendum to EIR*, August 1997).
- Denise Duffy & Associates (DDA), *Wetland and Riparian Resource Evaluation for the Potrero Area Subdivision of the Santa Lucia Preserve, Monterey County, California*, September 2002.
- Panzer, Joel, Santa Lucia Preserve, Personal Communication, September 25, 2002.
- Sage Associates, *Storm Water Pollution Prevention Plan for Phase C Roadway Improvements, Santa Lucia Preserve Project*, August 2000.
- Santa Lucia Conservancy, *Annual Baseflow Monitoring Report, Monterey County Conditions 14 & 15*, October 2000.
- Santa Lucia Conservancy, *Annual Baseflow Monitoring Report, Monterey County Conditions 14 & 15*, September 2001.
- Thompson-Hysell Engineers, *Preliminary Drainage and Erosion Control Report, Potrero Canyon Area*, June 2000.
- Weber, Hayes & Associates, *Review of Hydrogeologic and Wastewater Studies for Potrero Area Subdivision of the Santa Lucia Preserve*, May 29, 2002.

## Chapter 10. Fisheries

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### INTRODUCTION

The Santa Lucia Preserve FEIR provides a comprehensive description of fisheries resources and habitats for the entire Preserve, including the Potrero Area, and identifies potential impacts to fisheries along with comprehensive mitigation programs to prevent impacts to, and ensure the long-term health of, fisheries habitat. Those descriptions, evaluations and programs are still valid or in effect and are not discussed further in this SEIR except as appropriate to the project-specific impact discussions.

As provided in CEQA Section 15163(b), this chapter contains only information needed to supplement the previous EIR discussion and make it up-to-date and complete for the currently proposed Potrero Area Subdivision.

### SETTING

The steelhead trout is the only special-status fish species known to occur within the project area, having been designated a federally-threatened species since the time that the Preserve FEIR was certified. An addendum to the FEIR was submitted post-listing and addressed potential impacts to steelhead, as well as the red-legged frog. Critical habitat for this species is defined by USFWS as any river reach or estuarine area accessible to listed steelhead in coastal river basins from the Pajaro River south to, but not including, the Santa Maria River. Aquatic habitat for the steelhead occurs in Potrero Creek within the Potrero Area. While steelhead are known to utilize the portion of Potrero Creek associated with the scheduled bridge replacement at Wild Boar Run, it is unlikely that steelhead use the small tributary in the vicinity of lot 25 due the lack of summer flows and ponding. Furthermore, to prevent possible impacts to steelhead populations, the bridge will not be replaced until the stream is dry.

The Potrero Creek watershed has highly variable flows. Flows during the rainy season are typically several hundred times that of the summer flows. While it is not necessary to have streamflow in all seasons for fish survival, this species is limited by the summer low-flow period when reduced habitat availability and increased water temperature cause fish to become more vulnerable to the effects of predation, competition, and disease. In dryer years base flow is reduced and only isolated ponded sections of the creeks remain. The amount and quality of riparian vegetation dramatically affects the temperature of these critical habitat areas. Generally the greater the riparian vegetation coverage, the lower summer water temperatures are, and the more suitable the habitat is for the steelhead. In addition, successful spawning and egg incubation of steelhead trout is dependent on suitable substrate consisting of the right percentages of fine and coarse materials. Sedimentation from adjacent land uses can upset this balance and reduce habitat quality.

Although no fisheries surveys were performed specifically for this SEIR, detailed monitoring of stream base flows, water quality and riparian vegetation has been conducted since 1998 (Santa Lucia Preserve, *Annual Baseflow Monitoring Reports*). This type of monitoring is required as conditions of the Preserve FEIR. The continuation of this monitoring as required will allow for

the detection of long-term project-related effects if there are any. This data has been analyzed to determine if any changes in the parameters outlined above are natural or project-related. Mitigation included in the FEIR provides for thresholds in regard to steelhead environmental conditions within the Preserve and outlines management actions in the case that those thresholds are reached. To date, the monitoring has identified no detectable levels of phosphate, nitrate, or pesticides in the Potrero Creek. In addition, base flows have remained well above the 1990 thresholds set as a requirement of the FEIR, and water temperatures have remained within the required range (see Chapter 9. *Runoff, Flooding, and Water Quality*). In addition, the quantity and quality of riparian vegetation is sufficient to support the steelhead, and will continue as such with the implementation of the *Riparian Vegetation Management Plan* (prepared pursuant to GMPAP Condition #16) which provides for the long-term monitoring and maintenance of riparian habitats in the Preserve.

## **IMPACTS AND MITIGATION MEASURES**

### **Approach and Methodology**

The assessment of potential impacts to fisheries is primarily based on the following report:

- Denise Duffy & Associates (DDA), and Ecosystems West Consulting Group, *Biological Resource Survey for the Potrero Area Subdivision of the Santa Lucia Preserve, County of Monterey, California*, September 2002.

This document is included in the Technical Appendices of this SEIR. Since this report was prepared directly for the project applicant, it was subject to third party peer review by Biotic Resources Group (BRG) who reviewed the first draft in June 2002, the second draft in September 2002, and the final biotic report in October 2002. The final peer review letter which concurs with the analysis and findings of the final biotic report is also included in the appendices.

### **Significance Criteria**

The following thresholds for measuring environmental impacts of the project are based on CEQA Guidelines Appendix G, and the thresholds applied in the Preserve EIR. For purposes of this EIR, impacts are considered significant if they would result in the following:

- Have a substantial adverse effect, either directly or through habitat modifications, 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 U.S. Fish and Wildlife Service.
- 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

**Impact 10.1. Potential Direct Impacts to Steelhead Habitat in Potrero Creek. (Less than Significant)**

Wild Boar Run Crossing is the location of a proposed replacement bridge along the lower section of Potrero Creek. The roadway bridge over Potrero Creek will be constructed such that all the bridgework will occur above the bed and bank of the Potrero Creek. The bridge crossing would consist of a 60-foot long prefabricated wood bridge structure with reinforced concrete abutments. The concrete abutments would be placed at each end of the bridge structure and not in the channel, so that dewatering of the creek channel will not be necessary. The construction would be done during the summer months when there are no flows. The crossing currently consists of a historic ranch at-grade crossing through the creek channel, so the area directly under and adjacent the bridge site has been subject to repeated disturbance and is dominated by weedy non-native species as described above. There is no riparian habitat directly within the area of proposed disturbance, and the small amount of jurisdictional wetlands is confined to the creek channel. Therefore, the construction of the Wild Boar Run crossing will not result in direct impacts to Potrero Creek. Therefore, the impacts to steelhead habitat will be **less than significant**. Since the bridge project will occur entirely outside the bed and banks of the Creek, it may not require a Corps 404 Nationwide permit, or a RWQCB 401 Water Quality Certification. A CDFG Streambed Alteration Agreement may be required depending upon final bridge design.

No other development or activities proposed in connection with the Potrero Area Subdivision would result in potential direct impacts to Potrero Creek or its riparian habitat.

**Mitigation Measure: None required.**

**Impact 10.2: Potential Indirect Impacts to Steelhead Habitat due to Erosion and Sedimentation. (Potentially Significant)**

Potential erosion resulting from grading and construction (including bridge construction) in the vicinity of Potrero Creek could result in the transport of sediments to the creek channel. The effects of increased sediment loading include increased turbidity and reduced light penetration, resulting in the reduction in prey capture, reduction of light available for photosynthesis, clogging of gills, and reduced spawning and juvenile fish survival. These impacts are considered to be **potentially significant**.

**Mitigation 10.2: Implement Erosion Control Plans as Set Forth in Mitigation Measure 7.1.**

To address the potential for erosion in the Potrero Area Subdivision, the *Preliminary Drainage and Erosion Control Report, Potrero Canyon Area (2000)* was prepared which sets forth erosion control guidelines for the Potrero Area Subdivision. These guidelines, which are summarized in Chapter 7. *Soils*, will form the basis of site-specific erosion control plans required under the County's Erosion Control Ordinance, as well as the Storm Water Pollution Prevention Plans

(SWPPPs) required by the State Water Resources Control Board (see Chapter 9. *Runoff, Flooding, and Water Quality* for further discussion of SWPPPs).

In addition, management actions for the steelhead trout will be specified in the Habitat Conservation Plan (HCP) for the Preserve, which is currently in process.

**Significance After Mitigation. Less than Significant.**

## CITATIONS

- Biotic Resources Group (BRG), *Potrero Area Subdivision EIR Project: Biological Resources – Peer Review Report*, September, 2003.
- County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including *Addendum to EIR*, August 1997).
- Denise Duffy & Associates (DDA), and Ecosystems West Consulting Group, *Biological Resource Assessment for the Potrero Area Subdivision of the Santa Lucia Preserve, County of Monterey, California*, July 2003.
- Denise Duffy & Associates (DDA), and Ecosystems West Consulting Group, *California Red-Legged Frog Evaluation for the Potrero Area Subdivision of the Santa Lucia Preserve, County of Monterey, California*, September 2002
- Denise Duffy & Associates (DDA), and Ecosystems West Consulting Group, *Wetland and Riparian Resource Evaluation for the Potrero Area Subdivision of the Santa Lucia Preserve, County of Monterey, California*, September 2002
- Santa Lucia Conservancy, *Annual Baseflow Monitoring Report, Monterey County Conditions 14 & 15*, October 2000.
- Santa Lucia Conservancy, *Annual Baseflow Monitoring Report, Monterey County Conditions 14 & 15*, September 2001.
- Weber, Hayes & Associates, *Review of Hydrogeologic and Wastewater Studies for Potrero Area Subdivision of the Santa Lucia Preserve*, May 29, 2002.

## Chapter 11. Biological Resources

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### INTRODUCTION

This chapter addresses the biological resources of the Potrero Area Subdivision, and evaluates the potential project impacts upon the biological resources of the site and identifies mitigation measures to avoid or reduce identified impacts to less-than-significant levels. This chapter does not address Fisheries, which are covered in Chapter 10.

The 1995 Preserve EIR addressed the biological resources of the entire Santa Lucia Preserve, but evaluated site-specific impacts only for the Vesting Tentative Map (VTM) proposed for the GMPAP portion of the preserve. This included the three remainder lots from that VTM which are now part of the Potrero Area Subdivision (e.g., Lots 27, 28, and 29). The completed portions of Potrero Trail and Chamisal Pass traversing the Potrero Area were also evaluated in the Preserve EIR at a construction level of review. Since the specific locations of the building envelopes, driveways and other features of the Carmel Valley Master Plan (CVMP) portion of the Preserve had not yet been defined in 1995, these project elements were not evaluated at a construction level of review, but were evaluated on a cumulative level. Therefore, this chapter is intended to present the project-specific analysis of biological impacts associated with the Potrero Area Subdivision, including the development of proposed lots and driveways (including a discussion of updated conditions on Lots, 27, 28, and 29), as well as the construction of Wild Boar Run and Goodrich Trail. This discussion of biological resources is primarily based on the following reports:

- Denise Duffy & Associates (DDA), and Ecosystems West Consulting Group, *Biological Assessment for the Potrero Area Subdivision of the Santa Lucia Preserve, County of Monterey, California*, July 2003.
- Denise Duffy & Associates (DDA), and Ecosystems West Consulting Group, *California Red-Legged Frog Evaluation for the Potrero Area Subdivision of the Santa Lucia Preserve, County of Monterey, California*, November 2002.
- Denise Duffy & Associates (DDA), and Ecosystems West Consulting Group, *Wetland and Riparian Resource Evaluation for the Potrero Area Subdivision of the Santa Lucia Preserve, County of Monterey, California*, November 2002.
- Ralph Osterling Consultants, Inc., *Forest Management Plan for the Potrero Area Subdivision of the Santa Lucia Preserve*, August 2000 (revised August 2002).

These documents are included in Technical Appendix to this SEIR. Since these reports were prepared directly for the project applicant, they were subject to third party peer review by Biotic Resources Group (BRG) who reviewed the first drafts in June 2002, the second drafts in September 2002, and the final biotic report in July 2003. The final peer review letter which concurs with the analysis and findings of the final biotic reports is also included in Technical Appendix.

## **Project Overview**

The Potrero Area Subdivision encompasses a total of 1,286 acres, of which 77 acres (6 percent) will comprise the building envelopes or “Homelands” for the 29 lots proposed. The remaining 1,209 acres will be maintained as permanent open space, with 521 acres designated as “Wildlands” to be owned in fee by the Santa Lucia Conservancy, and 688 acres designated as “Openlands” which comprise those portions of the residential lots outside the Homeland areas which will be covered by conservation easements in favor of the Conservancy. The amount of permanent open space and resource protection within the Potrero Area is roughly proportional to the amount of preserve lands ranch-wide. Within the Santa Lucia Preserve, 18,000 of the Preserve’s approximately 20,000 acres will experience no development. Apart from access roads and driveways, these permanent open space lands will be maintained in accordance with resource management programs such as the *Cattle Grazing and Livestock Management Plan*, the *Forest Management Plan*, and the *Preservation Plan for Rancho San Carlos* which addresses cultural resource sites.

## **Methods**

Botanical and wildlife surveys of all 29 proposed building envelopes and driveway alignments, as well as the roadway alignments for Goodrich Trail and Wild Boar Run were conducted in the spring of 2000 and the spring of 2002. An additional wetland assessment and delineation was conducted in April 2003 for Lot 9.

Previous environmental documents for the Santa Lucia Preserve were consulted and species lists maintained by the U.S. Fish and Wildlife Service, the California Department of Fish and Game, and the California Native Plant Society were reviewed. (See the November 2002 biological survey report by DDA in the Technical Appendix for a detailed description of survey methods and literature reviewed.)

## **SETTING**

### **Botany**

#### Habitat Types

Although the vegetation of the portion of the Santa Lucia Preserve within Potrero Area Subdivision is diverse, it is not as diverse as that of the Preserve as a whole. Thirteen habitat types occur within the surveyed building envelopes, driveways, and roads, including: coast live oak woodland, coastal scrub, coast live oak savanna, Monterey pine forest (including Monterey pine savanna), redwood forest, coyote brush scrub, blue blossom scrub, chamise-manzanita chaparral, coast live oak-chamise-manzanita, coastal prairie (coastal terrace prairie), ruderal grassland, wetland and disturbed. All are upland habitat types, and all but one (blue blossom scrub) conforms to a habitat type previously recognized for the Preserve. In addition, wetland and riparian habitats occur within some residential lots, with the exception of Lot 9, outside the

building envelopes and driveways, although the planned Wild Boar Run bridge over Potrero Creek passes over a heavily disturbed section of riparian habitat associated with the creek. All of these habitat types are described in the following paragraphs in terms of their distribution among the proposed building envelopes, driveways, and roadway alignments. The habitat types present within each building envelope are summarized in **Table 11-1** following the narrative descriptions. The sensitive habitats are shown in **Figure 11-1**.

Brief descriptions of each habitat type, including general discussions of their occurrence within the building envelopes, are presented below. Detailed descriptions of each habitat type are found in the biological resources reports in Technical Appendix of this SEIR.

**Coast live oak woodland.** Coast live oak woodland is the most widespread habitat type in the surveyed areas and is very widespread throughout the Potrero Area. Coast live oak woodland and coastal scrub form the “matrix” of vegetation in this portion of the Preserve, within which the other habitat types occur as smaller “islands.” In the Potrero Area, coast live oak woodland generally occupies deep, well-drained soil on mesic (moist) sites in a variety of topographic positions. Coast live oak woodland occurs in 26 of the 29 building envelopes, and occupies all or most of 14 envelopes. In addition, it is found as the dominant vegetation type adjacent to the Wild Boar Run.

**Coastal scrub.** This habitat type is also widespread in the vicinity of the Potrero Area Subdivision. Although it sometimes occurs on mesic sites with deep soil, it tends to occupy sites that are drier and more exposed than those occupied by coast live oak woodland, often with thinner, rockier soil. It is most extensive on steep slopes, which are mostly not included in the surveyed building envelopes. Coastal scrub occurs in 14 envelopes, but is often limited in extent. This habitat type is extensive in only three building envelopes (Lots 2, 6, 15) and is found on approximately fifty percent of the Goodrich Trail alignment.

**Coast live oak savanna.** This habitat type is not sharply distinct from coast live oak woodland, but is of more limited extent in the vicinity of the Potrero Area Subdivision. It is characterized by scattered individual trees or small clumps of coast live oak with relatively large openings between them, and with a dense herbaceous cover largely dominated by annual, non-native grasses. The grasses include the same species that dominate the ruderal grassland habitat type (see below). Associated herb species are mostly non-native, and include poison-hemlock, milk thistle, and sheep sorrel. Four proposed building envelopes (Lots 1, 4, 16, and 29) contain well-developed coast live oak savanna. Two additional sites (Lots 3 and 14) contain stands of coast live oak with a nearly closed canopy but a dense understory dominated by annual grasses. These stands are transitional between coast live oak woodland and coast live oak savanna. A limited area of this transitional oak habitat exists adjacent to the lower portions of the Goodrich Trail alignment.

**Monterey pine forest (including Monterey pine savanna).** The northern portion of the Santa Lucia Preserve lies within one of the three limited areas along the California coast in which Monterey pine is native. The Santa Lucia Preserve is at the southeastern edge of the distribution

of native Monterey pine, and Monterey pine forest habitats on the Preserve are not as extensive as those on the Monterey Peninsula proper. Eight building envelopes contain one or more individual Monterey pines, but only one envelope (Lot 16) contains a Monterey pine stand extensive enough to be mapped as Monterey pine forest (see **Figure 11-1**). This habitat type is somewhat atypical in this envelope and would be more accurately described as Monterey pine savanna.

Figure 11-1

Backside of 11-1

**Redwood forest.** Redwood forest is fairly widespread in the northwestern portion of the Santa Lucia Preserve. Within the Potrero Area, redwood forest is of restricted and localized distribution on the most favorable ecological sites, generally mesic, sheltered north- and east-facing slopes. Redwood forest extensive enough to be mapped at the macro scale does not occur in any of the building envelopes, but the envelope for Lot 9 contains two small stands of redwood that may be considered as small, highly localized stands of redwood forest (see **Figure 11-1**). Redwood is the only tree species in these two stands, where it occurs as a mixture of mature and sapling-sized trees with essentially 100 percent canopy cover. Few shrubs or herbs are associated with these redwood stands.

**Coyote brush scrub.** Coyote brush scrub may be considered as a phase of coastal scrub, but was recognized as a separate habitat type in the Santa Lucia Preserve habitat classification scheme. It generally occurs on sites that are more mesic than is typical for coastal scrub, and may, in some cases, be a successional type in a sequence from grassland to forest or woodland. It is typically a dense, often impenetrable scrub overwhelmingly dominated by coyote brush. Among the surveyed envelopes, coyote brush scrub is extensive only in the building envelope for Lot 29. Small, localized stands of coyote brush scrub occur in the envelopes for Lots 4 and 10. Much of the envelope for Lot 16 is occupied by a habitat type considered to be transitional between ruderal grassland (see below) and coyote brush scrub.

**Blue blossom scrub.** Blue blossom scrub is a distinctive and unusual habitat type that is not recognized in the Preserve-wide habitat classification scheme. It could be regarded as an extreme phase of coastal scrub, but it is so atypical that it is best recognized as a separate habitat type. Among the building sites, it is found only within the building envelope for Lot 12. It is a dense, impenetrable scrub overwhelmingly dominated by tall shrubs of blue blossom.

**Chamise-manzanita chaparral.** This habitat type is very widespread in mountainous regions of California, and is of scattered, localized occurrence on the Santa Lucia Preserve. It generally occupies relatively dry, exposed sites, often upper slopes of ridges, and typically occurs in areas of shallow, rocky soil, although locally it may occupy sandy soils. It is more widespread in the interior portions of the Preserve than close to the coast. In the Potrero Area, it is an uncommon and highly localized habitat type. It occurs only in the building envelope for Lot 9, where it occupies a portion of the summit and upper slopes of a ridge in thin, rocky soil.

**Coast live oak-chamise-manzanita.** This habitat type is transitional between chamise-manzanita chaparral and coast live oak woodland, but is recognized as a distinct habitat type in the Santa Lucia Preserve habitat type scheme. It may be successional in nature, with coast live oak woodland gradually replacing chaparral. This habitat type is uncommon on the Preserve and occurs only in small patches, the largest being 26 acres. Within the building envelope for Lot 9, along the top of the slope, numerous young coast live oaks are locally associated with manzanita and chamise. This habitat type does not occur elsewhere in the building envelopes.

**Coastal prairie (coastal terrace prairie).** Grassland areas of various sizes occur in the northern portion of the Santa Lucia Preserve (within the zone of coastal summer fog), including the

portion of the Potrero Area. Grasslands are not as extensive in this portion of the Preserve as they are in the northwest corner of the Preserve, closer to the coast. Relatively extensive grasslands occur in the vicinity of the building envelope for Lots 1-2, 11, 18-21 (mostly outside the envelopes), and Lot 28. The remaining areas of grassland in the vicinity of the Potrero Area Subdivision occur as small inclusions within coast live oak woodland and coastal scrub vegetation.

**Ruderal grassland.** Most of the grassland in the vicinity of the Potrero Area Subdivision represents the ruderal grassland habitat type, dominated by non-native, mostly annual grasses. Within two building envelopes, on Lots 16 and 27, ruderal grassland occurs with a substantial component of shrubs, primarily coyote brush on Lot 16 and coyote brush and poison-oak on Lot 27. These habitats are transitional between ruderal grassland and coyote brush scrub (Lot 16) or coastal scrub (Lot 27), and are probably undergoing succession from grassland to scrub. Along the upper portion of Goodrich Trail, ruderal grassland is the dominant vegetation type.

**Disturbed.** This is an artificial habitat type associated with recent heavy human disturbances, such as grading, that have removed the pre-existing vegetation and more or less disrupted the soil surface. Disturbed sites may be largely unvegetated, or they may support a variety of weedy species. Although some disturbance was evident in many of the building envelopes, areas characterized as belonging to this habitat type occurred only on Lots 12, 13, and 27, where sizable areas had recently been cleared. Ruderal grassland on a few sites (e.g. Lots 1, 2, and 15) may have developed following disturbance, and could also be classified as disturbed. The existing ranch roads, and the alignments for Wild Boar Run and Goodrich Trail are also classified as disturbed habitat.

### **Wetland and Riparian Habitats**

The Potrero Area also includes wetland and riparian habitats. With the exception of Lot 9, these habitats are not located within the building envelopes or driveways proposed, although some of these habitat features are located nearby and could be subject to indirect impacts from the project. Less than five hundredths or 0.05 acres of wetland exists in the southern corner of Lot 9. In addition, the Wild Boar Run bridge over Potrero Creek passes over a heavily disturbed portion of the riparian habitat associated with the creek. These wetland and riparian habitats are described below.

**Wetlands.** Only four wetland sites equaling less than 1.5 acres were identified and mapped in the Potrero Area Subdivision during 1991-1993. An additional small wetland catchment was found and mapped during the more recent surveys in 2003, for a total of five wetland areas in the Potrero Area Subdivision. Of those five, two are ponds, two are catchments, and one is a spring. Four of the five wetlands documented during these surveys were identified during the previous surveys and their extent and condition were found to be consistent as previously mapped and classified. The fifth wetland was not previously mapped within the Potrero Area Subdivision, but is consistent with the description of other springs mapped at the time. These five wetlands are

most closely associated with homeland sites 5, 25, 19, 9, and 1 and will be referred to as pond 01, pond 05, catchment 01, catchment 02, and spring 01 respectively.

Ponds. These are the most artificial of the wetland communities, and include habitats that are largely anthropogenic (human-made) in origin and formed by impoundment or excavation. Two ponds are located within subdivision lots, including Pond 01 (on Lot 5) and Pond 05 (on Lot 25) (see **Figure 11-1**). Pond 01 is approximately 0.20 of an acre with a large mat of cattail floating on deep water. Perennial rushes dominate a small fringe, with other species including submerged aquatics such as manna grass, hornwort, and white buttercup, and emergents including narrow-leaved cattail, common rush, bulrush, and spiked rush. As there is no watercourse in or out, it is assumed to be spring fed. Pond 05 is a flooded stream channel, which was created by the existing dam, the top of which serves as a road crossing (Chamisal Pass) and is culverted. This pond is approximately 0.50 acre and supports perennial rushes on a small fringe, and includes an associated emergent plant community as described above.

Catchment. These features are largely flats or shelves that catch and hold water at the surface until such time that it evaporates, percolates through the soil, or runs off the surface. Most catchment sites have been used heavily by livestock in the past resulting in some soil modification including mixing and compression of the upper, organic and mineral layers. There are two catchments within the subdivision area, located on the border between Lots 19 and 20 (see **Figure 11-1**) (Catchment 01) and the southern corner of Lot 9 (Catchment 02). Catchment 01 is approximately 0.1 acre and supports plant species such as rat-tailed fescue, soft brome, perennial ryegrass, annual blue grass, Mexican rush and spreading rush. Catchment 02 is approximately 0.05 acre and supports the vegetative community described above for Catchment 01. As designed this catchment is likely to be impacted by fill.

Springs. Springs occur irregularly along both upper and lower slopes scattered throughout the ranch. Although not all springs are perennial, several maintained flow throughout the drought (1986-1991). Springs may maintain a simple plant cover consisting of a few stems of Iris-leaved rush and spikerush to a highly variable assemblage including course perennials, such as Nettles (*Urtica dioica*), water hemlock (*Cicuta* spp.), perennial ryegrass, curly dock (*Rumex crispus*), and scattered willows (*Salix* sp). Spring 01 (lot 1) is a linear seasonal feature parallel with Rancho San Carlos Road. It begins at the location of a historic well. This spring is approximately 0.40 acre and supports rushes, and includes the associated plant community as described above for spring. This spring is located approximately 300 feet from the homeland of lot 1. The planned activity does not propose to fill any portion of this wetland.

**Riparian Habitat.** Monterey County defines Riparian Corridors as: “*The zone of water-associated vegetation occurring in proximity to a river, stream or other water course.*” Although a number of riparian habitat types exist in the Santa Lucia Preserve, only two types were identified as being potentially subject to impacts by the proposed Potrero Area Subdivision project. These are described below and shown on **Figure 11-1**.

Arroyo Willow-White Alder Mixed/California Dogwood. This riparian association occurs in channels having a variety of hydrologic regimes such as tributaries, creeks, and isolated patches associated with seeps. This habitat includes arroyo willow with some scattered white alder, sycamore, and California dogwood. In disturbed areas associated with road crossings, non-native invasive species, such as ripgut, rat-tail fescue, and barnyard foxtail can occur. This habitat type is associated with the main stem of the Potrero Creek adjacent to Potrero Road, where the riparian corridor is approximately 50 feet wide. The planned bridge for Wild Boar Run spanning the lower portion of Potrero Creek will pass through this habitat type.

California Bay-Coast Live Oak Mixed. In this riparian association, the overstory lacks a layered tree canopy and species diversity. The steep channel walls are dominated by native tree species such as coast live oak and California bay. Closer to the channel bottom, dominant species include gooseberry, poison oak, common snowberry, and ocean spray. This habitat type is associated with an unnamed tributary of Potrero Creek adjacent to Pond 05. The riparian corridor is approximately 100 feet wide in this area, and approximately 250 linear feet of the corridor is adjacent to the building envelope for Lot 25. At its closest point, the corridor is approximately 200 feet from the building envelope for Lot 25.

**TABLE 11-1  
HABITAT TYPES IN THE POTRERO AREA SUBDIVISION  
BUILDING ENVELOPES, DRIVEWAYS, AND ROAD ALIGNMENTS**

Envelope Number	Habitat Types in the Envelope
<b>POTRERO TRAIL</b>	
Wild Boar Run	Coast live oak woodlands, riparian, ruderal grassland, coastal scrub, and disturbed area.
1	Coast live oak savanna, ruderal grassland, smaller amount of coastal scrub. Driveway: Coastal scrub (poison-oak and French broom dominated).
2	Ruderal grassland, coastal scrub (poison-oak dominated). Driveway: Coastal scrub (poison-oak dominated).
3	Mature coast live oak savanna, coast live oak woodland, coastal scrub Driveway: Coastal live oak woodland nearest road, and coast live oak woodland coastal scrub transition with poison-oak dominated understory.
4	Mature coast live oak savanna with a small amount of coyote brush scrub Driveway: Coastal scrub with poison-oak dominated understory nearest road, longest section through coast live oak savanna.

<b>Envelope Number</b>	<b>Habitat Types in the Envelope</b>
5	Coast live oak woodland, ruderal grassland (Aquatic and wetland adjacent—greater than 300 ft) Driveway: Ruderal grassland
6	Coastal scrub with a smaller amount of coast live oak woodland Driveway: Dense French broom and poison-hemlock
7	Ruderal grassland with coast live oak woodland on slopes. Driveway: Ruderal grassland and coast live oak woodland
8	Dense coast live oak woodland Driveway: Coast live oak woodland
<b>RANCHO SAN CARLOS ROAD</b>	
9	Chamise-manzanita chaparral, coast live oak-chamise-manzanita, coastal scrub, smaller amounts of ruderal grassland and wetland, coast live oak woodland and coastal prairie, two small redwood groves (redwood forest). Driveway: Chamise-manzanita chaparral, coast live oak-chamise-manzanita, coastal scrub, smaller amounts of ruderal grassland.
10	Coast live oak woodland with smaller amounts of ruderal grassland, coyote brush scrub. Driveway: Ruderal grassland and long stretch of dense coast live oak woodland.
11	Ruderal grassland, with smaller amounts of coastal scrub and coastal prairie. Driveway: Ruderal grassland, coastal scrub, coast live oak woodland along existing road.
<b>GOODRICH TRAIL</b>	
Goodrich Trail	Coast live oak woodland, ruderal grassland, coastal scrub, and disturbed area.
12	Coast live oak woodlands, coastal scrub; smaller amounts of blue blossom scrub and disturbed area. Driveway: Coastal scrub; smaller amounts of blue blossom scrub
13	Coast live oak woodland-disturbed; coast live oak woodland-French broom-poison-oak, and disturbed area. Driveway: Coast live oak woodland-disturbed.
14	Transitional between coast live oak woodland and coast live oak savanna, ruderal grassland. Driveway: Ruderal grassland
15	Ruderal grassland and coastal scrub with a smaller amount of coast live oak woodland near corner by driveway. Driveway: coastal scrub with a smaller amount of coast live oak woodland.
16	Monterey pine savanna-coastal terrace prairie, coast live oak savanna, transitional ruderal grassland-coyote brush scrub. Driveway: Transitional ruderal grassland-coyote brush scrub along existing road.
17	Coast live oak woodland with smaller amount of coastal scrub. Driveway: Coast live oak woodland with smaller amount of coastal scrub and ruderal grassland.

<b>Envelope Number</b>	<b>Habitat Types in the Envelope</b>
18	Coast live oak woodland, coast live oak woodland-French broom, with smaller amount of ruderal grassland. Driveway: Coast live oak woodland
19	Coast live oak woodland, ruderal grassland, with smaller amount of coastal scrub. (Seasonal wetland adjacent-greater than 100 feet) Driveway: Disturbed ruderal grassland
20	Coast live oak woodland with a few Monterey pines. (Seasonal wetland adjacent-greater than 100 ft) Driveway: Coast live oak woodland
21	Coast live oak woodland. (Seasonal wetland adjacent-greater than 100 feet) Driveway: Coast live oak woodland.
<b>CHAMISAL PASS</b>	
22	Coast live oak woodland. Driveway: Coast live oak woodland.
23	Coast live oak woodland. Driveway: Dense coast live oak woodland.
24	Coast live oak woodland. Driveway: long road through dense coast live oak woodland and two small patches of coastal scrub.
25	Coast live oak woodland. (Aquatic, and wetland adjacent-greater than 400 ft and riparian-greater than 200 ft) Driveway: dense coast live oak woodland.
26	Coast live oak woodland - dense French broom understory in west section of plot. Driveway: Coast live oak woodland and possibly coastal scrub.
<b>HIGH MESA TRAIL</b>	
27	Coastal scrub, ruderal grassland and transitional coastal scrub-ruderal grassland. Driveway: Coastal scrub.
28	Coastal prairie, coast live oak woodland, small amount of coastal scrub and ruderal grassland. Driveway: Coastal scrub.
29	Coast live oak savanna and coyote brush scrub. Driveway: Coast live oak savanna and coyote brush scrub.

Source: Denise Duffy & Associates

### **Sensitive Habitats**

Sensitive habitats are defined by local, state, or federal agencies with resource responsibility within the project region, or by educational museums, biological societies, or special interest groups with specific knowledge of biological resources within the project study area. Sensitive habitats include riparian corridors, wetlands, habitats for legally protected species and California Department of Fish and Game (CDFG) Species of Special Concern, areas of high biological

diversity, areas providing important wildlife habitat, and unusual or regionally restricted habitat types. Habitat types considered sensitive include those listed on the California Natural Diversity Data Base's (CNDDDB) working list of "high priority" habitats for inventory (i.e., those habitats that are rare or endangered within the borders of California).

Three of the habitats occurring within surveyed building envelopes, driveways, and roads are recognized as sensitive habitats, including Monterey pine forest, coastal prairie (coastal terrace prairie) and wetland. All three are recognized as "high priority" habitats by the CNDDDB. Monterey pine forest occurs naturally in only three small areas along the California coast, including the Monterey Peninsula. The restricted distribution of this habitat type appears to be associated with high levels of summer fog. As noted in the Special-Status Plant Species section below, ongoing development and pitch canker are threats to Monterey pine and, therefore, to this habitat type. Monterey pine forest is of very restricted distribution on the Santa Lucia Preserve, with only 38 acres total, mostly in the northwestern portion of the Preserve. Within the surveyed envelopes, a stand of Monterey pine recognized as Monterey pine forest occurs in the building envelope for Lot 16. The stand in Lot 16 could be better characterized as Monterey pine savanna, with mature trees widely spaced, but with all ages of Monterey pine present and the species apparently increasing its density and dominance in the stand. Monterey pine forest stands are located adjacent to the building envelopes for Lots 19 and 20, with a few trees within the envelope boundaries.

Coastal prairie (also known as coastal terrace prairie) is a habitat type that is widely distributed in the coastal regions of northern and central California, but has become greatly reduced in area due to overgrazing, alteration in fire regimes, invasion of weedy non-native species, cultivation, and urban development. Approximately 535 acres of coastal prairie occur in the northern portion of the Santa Lucia Preserve within the zone of summer fog. The most extensive and, apparently the most diverse area of coastal prairie in the envelopes surveyed is in (and adjacent to) the building envelope for Lot 28. The building envelopes for Lots 9, 11, and 16 also have well-developed stands of coastal prairie.

Less than five hundredths or 0.05 acre of wetland exists in the southern corner of lot 9. Please see the Technical Appendices for additional detail on this resource.

### **Special Status Plant Species**

Special-status plant species include species listed as Rare, Threatened, or Endangered by the U.S. Fish and Wildlife Service (USFWS) or by the State of California (California Department of Fish and Game (CDFG)). Species formally proposed for listing and federal Candidate species are also special-status species. Special-status species also include species listed on List 1A (Plants Presumed Extinct in California), List 1B (Plants Rare, Threatened, or Endangered in California and Elsewhere), or List 2 (Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere) of the California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Vascular Plants of California*. All species in the above categories fall under state regulatory authority, and may also fall under federal regulatory authority. Also considered

special-status species are species included on List 3 (Plants About Which We Need More Information -- A Review List) or List 4 (Plants of Limited Distribution -- A Watch List) of the CNPS *Inventory*. These species are generally considered to be of lower sensitivity, and generally do not fall under specific state or federal regulatory authority, although they may be protected under CEQA.

**Table 11-2** lists and describes the special status plant species with the potential to occur in the project vicinity. Two special-status plant species, Monterey pine and Mt. Diablo cottonweed, were documented in the building envelopes, driveways and roads (see **Table 11-4**). Monterey pine is listed on List 1B of the CNPS *Inventory*, and is protected under the California Environmental Quality Act (CEQA) (CEQA Guidelines, Section 15380(d)). It has no federal status. As a native tree, Monterey pine is restricted to three limited areas on the central California coast: the vicinity of Point Año Nuevo in San Mateo and Santa Cruz counties; the Monterey Peninsula; and the vicinity of Cambria in San Luis Obispo. There are genetically distinct populations on two islands off Baja California. Populations of Monterey pine on the Santa Lucia Preserve are near the southeastern edge of the Monterey Peninsula area of occurrence. Loss of trees and habitat to development is an ongoing threat to native Monterey pine. In recent years, pitch canker, a fungal disease introduced from the southeastern United States, has also become a serious threat to this species.

Monterey pine occurs in the building envelopes for Lots 9, 10, 11, 16, 17, 18, 19, and 20 and adjacent to Goodrich Trail (see **Figure 11-1**). Single mature trees occur in envelopes 9, 10, and 17, and a single submature tree occurs in envelope 11. Small numbers of trees, ranging in size from seedlings or saplings to mature trees, occur in envelopes 18, 19, and 20 and adjacent to Goodrich Trail. In envelopes 19 and 20, these represent the edges of larger stands that continue outside the envelope. In envelope 16, sizable stands of Monterey pine occur, with good reproduction and all age classes present. None of the Monterey pine trees seen within or in the vicinity of the building envelopes displayed any of the branch tip dieback characteristics of pitch canker, indicating that the trees in this area may be free of the disease.

Mt. Diablo cottonweed is listed on List 4 of the CNPS *Inventory*. This species is an annual herb that occurs in broadleaf upland forests, cismontane woodland, and valley and foothill grassland. Approximately 3000 individuals of this species were identified in the building envelope for Lot 28 during the June 2002 surveys. The CNPS occurrence records indicate the species may be existing in such small numbers throughout the southern portion of its range (the occurrence identified in Lot 28 is the most southernmost recorded) that it may become endangered if its environment worsens. Given this situation, this species should be provided management consideration under CEQA Guidelines, Section 15380(d).

**TABLE 11-2**  
**STATUS, DISTRIBUTION AND HABITAT OF SPECIAL-STATUS PLANTS**  
**WITH POTENTIAL TO OCCUR IN THE VICINITY OF THE SANTA LUCIA PRESERVE**

<b>Species Common Name<sup>1</sup></b>	<b>USFWS Listing<sup>2</sup></b>	<b>State Status<sup>3</sup></b>	<b>CNPS Status<sup>4</sup></b>	<b>Habitat Type<sup>5</sup></b>	<b>Distribution by County<sup>6</sup></b>
<i>Allium hickmanii</i> Hickman's onion	SOC	None	2-2-3 List 1B	Grassy places in closed-cone coniferous forest, maritime chaparral, coastal prairie, coastal scrub, valley and foothill grassland	MNT, SLO
<i>Arctostaphylos edmundsii</i> Little Sur manzanita	SOC	None	3-2-3 List 1B	Sandy soil in maritime chaparral, coastal scrub	MNT
<i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i> Hooker's manzanita	None	None	2-2-3 List 1B	Sandy soil in maritime chaparral, coastal scrub, closed-cone coniferous forest, cismontane woodland	MNT, SCR
<i>Arctostaphylos montereyensis</i> Monterey manzanita	SOC	None	3-2-3 List 1B	Sandy soil in maritime chaparral, coastal scrub, cismontane woodland	MNT
<i>Arctostaphylos pajaroensis</i> Pajaro manzanita	SOC	None	2-3-3 List 1B	Sandy soil in maritime chaparral	MNT, SCR*
<i>Arctostaphylos pumila</i> Sandmat manzanita	SOC	None	3-2-3 List 1B	Sandy soil in maritime chaparral, coastal dunes, coastal scrub, closed-cone coniferous forest, cismontane woodland	MNT
<i>Calandrinia breweri</i> Brewer's calandrinia	None	None	1-2-2 List 4	Sandy, loamy, or gravelly soil in chaparral, coastal scrub, generally on burns or disturbed places	CCA, LAX, MEN, MNT, MPA, MRN, NAP, SBA, SBD, SCL, SCR, SCZ, SDG, SLO, SMT, SON, VEN, Baja CA
<i>Ceanothus cuneatus</i> var. <i>rigidus</i> Monterey ceanothus	None	None	1-2-3 List 4	Sandy soil in maritime chaparral, coastal scrub, closed-cone coniferous forest	MNT, SCR, SLO

<b>Species Common Name<sup>1</sup></b>	<b>USFWS Listing<sup>2</sup></b>	<b>State Status<sup>3</sup></b>	<b>CNPS Status<sup>4</sup></b>	<b>Habitat Type<sup>5</sup></b>	<b>Distribution by County<sup>6</sup></b>
<i>Chorizanthe douglasii</i> Douglas's spineflower	None	None	1-1-3 List 4	Sandy or gravelly soil, chaparral, cismontane woodland, lower montane coniferous forest	MNT, SBT, SLO
<i>Chorizanthe robusta</i> var. <i>robusta</i> Robust spineflower	Endangered	None	3-3-3 List 1B	Sandy or gravelly soils, coastal dunes, coastal scrub, cismontane woodland (openings)	ALA*, MNT, SCL*, SCR, SMT*
<i>Clarkia lewisii</i> Lewis's clarkia	None	None	1-1-3 List 4	Chaparral, cismontane woodland, coastal scrub	MNT, SBT
<i>Cordylanthus rigidus</i> ssp. <i>littoralis</i> Seaside bird's-beak	SOC	Endangere d	3-3-3 List 1B	Sandy soil in closed-cone coniferous forest, cismontane woodland, coastal scrub, maritime chaparral, coastal dunes, often on disturbed sites	MNT, SBA
<i>Delphinium hutchinsoniae</i> Hutchinson's larkspur	SOC	None	3-2-3 List 1B	Broadleafed upland forest, chaparral, coastal scrub, coastal prairie	MNT
<i>Eriastrum virgatum</i> Virgate eriastrum	None	None	1-1-3 List 4	Sandy soil, coastal dunes, chaparral, coastal scrub and coastal bluff scrub	MNT, SBT
<i>Ericameria fasciculata</i> Eastwood's goldenbush	SOC	None	3-3-3 List 1B	Sandy soil, coastal dunes and openings in closed-cone coniferous forest, chaparral, and coastal scrub	MNT
<i>Eriogonum nortonii</i> Pinnacles buckwheat	None	None	2-1-3 List 1B	Sandy or rocky soil in chaparral, valley and foothill grassland, often on recent burns	MNT, SBT
<i>Erysimum ammophilum</i> Coast wallflower	SOC	None	2-2-3 List 1B	Sandy soil, coastal dunes and openings in coastal scrub	MNT, SCR, SMT, SRO
<i>Fritillaria liliacea</i> Fragrant fritillary	SOC	None	1-2-3 List 1B	Coastal prairie, coastal scrub, valley and foothill grassland in heavy clay soil	ALA, CCA, MNT, MRN, SBT, SCL, SFO, SMT, SOL, SON
<i>Fritillaria viridea</i> San Benito fritillary	SOC	None	1-2-3 List 4	Chaparral, generally serpentine soil	MNT, SBT, SLO

Species Common Name <sup>1</sup>	USFWS Listing <sup>2</sup>	State Status <sup>3</sup>	CNPS Status <sup>4</sup>	Habitat Type <sup>5</sup>	Distribution by County <sup>6</sup>
<i>Galium californicum</i> ssp. <i>lucianense</i> Cone Peak bedstraw	SOC	None	3-1-3 List 1B	Broadleafed upland forest, cismontane woodland, lower montane coniferous forest	MNT
<i>Gilia tenuiflora</i> ssp. <i>arenaria</i> Sand gilia	Endangered	Threatened	3-2-3 List 1B	Sandy soil, coastal dunes, chaparral, cismontane woodland, coastal scrub	MNT
<i>Grindelia hirsutula</i> var. <i>maritima</i> San Francisco gumplant	SOC	None	2-2-3 List 1B	Sandy or serpentinite soil, coastal scrub, coastal bluff scrub, valley and foothill grassland	MNT, MRN, SCR, SFO, SLO, SMT
<i>Hemizonia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	SOC	None	3-3-3 List 1B	Alkaline soil, valley and foothill grassland	ALA, CCA, MNT, SCL(*?), SCR*, SLO, SOL*
<i>Horkelia cuneata</i> ssp. <i>sericea</i> Kellogg's horkelia	SOC	None	3-3-3 List 1B	Sandy or gravelly soil, coastal prairie, openings in closed- cone coniferous forest, maritime chaparral, and coastal scrub	ALA*, MRN*, MNT, SBA, SCR, SFO*, SLO, SMT
<i>Lasthenia leptalea</i> Salinas Valley goldfields	None	None	1-1-3 List 4	Dry open places in cismontane woodland, valley and foothill grassland	KRN, MNT, SLO
<i>Lomatium parvifolium</i> Small-leaved lomatium	None	None	1-2-3 List 4	Closed-cone coniferous forest, chaparral, coastal scrub	MNT, SCR, SLO
<i>Malacothamnus niveus</i> San Luis Obispo County bush mallow	None	None	1-1-3 List 4	Chaparral	MNT, SBA, SLO
<i>Malacothamnus palmeri</i> var. <i>involucratus</i> Carmel Valley bush mallow	SOC	None	1-2-3 List 1B	Cismontane woodland, chaparral	MNT, SLO
<i>Malacothamnus palmeri</i> var. <i>lucianus</i> Arroyo Seco bush mallow	SOC	None	3-2-3 List 1B	Chaparral, meadows	MNT

Species Common Name <sup>1</sup>	USFWS Listing <sup>2</sup>	State Status <sup>3</sup>	CNPS Status <sup>4</sup>	Habitat Type <sup>5</sup>	Distribution by County <sup>6</sup>
<i>Malacothrix saxatilis</i> var. <i>arachnoidea</i> Carmel Valley cliff- aster	SOC	None	3-2-3 List 1B	Open, rocky banks in chaparral, broadleafed upland forest	MNT, SBA
<i>Micropus amphibolus</i> Mt. Diablo cottonweed	None	None	1-1-3 List 4	Broadleafed upland forest, cismontane woodland, valley and foothill grassland, coastal scrub	ALA, CCA, LAK, MNT, MRN, NAP, SCR, SON
<i>Monardella undulata</i> Curly-leaved monardella	None	None	1-2-3 List 4	Maritime chaparral, coastal dunes, coastal prairie, coastal scrub, ponderosa pine sandhills, in sandy soil	MNT, MRN, SBA, SCR, SFO, SLO, SMT, SON
<i>Mucronea californica</i> California spineflower	None	None	1-2-3 List 4	Sandy soil in chaparral, cismontane woodland, valley and foothill grassland, coastal scrub, coastal dunes	KRN, LAX, MNT, ORA, RIV, SBA, SBD, SDG, SLO, VEN
<i>Pedicularis dudleyi</i> Dudley's lousewort	SOC	Rare	3-2-3 List 1B	Maritime chaparral, north coast coniferous forest, valley and foothill grassland	MNT, SCR*, SLO, SMT
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i> Gairdner's yampah	SOC	None	1-2-3 List 4	Mesic sites in coastal prairie, broadleafed upland forest, chaparral, valley and foothill grassland,	CCA, KRN, LAX*, MEN, MNT, MRN, NAP, ORA*, SBT, SCL, SCR, SDG*, SLO, SMT(*?), SOL, SON
<i>Pinus radiata</i> Monterey pine	SOC	None	3-2-2 List 1B	Closed-cone coniferous forest, broadleafed upland forest	MNT, SCR, SLO, SMT, Baja CA, Isla Guadalupe (Baja CA)
<i>Piperia michaelii</i> Michael's rein orchid	None	None	1-2-3 List 4	Coastal scrub, coastal bluff scrub, broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, lower montane coniferous forest	ALA, AMA, BUT, CCA, FRE, HUM, LAX*, MNT, MRN, SBA, SBT, SCL, SCR, SCZ, SFO, SLO, SMT, STA, TUL, TUO, VEN (*?), YUB

Species Common Name <sup>1</sup>	USFWS Listing <sup>2</sup>	State Status <sup>3</sup>	CNPS Status <sup>4</sup>	Habitat Type <sup>5</sup>	Distribution by County <sup>6</sup>
<i>Piperia yadonii</i> Yadon's rein orchid	Endangered	None	3-3-3 List 1B	Sandy soil , coastal scrub, coastal bluff scrub, closed- cone coniferous forest, chaparral	MNT
<i>Plagiobothrys uncinatus</i> Hooked popcorn-flower	SOC	None	2-2-3 List 1B	Sandy soil in chaparral, cismontane woodland, valley and foothill grassland	MNT, SBT, SCL, SLO
<i>Psilocarphus tenellus</i> var. <i>globiferus</i> round woolly-marbles	None	None	1-2-1 List 4	Vernal pools, playas, vernal moist places in, valley and foothill grassland, coastal prairie, coastal dunes	ALA, BUT, CAL, CCA, FRE, KRN, MER, MNT, MRN, RIV, SLO, STA, TEH, TUL, South America
<i>Raillardiopsis muirii</i> Muir's raillardella	None	None	2-1-3 List 1B	Chaparral, lower montane coniferous forest, upper montane coniferous forest	FRE, KRN, MNT, TUL
<i>Sanicula hoffmannii</i> Hoffmann's sanicle	None	None	1-1-3 List 4	Broadleafed upland forest, chaparral, coastal scrub, often serpentinite or clay soil	MNT, SBA, SCR, SCZ, SLO, SMT, SRO
<i>Sanicula maritima</i> Adobe sanicle	SOC	Rare	3-3-3 List 1B	Clay or serpentinite soils, coastal prairie, meadows, valley and foothill grassland, openings in chaparral	ALA*, MNT, SFO*, SLO
<i>Sidalcea malachroides</i> Maple-leaved checkerbloom	None	None	2-2-2 List 1B	Broadleafed upland forest, coastal prairie, coastal scrub, north coast coniferous forest, often in disturbed areas.	DNT, HUM, MEN, MNT, SCL, SCR, SON, Oregon
<i>Systemotheca vortriedei</i> Vortriede's spineflower	None	None	1-1-3 List 4	Sandy or serpentinite soil, cismontane woodland	MNT, SLO
<i>Stebbinsoseris decipiens</i> Santa Cruz microseris	SOC	None	2-2-3 List 1B	Open areas in broadleafed upland forest, closed-cone coniferous forest, chaparral, coastal prairie, coastal scrub	MNT, MRN, SCR
<i>Trifolium buckwestiorum</i> Santa Cruz clover	None	None	3-3-3 List 1B	Coastal prairie, broadleafed upland forest, cismontane woodland	MNT, SCL, SCR, SMT, SON

Species Common Name <sup>1</sup>	USFWS Listing <sup>2</sup>	State Status <sup>3</sup>	CNPS Status <sup>4</sup>	Habitat Type <sup>5</sup>	Distribution by County <sup>6</sup>
<i>Trifolium polyodon</i> Pacific Grove clover	SOC	Rare	3-3-3 List 1B	Moist areas in coastal prairie, meadows, closed-cone coniferous forest, valley and foothill grassland	MNT

Source: Denise Duffy & Associates

<sup>1</sup> Nomenclature follows Hickman (1993) and Skinner and Pavlik (1994).

<sup>2</sup> U.S. Fish and Wildlife Service (1999a, b).

<sup>3</sup> Section 1904, California Fish and Game Code (California Department of Fish and Game 2000a).

<sup>4</sup> Skinner and Pavlik (1994).

Top line: CNPS R-E-D (Rarity-Endangerment-Distribution) code. Rarity: 1=Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time; 2=Occurrence confined to several populations or to one extended population; 3=Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported. Endangerment: 1=Not endangered; 2=Endangered in a portion of its range; 3=Endangered throughout its range. Distribution: 1=More or less widespread outside California; 2=Rare outside California; 3=Endemic to California.

Bottom Line: CNPS List. List 1B: Rare, Threatened, or Endangered in California and elsewhere. List 4: Plants of limited distribution: a watch list.

<sup>5</sup> Howitt and Howell (1964, 1973); Munz and Keck (1973); Hickman (1993); Skinner and Pavlik (1994); Matthews (1997); and unpublished information.

<sup>6</sup> Skinner and Pavlik (1994) and unpublished information; counties abbreviated by a three-letter code (below); occurrence in other areas as indicated.

ALA: Alameda  
AMA: Amador  
BUT: Butte  
CAL: Calaveras  
CCA: Contra Costa  
DNT: Del Norte  
(SBA Co.)  
FRE: Fresno  
HUM: Humboldt  
KRN: Kern  
LAK: Lake  
LAX: Los Angeles  
MEN: Mendocino  
MER: Merced

MNT: Monterey  
MPA: Mariposa  
MRN: Marin  
NAP: Napa  
ORA: Orange  
RIV: Riverside  
  
SBA: Santa Barbara  
SBD: San Bernardino  
SBT: San Benito  
SCL: Santa Clara  
SCR: Santa Cruz  
SCZ: Santa Cruz Island (SBA Co.)  
SDG: San Diego

SFO: San Francisco  
SLO: San Luis Obispo  
SMT: San Mateo  
SOL: Solano  
SON: Sonoma  
SRO: Santa Rosa Island  
  
STA: Stanislaus  
TEH: Tehama  
TUL: Tulare  
TUO: Tuolumne  
YUB: Yuba  
VEN: Ventura

\*Presumed extinct in these counties.

Earlier surveys identified relatively large areas of the coastal prairie and ruderal grassland habitat types, along with open coast live oak savanna, as potential habitat for Gairdner's yampah, a species present elsewhere on the Preserve. Previously a CNPS List 1B species, this species was downgraded to List 4 in the 1994 edition of the CNPS *Inventory*. Although thirteen sites were identified to have potential for occurrence of Gairdner's yampah (Lots 4, 5, 7, 10, 11, 14, 15, 16, 18, 19, 27, 28, and 29) in 1999, subsequent focused surveys conducted by Denise Duffy & Associate's biologist found no Gairdner's yampah in any of the 29 lots, driveways, or roads.

## **Landmark Trees**

As defined in Chapter 16.60.030E of the Monterey County Code, a landmark tree is any native oak tree that measures 24 inches or greater in diameter measured two feet from the ground. In addition, trees that are visually or historically significant or exemplary of their species are also classified as landmark trees. Special emphasis is placed on preserving and protecting landmark trees because of their significant wildlife, scenic and historic values.

Landmark oak trees were recorded in 25 of the 29 building envelopes and adjacent to the existing roads (**Table 11-4**). Landmark-sized Monterey pines were recorded in the building envelopes for Lots 16, 17, and 20. One Monterey pine in Lot 16 is approximately 67 inches in diameter, an exemplary specimen.

## **Wildlife**

### Wildlife Habitats

Fourteen habitat types occur within the building envelopes, driveways and road alignments, among which coast live oak woodland is the predominant habitat type in the proposed lots (see **Table 11-1**). Ruderal grassland, coast live oak savanna, and coastal prairie occur within the coast live oak woodland matrix, generally in flatter terrain, while coastal scrub, coyote brush scrub, chamise-manzanita chaparral, and coast live oak-chamise-manzanita generally occur on the slopes. Small amounts of Monterey pine forest occur mainly within the coast live oak woodland matrix. The amounts of blue blossom scrub and redwood forest types in the proposed lots are so small that they do not significantly add to the habitat types for wildlife.

Wetland habitat is present at several ponds located near the proposed lots (near Lots 5 and 25 and to a lesser degree, Lots 19 and 28), which significantly adds to both the potential for special-status wildlife species to occur in the adjacent non-aquatic habitats and to the habitat value in the proposed lots for non-special-status species. Wildlife is expected to travel through the proposed lots that are adjacent to ponds in order to access water.

Riparian habitat is found in association with Potrero Creek. Riparian habitat is present in the vicinity of the planned Wild Boar Run bridge crossing, while no riparian habitat exists within or adjacent to planned development areas.

Brief descriptions of each wildlife habitat type, including general discussions of its occurrence in the building envelopes, are presented below.

**Landmark trees.** The potentially affected landmark-sized trees primarily consist of coast live oaks and Monterey pines. These mature trees augment the wildlife value of the habitat types present in the proposed lots, and their presence is critical in determining the existing condition of the available coast-live oak woodland and savanna habitats for wildlife use in the proposed lots. The cavities and snags in these trees provide potential nesting sites for bats, Monterey dusky-footed woodrats, raccoons, gray foxes, owls, chickadees, nuthatches and swallows. Common development and timber harvest practices have removed large amounts of mature to senescent trees from forests and woodlands, greatly reducing available habitat for bats.

**Coast live oak woodland.** Oak woodlands are considered critical habitats for the conservation of many bird and mammal species. Mature oak trees bear natural cavities, which are important resources for cavity-nesting birds and small mammals. Also, mature oak forests typically contain snags (dead trees or branches). Snags are valuable resources for woodpeckers, which prefer dead trees and limbs for excavation of roost and nest sites. Subsequently, snags receive high levels of use by secondary cavity-nesting birds (e.g., chickadees and wrens), bats, and other mammals. Snags also support wood-boring insects, which provide food for bark-gleaning insectivorous birds. Great horned owls, western screech owls, and northern pygmy owls may nest in oaks and prey on rodents that are active at night. Representative mammal species that utilize this habitat include broad-footed mole, dusky-footed woodrat, deer mouse, black-tailed deer, western gray squirrel, bobcat, gray fox, striped skunk, Virginia opossum, and many bat species.

Another important feature of this habitat is the abundance of fallen woody debris (e.g., limbs and logs). Woody debris adds structural complexity to the forest habitat and is important as cover, nesting, roosting, and foraging substrate for wildlife. Downed wood also helps moderate arid conditions, creating microclimates suitable for amphibians and reptiles.

As a seasonal food, acorns are important for the survival of many species of wildlife in fall and winter. Birds that are dependent on acorns as a seasonal food include acorn woodpecker, scrub jay, band-tailed pigeon, and California quail.

**Monterey pine forest (including Monterey pine savanna).** With the exception of Lot 16, small patches of Monterey pine forest generally occur within the coast live oak woodland in the vicinity of the Potrero Area Subdivision. The Monterey pines are often landmark trees with woodpecker cavities and exfoliating bark, as well as deep folds in the bark that provide potential roosting habitat for bats. In addition, some diurnal raptors (especially white-tailed kites) are more likely to nest in Monterey pines than in oaks.

**Coast live oak savanna, ruderal grassland, and coastal prairie.** Grasslands provide an important foraging resource for a wide variety of wildlife species. The grasses and forbs produce an abundance of seeds and attract numerous insects, providing food for granivorous and insectivorous wildlife (lizards and skunks). Grasslands are productive habitats for small

mammals, providing abundant food plants and cover. In general, the wildlife value of grasslands is highest adjacent to forested or scrub habitats. This mosaic increases wildlife species richness, because many species utilize grasslands for feeding and trees and shrubs for cover and/or nest sites. Grasslands adjacent to aquatic areas can provide upland habitat for amphibians.

Botta's pocket gopher and California vole burrows were among the most numerous burrow types observed in these habitats. The abundance of small mammals in these grasslands makes them valuable foraging sites for raptors such as hawks and owls, and other predators, including coyote, fox, snakes, gray fox, badger, long-tailed weasel, and bobcat. Other common species expected to occur include black-tailed jackrabbit and California ground squirrel. However, burrows of these species are lacking or few on most sites, presumably due to squirrel control conducted for the safety of grazing cattle, which may trip in these larger holes. Bats forage for insects in these habitats, and black-tailed deer are often seen browsing in the late evening. Feral pigs typically forage on grasses and bulbs in grasslands. Typical reptile species in this habitat are southern alligator lizard, western fence lizard, and gopher snakes. Pacific tree frogs were noted in mammal burrows in grasslands at Lots 4, 5, and 11. Other amphibians such as western toads, California tiger salamanders, and California red-legged frogs may also use these mammal burrows in grasslands, especially in areas that are near water during the non-reproductive season and while traveling between other habitats. Western pond turtles and aquatic garter snakes are also expected to nest in the grassland near ponds or Potrero Creek.

Passerine birds (songbirds) noted in the grasslands habitat include western bluebird, western meadowlark, American robin, black phoebe and several swallows. Raptors that feed on small mammals in grassland habitat that are expected to occur on the site are white-tailed kites, golden eagle, northern harrier, American kestrel, red-tailed hawk and common barn owl. Turkey vultures are commonly seen soaring in search of carrion.

**Coastal scrub, coyote brush scrub, and blue blossom scrub.** Coastal scrub and coyote brush scrub provides cover and plentiful foraging habitat for a large diversity of song birds, rodents, reptiles, falcons, and hawks. Browsers (e.g., deer) rely on scrub habitats for foraging and cover. The dense shrub cover, especially at the edges of the grasslands, provides important structural cover for many species, including bobcat, raccoon, skunk, mountain lion, coyote, California quail, rabbit, and garter snake. Plant species such as blackberry, twinberry, huckleberry, and elderberry provide an important food and water source for many birds and mammals. Scrub habitats also provide cover for deer, which will bed down in the grasses between the shrubs, and provide protective cover and perch sites for mammals and birds which forage in the adjacent grasslands.

Although there are a few parcels with open coastal scrub or coyote brush scrub, especially where the scrub is transitional with the grassland habitats, most of the shrub habitats are tall and densely vegetated. This is likely due to the lack of recent fire or lack of grazing. The coastal scrub and coyote brush scrub habitats have the highest wildlife value when there is a matrix of different scrub densities or a matrix with other habitats (e.g., grasslands).

**Chamise-manzanita chaparral and coast live oak-chamise-manzanita.** Chaparral habitats are generally drier than scrub habitats. Water for herbivorous wildlife is often obtained by foraging on common chaparral plants that bear fruit, such as manzanita or coffeeberry, or by foraging on green leaves. Representative wildlife species include: wrentit, California thrasher, striped racer, woodrat, black-tailed deer, bobcat, coyote, grey fox, raccoon, rabbits, bush mouse, deer mouse, California quail, song sparrow, western rattlesnake, western fence, gopher snake, red-tailed hawk, and ring-necked snake.

**Redwood forest.** Within the Potrero Area Subdivision, the only redwood forest habitat consists of two small groves on Lot 9. The value to wildlife of these groves is considered minor due to their small size. Potential wildlife use of this habitat includes roosting by non-special-status bat species.

**Wetlands and Riparian Habitat.** These habitat types are described above under “Botany,” and with detailed descriptions appearing in Appendix C of the biological report (which is contained in the Technical Appendix of this EIR).

#### Special-Status Wildlife Species

Special-status wildlife species include species listed as Rare, Threatened, or Endangered by the USFWS under the federal Endangered Species Act or listed as Threatened, or Endangered by the State of California under the California Endangered Species Act. Special-status species also refers to species Proposed for listing and Candidate species for either state or federal listing, and species listed by CDFG as “species of special concern.” **Table 11-3** lists the special-status wildlife species with potential to occur in the project area.

The special-status wildlife species presented in **Table 11-3** are the endangered, threatened and sensitive wildlife species that are known to occur or could potentially occur in the Santa Lucia Preserve. Under Section 15380(d) of the CEQA Guidelines, a species not listed by the State of California “shall nevertheless be considered rare or endangered if the species can be shown to meet the criteria” for listing. Thus animal species of special concern are included in the list. **Table 11-4** provides a brief summary of the habitat requirements of each species and the proposed lot numbers with potential habitat for each species. Appendix A of the Biological Report (contained in Technical Appendix of this SEIR) presents a complete discussion of habitat requirements and distribution for the wildlife species in **Table 11-4** that are known or have potential to occur in the Potrero Area.

The following paragraphs contain brief summary discussions of the special-status insect, amphibian, reptile, raptors, songbird, and mammal species listed in **Table 11-4** that have the potential to occur in the Potrero Area Subdivision. Detailed descriptions of these species are included in Appendix A of the biological report, which is contained in Technical Appendix of this SEIR.

**TABLE 11-3**  
**SPECIAL-STATUS WILDLIFE SPECIES WITH POTENTIAL TO OCCUR**  
**IN THE VICINITY OF THE SANTA LUCIA PRESERVE**

<b>Common Name</b> ( <i>Scientific Name</i> )	<b>Status Federal /State</b>	<b>Presence at Ranch</b>	<b>Presence at Potrero Sub.</b>
<b>Invertebrates</b>			
Smith's blue butterfly ( <i>Euphilotes enoptes smithi</i> )	E/--	<b>K</b>	<b>K</b>
<b>Fishes</b>			
Steelhead - Central California Coast ESU ( <i>Oncorhynchus mykiss</i> )	T/--	<b>K</b>	<b>K</b>
<b>Amphibians</b>			
California red-legged frog ( <i>Rana aurora draytonii</i> )	T/SC	<b>K, R</b>	<b>K, R</b>
California tiger salamander ( <i>Ambystoma californiense</i> )	C/SC	<b>K</b>	<b>P</b>
Foothill yellow-legged frog ( <i>Rana boylei</i> )	--/SC	<b>U</b>	<b>U</b>
Coast range newt ( <i>Taricha torosa torosa</i> )	--/SC	<b>P</b>	<b>P</b>
<b>Reptiles</b>			
Western pond turtle ( <i>Clemmys marmorata</i> )	--/SC	<b>K</b>	<b>K</b>
Two-striped garter snake ( <i>Thamnophis hammondi</i> )	--/SC	<b>P</b>	<b>P</b>
California coast horned lizard ( <i>Phrynosoma coronatum frontale</i> )	--/SC	<b>U</b>	<b>U</b>
Legless lizard ( <i>Anniella pulchra</i> )	--/SC	<b>U</b>	<b>U</b>
<b>Birds</b>			
Purple martin ( <i>Progne subis</i> )	--/SC	<b>K</b>	<b>K</b>
Yellow warbler ( <i>Dendroica petechia brewsteri</i> )	--/SC	<b>K</b>	<b>K</b>
Willow flycatcher ( <i>Empidonax traillii</i> )	--/E	<b>K</b>	<b>K</b>
Yellow-breasted Chat ( <i>Icteria virens</i> )	--/SC	<b>K</b>	<b>P</b>
Bank swallow ( <i>Riparia riparia</i> )	--/T	<b>U</b>	<b>U</b>
Vaux's swift ( <i>Chaetura vauxi</i> )	--/SC	<b>K</b>	<b>P</b>
Black swift ( <i>Cypseloides niger</i> )	--/SC	<b>P</b>	<b>P</b>
Least Bell's Vireo ( <i>Vireo bellii pusillus</i> )	E/E	<b>U</b>	<b>U</b>
California horned lark ( <i>Eremphila alpestris actia</i> )	--/SC	<b>K</b>	<b>K</b>
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	--/SC	<b>K</b>	<b>K</b>
Tricolored blackbird ( <i>Agelaius tricolor</i> )	--/SC	<b>K</b>	<b>K</b>
Burrowing owl ( <i>Athene cunicularia</i> )	C/SC	<b>K</b>	<b>U</b>
Northern harrier hawk ( <i>Circus cyaneus</i> )	--/SC	<b>P</b>	<b>P</b>
Sharp-shinned hawk ( <i>Accipiter striatus</i> )	--/SC	<b>K</b>	<b>K</b>
Cooper's hawk ( <i>Accipiter cooperi</i> )	--/SC	<b>K</b>	<b>K</b>
White-tailed kite ( <i>Elanus caeruleus</i> )	--/FP	<b>K</b>	<b>K</b>
Golden eagle ( <i>Aquila chrysaetos</i> )	--/SC	<b>K</b>	<b>K</b>
Bald eagle ( <i>Haliaeetus leucocephalus</i> )	T/E	<b>K</b>	<b>U</b>
Merlin ( <i>Falco columbarius</i> )	--/SC	<b>K</b>	<b>P</b>
Long-eared owl ( <i>Asio otus</i> )	--/SC	<b>K</b>	<b>P</b>
Short-eared owl ( <i>Aiso flammeus</i> )	--/SC	<b>U</b>	<b>U</b>
Spotted owl ( <i>Strix occidentalis</i> )	--/SC	<b>K</b>	<b>K</b>

American peregrine falcon ( <i>Falco peregrinus anatum</i> )	--/E	<b>K</b>	<b>U</b>
California spotted owl ( <i>Strix occidentalis occidentalis</i> )	--/SC	<b>K</b>	<b>K</b>
Prairie falcon ( <i>Falco mexicanus</i> )	--/SC	<b>K</b>	<b>P</b>
<b>Mammals</b>			
Pallid bat ( <i>Antrozous pallidus</i> )	--/SC	<b>K, R</b>	<b>P</b>
Townsend's western big-eared bat ( <i>Plecotus townsendii</i> )	C/SC	<b>P<sup>1</sup></b>	<b>P</b>
Fringed myotis ( <i>Myotis thysanodes</i> )	C/**	<b>K, R</b>	<b>P</b>
Long-legged myotis ( <i>Myotis volans</i> )	--/SC**	<b>K, R</b>	<b>P</b>
Western red bat ( <i>Lasiurus blossevillii</i> )	--/**	<b>P</b>	<b>P</b>
Monterey dusky-footed wood rat ( <i>Neotoma fuscipes luciana</i> )	SC/--	<b>K</b>	<b>K</b>

Source: Denise Duffy & Associates

<sup>1</sup>Believed to occur on ranch based on presence of guano at two locations, but presence not definitely documented.

The wildlife status definition and governing agencies follow:

Federal (USFWS 1999b, c)

E = Endangered: Any species that is in danger of extinction throughout all or a significant portion of its range.

T = Threatened: Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

C = Taxa which are under review, and for which sufficient biological information exists to support a proposal to list as an endangered or threatened species.

M = Avian species and their nests which are protected during their breeding season under the Federal Migratory Bird Treaty Act.

State of California (CDFG 1999, 2000b)

E = Endangered: A native species or subspecies of animal which is in serious danger of becoming extinct throughout all, or a significant portion of its range, due to loss of habitat, change in habitat, over exploitation, predation, competition and/or disease.

T = Threatened: A native species or subspecies that, although no presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.

SC = CDFG Species of Special Concern

FP = Fully Protected under California Fish and Game Code

\*\*Included on 1996 California Department of Fish and Game preliminary list of revised Mammal Species of Special Concern

**Presence on Preserve and the Potrero Subdivision:** These are historic records from the focused species surveys conducted in the greater Santa Lucia Preserve Area in 1991 (BioSystems Analysis 1994) and data collected by the Santa Lucia Conservancy (1993 to 2003):

**K** Known to occur

**R** Reproducing

**P** Potentially occurring (within range of species and appropriate habitat exist on the Preserve / Potrero Subdivision)

**U** Unknown and unlikely

### Special-Status Insects

Smith's blue butterfly requires specific perennial buckwheat species (*Eriogonum parvifolium* or *Eriogonum latifolium*) as host plants for feeding adults and larvae. Previous surveys for these plant species in 1991 identified two populations on Lot 28 as shown in **Figure 11-1**. The building envelope on Lot 28 was designed to avoid these areas. Neither of these obligate host plant species were found in or adjacent to areas scheduled for development during recent field surveys. Thus, it is unlikely that Smith's blue butterfly is likely to occur in any area associated with future development.

### Special-Status Fishes

Steelhead trout is the only special-status fish species known to occur within the project site. Aquatic habitat occurs in Potrero Creek for this federally-threatened species. This species is addressed in detail in Chapter 10. *Fisheries*.

### Special-Status Amphibians and Reptiles

The special-status amphibians and reptiles present within the Potrero Area include the California red-legged frog, California tiger salamander, western pond turtle, two-striped garter snake, and Coast Range newt.

The California red-legged frog (CRLF) is listed as Threatened under the federal Endangered Species Act. CRLF are known to occupy and breed in marshy habitats, springs, ponds (both natural and artificial), and slack water pools of rivers and streams. Populations of CRLF have declined due to: exotic aquatic predators such as bullfrogs; habitat degradation from agricultural and grazing practices; a decrease in water quality from human manipulation of habitats; and from water diversions.

The USFWS determined that the California red-legged frog was a Threatened species (23 May 1996; 61 CFR 25824, 25827), and USFWS prepared a Biological Opinion for the Santa Lucia preserve (including the Potrero Area Subdivision) on September 6, 1996 (re-issued January 8, 1998). This Biological Opinion stated that the project would not be likely to jeopardize the continued existence of the subspecies provided that reasonable and prudent measures, and terms and conditions implementing those measures, to minimize take of the subspecies were implemented.

In 2001, the USFWS designated Critical Habitat for the CRLF, and the portions of the Potrero Area Subdivision proposed for development, driveway and roadway construction are included within Unit 18 of the designated Critical Habitat. The U.S. Army Corps of Engineers is required to consult with the USFWS if an action the Corps intends to authorize (i.e., fill of wetlands under Section 404 of the Clean Water Act) may destroy or adversely modify critical habitat. Although critical habitat for the California red-legged frog was rescinded in November of 2002, it is noteworthy that the Biological Opinion concluded that the project was not likely to destroy or adversely modify what was then defined as California red-legged frog Critical Habitat.

Within the Potrero Area, there are two ponds (Pond 01 and Pond 05) that have consistently provided breeding habitat for CRLF since at least 1994. The nearest building envelopes to these ponds are on Lot 5 (which is more than 300 feet from Pond 01), and on Lot 25 (which envelope is more than 400 feet from Pond 05). The planned Wild Boar Run bridge crossing over Potrero Creek is located more than 300 feet from the portions of the creek that have been identified as potential breeding areas for CRLF.

California tiger salamander, western pond turtle, two-striped garter snake, and Coast Range newt are all special-status species that are highly aquatic and also require non-aquatic upland habitat during some portion of their life history.

Adult Coast Range newts and California tiger salamanders require specific non-aquatic habitat, such as mammal burrows or leaf litter, during the non-breeding season, as well as routes of travel between aquatic sites. Upland areas adjacent to pond sites (building envelopes for Lots 4, 5, and 7) provide these features. In addition, the driveway for Lot 6 is located within a potential dispersal corridor on Lots 6 and 7. Both of the above species are CDFG California species of special concern. However, the California tiger salamander is currently emergency listed by the USFWS as federally Endangered in Santa Barbara and Sonoma Counties and proposed for listing as Threatened statewide. The species state-wide has been listed as ‘Warranted but Precluded’ by the USFWS since 1994, a designation meaning the species should be listed but the agency is precluded from doing so by budget limitations. Given this information, the species is likely to be federally listed at some point in the future and should be provided appropriate consideration during the planning process.

Both western pond turtles and two-striped garter snakes are CDFG California species of special concern. These species require non-aquatic upland habitat for reproduction (nest sites). Western pond turtles are known to occur in the pond near Lot 5, and potential nesting habitat occurs on Lots 1, 2, 4, and 5. Two striped-garter snakes may be present in Ponds 01 and 05, and in Catchment 01, and potential nesting or overwintering habitat may occur on Lots 1, 2, 4, 5, and 7.

The presence of California tiger salamander and Coast Range newt in the two stock ponds within the Potrero Area Subdivision is unknown. However, recent CDFG protocol aquatic surveys of these ponds have not found any individual CTS (2003 data collected by Denise Duffy and Associates, Inc.). Potential non-breeding habitat for both species occurs in the upland areas adjacent to both ponds.

Legless lizards, a state listed species of special concern, are not known to occur in the vicinity of the building envelopes. Lots 1 and 2 are located closest to both Potrero Creek and a small spring, and contain some sand in the soil, which would meet the habitat requirements for this species. The remaining lots contain rocky or dryer soil types that are not suitable for legless lizards.

Suitable habitat does not occur for California coast horned lizard or foothill yellow-legged frog.

### Special-Status Birds

**Table 11-4** provides a summary of the lots with potential nesting habitat for special-status birds. Potential nesting habitat occurs for the following special-status songbirds: purple martin, yellow warbler, willow flycatcher, yellow-breasted chat, Vaux's swift, least Bell's vireo, California horned lark, tricolored blackbird, and loggerhead shrike. Special-status raptors with the potential to occur in lots as nesting species include: burrowing owl, northern harrier, sharp-shinned hawk, Cooper's hawk, white-tailed kite, golden eagle, long-eared owl, spotted owl, and short-eared owl. Lots with foraging habitat were identified for: bald eagle, merlin, prairie falcon, and American peregrine falcon. It is unknown whether these species are utilizing habitat within the planned development areas and roadways, and pre-construction nesting surveys are needed. A pair of great horned owls was noted on three occasions between Lots 7 and 8, and is likely to be nesting in the coast live oak woodland in this area. A great horned owl was also flushed from Lot 28 during the survey. Although not a special-status species, the California Fish and Game Code protects nesting raptors, including owls. No appropriate habitat was identified for the special-status bank swallow and black swift, which are therefore not likely to occur in the lots or other planned improvement areas.

### Special-Status Mammals

Special-status mammals known to occur on the site include five species of bats and the Monterey dusky-footed wood rat. Special-status bat species documented to occur, reproduce, and utilize landmark trees on the Preserve include the pallid bat and long-legged myotis. The mature oaks in the coast-live oak woodland and coast-live oak savanna provide potential habitat for a number of bats (see **Table 11-4**). The majority of the proposed lots contain mature coast live oak woodland including old growth coast-live oak forest with landmark trees. Previous radio tracking of pallid bats at the Preserve confirmed that the pallid bats on the Preserve were extensively utilizing "mature" and "medium" aged coast live-oak woodland and coast live-oak savanna areas.

Lot 5 provides excellent roosting habitat for bats in the many cavities and crevices in the mature coast live oak woodland, and the nearby pond also provides foraging habitat. Ponds and open water other than the streams are limited on the Preserve. These open water sources are valuable resources for foraging and drinking by many bat species.

Monterey dusky-footed woodrats are abundant on the Preserve and in the building envelopes, driveways, and adjacent to roads. Woodrat stick nests or woodrat nests in oak tree cavities were noted in all building envelopes. The woodrat population provides a prey base for many species, especially owls, foxes, and bobcats. However, the presence of woodrat nests in tree cavities may exclude cavity-nesting songbirds (chickadees and nuthatches) and roosting bats from sites occupied by woodrats.

## **IMPACTS AND MITIGATION MEASURES**

### **Approach and Methodology**

The following evaluation of impacts related to biological resources is primarily based on the technical reports listed in the Introduction of this chapter, as well as the Preserve EIR and its technical supporting documents on biological resources.

### **Significance Criteria**

The following thresholds for measuring the biological impacts of the project are based on CEQA Guidelines Appendix G, and the thresholds applied in the Preserve EIR. For purposes of this EIR, impacts are considered significant if they would result in the following:

- a) Have a substantial adverse effect, either directly or through habitat modifications, 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 U.S. Fish and Wildlife Service.
- b) 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 U.S. Fish and Wildlife Service.
- c) 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.
- d) 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.
- e) A substantial introduction of new invasive species of plants or animals into an area or an introduction of a barrier to the normal replenishment of existing species.
- f) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- g) Conflict with the provisions of an adopted Habitat Conservation Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

## Botanical Resources

### Sensitive Habitats

**Impact 11.1:**        **As proposed, development within proposed building envelopes could remove up to 1.1 Acres (13 percent) of Monterey pine habitat. (Potentially Significant)**

The Potrero Area Subdivision contains approximately 8.5 acres of sensitive Monterey pine habitat, of which 12 trees are located within the proposed building envelopes and driveways. As currently configured, the project could result in the removal up to 13 percent of the existing Monterey pine habitat within the Potrero Area. Individual Monterey pine, a CNPS List 1B species, would be removed in four building envelopes on Lots 10, 16, 18, and 20. Loss of individuals is possible in four other envelopes including Lots 9, 11, 17, and 19, and the Goodrich Trail. Depending on home locations, a portion of a stand of sensitive Monterey pine forest habitat, with all ages of Monterey pine present, may be impacted within the building envelope for Lot 16. The removal of Monterey pine habitat and individual Monterey pines represents a **potentially significant** impact. The removal of Monterey pine habitat would also have a secondary adverse effect on non-listed wildlife species which utilize this habitat.

**Mitigation 11.1:**        **Avoid removal of Monterey pines to the greatest extent feasible through design. For the unavoidable removal of Monterey pines (due to vegetation density, topography or other factors), implement the tree replacement and protection measures specified in the *Forest Management Plan for the Potrero Area Subdivision of the Santa Lucia Preserve*. Applicants for individual lot development shall demonstrate to the satisfaction of the Planning and Building Inspection Department the necessity of the tree removal and why removal cannot be avoided. Additionally, GMPAP Condition #24 relating to the monitoring of success of the replacement planting shall be applied to the Potrero Area Subdivision.**

Removal of individual Monterey pines shall be avoided whenever feasible, and undisturbed buffer zones shall be established around the dripline of each tree in order to minimize the potential for root or bark damage due to excavation, soil compaction, or operation of construction vehicles. If removal of Monterey pines is unavoidable, individuals removed shall be replaced at a 3:1 ratio (except Landmark-sized trees which shall be replaced at a 5:1 ratio as discussed under Impact 11.6 below). Replacement trees shall be planted in suitable habitat elsewhere within the native range of Monterey pine on the Preserve under the supervision of a qualified botanist or revegetation specialist, as specified by the *Forest Management Plan*. Planted trees shall be propagated from seed of the trees to be removed or from other nearby native stands. Planting of Monterey pines of unknown origin, or known not to be of local origin, shall be prohibited. Additionally, the Santa Lucia Preserve Design Review Board will work with each individual lot design to assure that tree removal is minimized, and that encroachment within

the driplines of retained Monterey pines is avoided to the extent feasible. It is noted that, Preserve-wide, over 99 percent of the Monterey pine habitat is being preserved in conservation easements.

**Significance After Mitigation: Less than Significant.**

**Impact 11.2: Potential removal of up to 5.3 acres (12 percent) of coastal prairie habitat. (Potentially Significant)**

The Potrero Area contains approximately 44 acres of sensitive coastal prairie habitat. Coastal prairie is a sensitive habitat because of its limited distribution and threats facing the areas of this habitat that remain. As currently configured, the project may remove up to 12 percent of this existing coastal prairie depending on the specific locations selected for each residence. Sensitive coastal prairie habitat could be subject to potential removal in the homelands/building envelopes for Lots 9, 11, 16, and 28. Approximately one acre of a mix of non-native grassland and coastal prairie habitat occurs in homeland of Lot 28, and approximately ¼ acre occurs in each of the homelands of Lots 9, 11, and 16. The coastal prairie in Lot 28 occurs on a relatively gentle slope in a portion of the building envelope that would likely be developed, so removal of this habitat, or a considerable portion of it, may occur in this envelope. The coastal prairie in the homeland of Lot 11 occurs on a steeper slope where complete removal would be unlikely. The coastal prairie in Lot 16 occurs on a mesa within the building envelope and thus, complete removal is likely. The coastal prairie in Lot 9 is also almost completely within the envelope and would likely be removed. The removal of coastal prairie habitat represents a **potentially significant** impact.

**Mitigation 11.2: Minimize removal of coastal prairie habitat to the greatest extent feasible (avoidance through design), and implement the *Cattle Grazing and Livestock Management Plan for the Santa Lucia Preserve* on lots that contain this habitat type. Applicants for individual lot development shall demonstrate to the satisfaction of the Planning and Building Inspection Department the necessity of the habitat removal and why removal cannot be avoided.**

The Santa Lucia Preserve Design Review Board will work with each individual lot design to assure that the removal of coastal prairie habitat is minimized. The implementation of the *Cattle Grazing and Livestock Management Plan for the Santa Lucia Preserve* (Grazing Plan) will minimize the impact of the unavoidable removal of coastal prairie habitat through the reduction of grazing activities throughout the Preserve and through long-term monitoring and management of appropriate areas within the Preserve for the purpose of increasing the quality and quantity of native perennial grasslands. It is noted that, Preserve-wide, over 94 percent of the coastal prairie habitat is being preserved in conservation easements.

Mapped areas of coastal prairie within the Preserve shall be monitored as outlined in Section 2.4 of the Grazing Plan. The goal of this monitoring would be to determine rangeland composition

and total ground cover as a measure of habitat presence and quality. If monitoring indicates coastal prairie habitat is decreasing in area, adaptive management shall be implemented to increase the coverage and diversity of perennial grasslands on the Preserve as outlined in Section 2.2 of the Grazing Plan. Measures may include light grazing, selective brush management, and selective reseeding. In addition, irrigation systems shall be designed and operated to avoid irrigation runoff into sensitive coastal prairie habitats, as specified in Mitigation 11.7 below. The locations of approximately 127 acres within the Preserve have been identified as appropriate and available for enhancement measures as described above. These areas are presented in Section 2.2 of the Grazing Plan and should be utilized if monitoring indicates the necessity.

**Significance After Mitigation: Less than Significant.**

**Impact 11.3: Potential impacts to identified wetland and riparian habitats could occur as a result of the project. (Potentially Significant)**

The wetland and riparian features subject to potential project impacts are discussed below.

Pond 01 (Lot 5). A buffer of 300 feet from the nearest building envelopes has been established for this pond. This conforms with GMPAP Condition #121 which requires a 100-foot separation between new development and wetland features. This buffer will ensure preservation of the structure and function of wetland resources by reducing impact and providing a transition zone from surrounding uplands. However, unless temporary fencing is erected, the buffer zone could be subject to construction-related impacts such as equipment intrusion, ground disturbance, and erosion and sedimentation.

Pond 05 (Lot 25). The proposed design includes a 400-foot buffer zone from the homeland of Lot 25. This buffer will ensure preservation of the structure and function of wetland resources by reducing impact and providing a transition zone from surrounding uplands. However, unless temporary fencing is erected, the buffer zone could be subject to construction-related impacts.

Catchment 01 (Lot 19). This wetland is substantially different than the other two ponds in that it does not hold water long enough into spring to support amphibian breeding. Therefore, the suggested buffer of 300 feet is not prescribed for this catchment. The proposed design includes a 150-foot buffer zone from the building envelopes for Lots 19, 20, and 21. However, unless temporary fencing is erected, the buffer zone could be subject to construction-related impacts.

Catchment 02 (Lot 9)

As with catchment 01, this catchment does not retain water long enough into spring to support amphibian breeding. In addition, there is only a very small area (approximately five feet by six feet) that has any standing water and therefore it is unlikely that wildlife use the area preferentially. Therefore, the suggested buffer of 300 feet is not required under any existing state or federal regulation prescribed for this catchment. This resource is located in the southern boundary of the proposed design of lot 9. Unless this feature is avoided by design and protected

by temporary fencing, the catchment could be subject to permanent and construction-related impacts.

#### Spring 01

The proposed design includes a 300-foot buffer zone from the homeland of site 1. In addition to the buffer, it is recommended that a fenced setback of 50 feet from the edge of the wetland be established prior to construction to reduce the potential for construction-related impacts. Unless temporary fencing is erected, the buffer zone could be subject to construction-related impacts.

Potrero Creek Tributary Adjacent to Lot 25. The proposed design includes a 200-foot buffer zone from the building envelopes for Lot 25. However, unless temporary fencing is erected, the buffer zone could be subject to construction-related impacts.

Wild Boar Run Crossing. The roadway bridge over Potrero Creek will be constructed such that all the bridgework will occur above the bed and bank of the Potrero Creek. The bridge crossing would consist of a 60-foot long prefabricated wood bridge structure with reinforced concrete abutments. The concrete abutments would be placed at each end of the bridge structure and not in the channel, so that dewatering of the creek channel will not be necessary. Foundation work would be completed in four weeks. The construction would be done during the summer months when there are no flows. The crossing currently consists of a historic ranch at-grade crossing through the creek channel, so the area directly under and adjacent to the bridge site has been subject to repeated disturbance and is dominated by weedy non-native species as described above. There is no riparian habitat within the area of proposed disturbance, and the small amount of jurisdictional wetlands is confined to the creek channel. Therefore, the construction of the Wild Boar Run crossing will not result in direct impacts to wetland or riparian habitat. Since the bridge project will occur entirely outside the bed and banks of the Creek, it may not require a Corps 404 Nationwide permit, a CDFG Streambed Alteration Agreement, or a RWQCB 401 Water Quality Certification.

In summary, unless protective fencing is provided at the edges of the prescribed buffer zones for the potentially affected wetlands and riparian habitat, nearby construction activity could result in **potentially significant** impacts.

**Mitigation 11.3:**      **Prior to commencement of construction activity, construction fencing shall be erected along the outer edges of all the protective wetland and riparian buffer zones, in accordance with the project's wetland and riparian assessment, in order to avoid or minimize construction-related impacts. In addition, Lot 9 shall be amended to exclude the wetland area from the Homeland portion for the lot. Design changes shall be clearly demonstrated on final maps.**

In addition to the buffer zones established for Ponds 01 and 05, construction fencing shall be erected 300 feet from the edge of both ponds in order to reduce the potential for construction related impacts. At Catchment 01, and Spring 01, a 50-foot setback fence shall be provided, and

along the portion of the Potrero Creek tributary adjacent to Lot 25, a 100-foot fenced setback shall be provided. At Catchment 2 (lot 9), the wetland will be effectively avoided through design and protective construction fencing. Additionally, the fencing shall be maintained in a functional condition until all grading and construction is complete, consistent with the implementation of standard Best Management Practices (BMPs), erosion protection measures, and SWPPPs that are currently used throughout the Santa Lucia Preserve.

The adherence to these buffers, in addition to the application of erosion protection guidelines set forth in the *Preliminary Drainage and Erosion Control Report, Potrero Canyon Area* (2000), as well as erosion control standards required by the County and the Regional Board (see Chapter 7. *Soils*) will be sufficient to protect these wetland and riparian features from impacts such as increased sedimentation and turbidity.

In addition, all of the wetlands and riparian areas potentially affected by the project (with the exception of Catchment 02) are located within Openlands, and are subject to conservation easements where they will be protected in perpetuity.

As all of the proposed work shall occur outside of the bed and bank of Potrero Creek, it is unlikely that regulatory permits will be necessary. However, the USACE, CDFG, RWQCB and the USFWS shall be consulted as necessary, in accordance with existing laws, to confirm permit requirements or agency jurisdiction before construction is initiated.

**Significance After Mitigation. Less than Significant.**

**Impact 11.4: Potential fragmentation of vegetative habitats. (Less than Significant)**

The Potrero Area contains a number of sensitive habitats and special-status plant species. Fragmentation of these vegetative habitats could result in reduced function and value, including maintenance of species diversity, soil and watershed protection, and wildlife habitat. Several studies suggest that edge effects and reduced fragment size can influence the various life history stages of plants. In an effort to reduce impacts including fragmentation, the design of the Santa Lucia Preserve incorporates many of the suggested policy approaches related to fragmentation outlined in the CNPS Oak Hardwood Policy including: land use decisions which permit uses of the land consistent with the long term maintenance of vegetative populations; cooperative, non-regulatory programs such as conservation easements; efforts to artificially regenerate using only local seed and seedlings from ecotypically similar sites, and, the creation of private preserves for permanent conservation. Due to these measures, as well as the low density of lots, the designed avoidance of sensitive habitats, and the conservation and management of like habitat contiguous to the developed areas, fragmentation is not likely to significantly impact any vegetative habitat type or any of the plant species dependent on those habitats. Therefore, project impacts related to fragmentation of vegetative habitat would be **less than significant**.

**Mitigation Measures. None required.**

## Special Status Plants

### **Impact 11.5: Potential Removal of Mt. Diablo cottonweed. (Potentially Significant)**

Approximately 3000 individuals of Mt. Diablo Cottonweed, a List 4 CNPS species, are present in the building envelope of Lot 28 (see Figure 11-1). Substantial numbers of these plants could be removed in conjunction with the construction of the residence and driveway on Lot 28. This is considered to be a **potentially significant** impact.

**Mitigation 11.5: Reconfigure the building envelope of Lot 28 to exclude the Mt. Diablo cottonweed population, and provide a 20-foot buffer between the building envelope boundary and the nearest individuals of this species. These changes shall be clearly demonstrated on final maps.**

With the implementation of the above mitigation measure, removal of individual cottonweed plants would be avoided.

**Significance After Mitigation. Less than Significant.**

## Landmark Trees

### **Impact 11.6: Potential removal of landmark-sized trees from building envelopes, driveways, and road alignments. (Potentially Significant)**

Landmark trees are defined in the Monterey County Code (Section 21.64.260) as coast live oak trees which are 24 inches or greater in diameter when measured two feet above the ground, or trees which are visually significant, historically significant, or exemplary of their species. There are a total of 148 landmark-sized trees within the proposed building envelopes and driveways of the Potrero Area Subdivision, including 145 coast live oaks and 3 Monterey pines. Additional landmark trees are located in the roadway alignments of Wild Boar Run and Goodrich Pass. Landmark coast live oaks would be subject to removal on 25 homesites, while landmark-sized Monterey pines could be subject to removal in the building envelopes for Lots 16 and 20. Additional landmark-sized trees could be subject to removal for driveway and roadway construction.

**Mitigation 11.6: Avoid removal of landmark-sized trees to the greatest extent feasible. For the unavoidable removal of landmark-sized trees, implement the tree replacement and protection measures specified in the *Forest Management Plan for the Potrero Area Subdivision of the Santa Lucia Preserve*. Applicants for individual lot development shall demonstrate to the satisfaction of the Planning and Building Inspection Department the necessity of the tree removal and why removal cannot be avoided. Additionally, GMPAP Condition #24 relating to the**

**monitoring success of the replacement planting shall be applied to the Potrero Area Subdivision.**

Specific avoidance recommendations, replanting ratios, and tree protection guidelines are provided in the *Forest Management Plan for the Potrero Area Subdivision of the Santa Lucia Preserve*, included as Appendix D to the Biological Report (which is contained in the Technical Appendix of this SEIR). With respect to landmark trees, the plan states that “avoidance is the primary measure used to preserve and protect landmark trees. Only those trees that are a safety hazard or cannot be avoided will be removed.” The *Forest Management Plan* specifies replacement at a 5:1 ratio (replacement: removal) for the unavoidable removal of landmark trees. (All other trees are to be replaced at a ratio of 3:1.) To assure genetic integrity, seeds will be gathered from onsite sources. Additionally, the Santa Lucia Preserve Design Review Board will work with each individual lot design to assure that removal of landmark trees is minimized, and that encroachment within the driplines of retained landmark trees is avoided to the extent feasible.

**Significance After Mitigation: Less than Significant.**

**Indirect Impacts to Botanical Resources**

**Impact 11.7: Potential indirect impacts to botanical resources, including sensitive habitats due to: 1) drainage alterations; 2) damage to root systems during construction; 3) spread of invasive species; 4) landscape irrigation; 5) fertilizer and pesticide application; and 6) trampling by human activity. (Potentially Significant)**

Each of these potential indirect impacts is discussed below:

- 1) Drainage Alterations: Development could result in alterations of hydrology, which could increase erosion and downslope sedimentation. This can adversely affect native vegetation, with effects ranging from the uprooting of individual trees to larger-scale erosional degradation of vegetation, the initiation of slope failure, or burial of downstream vegetation in sediment.
- 2) Damage to Root Systems During Construction: Activities associated with development could adversely affect mature trees due to root system damage even if the trees are not removed. Cutting or other damage to roots during excavation and soil compaction due to vehicle operation can both cause damage to the root system of the tree, reducing the tree’s vigor and, perhaps, leading eventually to death of the tree. Since the root system of the tree extends approximately to the dripline, excavation or soil-compacting activities within the dripline of trees could result in these adverse impacts.
- 3) Spread of Invasive Species: Development and construction activities could facilitate the spread of invasive non-native plants into native vegetation, including sensitive coastal

prairie and Monterey pine forest habitat. One highly invasive non-native species, French broom, is widespread in the vicinity of many of the building envelopes. Grading, excavation, and other soil disturbance associated with construction and land clearing could facilitate the more rapid spread of French broom. Other potentially invasive species could be introduced as landscaping plants or could consist of dispersal of existing invasive species from the surrounding area, with their dispersal facilitated by the availability of disturbed habitat.

- 4) Landscape Irrigation: Irrigation of lawns and landscaped areas could result in an unnatural moisture regime in adjacent areas, leading to alteration of the native vegetation. Accelerated spread of weedy species could be one effect of an unnatural moisture regime. The sensitive coastal prairie habitat type could be especially susceptible to this impact.
- 5) Fertilizer and Pesticide Application: Herbicides, pesticides, or fertilizers used in landscaped areas or gardens following development could be carried by runoff into adjacent native vegetation, and could adversely affect native species.
- 6) Trampling by Human Activity: Native vegetation could be adversely affected by damage from trampling as a result of human activity. Damage could include direct crushing of plants, as well as soil compaction. However, given the scale of the habitat resources in the Potrero Area and Santa Lucia Preserve being placed in permanent conservation easements, the relatively minor impact to native vegetation resulting from human trampling is considered less than significant.

The foregoing indirect effects (except item #6) represent **potentially significant** impacts associated with the project.

**Mitigation 11.7:** **Potential indirect impacts to botanical resources shall be avoided or minimized as follows:**

- 1) Drainage Alterations: Implement erosion control measures set forth in the *Preliminary Drainage and Erosion Control Report, Potrero Canyon Area (2000)*, as well as erosion control plans prepared pursuant to the County's Erosion Control Ordinance, as well as the Storm Water Pollution Prevention Plan required by the State Water Resources Control Board (see Chapter 9. *Runoff, Flooding, and Water Quality*).
- 2) Damage to Root Systems During Construction: Implement the "Tree Protection Guidelines" set forth in the *Forest Management Plan for the Potrero Area Subdivision of the Santa Lucia Preserve (August 2002)*.
- 3) Spread of Invasive Species: Implement the provisions of the *Resource Management Plan for the San Carlos Ranch (1994)* which specify that non-native species known to be invasive shall not be

used in landscaping, that invasive exotics shall be controlled by revegetation of disturbed areas with native plants, that the use of landscape species known to be invasive shall be prohibited, and that species such as French broom and pampas grass shall be actively eradicated.

- 4) **Landscape Irrigation:** Selection of landscape species shall emphasize species not requiring irrigation such as drought-tolerant native species from local sources, or drought-tolerant non-natives that are known to be non-invasive. If irrigation systems are installed, they shall be designed to minimize runoff of irrigation water into adjacent areas of native vegetation. To avoid irrigation runoff into sensitive coastal prairie habitat in the building envelopes for Lots 11 and 28, irrigation and planting plans for these lots shall clearly demonstrate system type and limits of irrigation for County review.
- 5) **Fertilizer and Pesticide Application:** In the design of landscaping, emphasis shall be placed on the use of species not requiring herbicides, pesticides, or fertilizers.
- 6) **Trampling by Human Activity:** Less than significant; no mitigation required.

**Significance After Mitigation: Less than Significant.**

## **Wildlife Resources**

### Wildlife Habitat (General)

**Impact 11.8: Potential fragmentation of wildlife habitat, including removal of mature coast live oak forest. (Potentially Significant)**

Habitat fragmentation can negatively affect wildlife populations by creating barriers to movement and isolating small non-sustainable populations. The reduction of large continuous habitats into small isolated remnants can affect the abundance and composition of many species. In addition, connecting corridors are essential for maintaining genetic variability and long-term population success for animal species. Therefore, the habitat evaluation of the 29 building lots and the surrounding habitat types included an assessment of the level of fragmentation as manifested by barriers to migration and habitat isolation for both common and special-status wildlife species. It is anticipated that resident wildlife can modify their movements in response to the development. Due to the clustered nature of the building envelopes and the extent of adjacent undeveloped land that will be conserved in perpetuity through easements (approximately 94 percent of the total acreage), this project would not isolate any remaining habitat patches from connectivity to adjacent habitat of sufficient size and quality to sustain the species. Therefore, project impacts relative to fragmentation of wildlife habitat subdivision-wide would be **less than significant**.

The Biological Assessment does recognize the potential long-term effect of the removal of mature coast live oak forest wildlife habitat. The Project Description, Chapter 2.0, identifies that the project could result in the removal of approximately 260 trees, or 25% of the 1,182 trees surveyed within the development areas of the subdivision. Mature coast live oak woodland is considered critical habitat for the conservation of many bird and mammal species (see Setting). Mature oak trees bear natural cavities, which are important resources for cavity-nesting birds and small mammals. Removal of mature coast live oak woodland is therefore considered a **potentially significant** impact.

**Mitigation 11.8**      **Stands of oak woodland shall be avoided through site design to the greatest extent feasible as part of the application review process. Home construction on any lot shall result in the removal of no more than 25% of the total trees present within the building envelopes. For the unavoidable removal of oaks, implement the tree replacement and protection measures specified in the *Forest Management Plan for the Potrero Area Subdivision of the Santa Lucia Preserve*. Additionally, GMPAP Condition #24 relating to the monitoring of success of the replacement planting shall be applied to the Potrero Area Subdivision.**

The *Forest Management Plan* specifies replacement at a 3:1 ratio (replacement: removal) for the unavoidable removal of non-landmark trees (landmark trees are to be replaced at a ratio of 5:1.) Additionally, the Santa Lucia Preserve Design Review Board will work with each individual lot design to assure that removal of trees is minimized, and that encroachment within the driplines of retained trees is avoided to the extent feasible. Tree removal will vary from lot to lot, depending upon existing tree density and ultimate locations of building pads for residences.

**Significance After Mitigation: Less than Significant.**

#### Special-Status Wildlife Species

Table 11-4 provides a summary of the special-status species potentially occurring in the building envelopes, driveways, and roadway alignments of the Potrero Area Subdivision. These species are described in detail in Appendix A of the Biological Report, which is contained in the Technical Appendix of this SEIR. All of these species are assumed to be present within the Potrero Area based on the presence of appropriate habitat, with the exception of Smith's blue butterfly, bank swallow, and black swift. Table 11-4 indicates the building envelopes, driveways, and road alignments with potential habitat, and summarizes potential impacts.

The following impact discussion begins with an analysis of general impacts to all known special-status wildlife species and habitat within the Potrero Area Subdivision, and the mitigation measures intended to avoid or reduce those impacts to less-than-significant levels. This is followed by evaluations of individual species or groups of species which require additional mitigation measures tailored to their circumstances and habitat requirements. It should be noted that the federally-listed steelhead trout is addressed in Chapter 10. *Fisheries*.

**Impact 11.9: Potential direct and indirect impacts to special-status wildlife species during grading and construction, such as mortality of individuals in the short-term and removal of habitat in the long term. (Potentially Significant)**

The proposed development could result in short-term impacts to and mortality of special-status species listed in Table 11-4 during grading and construction, which represents a **potentially significant** impact. Detailed field surveys have been conducted on each proposed lot, and where special status wildlife species have been identified or are presumed to occur, species-specific mitigation has been provided. The following pre-construction measures are provided in addition to other species-specific measures, in order to ensure that all lots are surveyed again prior to development activity taking place.

**Mitigation 11.9: The following general measures shall be implemented to avoid or reduce the potential impacts of development to special-status wildlife species prior to construction. These measures apply to individual lot development, as well as any common improvements within the Potrero Area Subdivision**

- 1) **Prior to construction, a qualified biologist shall review the area to be disturbed by construction activities. If construction activities are planned to occur in habitat types identified as appropriate for any of the species listed in Table 11-4, a qualified biologist shall perform protocol-level species-specific surveys prior to the initiation of those activities. Such surveys may be season-dependent, depending on the species. If any protected species are identified within areas scheduled for construction activities, the level of potential impact and appropriate species-specific avoidance and mitigation measures shall be determined by the qualified biologist in accordance with state and federal laws.**
- 2) **During all construction activities a qualified biologist shall monitor for special-status species. If federally-listed special-status species are identified as being potentially impacted, construction activities shall halt until the species is relocated to appropriate habitat by an individual permitted to handle the species. The U.S. Fish and Wildlife Service (USFWS) shall be notified of the**

**incident before construction activities can resume. If other (non-federally-protected) special-status species are identified as being potentially impacted during construction, activities shall halt until the species removes itself from potential impact or is relocated by an individual permitted by the California Department of Fish and Game (CDFG) to handle the species.**

If there is the potential for a direct “incidental take” of a federally listed species during the construction activities, a Section 7 consultation or Section 10(b) permit from USFWS will be needed to authorize the “incidental take” of that species during the construction phase of the project. Indirect impacts resulting in the degradation of a listed species habitat may also be considered a “take,” and would, therefore, require a Section 7 consultation or a Section 10 permit from USFWS. Impacts are also considered significant if they result in “take” to any nesting habitat of migratory birds, as protected under the federal Migratory Bird Treaty Act. A Memorandum of Understanding (MOU) with the California Department of Fish and Game (CDFG) is required to “take” any state-listed species (or its habitat).

**TABLE 11-4  
SPECIAL-STATUS WILDLIFE SPECIES**

**KNOWN OR FOR WHICH POTENTIAL HABITAT OCCURS IN THE PROPOSED BUILDING ENVELOPES**

<b>Common Name (Scientific Name)</b>	<b>Status</b>	<b>Lots with Potential Habitat</b>	<b>Habitat Requirements</b>	<b>Potential Impacts</b>
<b>Insects</b>				
Smith's blue butterfly ( <i>Euphilotes enoptes smithi</i> )	E/--	No habitat (as defined by the presence of obligate host buckwheat species) associated with any lots or roads.	Requires buckwheat plants as a host plant for larvae.	Potential direct impacts from road improvements.  Potential indirect impacts from introduction of non-native/invasive species and/or shift in native vegetative communities. Buckwheat displacement may limit nectaring and egg-laying opportunities for this species.
<b>Fisheries</b>				
Central coast steelhead ( <i>Oncorhynchus mykiss</i> )	T/--	Steelhead is known to use the Potrero Creek. Wild Boar Run crossing and the existing Chamisal Road crossing.	Coastal streams from Pacific Ocean to up-stream barriers.	Short-term impacts are not expected to occur due to the existing condition of the crossing and the construction methodology chosen for the bridge installation. The installation will not require dewatering, or the removal of any riparian trees (a limited amount of trimming of existing trees may occur).  Long-term impacts may occur as a result of reduced base flows associated with groundwater pumping. However, specific thresholds have been established in the GMPAP conditions that require management actions that will reduce impacts if those thresholds are reached.
<b>Amphibians</b>				
California red-legged frog ( <i>Rana aurora draytonii</i> )	T/SC	Non-breeding habitat at Wild Boar Run crossing. Known breeding ponds associated with lot 5 and 25.	California red-legged frogs are known to use and breed in marshy habitats, springs, natural and artificial ponds, and slack water pools of rivers and streams.	Potential direct impacts from increased vehicle traffic (road kill).  No additional adverse impacts to Critical Habitat are anticipated because there will be no new construction activities within 300 feet of the ponds. Improvements to Chamisal Pass and the culverts associated with the road and Cypress Pond (Pond 05) have been installed and previously assessed in the SLP FEIR.

Common Name (Scientific Name)	Status	Lots with Potential Habitat	Habitat Requirements	Potential Impacts
California tiger salamander ( <i>Ambystoma californiense</i> )	C/SC	Potential breeding ponds include ponds 01 and 03. Potential upland habitat includes lots 4, 5, and 7.	Adult tiger salamander are a semi-permanent resident of annual grasslands and valley and foothill woodlands, and are occasionally found along streams	Potential direct impact from increased vehicle traffic (road kill).  Potential indirect impacts from loss of upland habitat.
Coast range newt ( <i>Taricha torosa torosa</i> )	--/SC	Potential upland habitat includes 1, 2, 4, 5, 6, 7, 8, and 25.	Adults use mammal burrows, rocks, and logs in woodland or forest habitats during the non-breeding season. Require slow moving creek pools, ponds or lakes for reproduction.	Potential direct impact from increased vehicle traffic (road kill).
<b>Reptiles</b>				
Western pond turtle ( <i>Clemmys marmorata</i> )	--/SC	Known to be present in pond adjacent to 5. Potential nesting habitat: 1, 2, 4, and 5.	Western pond turtles are found in ponds, marshes, rivers, streams, and irrigation ditches containing aquatic vegetation.	Potential direct impacts from increased vehicle traffic (road kill).
Two-striped garter snake ( <i>Thamnophis hammondi</i> )	--/SC	May be present in ponds located adjacent to 5, 19 and 25. Potential nesting or over wintering habitat: 1, 2, 4, 5, and 7.	Two-striped garter snake lives in wet places throughout the south Coast Range and the Transverse range.	Potential direct impacts from increased vehicle traffic (road kill) and other human related activities.
Legless lizard ( <i>Anniella pulchra</i> )	--/SC	Potential habitat in lots 1 and 2.	Coastal sand dunes, washes, woodlands, chaparral, and riparian areas.	Potential direct impacts from increased vehicle traffic (road kill) and other human related activities.  Potential direct impacts include direct construction related take of individuals from grading.
<b>Birds</b>				
Purple martin ( <i>Progne subis</i> )	--/SC	Lots with potential nesting habitat: 1, 3, 4, 5, 7, 8, 16 and 19, and Wild Boar Run crossing.	Purple martins are cavity nesters in riparian areas or on the edge of woodlands. They often using old woodpecker holes or cavities used by other tree swallows, or vertical holes under highway bridges.	Potential direct take from construction related impacts.  Potential indirect impacts from removal of oak trees that support cavities and snags may reduce available nesting habitat for this species.

Common Name (Scientific Name)	Status	Lots with Potential Habitat	Habitat Requirements	Potential Impacts
Yellow warbler ( <i>Dendroica petechia brewsteri</i> )	--/SC	No nesting habitat in lots. Nesting habitat at Wild Boar Run crossing.	Deciduous riparian woodlands and shrub habitats with open riparian canopy along streams and lakes.	Potential direct take from construction-related impacts.
Willow Flycatcher ( <i>Empidonax trailii</i> )	--/E	No nesting habitat in lots. Potential nesting habitat at Wild Boar Run crossing.	Associated with dense riparian habitats with a well-developed understory.	Potential direct take from construction-related impacts in riparian areas.  Potential indirect impacts from removal of oak trees that support cavities and snags may reduce available nesting habitat for this species.
Yellow-breasted chat ( <i>Icteria virens</i> )	--/SC	No nesting habitat in lots. Potential nesting habitat at Wild Boar Run crossing.	Associated with dense riparian habitats with a well-developed understory.	Potential direct take from construction-related impacts in riparian areas.  Potential indirect impacts from removal of oak trees that support cavities and snags may reduce available nesting habitat for this species.
Bank Swallow ( <i>Riparia riparia</i> )	--/T	No nesting habitat in lots or other areas evaluated.	Bluffs or earthen banks associated with permanent water.	None due to lack of appropriate habitat.
Vaux's swift ( <i>Chaetura vauxi</i> )	--/SC	Potential foraging and nesting habitat in lots 16 and 19.	Nest in tree cavities in forest especially in burned or open forest with hollow trees or snag branches.	Potential direct take from construction-related impacts.  Potential indirect impacts from removal of oak trees that support cavities and snags may reduce available nesting habitat for this species.
Black Swift ( <i>Cypseloides niger</i> )	--/SC	No nesting or foraging habitat in areas scheduled for development.	Nest high on wet cliff edges, usually within sea caves or behind waterfalls.	None due to lack of appropriate habitat.
Least Bell's vireo ( <i>Vireo bellii pusillus</i> )	E/E	No nesting habitat in lots. Potential nesting habitat at Wild Boar Run crossing.	Associated with dense riparian habitats with a well-developed understory.	Potential direct take from construction-related impacts.  Potential indirect impacts from removal of oak trees that support cavities and snags may reduce available nesting habitat for this species.

California horned lark ( <i>Eremphila alpestris actia</i> )	--/SC	Potential nest and foraging habitat in lot 11, 28	Nest and forage in short growing grassland habitats.	Potential direct take from construction-related impacts.  Indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.
Loggerhead shrike ( <i>Lanius ludovicianus</i> )	--/SC	Potential nest and foraging habitat in lot 11, 28	Associate with grassland or shrub habitat with lizards and insects for foraging.	Potential direct take from construction related impacts.  Indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.
Tricolored blackbird ( <i>Agelaius tricolor</i> )	--/SC	No potential nesting areas in lots. Nesting habitat at pond 5 (greater than 300 feet from lot 5).	Nest in colonies in dense riparian vegetation, along rivers, lagoons, lakes and ponds. Forages for insects over grasslands or aquatic habitats.	None, no habitat will be taken and a buffer of 300 feet exists between appropriate habitat and proposed development.
Burrowing owl ( <i>Athene cunicularia</i> )	C/SC	Potential nesting and foraging habitat in lot 4, 5, and 11	Open grassland habitats with low-growing vegetation and abandoned burrows.	Potential direct take from construction-related impacts.  Indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.
Northern harrier hawk ( <i>Circus cyaneus</i> )	--/SC	Potential nest and foraging habitat in lot 9, 11, and 28.	Grasslands, prairie, savanna, sloughs, wet meadows, and marshes.	Potential direct take from construction-related impacts.  Potential indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.
Cooper's hawk ( <i>Accipiter cooperii</i> )	--/SC	Potential nest habitat in lot 6, 7, 8, and 25.	Nesting habitats include riparian deciduous, live oak, or second-growth conifers, usually near stream courses in dense stands with relatively high crown closure and open understory.	Potential direct take from construction-related impacts.  Potential indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.  Potential indirect impacts from removal of mature oak trees that may represent a reduction in available nesting habitat for this species.

Common Name (Scientific Name)	Status	Lots with Potential Habitat	Habitat Requirements	Potential Impacts
Sharp-shinned hawk ( <i>Accipiter striatus</i> )	--/SC	Nesting habitat in any lots unlikely.	Nest in deciduous riparian forest, but are commonly associated with dense stands of smaller conifers. Often hunt near forest or woodland openings, using adjacent woodland for cover.	Potential indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.  Potential indirect impacts from the removal of mature oak trees that may represent a reduction in available nesting habitat for this species.
White-tailed kite ( <i>Elanus caeruleus</i> )	--/FP	Potential nesting habitat in lot 4. Potential foraging habitat in lots 1,2, 3, 4, 5, 11, 14, 16, 28 and 29.	Nest in conifers near open habitats such as grasslands or margins of sloughs/wetlands.	Potential direct take from construction-related impacts.  Potential indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.
Golden eagle ( <i>Aquila chrysaetos</i> )	--/FP	Potential nesting habitat in lots 11 and 28. Potential foraging habitat in lots 1,2, 3, 4, 5, 11, 14, 16, 28, and 29.	Nest in woodlands or forest near open grassland areas for foraging.	Potential direct take from construction-related impacts.  Potential indirect impacts from reduction in available foraging habitat for this species.
Bald eagle ( <i>Haliaeetus leucocephalus</i> )	T/E	No nesting habitat. Potential foraging habitat in lots 1, 2, 3, 4, 5, 11, 14, 16, 28, and 29.	Nests within 2 miles of lakes, rivers or reservoirs.	Potential indirect impacts from reduction in available foraging habitat for this species.
Merlin ( <i>Falco columbarius</i> )	--/SC	No nesting habitat. Potential foraging habitat in lots 1, 2, 3, 4, 5, 11, 14, 16, 28, and 29.	Forages along coastlines, open grasslands, savannas, and woodlands; often near lakes and other wetlands.	Potential indirect impacts from reduction in available foraging habitat for this species.

Long-eared owl ( <i>Asio otus</i> )	--/SC	Potential nesting habitat in lot 4, 5, 6, 7, 19, and 25.	Utilizes abandoned stick nests of other large birds or squirrel nests. Utilizes orchards, but usually near both water and open habitats for foraging. Opportunistic feeder but forages mostly on rodents.	Potential direct take from construction-related impacts.  Potential indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.  Potential indirect impacts from the removal of mature oak trees that may represent a reduction in available nesting habitat for this species.
Short-eared owl ( <i>Aiso Flammeus</i> )	--/SC	Potential nesting habitat in lot 11	Nest in low growing vegetation in prairie, savanna, marsh and meadow habitats.	Potential direct take from construction related-impacts.  Potential indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.
California Spotted Owl ( <i>Strix occidentalis occidentalis</i> )	--/SC	Potential nesting habitat in lot 4, 5, 6, 7, 11, 14, 15, 16, 19, 25, 26, 27, 28, and 29.	Stratified canopy layers of hardwoods in older forest with dead snags and trees.	Potential direct take from construction-related impacts.  Potential indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.
American peregrine falcon ( <i>Falco peregrinus anatum</i> )	--/E	No nesting habitat in lots. Foraging habitat in lots 1, 2, 4, 5, 7, 9, 11, 16, 28, and 29.	Isolated cliff locations on the coast and potentially inland Santa Lucia Range	Potential indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.
Prairie falcon ( <i>Falco mexicanus</i> )	--/SC	No nesting habitat in lots. Foraging habitat in 1, 2, 4, 5, 7, 9, 11, 16, 28, and 29.	Nest in rock crevice or cliff ledge in areas overlooking grasslands.	Potential indirect impacts from loss of grassland habitat that may represent a reduction in available nesting and foraging habitat for this species.
Mammals				
Pallid bat ( <i>Antrozous pallidus</i> )	--/SC	All lots, except lots 2, 27, and 29, provide potential roosting and foraging habitat.	Known to roost in coast live-oak woodland of Rancho San Carlos.	Potential direct construction-related and indirect impacts from the removal of mature oak trees supporting cavities, snags, and exfoliating bark that may represent a reduction in available roosting habitat for this species on-site.

Common Name (Scientific Name)	Status	Lots with Potential Habitat	Habitat Requirements	Potential Impacts
Townsend's western big-eared bat ( <i>Corynorhinus townsendii townsendii</i> )	--/SC	Roosting habitat unlikely in all lots. Potential foraging habitat in all lots.	Potential maternity roost and day roost habitat occurs in hollow redwoods or in large tree cavities (oaks).	Potential indirect impacts from the removal of mature oak trees supporting cavities, snags, and exfoliating bark that may represent a reduction in available roosting habitat for this species on-site.
Fringed myotis ( <i>Myotis thysanodes</i> )	--/**	All lots, except lots 2, 27, and 29, provide potential roosting and foraging habitat.	Potential maternity roost habitat occurs in oak tree cavities and in cavities and bark of the Monterey pines.	Potential direct construction-related and indirect impacts from the removal of mature oak trees supporting cavities, snags, and exfoliating bark that may represent a reduction in available roosting habitat for this species on-site.
Long-legged myotis ( <i>Myotis volans</i> )	-- /SC**	All lots, except lots 2, 27, and 29, provide potential roosting and foraging habitat.	Potential maternity roost and day roost habitat occurs in the exfoliating bark on dead limbs and snags and in the bark of oaks and Monterey pines.	Potential direct construction related and indirect impacts from the removal of mature oak trees supporting cavities, snags, and exfoliating bark that may represent a reduction in available roosting habitat for this species on-site.
Western red bat ( <i>Lasiurus blossevillii</i> )	--/**	Roosting unlikely in all lots. Potential foraging habitat in all lots.	Roosts in deciduous foliage of riparian habitat.	Potential indirect impacts from the removal of mature oak trees supporting cavities, snags, and exfoliating bark that may represent a reduction in available roosting habitat for this species on-site.
Monterey dusky-footed woodrat ( <i>Neotoma fuscipes luciana</i> )	--/SC	Nests observed in all lots, driveways, and adjacent to roads where oak woodland habitat was present.	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats.	Potential indirect impacts from removal of mature oak trees, and associated loss of leaf litter, that may represent a reduction in the availability of nest materials.  Potential indirect impacts from trampling or entombment of stick-nests.

Source: Denise Duffy & Associates

\*Occurrence, or potential occurrence, of California red-legged frog in the Potrero Area Subdivision addressed in Appendix B of the biological report.

The wildlife status definition and governing agencies follow:

Federal (USFWS 1999b, c)

E = Endangered: Any species that is in danger of extinction throughout all or a significant portion of its range.

T = Threatened: Any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

C = Taxa which are under review, and for which sufficient biological information exists to support a proposal to list as an endangered or threatened species.

M = Avian species and their nests which are protected during their breeding season under the Federal Migratory Bird Treaty Act.

State of California (CDFG 1999, 2000b)

E = Endangered: A native species or subspecies of animal which is in serious danger of becoming extinct throughout all, or a significant portion of its range, due to loss of habitat, change in habitat, over exploitation, predation, competition and/or disease.

T = Threatened: A native species or subspecies that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.

SC = CDFG Species of Special Concern

FP = Fully Protected under CDFG codes

\*\*Included on 1996 California Department of Fish and Game preliminary list of revised Mammal Species of Special Concern

A draft ranch-wide Habitat Conservation Plan (HCP) is being prepared under Section 10 consultation which includes management measures for the California red-legged frog, steelhead trout, and Smith's blue butterfly (although habitat for the latter species is not present in the Potrero Area). The HCP has not yet been approved by the regulatory agencies and therefore is not in effect at the time of EIR preparation. Therefore site-specific measures are provided consistent with the existing regulatory environment.

If there is the potential for a direct "incidental take" of a federally listed species during the construction activities, a Section 7 consultation or Section 10(b) permit from USFWS will be needed to authorize the "incidental take" of that species during the construction phase of the project. Indirect impacts resulting in the degradation of a listed species habitat may also be considered a "take," and would, therefore, require a Section 7 consultation or a Section 10 permit from USFWS. Memorandum of Understanding (MOU) with the California Department of Fish and Game (CDFG) is required to "take" any state-listed species (or its habitat).

**Significance After Mitigation: Less than Significant.**

**Impact 11.10: Project development could result in potential impacts to the California red-legged frog and its habitat. (Potentially Significant).**

Within the Potrero Area, CRLF breeding habitat is provided in Pond 01 and Pond 05. Pond 01 is located within proposed Lot 5, and is near Lots 6 and 7, but is greater than 300 feet from any proposed building envelope, driveway, or access road. A 300-foot buffer represents the minimum for 'associated upland habitat' of the CRLF as defined by the USFWS and will

provide for continued value and use of the pond by CRLF, especially for reproduction. A buffer of this size will reduce potential impacts from normal residential and outdoor activity, disruption from nighttime sound and light intrusion, and will provide appropriate overland foraging around and access to pond habitat. In addition, there is a 300-foot wide barrier-free dispersal corridor which connects this pond with other sites within 1.25 miles, which is also an essential habitat element of the CRLF Critical Habitat.

Pond 05 is located in proposed Lot 25 and is 400 feet from the nearest proposed building envelopes and driveways on Lots 23, 25 or 26. This buffer will be adequate to avoid disruption of frog habitat and population. In addition, there is a 300-foot wide barrier-free dispersal corridor which connects this pond with other sites within 1.25 miles.

Pond 05 was created by a dam that for decades has served as a crossing for a ranch thoroughfare and intersection to surrounding pastures and resource sites. The previous completion of Chamisal Pass as it crosses the dam has not encroached upon or otherwise affected the pond environment and CRLF habitat. Adjacent home-sites (on Lots 23, 25, and 27) are sufficiently removed from the pond to avoid disruption of frog habitat and populations.

Wild Boar Run Crossing is the location of a proposed new bridge along the lower section of Potrero Creek. The planned bridge location is greater than 300 feet from portions of the Potrero Creek that have been identified as potential breeding areas for the CRLF. It is possible that the crossing is between areas identified as potential breeding sites upstream and unidentified breeding sites downstream and off the property. Although CRLF do not require riparian corridors for dispersal and the USFWS does not require the barrier-free dispersal corridor to be riparian, it is possible CRLF would utilize the Wild Boar Run Crossing portion of Potrero Creek as such. However, since the bridge will completely span the creek, it will not create an obstacle to any dispersal along Potrero Creek. (As discussed above under Impact 11.3 above, the Wild Boar Run Crossing does not require Corps authorization under Section 404 of the Clean Water Act and therefore is not included in any USFWS Biological Opinion on the CRLF.)

In summary, the long-term impacts of the Potrero Area Subdivision upon the California red-legged frog and its habitat would be **less than significant**.

During grading and construction, the erosion of exposed soil in the vicinity of the breeding ponds could result in sediment transport and turbidity in the ponds. However, this impact is expected to be avoided through implementation of the required erosion control plans for the project, as discussed in Chapter 7. *Soils*. In addition, construction fencing to be erected around the buffer zones, as specified in Mitigation Measure 11.3, will prevent incursion of construction equipment into the buffer zones. However, the short-term movement of equipment and vehicles in the vicinity of the breeding ponds and other aquatic resources, beyond the fenced areas, could result in direct mortality to CRLF. This is considered to be a **potentially significant** impact.

**Mitigation 11.10: Implement pre-construction and construction phase management actions as prescribed by the USFWS Biological Opinion.**

All measures included in the USFWS 1998 Biological Opinion on the California red-legged frog that specify comprehensive pre-construction and construction phase management action protocols shall be implemented. In addition, pre-construction and construction management within 500 feet of any aquatic resource, including the breeding ponds, wetlands, and riparian corridors, shall include regular onsite monitoring for presence of CRLF and other special-status species. All monitoring shall be conducted by a qualified biologist or resource monitor who is trained and supervised by the biologist.

**Significance After Mitigation. Less than Significant.**

**Impact 11.11: Potential impacts to the California tiger salamander and its habitat could occur as a result of project development. (Potentially Significant).**

Potential breeding habitat for the California Tiger Salamander (CTS) exists in Pond 01 on Lot 5 and Pond 05 on Lot 25, although the presence or absence of the CTS at these ponds has not been confirmed by field surveys. Recent CDFG protocol aquatic surveys of these ponds have not found any individual CTS (2003, Denise Duffy & Associates, Inc.) If these ponds are found to constitute CTS breeding habitat, then the adjacent upland areas would be used by CTS during the non-breeding season as aestivation habitat.

There is approximately 25.8 acres of appropriate upland estivation habitat (grassland and oak savanna) adjacent to pond 01 in a linear feature going north from the pond. Current literature documents CTS as potentially utilizing upland habitat within 1,200 feet of known breeding sites. As seen in **Figure 11-2**, the Potrero Area Subdivision lot design provides for relatively unobstructed access to the vast majority of appropriate upland habitat for 1,200 feet and beyond. Of the total upland habitat available adjacent to the pond, less than 3.9 acres is within a homeland boundary and only a portion of the area within the homeland boundary is available for development. This means over 85% of the potential CTS upland habitat adjacent to Pond 01 is proposed for permanent conservation. In addition, the impact of the lot development on the potential CTS habitat is limited to the direct take of acreage as outlined above. More specifically, the placement of the lots does not present a barrier to the salamanders to access the entire length of the upland habitat feature. The width of this habitat feature is approximately 1,000 feet. The width of the homeland of Lot 5 is less than 450 feet. Therefore, the development would not preclude the utilization of any portion of the habitat other than that portion which will be developed.

The California Department of Fish and Game (CDFG) was provided current design plans for the subdivision and a copy of the mitigation outlined in this document. In an e-mail response dated 4-2-03 (within the Technical Appendices) CDFG reported that if the salamanders were utilizing the area, the existing lot placement and mitigation are sufficient to avoid negative impacts. Recent aquatic surveys conducted under the supervision of USFWS and CDFG consisting of

sampling the ponds according to CDFG protocol have not identified any CTS as of June 2003. Surveys will be ongoing through spring 2004 to satisfy the full protocol for an absence determination.

No appropriate upland CTS habitat exists adjacent to pond 05.

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Figure 11-2 CTS

Backside of 11-2

Buffers established for the California red-legged frog (discussed under Impact 11.10 above) would also provide and preserve in perpetuity appropriate upland aestivation habitat for the California tiger salamander directly adjacent to potential breeding areas.

If the pre-construction surveys specified in Mitigation 11.9 above indicate the presence of CTS in Pond 01, direct mortality to individual salamanders is likely to occur along the driveway for Lots 5 and 6 which traverse a potential dispersal corridor for the California tiger salamander and other amphibian and reptile species. This is considered a **potentially significant** impact.

**Mitigation 11.11: Construct permanent exclusionary ground fencing along the driveway for Lots 5 and 6; and construct a tunnel under the driveway(s) to allow passage of California tiger salamander and other amphibians and reptiles. This fencing shall be monitored on a seasonal basis to assess its condition and repairs made if necessary.**

To further minimize, to the greatest extent feasible, any potential for take, permanent exclusionary ground fencing should be placed adjacent to the building envelopes of lots 5 and 6. This measure will reduce the potential for the salamander to aestivate in areas occupied by humans to a less than significant level.

To minimize any potential for take of the salamander, permanent exclusionary ground fencing shall be placed in the grassland and oak savanna habitat parallel to the driveway for Lot 5 and 6. This fencing shall be monitored by a qualified biologist on an annual basis to assess its condition and repairs made if necessary.

Since this exclusionary fencing will present a barrier to amphibian and reptile movement along this dispersal corridor, a tunnel shall be constructed under the driveway for Lots 5 and 6 that allows for passage of the California tiger salamander and other amphibians and reptiles. The design and location shall be reviewed by a qualified herpetologist and approved by the CDFG. Long-term management of the tunnel should include annual inspections to confirm it is not blocked.

**Significance After Mitigation. Less than Significant.**

**Impact 11.12: Potential impacts to other species requiring aquatic, riparian, and adjacent upland habitats including the western pond turtle, two striped garter snake, Coast Range newt, tricolored blackbird, purple martin, yellow warbler, willow flycatcher, and yellow-breasted Chat. (Potentially Significant)**

The proposed development includes lots, driveways, and ranch roads in proximity to ponds nearest Lots 5, 19, and 25. Long-term adverse impacts to special-status wildlife species utilizing and moving to these ponds, which are sensitive wildlife habitat areas, could occur as a result of development. These include potential impacts from normal residential and outdoor activity,

disruption due to nighttime sound and light intrusion, and mortality resulting from collisions with vehicles on driveways and roads. These potential impacts will be reduced to less-than-significant levels through the creation of buffer zones around these ponds to satisfy the USFWS Criteria Habitat requirements for the California red-legged frog, as discussed under Impact 11.10 above. Additionally, impacts will be minimized by implementation of pre-construction and construction management action protocols, including monitoring for special-status species, as discussed in Mitigation Measures 11.9 and 11.10 above.

In addition, implementation of GMPAP Conditions #11 through 15 relating to monitoring and management action protocols for maintaining minimum stream base flows will avoid and mitigate impacts to riparian habitat along Potrero Creek and its tributaries.

**Mitigation 11.12: Implement prescribed pre-construction and construction phase management actions specified in Mitigation Measure 11.10.**

In addition, the terms and conditions of 1996 USFWS Biological Opinion (p.14) on CRLF shall be applied to the Potrero Area Subdivision.

**Significance after Mitigation. Less than Significant.**

**Impact 11.13: Potential impacts to protected bat and bird species. (Potentially Significant)**

Mature coast live oak forest, and to a lesser extent mature Monterey pines, are important as habitat for special-status bats (listed in Tables 11-3 and 11-4) that use cavities, snag branches and exfoliating bark. These features are not as available in younger-aged forest, and their removal could be an adverse impact to those species. These features provide potential nesting and roosting habitat for special-status bat species such as Pallid bat and long-legged myotis. Special-status bats known to have maternity roosts on the Preserve, and which also forage on insects associated with coast live oak include Pallid bat, long-legged myotis, and fringed myotis. The oaks also provide potential roost and foraging habitat for western red bat and Townsend's western big-eared bat.

Tree cavities and snag branches also provide nesting habitat for special-status song-birds such as Vaux's swift, and for some raptors such as Cooper's hawk and long-eared owl. Nesting of migratory birds, including raptors, is protected under the federal Migratory Bird Treaty Act.

The above impacts potentially occur on 26 of the 29 proposed lots, as well as along the roadway alignments for Goodrich Trail and Wild Boar Run. The potential loss of individuals of these bat and bird species is considered a **potentially significant** impact. This impact would be partially avoided through implementation of Mitigation Measure 11.3 above, which stipulates avoidance of landmark trees to the greatest extent feasible, and through implementation of the *Forest Management Plan* which outlines provisions for tree avoidance and protection.

The removal of grasslands due to the project may result in indirect impacts due to a reduction in available nesting and foraging habitat for bird species such as Vaux's swift, California horned lark, loggerhead shrike, burrowing owl, northern harrier, Cooper's hawk, sharp-shinned hawk, white-tailed kite, golden eagle, long-eared owl, short-eared owl, spotted owl, prairie falcon, bald eagle, merlin, and peregrine falcon.

While the loss of individuals of these bird and bat species would be considered a significant impact, the loss of 0.6 percent of oak woodland and oak savanna habitat, as well as relatively small amounts of Monterey pine and grassland habitat within the Potrero Area would not represent a significant loss of bat or bird habitat, particularly since abundant suitable habitat is permanently available elsewhere within the Preserve. Therefore, the loss of that habitat for these special status bat and bird species would represent a **less than significant** impact.

**Mitigation 11.13:** **The following specific measures shall be implemented to avoid or mitigate for the potential impacts of development to individual bat and bird species requiring one of, or a combination of, riparian, grassland, and woodland/forest habitats:**

- 1) **Measures specified in Mitigation Measure 11.9 above for special-status species providing for pre-construction surveys and construction phase monitoring (general special-status wildlife species measures).**
- 2) **Bats. If construction is to begin before August 1, before young have fledged, surveys for special-status bat species shall be performed. If maternity roosts are located during pre-construction surveys, a qualified biologist shall establish a 300-foot buffer around each roost for the duration of the breeding season (until such time as the young are fully fledged) to prevent roost harassment and brood mortality. If colonial roosts are found, removal of the tree may only occur during the day after an exclusionary device is installed in the opening to the roost. A qualified bat expert must supervise the placement and examine the success of the exclusionary device before the removal of any confirmed roosts.**
- 3) **Raptors. If construction is to begin before August 1, before young have fledged, pre-construction surveys for nesting raptors are required. If raptor nests are located during pre-construction surveys, a qualified biologist shall establish a 300-foot buffer around each nest for the duration of the breeding season (until such time as the young are fully fledged) to prevent nest harassment and brood mortality. If trees known to support raptor**

**nests cannot be avoided, removal of these trees may only occur during the non-breeding season (August 1 through April 15).**

In addition, implementation of GMPAP Conditions #11 through #15 relating to monitoring and management action protocols for maintaining minimum stream base flows will avoid and mitigate impacts to riparian habitat along Potrero Creek and its tributaries. Also, implementation of the *Cattle Grazing and Livestock Management Plan for the Santa Lucia Preserve* (Grazing Plan), as specified in Mitigation Measure 11.2 above, will minimize the impact of the unavoidable removal of coastal prairie habitat through the reduction of grazing activities throughout the Preserve and through long-term monitoring and management of appropriate areas within the Preserve for the purpose of increasing the quality and quantity of native perennial grasslands.

As stipulated in Mitigation Measure 11.6 above, the *Forest Management Plan* shall be implemented to the greatest extent feasible. The Plan outlines provisions for tree avoidance and protection which will partially reduce the above impact.

**Significance after Mitigation. Less than Significant.**

**Impact 11.14: Potential impacts to Monterey dusky-footed woodrat. (Less than Significant)**

Although the Monterey dusky-footed woodrat is listed as a CDFG California species of special concern, high densities of woodrats are documented to occur in the oak woodland communities in and adjacent to the Monterey Peninsula. The removal of some oak woodland habitat in conjunction with the project would be minimal in comparison to existing regional resources. Therefore, the potential impacts of the Potrero Area Subdivision upon the oak woodland habitat or individual woodrats would be **less than significant**.

**Mitigation Measure. None required.**

**Impact 11.15: Potential predation of special-status amphibian, reptile, and songbird species by domestic dogs and cats. (Less than Significant)**

Predation by domestic dogs and cats may result in adverse impacts to special-status wildlife species. However, given the existence of healthy sustainable populations of natural predators, such as raccoons, skunks, opossums, raptors, bobcats, and mountain lions, these species will remain the dominant predatory factor for special-status species. In addition, the larger of these predators will likely define the pet population to an insignificant number in the wild via predation. The CC&R's of the SLP also prohibit free-roaming cats, and such conditions will be applicable to the Potrero Area. As such, this potential impact is considered to be **less than significant**.

**Mitigation Measure. None required.**

## CITATIONS

- Biotic Resources Group (BRG), *Potrero Area Subdivision EIR Project: Biological Resources – Peer Review Report*, September 2003.
- County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including Addendum to EIR, August 1997).
- Denise Duffy & Associates (DDA), and Ecosystems West Consulting Group, *Biological Assessment for the Potrero Area Subdivision of the Santa Lucia Preserve, County of Monterey, California*, July 2003.
- Denise Duffy & Associates (DDA), and Ecosystems West Consulting Group, *California Red-Legged Frog Evaluation for the Potrero Area Subdivision of the Santa Lucia Preserve, County of Monterey, California*, November 2002.
- Denise Duffy & Associates (DDA), and Ecosystems West Consulting Group, *Wetland and Riparian Resource Evaluation for the Potrero Area Subdivision of the Santa Lucia Preserve, County of Monterey, California*, November 2002.
- Denise Duffy & Associates, *Potrero Area Subdivision of the Santa Lucia Preserve (Project Description)*, April 2001.
- County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including Addendum to EIR, August 1997).
- Ralph Osterling Consultants, Inc., *Forest Management Plan for the Potrero Area Subdivision of the Santa Lucia Preserve*, August 2000 (revised August 2002).
- Rancho San Carlos Partnership, *The Santa Lucia Preserve Resource Management Plan*, 1994.
- Sage Associates, *Revised Rancho San Carlos Cattle Grazing and Livestock Management Plan*, April 1998.
- Thompson-Hysell Engineers, *Preliminary Drainage and Erosion Control Report, Potrero Canyon Area*, June 2000.

## **Chapter 12. Aesthetics**

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### **INTRODUCTION**

This chapter of the SEIR describes the existing visual character of the project area and identifies potential visual and aesthetic impacts that could occur as a result of the project. The primary aesthetic concerns are potential changes in aesthetic character, negative impacts to existing public viewsheds, or obstruction of existing views. Visual impacts are evaluated using a combination of site reconnaissance, tentative map review, photo documentation, a review of the previous Santa Lucia Preserve EIR and existing policy documents.

### **SETTING**

The Santa Lucia Preserve encompasses approximately 20,000 acres within portions of three Monterey County Planning areas: Carmel Valley Master Plan Area, Greater Monterey Peninsula Area Plan, and the Coastal Zone. The Santa Lucia Preserve EIR evaluated the aesthetic impacts of the Comprehensive Development Plan and contains discussion, analysis and additional mitigation measures for the entire preserve area, including the 1,286-acre Potrero Area. Elements of the Comprehensive Development Plan, including mitigation measures recommended in the previous EIR, were incorporated into the Santa Lucia Preserve conditions of approval.

#### **Regional Visual Resources**

The landscape of the northern region of Monterey County can be described as highly scenic, with a diverse mix of natural and cultural elements that contribute to a rural character. The topography of the region varies from flat, farmed areas to rolling hills with broad valleys, to the steep slopes, rugged canyons and prominent ridges of the Coast Ranges. The cultural character of the region can be described as rural, defined by scattered residences and residential developments, commercial centers, and agricultural operations.

Elevations in the region range from a low of approximately 30 feet on the floor of Carmel Valley to approximately 3,000 feet for the high ridges and peaks of the Big Sur and Los Padres National Forest areas. Ridges and valleys in the region generally trend northwest-southeast. There are many small creeks in the region vegetated with sycamore, Douglas fir, redwood, bay, oak and willow. Hillsides and ridges are vegetated with forests and chaparral shrublands and there are areas of open grassland on slopes and in the valleys.

Due primarily to its high scenic quality, the region is an important destination for tourists and recreationists. Several scenic routes link areas in the north Monterey County region. Highway 1 runs along the coast from Lompoc and winds through Big Sur, Carmel, and Monterey on its way to San Francisco. State Highway 68, a designated scenic route, connects Monterey and Salinas, and is joined by Highway 218 in the vicinity of Del Rey Oaks and Ryan Ranch. Carmel Valley Road, a proposed scenic route, runs parallel to Highway 68 for a distance and connects Highway 1 with Highway 101 in the Salinas Valley near Greenfield. Laureles Grade Road, another

proposed scenic route, connects Carmel Valley Road and Highway 68. The project's location relative to visually sensitive areas and scenic routes (as identified by the Monterey County General Plan) is shown in **Figure 12-1**.

### **Visual Resources of the Project Site**

The Potrero Area Subdivision represents approximately 1,286-acres within the greater 20,000-acre Santa Lucia Preserve. The site is located approximately five miles east of the Pacific Ocean and approximately two miles south of Carmel Valley. Entrance to the project site is gained via Rancho San Carlos Road, which intersects Carmel Valley Road. The primary ranch roads on the project site providing access to the proposed residential areas are Rancho San Carlos Road, Potrero Trail, Goodrich Trail, Wild Boar Run, Chamisal Pass, Corral Run, and Mesa Trail.

The project site is not currently developed, however there is an equipment staging area, masonry milling area, and an on-site caretaker's trailer on Potrero Trail near Rancho San Carlos Road just inside the entrance to the project area. The northern entrance to the project site and the greater Rancho San Carlos Preserve is a restored stone reception, security and office structure known as the Gatehouse. Improvements to existing ranch roads are under construction.

The project site is bordered by Carmel Valley on the north, by undeveloped land on the east and west, and the remainder of the Santa Lucia Preserve on the south. Land uses bordering the site consist of ranching and grazing, public and private recreation, open space, and residential development.

The primary topographic features of the project site are two prominent ridgelines, Chamisal Ridge and the ridgeline associated with Saddle Mountain, each trending in a northwest southeast direction and roughly 1,000 feet in elevation. The interval between the ridges is a valley known as Potrero Canyon, the northern, broad portion of which provides the setting for two proposed clusters of building sites (Lots 1-8 and 12-15). The landscape and terrain of the project site is similar to that of the greater Carmel Valley, characterized by rolling hills with broad valleys that support a mosaic of grasslands, chaparral scrublands and densely forested stands of live oaks with occasional redwoods and thick understory of poison oak and bramble.

### Views From Proposed Lot Locations

The northeastern ridge, formed by Saddle Mountain, shields much of the project area from view from Carmel Valley Road and creates a backdrop for Lots 1 through 8 and 12 through 15, which are at an elevation of approximately 400 feet.

Lots 9 through 11 are situated on a prominent overlook near Chamisal Ridge at an elevation of approximately 800 to 1,000 feet. Carmel Valley Road, partially visible from all three lots, is located to the northeast approximately two miles away. **Figures 12-2A** and **12-2B** provide photo location maps for views to and from the site.

**Figures 12-3 and 12-4** provide photographs taken from Lots 11 and 9 looking north toward Carmel Valley Road. Saddle Mountain and the general location of Lots 1-8 and 12-15 are in the middle ground.

Lots 16 through 21 are clustered on a high plateau above Lots 12 through 15 at approximately 400 to 600 feet. The northernmost lots of this cluster, 17 and 21, would overlook Carmel Valley Road, however a dense thicket of live oak forest with a poison oak and bramble understory at the lots' northern edges currently block views to and from Carmel Valley Road.

**Figure 12-5** shows photographs taken from Lots 17 and 21 looking north toward Carmel Valley Road showing the dense forested area.

Lots 22 through 27 are located farther to the south, within Potrero Canyon, at an elevation of approximately 600 to 800 feet and sloping southward. These lots are approximately 1.75 miles from Carmel Valley Road and there is no visibility to or from the road or public viewing areas. Lot 27 is located within the GMPAP.

Lots 28 and 29 are located southeast of Lot 27 atop a hillside clearing at an elevation of approximately 1,000 feet overlooking the greater Carmel Valley to the north, and portions of Robinson Canyon to the east. The peak of Saddle Mountain, located to the northwest, no longer provides a visual barrier between the lots and Carmel Valley Road. Views from these lots to the northeast take in portions of Carmel Valley Road, and off in the distance can be seen the occasional reflections of sunlight off of automobile windshields coming into Carmel Valley via Laureles Grade Road. Due east is Robinson Canyon Road, short segments of which can be seen from the lots. Lots 28 and 29, like the majority of the other proposed lots on the project site, have open areas of grassland and forested oak woodland within which construction could occur. Lots 28 and 29 are within the GMPAP.

### **Views From Carmel Valley Road**

Carmel Valley Road is located approximately two miles from the entrance to the project site. True to Carmel Valley Master Plan Policy 26.1.21 stating Carmel Valley's intent to remain rural residential in character, the Valley's landscape is comprised of rolling hillsides with stands of oak and open grasslands interspersed with rural residences, vineyards, and farms. There are also intermittent shopping areas on the valley floor with easy access to and from Carmel Valley Road.

Photographs were taken toward the project site at several points along Carmel Valley Road between Rancho San Carlos Road and Robinson Canyon Road, including a viewpoint from within a neighborhood on Brookdale Road. Carmel Valley Road is visible from some of the proposed lots on the project site. Portions of Lots 9-11, 17, 21, 28 and 29. Lots 9-11, which are at a higher elevation than the northern ridge and consist of more exposed grasslands, are the most prominent. Photos taken toward the project site from Carmel Valley Road show that views from most vantage points along Carmel Valley Road are blocked by Saddle Mountain and its associated ridgeline. Overall, views from Carmel Valley Road have a low level of intactness and unity, as foreground elements such as residences, residential landscaping, and utility poles

encroach into the middle and background views. Views to and from Carmel Valley Road at best provide a distant glimpse into the subdivision. Of the remaining lots that may be visible, most (particularly lots 17 and 21) are heavily obscured by thick woodland.

Views toward the project site from Carmel Valley Road are shown on **Figures 12-6 and 12-7**.

### **Views from Robinson Canyon Road**

Robinson Canyon Road is a County Scenic public road that extends from Carmel Valley Road southward, bisecting the greater Santa Lucia Preserve east of San Francisquito Flat and dead-ending at the private White Rock Club. The Santa Lucia Preserve facilities at San Francisquito Flat are visible in the foreground and middleground from the northern portion of Robinson Canyon Road.

With respect to the Potrero Area Subdivision, Robinson Canyon Road is located approximately one mile east of proposed Lot 29. Views in the direction of the project site are of slopes of forested rolling hills and ridgelines descending to grasslands. The panorama from Robinson Canyon Road is highly vivid, intact, and unified. Photographs were taken in the direction of Lots 28 and 29 from Robinson Canyon Road. Being over a mile away, views of the project site lie in the middleground to background zones. A portion of the ridgeline and slope that comprises the northern boundary of Carmel Valley is also visible in the far background; however, a ridgeline, possibly Chamisal Ridge, lies between Carmel Valley and the Robinson Canyon Road vista. While there is no flagging or story poles marking the lots, the vicinity of Lots 28 and 29 is visible from the road, as each lot is comprised of a cluster of oaks surrounded by grassland.

One or two scattered residences that are not part of the project site are also visible from this vantage point on Robinson Canyon Road, and give an indication of the degree of change in the landscape that development on Lots 28 and 29 could affect. The existing buildings appear as small “dots” on a rural landscape with what appear to be earth-toned roofs and exteriors. With proper siting and design, development on Lots 28 and 29 would be similarly innocuous.

Robinson Canyon Road is popular with highly sensitive viewers such as cyclists, photographers, painters, and other recreationists, in addition to those traveling to the recreation club at its terminus. Northbound travelers would not see the project site. Views of the project site are available to southbound travelers, however, the road traverses winding, steep terrain, and viewer sensitivity of automobile traffic is much lower than that of cyclists, hiker/pedestrians, painters, or photographers. Properly designed development on Lots 28 and 29 would present more sensitive viewers with a rural panorama of high visual quality that contains unobtrusive residences.

Photographs taken from Robinson Canyon Road toward Lots 28 and 29 are shown on **Figure 12-8**.

## **Views From Laureles Grade Road**

Laureles Grade Road is a steep, winding two-lane County Scenic road that connects Highway 68 with Carmel Valley Road. As drivers crest the grade and drive south into the Valley they are presented with panoramic views of the ridges and slopes that form the southern half of Carmel Valley. There is one main overlook turnout and two other minor locations that provide vistas toward the southwestern portion of Carmel Valley in the direction of the project site. Ridgelines can be seen in every section of the panorama; in the foreground, middle ground and background. Views are vivid and unified, although structures constructed on the hillside can be seen in the foreground and middle ground. Like the view from Robinson Canyon Road, the vicinity of Lots 28 and 29 is visible, identifiable by a road unassociated with the project site that has been constructed close to and east of Lot 29 which serves two existing lots.. This road, which slightly decreases the unity and intactness of the vista, can be seen from the turnout. As discussed above, reflections off of car windshields can be seen on Laureles Grade Road from Lots 28 and 29. While views from the turnout are subject to high viewer sensitivity, overall viewer sensitivity on Laureles Grade Road is low due to its steep, winding nature. In addition, portions of the project site viewable from Laureles Grade Road are a minimum of 5 miles away. Well designed and aesthetically blended structures in this area will not significantly affect views from viewing points on Laureles Grade Road.

The photographs in **Figure 12-9** show the vicinity of Lots 28 and 29 and the above-mentioned road; they were taken from the main pullout on Laureles Grade Road.

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Figure 12-1: Visually Sensitive Areas

Backside of 12-1

Figure 12-2a: Photo Location Map

Backside of 12-2a

Figure 12-2b: Photo Location Map

Backside of 12-2b

Figure 12-3: Photos 1 and 2 – lot 11

Backside of 12-3

Figure 12-4: Photos 3 & 4 – Lot 9

Backside of 12-4

Figure 12-5: Photos 5 & 6 – Lots 17 & 21

Backside of 12-5

Figure 12-6: Photos 7 & 8 from CVR

Backside of 12-6

Figure 12-7: Photos 9&10 from CVR

Backside of 12-7

Figure 12-8: Photos 11 & 12 from Robison Canyon Road

Backside of 12-8

Figure 12-9: Photos 13 & 14 from Laureles Grade Road

Backside of 12-9

## Regulatory Setting

### Monterey County Goals and Policies for Visual Resource Protection

Two areas of concern are addressed by visual resource policies in Monterey County. The first set of policies addresses the issues of development on ridgelines visible from public viewing areas and the second set addresses development within County designated “sensitive” or “highly sensitive” visual resource areas.

Monterey County places high value on maintaining its scenic and rural character and restricting development on ridgelines within the County is one way of doing so. The current General Plan and Zoning Ordinance contains policies intended to avoid development on all ridgelines visible from public viewpoints within the County, unless a special permit is granted. The General Plan and Zoning Ordinance both define ridgeline development as “development on the crest of a hill which has the potential to create a silhouette or other substantially adverse impact when viewed from a common public viewing area.” The Monterey County Zoning Ordinance, Section 21.06.195 defines a “common public viewing area” as a public area such as a street, road, designated vista point, or public park from which the general public ordinarily views the surrounding viewshed. In order to obtain a special permit to develop on a ridgeline, the proposed development must be consistent with the following policies:

**General Plan Policy 26.1.** In order to preserve the County’s scenic and rural character, ridgeline development will not be allowed unless a special permit is first obtained. Such a permit shall only be granted upon findings being made that the development, as conditioned by permit, will not create a substantially adverse visual impact when viewed from a common public viewing area. New subdivisions shall avoid lot configurations which create building sites that will constitute ridgeline development. Siting of new development visible from private viewing areas may be taken into consideration during the subdivision process.

**Zoning Ordinance Section 21.66.D.** A Use Permit for ridgeline development may be approved only if the following finding, based on substantial evidence, can be made: The ridgeline development, as conditioned by permit, will not create a substantially adverse visual impact when viewed from a common public viewing area.

Monterey County defines “sensitive” visual resources as “having local or community significance” and “highly sensitive” resources as “general areas having regional or county significance.” Figure 10 of the Greater Monterey Peninsula Area Plan depicts areas of visual sensitivity in northwestern Monterey County, from the Big Sur Coast and Cachagua planning areas in the south to the Greater Salinas planning area in the north. The Potrero Area Subdivision project site is within both the Carmel Valley Master Plan and Greater Monterey Peninsula Area Plan boundaries. These areas are defined by the County as both “sensitive” and “highly sensitive”, visible from existing, potential, and proposed scenic routes (see **Figure 12-1**). Highly sensitive resource areas within the project are in the vicinity of Lots 1 through 8, 16 through 21, and 28 and 29. The Greater Monterey Peninsula Area Plan and Carmel Valley

Master Plan each contain visual resource policies. It should be noted, however, that only three of the 29 proposed lots, lots 27, 28 and 29, are located within the GMPAP, and the remaining lots are in the CVMP area. Relevant County policies for protecting the visual quality of sensitive and highly sensitive visual resources include:

**General Plan Policy 40.2.1.** Additional sensitive treatment provisions shall be employed within the scenic corridor, including placement of utilities underground, where feasible; architectural and landscape controls; outdoor advertising restrictions; encouragement of area native plants, especially on public lands and dedicated open spaces; and cooperative landscape programs with adjoining public and private open space lands.

**General Plan Policy 40.2.2.** Land use controls shall be applied or retained to protect the scenic corridor and to encourage sensitive selection of sites and open space preservation. Where land is designated for development at a density which, should maximum permissible development occur, would diminish scenic quality, the landowner shall be encouraged to voluntarily dedicate a scenic easement to protect the scenic corridor.

**Greater Monterey Peninsula Area Plan Policy 1.1.3.** The County shall take comprehensive measures to ensure protection of sensitive scenic areas as shown on the Greater Monterey Peninsula Visual Sensitivity Map. Implementing policies are located in the transportation section of this plan.

**Greater Monterey Peninsula Area Plan Policy 26.1.9.1.** Development on canyon edges and hilltops shall be designed to minimize the visual impact of the development.

**Greater Monterey Peninsula Area Plan Policy 40.2.6.** Areas shown as “highly sensitive” on the Greater Monterey Peninsula Visual Sensitivity Map should be preserved as open space to the maximum extent possible through scenic easements or, if necessary, fee acquisition.

**Greater Monterey Peninsula Area Plan Policy 40.2.7.** New development should not be sited on those portions of property which have been mapped as “highly sensitive.” Where exceptions are appropriate to maximize the goals, objectives and policies of this plan, development shall be sited in a manner which minimizes visible effects of proposed structures and roads to the greatest extent possible and shall utilize landscape screening and other techniques to achieve maximum protection of the visual resource.

**Greater Monterey Peninsula Area Plan Policy 40.2.9.** New development to be located in areas mapped as “sensitive” or “highly sensitive” and which will be visible from the scenic route shall maintain the visual character of the area. In order to adequately mitigate the visual impacts of development in such areas, the following shall be required:

- Development shall be rendered compatible with the visual character of the area using appropriate siting, design, materials, and landscaping;

- Development shall maintain no less than a 100' setback from the scenic route right-of-way;
- The impact of any earth movement associated with the development shall be mitigated in such a manner that permanent scarring is not created;
- Tree removal shall be minimized;
- Landscape screening and restoration shall consist of plant and tree species consistent with surrounding native vegetation;
- Architectural review of projects shall be required to ensure visual compatibility of the development with the surrounding area; and
- New development in open grassland areas shown as “sensitive” or “highly sensitive” on the Visual Sensitivity Map should minimize its impact on the uninterrupted viewshed.

Exceptions to the above may be considered if compelling circumstances are demonstrated.

**Carmel Master Plan Policy 26.1.21.** It is intended that Carmel Valley remain rural residential in character.

**Carmel Master Plan Policy 26.1.24.** Every attempt should be made to minimize hillside scarring by avoiding cuts and fills where possible and where cuts and fills are unavoidable, by creating slopes that shall be revegetated. Permanent non-revegetated scarring of hillsides is strongly discouraged and should occur only if no other reasonable alternative is available.

**Carmel Master Plan Policy 26.1.25.** The visible alteration of natural landforms caused by cutting, filling, grading, or vegetation removal shall be minimized through sensitive setting and design of all improvements and maximum possible restoration including botanically appropriate landscaping.

**Carmel Master Plan Policy 26.1.26.** Development either shall be visually compatible with the character of the valley and immediate surrounding areas or shall enhance the quality of areas that have been degraded by existing development.

**Carmel Master Plan Policy 26.1.28.** Structures located in open grassland areas where they would be highly visible from Carmel Valley Road and Laureles Grade Road shall be minimized in number and clustered near existing natural or man-made vertical features.

**Carmel Master Plan Policy 26.1.31.** Materials and colors used in construction shall be selected for compatibility with the structural system of the building and with the appearance of the buildings natural and man-made surroundings.

**Carmel Master Plan Policy 26.1.32.** Development should be located in a manner that minimizes disruption of views from existing homes. This applies to road cuts as well as structures.

**Carmel Master Plan Policy 40.1.1.1.** County Scenic Route status shall be sought for Carmel Valley Road.

**Carmel Master Plan Policy 40.2.1.1.** An appropriate setback of 100 feet shall be established along Carmel Valley Road without causing existing structures to become non-conforming and without rendering existing lots of record unbuildable.

Monterey County is required to review architectural projects to confirm compatibility of the development with the surrounding character of the land. Development in open grassland areas shown on Figure 10 of the Greater Monterey Peninsula Area Plan as sensitive and/or highly sensitive must minimize its impact on the viewshed. If compelling circumstances are demonstrated, exceptions to the above requirements may be considered.

#### Santa Lucia Preserve Comprehensive Development Plan

**Design Standards.** As stated in the introduction to this chapter, in 1994 the Rancho San Carlos Partnership submitted an application for a combined development permit for the 20,000 acre Santa Lucia Preserve, which included a Comprehensive Development Plan for the entire preserve area. The Comprehensive Development Plan includes development standards for the development of roads, drives and utilities; standards for site development; and enforcement mechanisms and procedures. Under these three headings are specific standards pertaining to the aesthetic issues discussed within this chapter. Specific standards are included for development within visually sensitive areas, the establishment of building envelopes, and site analysis including views to and from a building site; standards are included for ridgeline silhouette avoidance, and architectural design standards that address site grading, architectural style, building height, building materials, landscape design and lighting are also provided. The guiding principle for development of the Santa Lucia Preserve is the avoidance of unique natural and scenic resources. However, this “avoidance principle” cannot be attained in every instance; therefore, the development standards incorporate mitigation and compensation principles for reducing potential impacts that may result from development within the Santa Lucia Preserve. Discussion of specific development standards is included with the discussion of potential impacts and mitigation measures later in this chapter.

**Lighting.** As described above, the design standards in the Comprehensive Development Plan include landscape design standards that govern the use of exterior lighting within the entire preserve area, including the Potrero Area Subdivision. While exterior lighting is allowed, it is only permitted to the extent that is required for safety but does not disturb the nighttime

ambience of the Preserve or areas outside its boundaries. The lighting guidelines require the use of subtle, concealed light sources and prohibit floodlighting.

## **IMPACTS AND MITIGATION MEASURES**

### **Approach and Methodology**

Analysis of potential aesthetic impacts is based upon field review of the project site and surrounding areas, photographs of visual vantage points on and around the project site, review of the previous analysis conducted for the Santa Lucia Preserve EIR, background documents for the Potrero Area Subdivision project provided by the applicant, and the Monterey County General Plan and area plans. For consistency, the approach adapted for this visual assessment is the same used for the Santa Lucia Preserve EIR, which used the visual impact assessment system outlined by the Federal Highway Administration (FHWA) as described below.

The Santa Lucia Preserve EIR, using Webster's New World Dictionary, defined aesthetics as "the study or theory of beauty and the psychological responses to it." The prior EIR's approach to evaluating the aesthetic resources of the Santa Lucia Preserve involved the application of a process that objectively identified the visual features or resources of the landscape; assessed the character and quality of those resources relative to overall regional visual character; and identified the importance to people, or sensitivity, of views of visual resources in the landscape.

For consistency, this SEIR uses the same approach taken by the Santa Lucia Preserve EIR to assess the visual resources of the Potrero Subdivision. This includes identification of visual resources (i.e., visual character and quality) of the region and the immediate project site; important viewing locations (e.g., roads, trails, and overlooks), the general visibility of the project area and site, using descriptions and photographs; viewer groups and their sensitivity and relevant local policies and concerns for protection of visual resources.

Data for this visual assessment were gathered from existing Monterey County policy documents, documents and maps prepared by the applicant for this project, a visual resource map and overlay depicting ridgelines and development, maps of the area, and a site visit on May 24, 2002. The site visit was conducted to document existing site conditions and assess potential visual impacts associated with development of the project. Important public views were photographed during the site visit.

### **FHWA Resource Evaluation**

Existing conditions of aesthetic resources are identified through the visual features or resources of the landscape; the character and quality of those resources relative to overall regional visual character; and the sensitivity of views of visual resources. With this preliminary baseline (existing) condition established, changes to the landscape by a proposed project could then be systematically evaluated for the degree of impact. The degree of impact depends on both the magnitude of change in the visual resource (i.e., visual character and quality) and viewers'

responses to and concern for those changes. This general process is similar for all established federal procedures for visual assessment and represents a suitable methodology for visual assessment of the project area.

### FHWA Criteria for Visual Assessment

The appearance of the landscape is evaluated using the following three criteria and descriptions of the elements of form, line, color, and texture. These elements are the basic components used to describe visual character and quality for most visual assessments.

- 1) *Vividness* is the visual power or memorability of landscape components as they combine in striking or distinctive visual patterns.
- 2) *Intactness* is the visual integrity of the natural and human-built landscape and its freedom from encroaching elements; this factor can be present in well-kept urban and rural landscapes, as well as in natural settings.
- 3) *Unity* is the visual coherence and compositional harmony of the landscape considered as a whole; it frequently attests to the careful design of individual components in the landscape.

### Viewer Sensitivity

Viewer sensitivity or concern is based on the visibility of resources in the landscape, the proximity of viewers to visual resources, the elevational position of viewers relative to visual resources, the frequency and duration of views, the number of viewers, and the type and expectations of individuals and viewer groups.

One criterion for identifying the importance of views is related in part to the position of the viewer relative to the resource. An area of the landscape that is visible from a particular location (e.g., an overlook) or series of points (e.g., a road or trail) is defined as a viewshed. To identify the importance of views as resources, a viewshed may be broken into distance zones of foreground, middle ground, and background. Generally, the closer a resource is to the viewer, the more dominant it is and the greater is its importance to the viewer. Although distance zones in viewsheds may vary between different geographic regions or types of terrain, a commonly used set of criteria identifies the foreground distance zone as being 0.25-0.5 mile from the viewer, the middle ground zone as extending from the foreground zone to 3-5 miles from the viewer, and the background zone as extending from the middle ground zone to infinity. Also, resources that are higher in elevation than the viewer generally tend to take on greater visual importance than resources located at a lower elevation than the viewer.

Visual sensitivity also depends on the number and type of viewers and the frequency and duration of views. Generally, visual sensitivity increases with an increase in total numbers of viewers, the frequency of viewing (e.g., daily or seasonally), and the duration of views (i.e., how long a scene is viewed). Visual sensitivity is higher for views seen by people who are driving for

pleasure; people engaging in recreational activities such as hiking, biking, or camping and homeowners. Views from recreation trails and areas, scenic highways, and scenic overlooks are generally assessed as having visual sensitivity. Visual sensitivity tends to be lower for views seen by people driving to and from work or as part of their work.

### **Significance Criteria**

Criteria for determining the significance of impacts are based on Appendix G of the 2003 State CEQA Guidelines and criteria used within the certified EIR for the Santa Lucia Preserve. Guidelines applicable to visual impacts state that a project will normally have a significant effect on the environment if it will:

- 1) Have a substantial adverse impact on an important public viewshed using FHWA and viewer sensitivity standards;
- 2) Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- 3) Substantially degrade the existing visual character or quality of the site and its surroundings through the alteration of existing natural landforms or vegetation patterns;
- 4) Create a silhouette or are otherwise visible on important ridges or crests of hills when viewed from common public viewing areas;
- 5) Reduce the visual quality of “sensitive” and “highly sensitive” visual resources from the county’s designated scenic routes; or
- 6) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

## Changes in Views from Carmel Valley Road

**Impact 12.1: Development on Lots 9 through 11 on the project site has the potential to change views southward from Carmel Valley Road. (Less than Significant)**

Views south from Carmel Valley Road toward the Potrero Area Subdivision include areas listed as “sensitive” or “highly sensitive” on Figure 10 of the GMPAP (**Figure 12-1**). The views consist of forested hills and ridges in the background and views of lower lying hillside slopes in the middle ground. Existing residences, located on the hillsides in the middle ground, contribute to the rural residential nature of the Carmel Valley landscape. Urban elements such as utility poles and traffic signals are included in middle ground and foreground views, and the foreground is primarily comprised of residential and commercial development. Background views are vivid, but not entirely intact; elements located in the foreground, particularly residential landscaping and utility poles, degrade the quality of elements of the middle and background.

Precise identification of lot locations within the Potrero Area Subdivision is difficult from Carmel Valley Road, as there is currently no flagging or other identifying reference marker, and the precise location of future homes is not known at this time. However, a visit to the project site confirmed that Carmel Valley Road was visible from lot clusters within the Potrero Area, primarily in the area of Lots 9-11 and to a lesser degree Lots 17, 20, and 21. As described above under the subheading *Visual Resources of the Project Site*, Lots 17, 20, and 21 are screened from Carmel Valley Road by dense vegetation. Based on the site reconnaissance and photographs, Lots 17, 20, and 21 will not be seen from Carmel Valley Road.

Lots 9-11 include prominent hilltop areas with sparse, mostly grassland vegetation. The majority of the area of Lots 10-11 slope southward, away from Carmel Valley Road; however, as photographs taken from a high point on Lot 11 demonstrate, portions of Carmel Valley Road and existing development below is clearly visible, albeit from a significant distance. The view toward Carmel Valley Road looks over a ridge formed by Saddle Mountain (see **Figure 12-2**), and photographs taken toward the project site from points along Carmel Valley Road show Saddle Mountain as a prominent ridgeline in the background. This ridgeline shields the majority of the land area on Lots 9-11 as seen from Carmel Valley Road. The portions of Lots 9 and 11 visible from Carmel Valley Road are at best seen through a narrow “window” up Potrero Canyon approximately 2.5 miles in the distance.

Individual homes developed on Lots 9-11 have the potential to be visible from Carmel Valley Road. However, based on the distance from the roadway, short duration of the view, and the design guidelines required by the Santa Lucia Preserve, the visual impact from Carmel Valley Road will be **less than significant**. Applying the FHWA criteria, any visible portion of homesites from this distance will not detract from the vividness, intactness or unity of views within the Valley. Nor will project visibility impact viewer sensitivity criteria, as the duration of any visibility will be of such short duration as seen from drivers. The locations of the lots in question are beyond the foreground viewing zone and well outside the minimum 100-foot County designated buffer zone adjacent to County scenic roads. As views from public viewing

areas will not result in a substantially adverse impact, the project will not violate County scenic or ridgeline development policies.

These less than significant visual impacts of developing Lots 9-11 and 17, 20, and 21 can be further minimized or fully eliminated through specific siting of structures back from the ridgeline or by locating structures to be screened by existing vegetation. Architectural design and lighting guidelines required by the Comprehensive Development Plan will also minimize the visual effect of new development.

### **Mitigation: None Required**

No mitigation measures are required for project impacts as seen from Carmel Valley Road, as no threshold of significance will be exceeded. However, to ensure that project visibility is reduced to the greatest extent possible, the following measure is recommended as a condition of project approval to be applied to individual homesites:

**Implement County Staking and Flagging Procedures.** All lots within the Potrero Area Subdivision shall be staked in accordance with “County-wide Staking and Flagging Criteria” before individual project applications for home construction are deemed complete. Staking and flagging will be used to disclose building plans to neighboring properties, optimize homesite location and minimize homesite visibility.

### **Impacts on Views from Robinson Canyon Road**

**Impact 12.2: Development on Lots 28 and 29 on the project site has the potential to change views northward from Robinson Canyon Road. (Less Than Significant)**

As described above under *Views from Robinson Canyon Road* within this chapter, views in the direction of the project site consist of forested slopes, rolling hills and ridgelines descending to grasslands. Views are expansive, unified, intact and highly vivid. Such views are important visual resources in the region. Robinson Canyon Road is a County-designated scenic road popular with recreationists, a sensitive viewer group, and local residents of the San Clemente development further south.

Located over a mile away, views of the Potrero Area Subdivision site are within the middle ground to background zones (see **Figure 12-8**). While there is no flagging marking the lots at this time, the general location of Lots 28 and 29 is visible from the road, as each lot is identifiable by a cluster of oaks surrounded by grassland. Like many of the views within Carmel Valley, residences and other structures appear intermittently on the landscape of oak forest, chaparral and grassland. A series of existing lots within the GMPAP area are located between Robinson Canyon Road and Lots 28 and 29.

The clustering scheme, as described in the Project Description, is intended to minimize the project’s visual impacts on public viewing areas and satisfies both GMPAP Policy 40.2.9[g] and

CVMP Policy 26.1.28. By siting structures among or adjacent to forested areas on the lots, the visual impact can be reduced either by shielding the structure from view or allowing it to blend with the surrounding landscape. The Santa Lucia Preserve design guidelines require subdued earth tones intended to further blend the structures into the surrounding landscape and maintain visual unity and is consistent with GMPAP Policy 40.2.9[a] and CVMP Policy 26.1.31. Flagging is recommended for all lots within the project area as part of the application process for individual homes.

The view toward the project site from Robinson Canyon Road is very important, considering Robinson Canyon Road's designation as a County scenic road and its frequent use by more sensitive users such as hikers, photographers and painters. Development of Lots 28 and 29 may alter the view from Robinson County Road; however, considering the distance between these lots and the public viewing areas along the road, the fact that there are intervening lots of record closer to the road, and existing intermittent residences within the viewshed, the overall impact from this proposal will be minimal as the post-construction view will be substantially the same as the existing condition. Based upon the FHWA and viewer sensitivity standards described, the project will have a **less than significant** impact upon views from Robinson Canyon Road.

**Mitigation: None Required.**

#### **Impacts on Views from Laureles Grade Road**

**Impact 12.3: Development on Lots 28 and 29 on the project site has the potential to affect views southwest from Laureles Grade Road. (Less Than Significant)**

There is one main overlook turnout and two smaller turnouts that provide views of the southern portion of Carmel Valley in the direction of the Potrero Area Subdivision. Only the main, large turnout, located just south of the Laureles Grade summit, provides a view of the project site in the general vicinity of Lots 28 and 29. Again, since there is no flagging or other indication of the ultimate building site, precise homeland locations cannot be identified. However, a road that is not part of the project site has been constructed close to and east of Lot 29 and can be seen from the turnout. Conversely, reflections off automobile windshields traveling south on Laureles Grade Road can be seen from Lot 29, indicating that at least a portion of the lot is visible from the roadway.

The view toward the project site from the main turnout on Laureles Grade is similar to the view from other public viewing areas in Carmel Valley. Ridgelines can be seen in every section of the photograph (**Figure 12-9**), in the foreground, middle ground and background. The existing visible structures are white and do not blend into the landscape, which decreases its unity and intactness as a resource. In addition, the fact that there is an existing road further decreases the unity and intactness of the vista. Laureles Grade Road is a steep road with sharp curves and motorists who do not pull over are not likely to see any structures in this area while driving or riding as a passenger.

While the vicinity of Lots 28 and 29 is visible from the main turnout on Laureles Grade Road, the distance of the lots is over five miles from the viewing point and in the middle-to-background of the photograph. Motorists and passengers who travel this road are highly unlikely to notice a well sited and designed structure across the valley from this distance.

Due to the distance of Lots 28 and 29 from the public viewing area on Laureles Grade Road, in addition to preexisting elements that decrease overall visual quality and integrity of the view, the potential impact of the project on views from Laureles Grade Road is considered **less than significant**.

**Mitigation: None Required**

### **Visual Impacts of Roads and Drives**

**Impact 12.4                    Subdivision development will result in other visual features such as the construction of roads and driveways (Less than Significant).**

As discussed above the primary mitigating factor for visual impacts within the Potrero Area is distance. From public roadways and viewpoints, development within the subdivision will not be visible except possibly at a few distant locations. Buildings, with greater mass and height, would generally be more visible than roads and driveways. It should be noted that the primary roadway system for the Potrero Area is in place, although existing ranch roads will be improved. Upon review of the tentative map and views from the field, the only road improvements that have the potential to be visible from off site locations are Goodrich Trail and Wild Boar Run. All other roads and driveway locations are obscured by topography and dense vegetation within the subdivision. As with the homesites, all development is subject to the Santa Lucia Preserve Design Guidelines. Applying the FHWA criteria described above, any visible portion of roads or private drives from this distance will not detract from the vividness, intactness or unity of views within the Valley. Visibility of these features will not impact viewer sensitivity criteria because the visibility will be of such short duration. Based on this criteria visibility of these features will be **less than significant**.

**Mitigation: None Required**

## CITATIONS

County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including *Addendum to EIR*, August 1997).

Denise Duffy & Associates, *Potrero Area Subdivision of the Santa Lucia Preserve*, Project Description, April 2001.

Potrero Area Subdivision EIR Project File.

## Chapter 13. Traffic

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### INTRODUCTION

This chapter is based upon a traffic impact analysis conducted by Dowling Associates (January 2000, updated June 2003) for the 29 lots of the Potrero Area Subdivision. Considering that the vehicle trips and traffic impacts assumed to be generated within Potrero Area were analyzed within the certified Santa Lucia Preserve Final EIR in 1995, the scope of this current study focuses on any changes in circumstances or environmental conditions that may have occurred subsequent to approval of the Comprehensive Development Plan. The purpose of the study is to validate and update the assumptions of the prior analysis, update the status of existing traffic conditions, and determine if the project would result in any new or different impacts beyond those identified for the entire Preserve.

### SETTING

#### Project Access

Rancho San Carlos Road will be the primary access to the proposed project. It has been widened to county private road standards (20 feet paved travel way plus two 2-foot paved shoulders) between Carmel Valley Road and the main gate of the Santa Lucia Preserve. A traffic signal with turn lanes has been installed at the intersection of Rancho San Carlos Road and Carmel Valley Road. A pedestrian/bicycle walkway has been added to the Rancho San Carlos Road Bridge across the Carmel River.

Rancho San Carlos Road is paved and built to county private road standards (18 to 20 feet of paving with two 2-foot paved shoulders) south of the main gate, within the Preserve. Chamisal Pass and Potrero Trail were recently paved and built to county private road standards as part of previous approvals for the Santa Lucia Preserve within the GMPAP boundaries.

#### Primary Roadways (Carmel Valley Road and Highway One)

According to the traffic analysis, traffic conditions on Carmel Valley Road have remained relatively stable over the last six years. Daily traffic volumes have grown at less than a one percent annual rate. Caltrans estimates that daily traffic has grown about 0.74 percent per year on Highway One; however, these estimates are based upon projections of countywide growth trends rather than actual traffic counts taken in the Carmel Valley area. Daily and annual traffic trends for Carmel Valley Road and Highway One are summarized in **Table 13-1** below:

**TABLE 13-1  
TRAFFIC TRENDS ON CARMEL VALLEY ROAD AND STATE HIGHWAY ONE**

Daily Traffic											
Location	Year									9-Year Growth	Avg. Annual Growth Rate
	1994	1995	1996	1997	1998	1999	2000	2001	2002		
Carmel Valley Road (east of Carmel Rancho)	23,400	23,100	23,200	24,000	23,700	24,200	25,000	23,000	25,022	6.9%	0.94%
Highway One (north of Carmel Valley Road)	47,500	49,000	50,000	52,000	53,000	54,000	53,000	50,000	N/A	5.3%	0.74%

Sources: *Monterey County Annual Traffic Count Reports for Carmel Valley Road and Mr. Al Ingram, Caltrans 05 for Highway 1.*

Counts taken in November 2002 show that Rancho San Carlos carried 2,031 vehicles per day between Valley Greens Road and Carmel Valley Road. This compares to 1,902 trips per day taken in October of 1994 and represents an increase of 6.7 percent over 8 years.

**Existing Intersection Levels of Service**

Intersection level of service analysis was conducted for existing conditions as of November 2002. As discussed under the section on cumulative analysis below, this 2002 analysis includes much of the traffic that was considered cumulative in 1995. **Tables 13-2** and **13-3** summarize the results of intersection level of service analysis. Consistent with the Santa Lucia Preserve FEIR, analysis was conducted for the P.M. peak hour for six locations and for the A.M. Peak hour for the intersection of Rancho San Carlos Road/Carmel Valley Road.

**TABLE 13-2  
SUMMARY OF EXISTING (2002) P.M.  
PEAK HOUR LEVELS OF SERVICE**

Location	P.M. Peak LOS	Delay/Vehicle (sec.)
Rancho San Carlos/Carmel Valley Road	A	7.3
Highway 1/Carpenter Street	C	25.2
Highway 1/Ocean Avenue	C	23.8
Highway 1/Carmel Valley Road	C	22.3
Highway 1/Rio Road	C	22.9
Carmel Valley Road/Carmel Rancho Road	C	21.7

**TABLE 13-3**  
**SUMMARY OF EXISTING (2002)**  
**A.M. PEAK HOUR LEVELS OF SERVICE**

Location	A.M. Peak LOS	Delay/Vehicle
Rancho San Carlos/Carmel Valley Road	A	4.4

For all locations for each peak period the study intersections operate acceptably under existing conditions.

### **Existing Construction Traffic and Traffic Regulations at Santa Lucia Preserve**

Rancho San Carlos Road recently has been experiencing construction traffic associated with roads, residences, infrastructure and golf course construction within the Preserve. Construction traffic (using the contractor/construction delivery gate at the Preserve) was observed to be about approximately 50 vehicle-trips per day in April 2000. Construction traffic is approximately 50-80 vehicle trips per day on average since that period.

The golf course, Clubhouse, gatehouse and fitness center construction have all been completed and are in operation. The Potrero Area subdivision will require off-ranch trips for contractors, construction and grading equipment and building materials for future road, driveway and home construction, although the majority of the roads on the property have been built.

The Santa Lucia Preserve Construction Guidelines impose several conditions on contractors working within the Preserve, including: access restrictions, parking limits, carpool requirements, speed limits, identification requirements, construction time limits, pet prohibitions, noise and radio prohibitions, security requirements, and fines for noncompliance with the Guidelines. The major provisions of the Construction Guidelines related to existing traffic include:

1. All construction access is limited to the construction gate on Rancho San Carlos Road. No access is allowed off of Robinson Canyon Road.
2. Trucks are prohibited from using Valley Greens Drive unless over 40 tons gross weight, in which case a special arrangement with Security must be made to use Valley Greens Drive.
3. Carpooling and off-site parking are encouraged.
4. Parking off-road and outside of the construction site is prohibited.
5. Construction times are limited to 7:30 AM to 5:30 PM, Monday through Friday and 9 AM to 5 PM on Saturday.
6. Trucks and big rigs cannot enter or exit the Preserve before 7 AM or after 6 PM and are prohibited from parking on Rancho San Carlos Road or Valley Greens Drive to wait for the appropriate time to enter the Preserve.

## IMPACTS AND MITIGATION MEASURES

### Analysis Approach and Assumptions

The approach to the traffic analysis conducted for this SEIR begins with an assessment of the analysis and recommendations contained in the 1995 Santa Lucia Preserve Final EIR. As discussed in the introduction to this section, vehicle trips generated within the Potrero Area were analyzed and accounted for within the certified Santa Lucia Preserve Final EIR. The scope of this current study focuses on any changes in circumstances or environmental conditions that may have occurred subsequent to the approval of the Comprehensive Development Plan. The purpose of the study is to validate (or update) the assumptions of the prior analysis, update the status of existing traffic conditions, and determine if the project would result in any new or different impacts beyond those identified for the entire Preserve.

To analyze the Potrero Area Subdivision in the context of the prior EIR, this section addresses the four following questions. The relevant findings are summarized below each inquiry:

1. Are the assumptions in the Final EIR regarding cumulative development still valid?

*Although much of the cumulative development assumed by the Final EIR has been completed and is included in Existing (2002) conditions and new projects have been proposed that were not contemplated in the Final EIR, the conclusions in the FEIR that no additional mitigation measures are required for cumulative conditions are still valid. Refer to the updated information provided herein.*

2. Are the assumptions in the Final EIR regarding planned road improvements still valid?

*Many of the previously expected off-site improvements have been constructed and are included in the Existing (2002) conditions while some of the expected off-site improvements have been dropped.*

*All improvements required of RSC have been built. See Table 13-5 for status of Highway 1 improvements.*

3. Are the required mitigation measures for build-out of the Santa Lucia Preserve still valid?

*The required mitigations for the build out of Santa Lucia Preserve are still valid even assuming the updated existing and cumulative traffic conditions. Some measures have been implemented and are included in the Existing Conditions.*

4. Will there be any significant traffic impacts created by the Potrero Area Subdivision that have not been previously analyzed or accommodated by the prior mitigation?

*All significant traffic impacts and changes in traffic conditions created by the Potrero Area Subdivision have been analyzed as part of Santa Lucia Preserve, and all impacts are addressed by the prior mitigation measures.*

#### Assumptions for Project Trip Generation and Distribution

All project trip generation projections were computed using the same trip generation rates and distribution percentages reported in the Santa Lucia Preserve Final EIR, updated for changes in the Preserve plan that have occurred since 1995. Specifically, the trip distribution was revised to account for the exclusion of the visitor lodge and residential serving retail uses in the original Preserve plan. Ninety percent of the new trips generated by the Potrero Area Subdivision will go to and from the west on Carmel Valley Road.

#### Assumptions for Cumulative Development

The cumulative impact analysis contained within the Santa Lucia Preserve Final EIR (and 1997 Addendum) included full build-out of the Comprehensive Development Plan (350 dwelling units, 150 room lodge, neighborhood commercial, golf course, clubhouse and service facilities). In addition, the Final EIR assumed construction of another 557 dwelling units within Carmel Valley. In total, expected cumulative daily traffic volumes from all assumed projects totaled 6,964 daily trips in that analysis.

Since 1995, the County's assumptions for cumulative development affecting Carmel Valley have changed. Many of the projects assumed in 1995 have either been dropped or denied, and other applications have been submitted and approved. Projects listed as reasonably foreseeable in 1995, but have since been approved and constructed, are assumed as part of the "existing condition" for the purposes of this SEIR. The effects of these built projects on traffic conditions are assumed to be representative of existing environmental conditions at the time of publication of the Notice of Preparation of this SEIR. For example, the traffic generated from built projects is assumed to be on the roadway, and reflected in existing Levels of Service and traffic counts.

Table 13-4, shown below, represents the current (2002) "cumulative projects" list that could influence local traffic conditions:

**TABLE 13-4  
CUMULATIVE PROJECTS, 2003**

PROJECT NAME OR APPLICATION	DWELLING UNITS	NON- RESIDENTIAL UNITS	STATUS	FUTURE TRIPS	
				DAILY	PM
<b>Santa Lucia Preserve (excluding Potrero Subdivision's 29 units) <sup>1</sup></b>					
Santa Lucia Preserve (SLP) Residences (excluding Potrero)	321 units		Intermittent Construction (10% Completed)	2,768	292
SLP Visitor Accommodations		150 visitor serving	Not Approved	0	0
SLP Neighborhood Commercial			Not Approved		
<b>Commercial/Non Residential Projects Approved or Foreseeable</b>					
Quail Lodge (Quail Meadow)		40 visitor serving	Not built	300	12
Carmel Valley Ranch		44 visitor serving	Not built	330	14
Carmel Valley Ranch guest spa		19,000 s.f.	Not built	818	82
White Oak Plaza Commercial		7,267 s.f.	Not built	296	35
Community Life Center		29,424	Not built	674	51
Rancho Chiquita Pt. Lobos		10 visitor serving	Not built	102	11
Crossroads Expansion (Grocery)		+21,260 s.f. exp.	Not built	1,953	134
Gamboa Elvira (Assisted Care fac.)		78- beds	Not approved	151	12
Rancho Canada Golf Club (Hotel)		175 visitor serving	Not approved	933	66
Rancho Canada Employee Housing	50 units		Not approved	618	33
<b>Subdivisions Approved</b>					
Quail Lodge (Quail Meadow)	52 units		Intermittent Construction (50% Complete)	250	26
Canada Woods	59 units		Not built	1,052	124
990386	3 units		Not built	28	3
010004 (prev. 980664)	5 units		Not built	48	5
980343	3 units		Not built	28	3
Fox Creek Ranch	10 units		Not approved	96	11
010238	2 units		Not built	20	2
<b>Projects Not Approved But Considered Foreseeable</b>					
September Ranch	117 units		Not approved	887	124
<b>Totals</b>	<b>303 Dwelling Units (272 units in addition to Santa Lucia Preserve)</b>	<b>419 Visitor Serving units; approx. 58,300 s.f. commercial; 19,000 s.f. guest spa; 78-bed care facility; approx. 29,400 s.f. community center.</b>		<b>8,022</b>	<b>1,124</b>

**Notes:**

<sup>1</sup> The 150 room lodge and neighborhood commercial components of the Preserve were included in an early development phase of the project in 1995. They are not being proposed by RSC nor are they part of any pending County application. The Chamisal Subdivision, approved in 2003, is also a portion of the total unit count within the Santa Lucia Preserve.

## Assumptions Regarding Road Improvements

The Santa Lucia Preserve FEIR referenced the Hatton Canyon Freeway as a potential long-term improvement but did not include the freeway project in its analyses, nor did the FEIR identify the freeway as a potential or required mitigation measure. The Hatton Canyon Freeway is currently considered a non-foreseeable project. Since the prior EIR did not consider completion of the freeway in its future assumptions, the current status of the freeway has no influence on the Potrero project or cumulative development assumptions.

The prior EIR also identified several operational improvements to Highway 1 that were being pursued by Caltrans, the County and the Transportation Agency for Monterey County (TAMC). The Table below provides the current status of these projects:

**TABLE 13-5  
STATUS OF HIGHWAY ONE OPERATIONAL IMPROVEMENTS**

<b>Project</b>	<b>Status</b>
No. 1 – Widen the Carmel River Bridge on Highway 1 south of Carmel Valley Road	Completed in 1995.
No. 2 – Construct second westbound through lane at Rio Road	The County Board of Supervisors did not approve the “No Parking” ordinance; however, they approved a continuance to study other possible solutions to the Rio Road area.
No. 3 – Construct dual left-turn lanes on Highway 1 at Carmel Valley Road	Completed in 1996.
No. 4 – Northbound climbing lane from Carmel Valley Road to Morse Drive	Partially completed and further environmental is required. Will be completed in conjunction with improvements #11 and #12.
No. 5 – Dual right-turn lanes from Carmel Valley Road onto Highway 1	Completed in 2001.
No. 6 – Construct exclusive right-turn lane eastbound to southbound at Ocean	Dropped in 2002.
No. 7 – Extend right turn lane southbound to westbound at Ocean	Design is completed. Construction delayed by court injunction.
No. 8 – Extend lane merge southbound of south of Ocean Avenue	Dropped in 2002.
No. 9 – Extend storage length of eastbound leg at Carpenter Street	Caltrans dropped this project from further consideration due to excessive tree removal.
No. 10 – Park and Ride Lot	Completed in 2002.
No. 11 – Left turn channelization of northbound Highway 1 to westbound Hanley	Further environmental review is required; will be completed in conjunction with improvements #4 and #12.
No. 12 – Third northbound lane from Hanley Drive to Highway 68 (Pacific Grove) interchange	Further environmental review is required; will be completed in conjunction with improvements #4 and 11.

Source: *Caltrans Construction Projects Update Report to TAMC, January 2003.*  
*Mr. David Silverberger*

### Status of Santa Lucia Preserve Final EIR Mitigation Measures

As indicated above a number of improvements designated in the Final EIR for Highway 1 have already been constructed. Likewise, the following mitigation measures, required for the previous approvals, have been implemented:

1. Construction of traffic signal and other improvements at the intersection of Carmel Valley Road and Rancho San Carlos Road.
2. Widening of Rancho San Carlos Road and installation of appropriate traffic control devices between Carmel Valley Road and its end point with the Preserve.
3. Construction of pedestrian/bicycle walkway on Rancho San Carlos Road bridge across the Carmel River.
4. Development and implementation of a construction traffic control plan for existing approved phases.
5. Contribution to Traffic Mitigation Fund for Highway One.

The following two mitigation measures have been partially implemented:

6. Contribution to Traffic Mitigation Fund for Carmel Valley Road.
7. Development and implementation of a construction traffic control plan will be completed as a condition of approval for the project.

### **Significance Criteria**

As identified throughout this SEIR, the development of the Potrero Area Subdivision was assumed within the analysis of the Santa Lucia Preserve Final EIR. The traffic impacts from buildout of the Preserve were quantified against existing and cumulative conditions, and a series of mitigation measures were required as conditions of project approval. As identified above, many of these measures have been implemented.

- a) Given this setting and for the purposes of this SEIR, the project would have a significant effect on the environment if it would cause any significant project-specific or cumulative impacts that were not identified and mitigated in the Santa Lucia Preserve Final EIR, including:
  - deterioration of Level of Service operations for roadway segments or intersections to unacceptable levels;
  - substantial alteration of vehicle circulation patterns or movements; or
  - increased hazards to motor vehicles, bicycles or pedestrians.

## Additional Trips on the Roadway System

Table 13-6 summarizes project trip generation under the current proposal. The project will add 12 AM peak hour trips and 18 PM peak hour trips to Rancho San Carlos Road at Carmel Valley Road over the existing condition. The Preserve FEIR assumed the construction of 62 lots within the CVMP Area, 33 more than the 29 lots currently proposed by the Potrero Area Subdivision. As demonstrated by the table below, the vehicle trips reaching the public roadway system will decrease by 41% compared to the trips assumed in 1995.

**TABLE 13-6  
PROJECT TRIP GENERATION**

Land use	Num.	Type	Daily Trip Rate	% Off-Ranch	Daily Trips Off-Ranch	% AM Peak Hour	% PM Peak Hour	AM Peak Hour Trips			PM Peak Hour Trips		
								In	Out	Tot.	In	Out	Tot.
<b>POTRERO AREA SUBDIVISION</b>													
Market Rate Homes	26	Dwellings	6.7	90%	157	7%	10%	3	8	11	11	5	16
<i>Other Lots</i>													
GMPAP Lots	3	Dwellings	6.7	90%	18	7%	10%	0	1	1	1	1	2
<b>SUBTOTAL</b>	29				175			3	9	12	12	6	18
<b>1995 FEIR CVMP AREA BUILDOUT</b>													
Market Rate Home	53	Dwellings	6.7	80%	284	7%	10%	5	15	20	19	9	28
Multi-Family (inc.)	9	Units	5	32%	14	8%	10%	0	1	1	0	1	1
<b>SUBTOTAL</b>	62				298			5	16	21	19	10	29

Source of trip rates: Table 13-10 of Santa Lucia Preserve FEIR, September 1995

Of the 18 p.m. peak hour trips, 16 are expected to travel to/from the west along Carmel Valley Road and two are expected to travel to/from the east.

### Contribution to Cumulative Traffic Conditions

As demonstrated by Table 13-4, cumulative projects in Carmel Valley and surrounding area have been updated to reflect current application activity as provided by the Monterey County Planning and Building Department and verified in the field. Level of Service analysis was conducted to evaluate traffic operations at study intersections under conditions where project traffic and traffic from all of the cumulative projects identified. Cumulative Levels of Service are shown in Tables 13-6 and 13-7.

Note that the cumulative LOS in the table is not based on future traffic but the existing 2003 roadway configuration. In effect no future mitigations or improvements have been assumed.

**TABLE 13-7  
SUMMARY OF CUMULATIVE P.M. PEAK HOUR LEVELS OF SERVICE**

<b>Location</b>	<b>P.M. Peak LOS</b>	<b>Delay/Vehicle (sec.)</b>
Rancho San Carlos/Carmel Valley Road	B	10.6
Highway 1/Carpenter Street	C	28.6
Highway 1/Ocean Avenue	C	29.2
Highway 1/Carmel Valley Road	C	27.0
Highway 1/Rio Road	C	23.4
Carmel Valley Road/Carmel Rancho Road	C	27.4

**TABLE 13-8 SUMMARY OF CUMULATIVE A.M. PEAK HOUR LEVELS OF SERVICE**

<b>Location</b>	<b>A.M. Peak LOS</b>	<b>Delay/Vehicle</b>
Rancho San Carlos/Carmel Valley Road	B	12.9

Note that for all locations for each peak period the study intersections operate acceptably under cumulative conditions. Based upon this the project will have **a less than significant impact.**

**Mitigation:** None Required.

Based upon existing and projected traffic conditions, this traffic analysis concludes that:

- a) the project will not result in any new or different impacts beyond those identified in the previously certified EIR;
- b) there will be no substantial increase in the severity of impacts identified as significant in the previously certified EIR; and
- c) the existing mitigation measures (as required of the Santa Lucia Preserve Final EIR) will continue to be sufficient to mitigate the effects of buildout of the Preserve, including the Potrero Area Subdivision.

Overall, although assumptions for cumulative development have resulted in an increase in the estimated number of new traffic trips on area roadways, actual conditions (vehicle trips and levels of service) on those roadways have remained relatively stable, with slight annual changes in volume. Operations at key intersections, such as Rancho San Carlos Road/Carmel Valley Road and Carmel Valley Road/Highway One have improved due to intersection improvements, turn lanes, and signalization.

The mitigation measures required for approval of the Preserve will continue to be applicable to the Potrero Area Subdivision. No further or additional mitigation is required, as no additional impacts are projected beyond those identified in 1995.

The approvals for the Preserve incorporated the following measures (listed according to the FEIR's numbering system):

38. Contribute to the traffic mitigation fund for Carmel Valley Road.
39. Add a left-turn acceleration lane on Carmel Valley Road for the northbound to eastbound left-turning vehicles and extend the eastbound right-turn lane. **(Completed)**
40. Contribute to a fund for signalizing the intersection of Carmel Valley Road and Rancho San Carlos Road. **(The signal has been installed)**
41. Contribute to the traffic mitigation fund for Highway One. **(Completed)**
43. Develop and implement a traffic control plan for the construction site.
44. Improve Rancho San Carlos Road and existing bridge across Carmel River, to conform with the County and CDF standards. **(Completed)**
45. Provide adequate sight distance, and install appropriate traffic control devices.

Because many of the physical improvements are completed, the remaining measures for the Potrero Area Subdivision are limited to the payment of mitigation fees toward funds for Carmel Valley Road. Fees will continue to be assessed, as a condition of project approval, consistent with existing procedures established by the County.

**Mitigation: Implement Existing Measures:** No further mitigation is required beyond the existing measures as identified within the previously certified SLP Final EIR. The applicable measures (38, 41, 43 and 45) will be included as conditions of project approval.

## CITATIONS

Dowling Associates, Inc. *Traffic Impact Analysis for the Potrero Area Subdivision of the Santa Lucia Preserve*, December 4, 2000, updated June, 2003.

Hexagon Transportation Consultants. *Peer Review of the Traffic Impact Analysis for the Potrero Area Subdivision*, September 2003.

County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including *Addendum to EIR*, August 1997).

## **Chapter 14. Climate and Air Quality**

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### **INTRODUCTION**

The *Santa Lucia Preserve Final Environmental Impact Report*, certified in 1996, addressed the impacts of the 20,000-acre Santa Lucia Preserve Comprehensive Development Plan. As a planned component of the Santa Lucia Preserve project, the Potrero Area Subdivision consists of 29 lots developed over 1,286-acres. This section of the Supplemental EIR (SEIR) describes the project area's physical and regulatory air quality environment, as well as the potential air quality impacts of developing the Potrero Area Subdivision, with an emphasis on changes that may have occurred since the certification of the prior EIR. Sources of new or updated information include publications from the Monterey Bay Unified Air Pollution Control District (MBUAPCD) and the California Air Resources Board (CARB).

### **SETTING**

#### **Existing Meteorological and Climatic Conditions**

The project site is located in northwestern Monterey County approximately two miles south of the Carmel Valley and five miles east of the Pacific Ocean in the North Central Coast Air Basin (NCCAB) of California. The NCCAB consists of Monterey, Santa Cruz, and San Benito Counties.

A semi-permanent high-pressure ridge in the eastern Pacific is the controlling factor in the climate of the air basin. In late spring and summer, the high-pressure system is dominant and causes persistent west and northwesterly winds over the entire California Coast. The onshore air currents pass over cool ocean waters to bring fog and relatively cool air into the coastal valleys. Warmer air aloft creates elevated inversions that restrict dilution of pollutants vertically, while mountains surrounding the valleys restrict dilution horizontally.

In the fall, the surface winds become weak, and the relatively stagnant conditions allow pollutants to accumulate over a period of days. During this season north or east winds develop that transport pollutants from either the San Francisco Bay Area or the Central Valley into the NCCAB. During winter and early spring the high pressure system over the Pacific migrates southward and has less influence on the air basin. Wind direction is more variable, but northwest wind still dominates. The general absence of deep, persistent inversions and occasional storm passages usually result in good air quality for the basin as a whole.

#### **Ambient Air Quality Standards**

Pollutants of concern within the air basin include carbon monoxide (CO), ozone and particulate matter smaller than 10 microns (PM<sub>10</sub>). Health risks and the state and federal standards for these pollutants are addressed in the *Santa Lucia Preserve EIR*, incorporated by reference. Since the certification of the prior EIR, there have been a few changes to the state and federal standards for pollutants. On the state level, the sulfur dioxide (SO<sub>2</sub>) standards have become more stringent,

and the standard is now 0.04 parts per million (PPM) rather than 0.05 PPM. The annual standard for PM<sub>10</sub> was changed from 30 to 20 µg/m<sup>3</sup> and the new annual standard for PM<sub>2.5</sub> is 12 µg/m<sup>3</sup>.

On the federal level, in 1997, the U. S. Environmental Protection Agency (EPA) adopted new national air quality standards for ground level ozone and for fine particulate matter. The EPA intends to eventually phase out the 1-hour ozone standard of 0.12 PPM and replace it with an 8-hour standard of 0.08 PPM. Although currently in effect, the planning process to determine compliance with these new standards and the development of control programs to meet these standards, if needed, are several years away since a monitoring network has yet to be established and a minimum 3-year monitoring period is required to determine designations.

### **Existing Air Quality Conditions**

Areas that comply with ambient air quality standards are designated “attainment areas” and those that do not comply are designated “nonattainment areas.” Since the certification of the EIR, the NCCAB remains on the borderline between attainment and nonattainment of ambient air quality standards in part due to variable meteorological conditions occurring from year to year, transport of air pollution from the San Francisco Bay Area and locally generated emissions.

Under the California Clean Air Act, the Monterey County portion of the NCCAB remains an attainment area for the state CO standards. The entire NCCAB remains a moderate non-attainment area for the state 1-hour ozone standards, and a nonattainment area for the state PM<sub>10</sub> standards.

Under the Federal Clean Air Act, the Monterey County portion of the NCCAB remains an unclassified/attainment area for the federal CO standards. The Basin was re-designated from a moderate non-attainment area to a maintenance area in 1997 after meeting the federal 1-hour standard in 1990. The Basin has also been designated as an attainment area for the federal 8-hour ozone standard. The Basin remains an unclassified area for federal PM<sub>10</sub> standards.

### **Regulatory Environment**

#### State and Federal Air Quality Management

The Federal Clean Air Act, passed in 1970 and last amended in 1990, mandated the establishment of ambient air quality standards and required that areas that violate these standards prepare and implement plans to achieve them. These plans are called State Implementation Plans, or SIPs. The approved State Implementation Plan (SIP) for the NCCAB consists of the *1994 Maintenance Plan and Contingency Control Measures for the Monterey Bay Region* and adopted rules and regulations.

The 1988 California Clean Air Act established an air quality management process that roughly parallels the federal process. The California Clean Air Act, however, focuses on attainment of state ambient air quality standards that are often more stringent than federal standards. State air quality standards have also been established for certain pollutants not covered by the NAAQS,

such as hydrogen sulfide and vinyl chloride. (State and federal ambient air quality standards are discussed above).

### Local Air Quality Management

The California Clean Air Act required the MBUAPCD to prepare a 1991 Air Quality Management Plan (AQMP) showing how the state ozone standard would be met in the District, and required that this plan be updated every three years. Since the certification of the *Santa Lucia Preserve EIR*, the MBUAPCD has developed the *2000 Air Quality Management Plan for the Monterey Bay Region*, the third update of the 1991 AQMP. The 2000 AQMP includes revisions to the base year emission inventories and 2005, 2010, 2015 and 2020 emission forecasts for volatile organic compounds and oxides of nitrogen (pollutants which form ozone).

The most significant changes in the AQMP from previous years are the updates to the on-road and off-road mobile source emission inventories. The AMBAG Vehicle Miles Traveled (VMT) estimates are consistently higher than previous AQMP estimates. The higher VMT contributes to higher estimated emissions for on-road vehicles. However, future emission controls on motor vehicles are expected to offset this growth and both VOC and NO<sub>x</sub> emissions are expected to decrease. The ARB has developed a new model called OFFROAD which estimates emissions from a large-spectrum of off-road equipment such as construction equipment, commercial equipment and other various equipment using compression ignited diesel engines. The estimated on-road emissions increased using the new model.

Attainment of the PM<sub>10</sub> standards are addressed in the *1998 Report on Attainment the California Particulate Matter Standards of the Monterey Bay Region*.

## **IMPACTS AND MITIGATION MEASURES**

### **Approach and Methodology**

The Santa Lucia Preserve EIR assessed two main categories of impacts: construction related impacts and operations related impacts. The 1997 Santa Lucia Preserve EIR Addendum was written in response to events that transpired that resulted in minor modifications to the project. For the purposes of this SEIR, existing air quality regulations were assessed for any changes that may have occurred since the EIR and Addendum were prepared to determine if any conclusions from the certified EIR have changed.

### **Significance Criteria**

As identified in the previous EIR, a project will normally have a significant adverse effect on air quality if it will violate any ambient air quality standard, contribute to an existing or projected air quality violation or expose sensitive receptors to pollutants. Current CEQA Guidelines also consider whether a project will conflict with, or obstruct, implementation of an applicable air quality plan or create objectionable odors affecting a substantial number of people.

The MBUAPCD has established recommended thresholds of significance during construction and operation of a project, to be used to evaluate air quality impacts in environmental documents. The recommended threshold of 82 pounds per day (ppd) or greater, for construction related PM<sub>10</sub> emissions remains unchanged since the certification of the EIR. The threshold of direct and indirect operational emissions also remain unchanged for PM<sub>10</sub> (82 ppd or greater) and NO<sub>x</sub> (137 ppd).

### **Construction Related Impacts**

#### **Impact 14.1: Construction of the subdivision will generate construction-related emissions of non-attainment pollutants. (Less than Significant)**

The Potrero Area Subdivision is a planned component of the approved Santa Lucia Preserve and consists of 29 lots developed over 1,286 acres. The impacts of all development within the 20,000-acre Preserve, including air emissions from 350 units (29 of which are the Potrero Area Subdivision), were analyzed in the approved Santa Lucia Preserve EIR and Addendum, were found to be significant, and correspondingly mitigated. There have been no changes to construction related emissions standards (such as MBUAPCD daily PM<sub>10</sub> thresholds) since the certification of the EIR, and the project does not conflict with the 2000 AQMP. For these reasons, the specific measures applicable to development projects within the Preserve are also applicable to the Potrero area. These adopted measures, required of all development within the Preserve as conditions of project approval, include the following:

**Implement PM<sub>10</sub>-Reducing Construction Practices.** The construction contractor shall implement the following PM<sub>10</sub>-reducing practices at all construction sites throughout the entire construction period to reduce pollutant emissions generated during construction activities.

- 1) Use watering trucks to control dust emissions from haul roads, construction sites, borrow pit operations and asphalt batch plant area. Sprinkle exposed areas, including soil piles left for more than two days, with water to sufficiently control windblown dust and dirt. Watering shall be conducted during morning hours and once during afternoon work hours. The frequency of watering shall be increased to control dust if winds exceed 15 miles per hour (mph).
- 2) Limit construction vehicle speeds to 10 mph on unpaved surfaces.
- 3) Apply a chemical dust stabilizer to unpaved haul roads and other heavily-traveled areas, in strict accordance with the manufacturer's directions for application. The suppressant chosen should be nontoxic and suitable for use near waterways.
- 4) Cover or water all soil transported offsite, if any, to prevent excessive dust release.
- 5) Sweep streets adjacent to the project at least daily to remove silt accumulated from construction activities.

- 6) Periodically and properly maintain all construction equipment, including exhaust systems, mufflers, cooling fans, engines, and transmissions, according to the manufacturer's recommendations.

**Phase Construction Ensuring That Estimated Construction-Related PM<sub>10</sub> Emissions Fall Below MBUAPCD Daily Threshold.** The project applicant shall phase construction activities in such a way that the estimated amount of PM<sub>10</sub> generated is less than 82 ppd. This phasing may be organized in any feasible manner that ensures that the daily PM<sub>10</sub> levels do not exceed the MBUAPCD threshold describes above. A construction schedule that meets these requirements shall be devised by the project applicant before construction begins. The construction schedule shall be reviewed and approved by the Monterey County Planning and Building Department before the start of construction.

The Santa Lucia Preserve EIR assumed 62 dwelling units within the CVMP. The Potrero Area Subdivision assumes 29 units. Compared to the assumptions in the prior EIR, the overall emission quantities will therefore be reduced accordingly. Implementation of the above adopted measures, consistent with the on-going construction management requirements for all development within the Preserve, will ensure that air quality impacts due to construction of the subdivision are **less than significant**. No additional mitigation is required.

**Additional Mitigation: None Required.**

### **Operations Impacts**

**Impact 14.2: The potential exists for significant air impacts to occur as a result of the operation of the proposed project. (Less than Significant)**

The Santa Lucia Preserve EIR assumed 62 dwelling units within the CVMP. The Potrero Area Subdivision assumes 29 units. Compared to the assumptions in the prior EIR, the overall emission quantities for this area will be reduced accordingly.

The operations impacts of all development within the Preserve were analyzed in the Santa Lucia Preserve EIR and Addendum and found to be less than significant, with the exception of odor generated from the proposed Equestrian Center. There are no equestrian facilities proposed in the Potrero Area Subdivision; therefore, this impact is not relevant. There have been no significant changes to operations-related impact standards (such as CO concentrations, ROG, NO<sub>x</sub> and daily PM<sub>10</sub> emissions) since the certification of the prior EIR, and the project does not conflict with the current AQMP. For these reasons, operations for the Potrero Area Subdivision are considered to be **less than significant**.

**Mitigation: None Required.**

## CITATIONS

California Air Resources Board (ARB), Last Revised *May 22, 2002*. *Air Quality, Emissions, and Modeling*, <http://www.arb.ca.gov/html/ae&m.htm> (May 31, 2002).

California Regional Water Quality Control Board Central Coast Region, *Water Quality Control Plan*, 1994.

County of Monterey, *Draft Monterey County General Plan*, December 2001.

County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including *Addendum to EIR*, August 1997).

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Galzio, Mike, California Department of Transportation (CALTRANS) District 5, *Personal Communication* May 22, 2002.

Monterey Bay Unified Air Pollution Control District (MBUAPCD), *2000 Air Quality Management Plan For The Monterey Bay Region Third Revision to the 1991 Air Quality Management Plan for the Monterey Bay Region*, 2000.

Potrero Area Subdivision EIR Project File.

## Chapter 15. Noise

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### INTRODUCTION

This section of the Supplemental Environmental Impact Report (SEIR) discusses the existing noise environment within the project area and identifies potential noise impacts associated with development of the Potrero Area Subdivision. Sources of information for this section include the certified *Santa Lucia Preserve Final Environmental Impact Report*, which addressed the impacts of the 20,000-acre Santa Lucia Preserve Comprehensive Development Plan. The noise analysis in the prior EIR, based on the results of the *Rancho San Carlos Noise Assessment Study* (Charles M. Salter Associates, 1994), quantified noise levels caused by project-generated traffic and compared those levels to local standards. This current analysis emphasizes site-specific conditions, and any changes to the existing physical and/or regulatory noise environment that have occurred since the certification of the prior EIR.

### SETTING

#### 1994 Noise Assessment

An extensive noise monitoring survey was conducted throughout the entire Santa Lucia Preserve and at potentially affected outlying areas in 1994, as part of the Rancho San Carlos Noise Assessment Study. The noise assessment was conducted to document the existing noise environment for the Santa Lucia Preserve EIR. Within the Potrero area, one continuous measurement was taken 60 feet east of Rancho San Carlos Road at the parking lot of a private preschool, and a shorter duration measurement was taken at the northern property line north of Potrero Canyon. The noise measurements taken at these two locations were within, or below, the normally acceptable Noise Range I for all land use categories as described in **Table 15-3**. These measurements indicate that the noise range of these locations are “normally acceptable,” and the proposed residential land use will not exceed the County’s compatibility standard. Locations and noise monitoring results of the *Rancho San Carlos Noise Assessment Study* for the entire Santa Lucia Preserve are described in Chapter 15 of the *Santa Lucia Preserve EIR*.

#### Existing Noise Conditions

Noise conditions of the Potrero Area of the Santa Lucia Preserve are essentially unchanged from the time of the previous EIR. The noise environment is generally quiet and consists of distant traffic, wind over terrain, and sound associated with ranch operations such as the operation of farm equipment, cattle, farm transport vehicles and associated human activity. The noise environment is often punctuated by aviation aircraft, likely from the Monterey Peninsula Airport, five miles north of the project site.

The Carmel Associated Sportsmen’s Inc. operates a gun club east of the project site, near the northern Santa Lucia Preserve Boundary at Robinson Canyon Road. The club is located more than a mile away from the closest proposed home site and is not expected to affect residents within the Potrero Area Subdivision.

## Regulatory Setting

### Federal Interagency Committee on Noise

The effects of increased traffic noise resulting from a new project at existing off-site and on-site noise-sensitive land uses are often evaluated using standards developed by the Federal Interagency Committee on Noise (FICON). The FICON standards provide thresholds for likely noise impacts based on the difference between anticipated project-related noise level increase and the pre-project ambient noise conditions.

The FICON standards are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were developed to assess aircraft noise impacts, they have commonly been applied to all sources of noise that are described in terms of cumulative noise exposure metrics such as  $L_{dn}$  (day-night average noise levels or “DNL”) and  $L_{den}$  (community noise equivalent level or “CNEL”). The FICON standards are shown in **Table 15-1**.

**TABLE 15-1**  
**SIGNIFICANCE OF CHANGES IN CUMULATIVE NOISE EXPOSURE**

Ambient Noise Level Without Project ( $L_{dn}$ or CNEL)	Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

*Source: Federal Interagency Committee on Noise (FICON).*

### California Office of Noise Control

The State of California Office of Noise Control (ONC) developed the Model Community Noise Control Ordinance to assist cities and counties in the development of appropriate noise standards for their jurisdictions. The ONC standards are recommended in terms of hourly levels, and include adjustments for the rural versus urban nature of the community, the time of day the noise occurs, the duration of the intrusive sound, the ambient conditions and the characteristics of the noise (impulsive, tonal, speech or music, etc.). The ONC recommended standards that would be most applicable to this project are shown in **Table 15-2**.

**TABLE 15-2**  
**STATE OF CALIFORNIA MODEL NOISE ORDINANCE RECOMMENDED STANDARDS**

Receiving Land Use	Duration of Intrusive Sound	Daytime Standard (7 a.m. - 10 p.m.)	Nighttime Standard (10 p.m. - 7 a.m.)
One & Two Family Residential	30 - 60 minutes per hour	55	45
	15 - 30 minutes per hour	60	50
	5 - 15 minutes per hour	65	55
	1 - 5 minutes per hour	70	60
	Less than 1 minute per hour	75	65

1. If the offensive noise contains a steady, audible tone such as a whine, screech, or hum, or is a repetitive noise such as hammering, or riveting, or contains music or speech, the standard limits shown shall be reduced by 5 dB.
2. Source: State of California Model Community Noise Control Ordinance.

Local Guidelines and Regulations

In California, cities and counties are required to adopt a noise element as part of their General Plan. Cities and counties can also adopt noise control requirements within their zoning ordinances or as a separate noise ordinance.

**General Plan Noise Element Policies.** The Monterey County General Plan Noise Element states that transportation facilities, industrial plants, mining operations and a power plant are the major sources of noise in the County. The Noise Element suggests that noise conflicts may be minimized or avoided by isolating noise-producing from noise-sensitive land uses. Objectives and policies designed to maintain desirable noise levels in Monterey County that are relevant to the proposed project include:

- **Objective 22.2:** Ensure through land use planning, a quiet acoustic environment in portions of the County to be developed.
- **Policy 22.2.1:** The County shall require new development to conform to the noise parameters established in the Land Use Compatibility for Exterior Community Noise Environments as described in the following table:

**TABLE 15-3  
LAND USE COMPATIBILITY FOR EXTERIOR COMMUNITY NOISE**

Land Use Category	Noise Ranges (DNL <sup>1</sup> or CNEL <sup>2</sup> ) db			
	I	II	III	IV
Passively used open spaces	50	50-55	55-70	70+
Auditorium, concert halls, amphitheaters	45-50	50-65	65-70	70+
Residential - low-density single family, duplex mobile homes	50-55	55-70	70-75	75+
Residential – multi-family	50-60	60-70	70-75	75+
Transient lodging – motels, hotels	50-60	60-70	70-80	80+
Schools, libraries, churches, hospitals, nursing homes	50-60	60-70	70-80	80+
Actively used open spaces – playgrounds, neighborhood parks	50-67	--	67-73	73+
Golf courses, riding stables, water recreation, cemeteries	50-70	--	70-80	80+
Office buildings, business commercial, and professional	50-67	67-75	75+	--
Industrial, manufacturing, utilities, agriculture	50-70	70-75	75+	--

*Source: Monterey County Building and Planning Department 1982.*

Noise Range I – Normally Acceptable: Specified land use is satisfactory, based upon the assumption that the buildings are of normal conventional construction, without any special noise requirements.

Noise Range II – Conditionally Acceptable: New construction or development should only be undertaken after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.

Noise Range III: Normally Unacceptable: New construction of development should generally be discouraged.

Noise Range IV – Clearly Unacceptable: New construction of development should generally not be undertaken.

- **Policy 22.2.3:** The County shall require environmental review of all proposed new development, expansion of industrial facilities, and quarry excavation and processing activities which may increase the noise level in surrounding areas or generate noise levels greater than those specified in Table 15-3.
- **Policy 22.2.5:** The County, in accordance with Table 15-3, should require ambient noise levels to be less at night (10. p.m. to 7 a.m.) than during the day.
- **Policy 22.2.6:** The County shall make available to the public methods and noise data which can be employed to reduce unwanted noise from the environment.

**Monterey County Noise Ordinance.** The County of Monterey Board of Supervisors adopted the Monterey County Noise Ordinance in 1978. This Ordinance states that no person shall operate any device that produces a noise level exceeding 85 decibels (dB) measured at 50 feet. This prohibition does not apply to aircraft or any device operated more than 2,500 feet from any occupied dwelling unit.

## **Land Uses and Sensitive Receptors in the Project Vicinity**

Since the certification of the previous EIR, there have been no new or additional sensitive receptors that have located within or near the Potrero project area. Local land uses and sensitive receptors in the proposed project vicinity as identified in the previous EIR and applicable to the Potrero Area Subdivision include:

- the child-care facility in the Carmel Valley Racquet Club on the east side of Rancho San Carlos, ½ mile north of the project area,
- the Quail Meadows subdivision, ½ mile northeast of the project area,
- neighborhoods ½ mile to the north near the Carmel Valley Golf and Country Club,
- single family residences ½ a mile and less to the north and east of the project site, and
- residences in Hacienda Carmel one mile from the project site, north of Quail Meadows.

The only change in the noise environment since certification of the prior EIR would be additional construction traffic and noise from construction within the Preserve.

## **IMPACTS AND MITIGATION MEASURES**

### **Approach and Methodology**

Potential noise impacts associated with the development of the Santa Lucia Preserve were evaluated in the *Santa Lucia Preserve EIR*. The EIR assessed two phases of development. Under the first phase, called the Comprehensive Development Plan within the Greater Monterey Peninsula Area Plan (CD-GMPAP), 80% of the total proposed dwelling units would be built along with facilities such as the golf course/golf club facility. The second phase of development included construction of the Potrero Area Subdivision.

The previous EIR points out that when the traffic assessment for the Santa Lucia Preserve was prepared, construction of the golf course was part of the second development phase. Subsequently, all traffic noise modeling reported in the EIR are based on this assumption. The EIR found that the golf course phasing did not change any of the conclusions in the noise study because of the relatively low vehicle trips generated by the golf course; there is virtually no difference in the projected noise levels for the two phases of development.

The 1997 Santa Lucia Preserve EIR Addendum was written in response to a ballot measure that resulted in modifications to the project including the elimination of commercial uses within the Preserve. The Addendum determined that the revised project would generate fewer daily and a.m. peak-hour trips and the same number of p.m. peak hour trips, therefore no new impacts would occur and the same project impacts discussed in the final EIR would result from the revised project.

For the purposes of this SEIR, current noise regulations and the existing noise environment were assessed for any changes that may have occurred since the EIR and Addendum were prepared to determine if any conclusions from the certified EIR may have changed.

### **Significance Criteria**

As identified in the previous EIR, a project will normally have a significant adverse effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or if it will expose people to severe noise levels. More specifically, a noise impact is considered significant if it would generate noise that would conflict with local planning criteria or ordinances, substantially increase noise levels at noise-sensitive land uses or propose land uses that are incompatible with existing baseline noise levels.

### **Mining Noise**

**Impact 15.1:           The proposed project may expose new residents to noise from aggregate mining operations within the Preserve. (Less than Significant)**

Base rocks for roads and driveways will be obtained from a borrow pit on the Santa Lucia Preserve. The borrow pit site is located approximately one mile south of the Potrero Area Subdivision boundary as depicted in **Figure 15-1**. New home sites in the vicinity of the borrow pit site could be adversely affected by noise from mining and batch plant operations, depending upon distance. Noise monitoring conducted at a similar plant, for the Santa Lucia Preserve EIR, indicates that this type of facility can produce an hourly equivalent steady sound level of 60 dB at a distance of 700 feet. Assuming constant operations between 7 a.m and 7 p.m., this corresponds to a DNL of 66 dB measured at 700 feet. If point source attenuation is used, a distance of at least 1,000 feet from the site would be needed before the DNL would drop to 60 dB, the County's standard for residential use. At 2,000 feet, the DNL could be as high as 53 dB and intervening terrain would probably reduce this further.

The borrow pit is located more than a mile from the closest proposed Potrero Area Subdivision residential site. Since there are no homes in the Potrero Area planned less than 1,000 feet from the borrow pit site, new residents would not be exposed to sound levels in excess of Monterey County land use compatibility standards. Therefore, this impact is considered to be **less than significant**.

**Mitigation: None Required.**

**Figure 15-1 Borrow Site Location**

Back of 15-1

## Construction Noise

**Impact 15.2:           The proposed project may expose new residents to noise from construction activities. (Less than Significant)**

Construction activities will generally be localized at home sites and central facilities as they are constructed over a period of up to one year each. Typical construction noise may consist of sawing, welding, hammering and other operations requiring stationary diesel-powered equipment. Due to the large distance between proposed construction sites and existing residents or adjacent home sites, the exposure of existing and new residents to construction will be minimal. Therefore, the impact is considered to be less than significant.

Traffic along Carmel Valley Road and other local roadways may be increased due to the transportation of construction personnel, equipment and materials. However, the number of residences to be constructed is relatively small and the construction will be spread out over time. No noticeable change in traffic due to transportation of construction personnel, equipment and materials is expected to occur. As a result, the impact is considered to be **less than significant**.

**Mitigation: None Required.** Although this impact is considered less than significant, the following noise-reducing construction practices, recommended for the Santa Lucia Preserve project, shall also be incorporated with construction contract specifications for the Potrero Area Subdivision, as a condition of project approval, to minimize the potential for noise impacts from construction operations.

**Implement Noise Reducing Construction Practices.** To reduce the effects of construction noise, the applicant shall require construction contractors to limit high noise-producing activities to the least noise-sensitive times of day and week (e.g., 7:00 am to 6:00 pm, Monday through Saturday).

During construction, the applicant shall require all construction contractors to comply with all County and local sound control and noise-level regulations and ordinances, including the Monterey County noise ordinance.

The applicant shall require that all construction contractors equip and maintain all construction equipment with effective muffler exhaust systems no less effective than those provided on the original equipment.

As directed by County staff and as a result of building site inspections, the contractor shall implement appropriate additional noise mitigation measures including, but not limited to, changing the location of stationary equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work or installing acoustical barriers around stationary construction noise sources.

## Traffic Noise

**Impact 15.3: The proposed project may expose existing noise-sensitive land uses to increased traffic noise. (Less than Significant)**

The Potrero Area Subdivision is a component of the approved Santa Lucia Preserve and consists of 29 lots developed over 1,286 acres. The impacts of all development within the 20,000-acre Preserve, including potential transportation related noise impacts, were analyzed in the certified Santa Lucia Preserve EIR and found to be less than significant. Since the certification of the EIR, modifications were made to the project and an Addendum to the EIR was prepared in 1997. The Addendum determined that there would be fewer daily and peak-hour trips than analyzed in the EIR because of the elimination of the visitor serving use, expanded hacienda, and commercial uses. Because the revised project generated fewer trips, no new impacts were expected to occur and, as determined in the prior EIR, transportation related noise impacts associated with the revised project would be less than significant.

As part of this SEIR, current traffic conditions as well as the analysis of the prior EIR and Addendum have been evaluated (Chapter 13. Traffic). The evaluation has determined that there have been no significant changes to traffic noise standards (such as the County's compatibility standards) or to existing traffic conditions since the certification of the EIR and Addendum that would affect noise levels. Therefore, potential traffic noise impacts for the Potrero Area Subdivision are considered to be **less than significant**, consistent with the findings of the prior EIR.

**Mitigation: None Required.**

## Operational Noise

**Impact 15.4: The proposed project may expose surrounding land uses to noise from new residents. (Less than Significant)**

As discussed in the Santa Lucia Preserve EIR, normal activities associated with residential neighborhoods will generate noise that did not exist when the site was undeveloped. The primary sources of noise for this type of development are landscape maintenance activities such as lawn mowers and sprinklers. Other occasional sources of noise may include barking dogs, children and other neighborhood activities.

These direct sources of noise are, for the most part, temporary and restricted to the immediate inhabited areas, with little, if any, effect on surrounding land uses. In the Potrero Area subdivision, there is a high degree of separation between proposed home sites and little potential for adverse noise effects on adjacent home sites or other surrounding land uses.

It is anticipated that neighborhood noise will have little, if any, effect on surrounding wildlife. Animals indigenous to the project area will most likely avoid immediate home sites and remain at a distance that the sound level of occupant activities will not cause harm to the animal or

significantly interfere with communication. This impact is therefore considered to be **less than significant**, consistent with the findings of the prior EIR.

**Mitigation: None Required.**

## CITATIONS

Charles M. Salter Associates, *Rancho San Carlos Noise Assessment Study*, February 1994.

County of Monterey, *Draft Monterey County General Plan*, December 2001.

County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including *Addendum to EIR*, August 1997).

Denise Duffy & Associates, *Potrero Area Subdivision of the Santa Lucia Preserve*, Project Description, April 2001.

Denise Duffy and Associates, *Santa Lucia Preserve Mitigation and Monitoring Plan*, Prepared for the Rancho San Carlos Partnership, Carmel, California, 1994.

Hexagon Transportation Consultants, *Peer Review Traffic Study for Potrero Area Subdivision – Santa Lucia Preserve*, 2002.

Potrero Area Subdivision EIR Project File.

## **Chapter 16. Public Services and Utilities**

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### **INTRODUCTION**

This chapter describes the public services agencies having jurisdiction over the proposed project and existing conditions of the public services and utilities in the project vicinity. The environmental impacts of any new or expanded public services or utility systems required for the Potrero Area Subdivision are assessed in this section. Information for this chapter was compiled from the Comprehensive Development Plan for the Santa Lucia Preserve, the combined development permit application for the Potrero Area Subdivision of the Santa Lucia Preserve, various technical documents prepared for the Santa Lucia Preserve and the Potrero Area Subdivision, and personal communications with public utility and service representatives. Additional information specific to water supply can be found in Chapter 8.

The Santa Lucia Preserve Final EIR was certified by Monterey County in 1995. This document addressed the environmental impacts of the entire Comprehensive Development Plan of the Santa Lucia Preserve, which assumed the ultimate construction of up to 350 residences and 150 visitor-accommodating units. The Potrero Area Subdivision represents 29 of the potential 350 residential units proposed in the approved Comprehensive Development Plan and assumed within the prior environmental analysis.

### **SETTING**

#### **Wastewater Treatment and Disposal**

There are currently no wastewater treatment and disposal facilities within the Potrero Area Subdivision project site. No residential development has occurred in this area and no sewer infrastructure exists.

#### **Water Supply**

The Santa Lucia Community Services District (Santa Lucia CSD) provides domestic and fire flow water supply for all development within the Santa Lucia Preserve through a ranch-wide system of deep wells, described below, and storage and distribution facilities. Board Resolution No. 93-115, policy (h.3) requires that water systems serving development on the Preserve be coordinated and managed under a preserve-wide system. Water supply within the Potrero Area will be served by the approved water system.

The existing Santa Lucia Preserve water supply system includes a network of 60 water production wells, located throughout the 20,000-acre Preserve (two of the existing wells are within the Potrero Area). However, these wells are located outside of the Monterey Peninsula Water Management District (MPWMD). Of these, 56 wells are active and 4 wells are inactive. The treated water system is currently built and operational (D. Wilcoxon, 2003). This interconnected water system includes multiple pressure zones with two storage tanks with a combined storage capacity of 1.925 million gallons. There is also one recently completed major water treatment plant (of a planned total of 3 new plants) to remove iron and manganese from groundwater pumped from some of the wells. The system currently includes approximately 100

miles of completed water mains, including a water main that runs through the Potrero Area Subdivision along Potrero Trail and Chamisal Pass (Utegaard, Pers. Comm.). The water system is operated by the Santa Lucia Community Services District, under a water system permit from the Monterey County Division of Environmental Health. The County's conditions of approval for the Santa Lucia Preserve restrict the project to on-site water sources only, with no connection to other public or private water sources.

The water system has a currently permitted capacity of 84 connections, with 49 connections currently active. These include 34 active connections for market rate residential, 5 connections for employee housing, and the remaining connections serving other facilities such as the golf course and clubhouse, sport center, equestrian center, and services and operations (Santa Lucia Community Services District Annual Water Report, 2003).

The water system has a currently permitted capacity of 84 connections, with 35 connections currently active. These include 20 active connections for market-rate residential, five connections for employee housing, the remaining connections will serve other facilities such as the golf course and clubhouse, sport center, equestrian center, and services and operations (Carmel Lahaina Utility Services, 2002).

## **Solid Waste**

Solid waste collection will be managed by the SLCSO and delivered to the Monterey Regional Waste Management District (MRWMD) landfill facility located north of the City of Marina. SLCSO staff currently provide direct haul on "trash day" within the Santa Lucia Preserve, and solid waste is brought to a transfer station for removal to the Marina landfill at regular intervals. By the time residents occupy homes in the Potrero Area Subdivision, the applicant anticipates that the lots will be served by a contract waste hauler. MRWMD also operates a recycling program that will be incorporated within the collection system at the Santa Lucia Preserve.

## **Schools**

### Public Schools

The Santa Lucia Preserve and Potrero Area Subdivision are within the Carmel Unified School District. Children residing within the project area can attend Carmel River School (Elementary), Carmel Middle School and Carmel High School. Carmelo School is located adjacent to Rancho San Carlos; however due to reduced enrollment the school is closed and is currently operated by the CUSD as a preschool/childcare program. **Table 16-1** shows school enrollment in the Carmel Unified School District.

**TABLE 16-1**  
**CARMEL UNIFIED SCHOOL DISTRICT ENROLLMENT, 2002**

School	Enrollment	Capacity
Tularcitos Elementary	396 <sup>1</sup>	525 <sup>1</sup>
Carmel River School (Elementary)	379	500
Captain Cooper Elementary	74	100
Carmel Middle School	599	850
Carmel High School	764	918
Carmel Valley High (cont.)	22	54

Source: California Department of Education prepared 10/2/02

<sup>1</sup> Provided by Judy Long, Director of Business Service, CUSD on 10/3/02. The remaining figures were checked and found to be consistent with the CUSD figures.

### Private Schools

Two private elementary schools (grades K-8) are located near the project site. All Saints Episcopal School is located on Carmel Valley Road, west of the intersection of Schulte Road and Carmel Valley Road. The current enrollment is 210 students, which is considered capacity. Robert Louis Stevenson Lower and Middle School (grades K-8) is located on Dolores Street in Carmel. The current enrollment is 220 students and the school has capacity for 225 to 230 students.

Junipero Serra is an elementary school located in the City of Carmel-by-the-Sea, at 2992 Lausen Drive. The current enrollment is 189 students. The school does not have a capacity ceiling, however it maintains class sizes at approximately 25 to 30 students per room.

Santa Catalina School, a private institution, is located on Mark Thomas Drive in Monterey. The Lower School (pre-K through 8) has a co-ed enrollment of 275 students. The Upper School is an all-girls resident and day school, high school grades 9-12. The Upper School enrollment is 307 students. The current total enrollment is approximately 600 students. .

York School is a private high school (grades 8-12) located at 9501 Salinas Highway in Monterey. The current enrollment is 219 students, which is considered capacity.

Robert Louis Stevenson Upper School (grades 9-12) is located on Forest Lake Road in Pebble Beach. Currently, the student enrollment is 515 students and the capacity of the school is 530.

### **Law Enforcement**

The Monterey County Sheriff's Department provides police service to the project site. The Santa Lucia Preserve and Rancho San Carlos is within Beat 8, which also includes a large portion of Carmel Valley. One deputy patrols Beat 8 during the day and two deputies patrol at night. The

closest sheriff's station is located at the Monterey County Courthouse Annex, in Monterey. Personnel include 17 deputies, four sergeants, and one captain. The estimated response time to the Santa Lucia Preserve varies, depending on the type and exact location of the emergency and the availability of staff. Response time for emergency vehicles to the entrance of Rancho San Carlos is estimated to be 5-7 minutes. Crimes within Beat 8 include commercial and residential burglaries, petty thefts, vandalism and thefts from vehicles. The majority of the crime within Beat 8 consists of commercial burglaries.

The Santa Lucia CSD provides security patrols within the Santa Lucia Preserve. Radio and telephone communication is maintained between the Santa Lucia CSD security patrol and the Sheriff's Department.

### **Fire Protection**

Until recently, the SLCSO was responsible for fire protection within the Preserve. However, fire protection districts in Carmel Valley have now consolidated into a single fire protection district, known as the re-organized Carmel Valley Fire Protection District (CVFPD). Districts participating in the consolidation include the SLCSO, Carmel Valley Fire Protection District and the Mid-Carmel Valley Fire Protection District (MCVFPD). The district consolidation became effective January 1, 2001. The CVFPD is responsible for all community fire protection services in the consolidated district area, which includes the entire Santa Lucia Preserve. A CVFPD station is located approximately four miles from the Potrero Area Subdivision outside of Rancho San Carlos. The CVFPD coordinates with the California Division of Forestry and Fire Protection (CDF) for wild land fire protection.

Carmel Valley Fire Protection District consists of nine full-time employees, one part-time employee, and 29 active volunteers protecting an area of 12 square miles with a population of approximately 6,000. The District currently operates one fire station housing two Type 1 engines, two Type 3 engines, water tender, rescue, Advanced Life Support ambulance, OES Engine and several support vehicles. In 1998 the District responded to 530 incidents. Carmel Valley Fire Protection District provides a wide range of both emergency and non-emergency services to the citizens it serves and is very active in community events. In addition to traditional fire department emergency response activities, the District provides Advanced Life Support ambulance service through a Joint Powers Authority.

### **Emergency Medical Response**

Ambulances may be dispatched from the CVFPD, as well as Big Sur, and the City of Carmel. The ambulances are equipped for Advanced Life Support (ALS) and include paramedics who are able to administer drugs. The closest hospital to the project site is the Community Hospital of the Monterey Peninsula. The return time to this hospital is the initial response time plus 10 minutes. Carmel Regional Ambulance (CRA) also has access to a helicopter when head injuries are sustained or when medical response is required for backcountry emergencies.

## **Health Services**

Community Hospital of the Monterey Peninsula provides medical services to residents at Rancho San Carlos. This facility is a general acute care community hospital and is staffed by 198 doctors. Hospital equipment includes 169 beds, a computerized tomography (CT) scanner, magnetic resonance imaging, outpatient surgery, and radiation therapy.

## **Utilities**

Power and telephone service is available in major portions of the Santa Lucia Preserve and increased capacity for the Potrero portion of the property is already planned and readily available. Utility mains are currently being placed underground within the Potrero Area as part of the approved infrastructure improvements connecting to a previously subdivided portion of the Preserve.

## **Regulatory Setting**

### Draft Monterey County General Plan Update

The County has recently prepared an update to the General Plan, which is under public review. The Policies of the draft General Plan are not yet approved; however the Objectives, which are intended to provide the framework for guidance on the General Plan Update, have been reviewed and approved by the Board of Supervisors. Of the 12 Objectives of the draft General Plan, one is relevant to the Potrero Area Subdivision in terms of public services and utilities:

- *Objective 8: Provide adequate infrastructure and public services for existing residents and businesses. Ensure that infrastructure and public services are available, fully funded and constructed concurrently with new development. Ensure that new development neither increases the infrastructure and public service cost for existing residents and businesses nor reduces their quality of service by any significant amount.*

### State Education Code

Section 17620 of the State Education Code authorizes the governing board of any school district to levy a special fee, charge, dedication, or other requirement against any construction within the boundaries of the school district, for the purpose of funding the construction or reconstruction of school facilities, subject to the limitations set forth in Chapter 4.9 of Division 1 of Title 7 of the Government Code. The special fee, charge, dedication or other requirement may be applied to new residential, commercial and industrial construction, to other residential improvements, additions or modifications in excess of 500 square feet, or to the location, installation or occupancy of manufactured or mobile homes.

School districts may collect “Level I, II or III” fees. All fees require the preparation of a study to prove eligibility for funding and all fees require public notice, a hearing and local school board

approval of the fee. Level I fees are ongoing and are adjusted for inflation every two years. This fee is collected by the State and may be collected on residential construction, additions, and modernizations and for commercial and industrial construction over 500 square feet. Level II fees are generally higher than level I fees and are only authorized for one year, after which a new study must be conducted to justify additional fees. Level III fees, when implemented, replace level II fees and are the highest fees. Level III fees cannot be collected until the State declares that it has no funds to support school facility improvements.

### School Facilities Act of 1998

The School Facilities Act of 1998, also known as SB 50, provides state funding for new school construction projects that can satisfy specific criteria, including eligibility due to growth. However, the Act also dramatically limits the maximum amount of impact fees that can be charged by school districts as mitigation for new residential, commercial and industrial construction. Further, if the maximum amount is insufficient to meet their established policies, cities and counties are prohibited from imposing additional conditions to bring the development application into conformity with the established policies. The Act also prohibits local agencies from denying a development application on the basis of a person's refusal to provide school facilities mitigation that exceeds the fee amount and refusing to approve any legislative or adjudicative act on the basis that school facilities are inadequate.

### California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties are required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995 and 50 percent by January 1, 2000.

The Act further requires every city and county to prepare two documents to demonstrate how the mandated rates of diversion will be achieved. The first document is the Source Reduction and Recycling (SRR) Element describing the chief source of the jurisdiction's waste, the existing diversion programs, and the current rates of waste diversion and new or expanded diversion programs intended to implement the Act's mandate. The second document is the Household Hazardous Waste (HHW) Element, which describes what each jurisdiction must do to ensure that household hazardous wastes are not mixed with regular non-hazardous solid waste and deposited at a landfill.

### California Water Code

California Water Code Section 231 requires the California Department of Water Resources to develop well standards to protect California's ground water quality. DWR Bulletin 74-90 (Supplement to Bulletin 74-81), *California Well Standards, Water wells, Monitoring wells, Cathodic protection wells, June 1991*, contains the minimum requirements for constructing,

altering, maintaining, and destroying these types of wells. The standards apply to all water well drillers in California and the local agencies that enforce them.

## **IMPACTS AND MITIGATION MEASURES**

### **Approach and Methodology**

Impacts of the proposed project were based upon available technical information from the Comprehensive Wastewater Disposal Plan, the Comprehensive Hydrologic Study, Fire Safety Management Plan, Monterey County General Plan, Carmel Valley Master Plan, Comprehensive Development Plan for the Santa Lucia Preserve, Potrero Area Subdivision Project Description and application materials, and personal communications with public service representatives. All technical reports prepared on behalf of the applicant were independently peer reviewed by the EIR team.

### **Significance Criteria**

The following thresholds for measuring a project's environmental impacts are based on CEQA Guidelines Appendix G and previous standards used by the County for similar projects. For the purposes of this EIR, impacts are considered significant if the following could result from implementation of the proposed project:

- a) A substantial increase in demand for an adequate water supply over the existing condition;
- b) The inability to provide an adequate water supply, including facilities for treatment, storage and distribution;
- c) Require expansion, alteration or otherwise negatively impact existing wastewater treatment or collection facilities;
- d) A need for new or physically altered government facilities (including fire and police facilities), the construction of which could cause significant physical environmental impacts;
- e) Increased demand for services that exceed the provider's performance standards;
- f) Substantial increases in demand necessitating new or extended electric, natural gas, telephone or cable services in a manner that would create physical environmental effects;
- g) Result in a substantial increase in students at a school facility that results in a physical environmental impact;
- h) Create a demand for solid waste services and generate solid waste in an amount greater than the ability of landfill facilities to accommodate such waste;

- i) Increase demand for park and recreational services such that substantial physical deterioration of the park or facility would occur or be accelerated; or
- j) Contribute considerably to any cumulative public service or utility impact.

### **Increased Wastewater Generation**

**Impact 16.1: The project will result in individual septic tank and leach field systems for 29 lots. Generation of wastewater will not enter a common system, require the construction of a new community system, or stress an existing system. (Less than Significant)**

The proposed subdivision will construct 29 single-family homes that will generate wastewater. The Combined Development Permit Application submitted in 1994 to develop the GMPAP portion of the Santa Lucia Preserve included a Comprehensive Development Plan delineating proposed development for the entire ranch at build-out in all three planning areas. A Comprehensive Wastewater Disposal Plan was included as part of the Comprehensive Development Plan in compliance with Board Resolution No. 93-115 policy (h) and County Subdivision Ordinance 19.07.020.

The Comprehensive Wastewater Disposal Plan provides that the single-family residences in the Potrero Area be served by conventional septic tank and leach field systems, with the location and design requirements for individual systems to be determined subsequently. No portion of the Potrero Area Subdivision will be connected to the wastewater collection and treatment system that serves portions of the GMPAP area of the Preserve.

The Comprehensive Wastewater Disposal Plan projected an annual wastewater flow of 17,000 gallons per day (gpd) from 58 market-rate lots and 9 inclusionary units in portions of the Santa Lucia Preserve that lie outside the GMPAP area, including the 29 single-family units in the proposed Potrero Area Subdivision. The 29 lots within the Potrero Area represent 43% of this total or about 7,300 gpd.

The septic tanks and leach field systems must be designed in accordance with Monterey County Standards, which consider the size of the dwelling, as well as expected effluent flow and soil percolation capability. Percolation tests were conducted by Cleary Consultants (and inspected by the County Division of Environmental Health) in August 2002 to determine the location and design requirements for the leach field systems for 26 of the proposed lots (the septic systems for the three lots located in GMPAP area were previously approved by the County). All residential lots planned for the Potrero Area Subdivision have received field approval from the County Division of Environmental Health for septic system disposal. According to Environmental Health records, the final two lots, Lots 5 and 6, were tested with backhoe pits in June 2001 and found to be acceptable for trench leachline systems. Most of the leach field systems will consist of conventional trenches, except for Lots 9 and 24 which will require deep seepage pits due to low soil percolation rates. (Lot 24 requires a dual system using a seepage pit as well as

convention trench leachline). In addition, each residential lot must include a 200% expansion area for backup septic disposal, as required by County Code. The Percolation Testing Summary Report by Cleary Consultants is included as an Appendix to this SEIR. The Cleary report has been peer reviewed by Weber, Hayes & Associates, which concurs with its findings (Weber Hayes, 2002)..

The Santa Lucia Community Services District will be responsible for undertaking systematic monitoring and maintenance of individual septic tank and leach field systems, including regular pumping and disposal of septic tank effluent.

Due to the very low density of development proposed (i.e., an average of one residence per 40 acres), the nitrate loading rate from the individual septic systems is expected to be low. (See Chapter 9 for a discussion of water quality impacts.)

The final septic system leach field and seepage pit locations must meet all Monterey County and Regional Water Quality Control Board standards for setbacks from creeks, drainages, wells, trees, groundwater and slopes. Assuming the applicable septic system siting guidelines will be met, wastewater treatment and disposal impacts of the project will be **less than significant**.

**Mitigation Measures: None required.**

#### **Increased Demand for Water Service**

**Impact 16.2:           The project will generate water demand and require the construction of new water supply infrastructure. (Less than Significant)**

As discussed in the Project Description, domestic water for the Potrero subdivision project will be provided from an integrated water supply system serving the entire Santa Lucia Preserve. This water system has been largely completed and includes a network of deep groundwater wells, as well as interconnected distribution pipelines, storage tanks, a booster station, and a water treatment plant (see “Setting” above for a full description).

The existing water system was constructed based on the Comprehensive Hydrological Study (CDM, 1994). Although the Comprehensive Hydrological Study included extensive groundwater exploration through a series of test wells, there remained some uncertainty as to the long-term yield of groundwater from the fractured bedrock aquifer that serves as the sole water source for the project. Consequently, the certified Preserve EIR included a series of applicant proposed measures and County-imposed conditions that required maintaining groundwater supplies to meet incremental demand, and a monitoring program for groundwater levels, among other related measures. (For a full discussion see *Chapter 8. Groundwater Hydrology, Stream Base Flow, and Water Supply and Demand*.)

In 2002, the water system had a combined “approved yield” (based on Monterey County requirements for well yield estimation for fractured rock aquifers) of 598 gallons per minute (gpm), with maximum daily pumping of 12 hours per well, followed by 12 hours of recovery.

The total system demand on the maximum day in 2002 was 281 gpm (well below existing system capacity) with an average daily demand of 130 gpm (Santa Lucia Community Services District Annual Water Report, 2003).

The projected additional maximum day demand for the Potrero Area Subdivision will be 1 gpm per dwelling, or 29 gpm. This incremental demand can be readily accommodated by the existing water system without additional source capacity (i.e., current maximum day demand of 281 gpm plus project maximum day demand of 29 gpm adds to 310 gpm, which is well within the existing system capacity of 598 gpm). The average annual net groundwater demand from the Potrero Area Subdivision is estimated to be approximately 11 acre-feet, an additional 8 percent of the total Preserve-wide annual net demand of 270 acre-feet anticipated at buildout.

The peer review report by Weber, Hayes & Associates concurs that based on the projected water demand and demonstrated and permitted capacity of the existing water system, there is sufficient water supply from the existing network of completed water wells to supply the domestic and fire flow supplies required for the Potrero Area Subdivision (the Weber Hayes report is contained in the appendices to this EIR. The Santa Lucia Preserve Community Water Services District has provided a “can and will serve” letter for water supply for the Potrero Area Subdivision. Water quality testing shows that water quality meets the State Drinking Water Standards. According to Weber, Hayes & Associates, the applicant has complied with the requirements of Monterey County Ordinance 04082 requiring proof of water quantity and quality for a subdivision application.

Water service to the Potrero Area Subdivision will be provided from the existing water mains that run through the project area along Potrero Trail and Chamisal Pass. Additional mains will be installed along Goodrich Trail and Wild Boar Run in conjunction with the construction of those roadways. Water service laterals to individual home sites will be installed as part of driveway construction for each residence.

Construction impacts for the water system are considered incidental to the construction of the entire subdivision, and the minor impacts that could occur (dust generation and soil disturbance) will be addressed through air quality mitigation and construction best management practices for erosion control as outlined in Chapters 7 and 14, respectively.

Water supply and demand will have a **less than significant** impact on the environment since there is adequate availability of sustained water supply to meet the incremental demand generated by the project. (Refer to see *Chapter 8. Groundwater Hydrology, Stream Base Flow, and Water Supply and Demand* for a full review of hydrologic issues related to water supply.).

**Mitigation Measures: None required.**

## **Solid Waste**

### **Impact 16.3: The project will generate additional solid waste for landfill disposal. (Less than Significant)**

The Santa Lucia Preserve Final EIR addressed solid waste generation and the resulting impacts on a ranch-wide basis. This analysis assumed waste generation for the 29 lots within the Potrero Area Subdivision. All impacts were considered less than significant and no mitigation was required, considering that the Marina Landfill has a 90-year site life and the solid waste generated within the Santa Lucia Preserve will not substantially affect landfill longevity. There have been no significant changes to the regulatory environment or physical environment relative to solid waste disposal, and all prior conclusions from the certified Santa Lucia Preserve EIR remain valid. Solid waste is currently collected by the SLCSD in other areas of the Preserve; however, the applicant has indicated that a contract waste hauler will be providing service by the time the Potrero Area is occupied. The hauler has no effect on landfill capacity.

**Mitigation Measures: None required.**

## **Schools**

### **Impact 16.4: The project will generate additional students and create demands on local public and private schools. (Less than Significant)**

The proposed Potrero Area Subdivision has the potential to increase student enrollment at schools within the Carmel Unified School District (CUSD) and local private schools.

Potential environmental impacts to local schools were analyzed in the Santa Lucia Preserve Final EIR. The certified EIR analyzed project impacts on a ranch-wide basis, based upon full buildout of the project. Full buildout assumed the development of the 29 lots of the Potrero Area Subdivision. The Potrero Area Subdivision would therefore result in no additional or more severe impacts beyond what was analyzed and mitigated for in the prior environmental document.

The CUSD does not have a student generation rate, and therefore it is difficult to quantify the number of additional students the proposed project may generate. Using a rate of 0.37 elementary, 0.12 middle and 0.21 high school students per household (used in Monterey County), 29 homes would generate up to eleven elementary, four middle and seven high school students. This estimate is likely to be exaggerated, however, considering that the demographic of the project area is anticipated to include a high percentage of retired individuals without school-aged children. Residences on the project site are also expected to be used commonly as second homes.

Based upon 2002 statistics, all public schools within CUSD have existing capacity (Table 16-1), and the development of the Potrero Area Subdivision will result in **less than significant** impacts to school facilities. Prior mitigation for the Santa Lucia Preserve required the payment of school impact fees in accordance with state and local laws. The applicant shall be required to contribute

the designated school impact fees, in accordance with the provisions of the State Education Code and School Facilities Act of 1998, calculated at \$2.05 per square foot for new residential development. Additional mitigation required on a ranch-wide basis, including a year round elementary school schedule and the reopening of Carmelo School, are policy issues to be considered by CUSD and not required as mitigation for the Potrero Area Subdivision.

## **Law Enforcement**

**Impact 16.5: The project will place additional demands upon law enforcement service providers. (Less than Significant)**

The project may potentially increase demand for police officers responding to the project area. As identified within the Santa Lucia Preserve Final EIR, impacts even on a ranch-wide basis were found to be less than significant. The Monterey County Sheriff's Department has primary jurisdictional responsibility for law enforcement within the project area; however, security within the Santa Lucia Preserve will (and currently is) provided by the SLCSA under contract with a third party. Security staff patrol the residential areas within the Preserve, and will do so within the Potrero Area Subdivision as well. Security staff will also monitor security alarms and maintain a presence at the entrance gate. Security staff will maintain telephone and radio contact with the Monterey County Sheriff, and no additional staff or equipment are needed within the Sheriff's Department to serve the project. Law enforcement impacts are considered **less than significant** and no mitigation is required.

**Mitigation Measures: None Required.**

## **Fire Protection**

**Impact 16.6: Development of the Potrero Area Subdivision will place urban uses in an otherwise unpopulated area, creating the potential for increased fire hazard and additional demand on existing service providers. (Less than Significant)**

The Santa Lucia Preserve Final EIR concluded that development within the Santa Lucia Preserve will result in an increased risk of fire hazard within project area and additional onsite fire protection personnel will be necessary to protect the area and surrounding wild lands. This prior analysis was conducted on a ranch-wide basis, and included development assumptions for the Potrero Area subdivision.

To reduce the potential for fires within the Santa Lucia Preserve, including the Potrero Area Subdivision, the Santa Lucia Preserve Fire Safety Management Plan (FSMP) was prepared and is currently being implemented by the SLCSA. The FSMP was designed to set standards for roadway, water distribution and building design based upon fire prevention techniques; and to implement a vegetation management program of fuel modification to reduce fire hazard. The design standards set forth in the FSMP adhere closely to Monterey County Ordinance No. 3600, Wildfire Protection Standards in State Responsibility Areas, which was adopted on March 10,

1992. Some measures set forth in the Plan, such as locating facilities and homes outside identified fire hazard areas, have already been implemented.

The FSMP proposed the construction of a fire station in the Santa Lucia Preserve area managed under contract with the SLCSO. The construction of the fire station, located within four miles of the Potrero Area Subdivision, is complete. The location of a fire station within the Preserve enables a response time anywhere in the Preserve of approximately 15 minutes. The fire station will provide first-response fire protection services to the Potrero Area Subdivision.

The Cypress Fire Protection District (CFPD), the Mid-Carmel Valley Fire Protection District (MCVFPD) and the SLCSO volunteer fire program recently consolidated to form the Carmel Valley Fire Protection District (CVFPD). The CVFPD is responsible for all community fire protection services within the consolidated district area, which includes the Santa Lucia Preserve in its entirety along with the rest of the Carmel Valley. All fire districts in Monterey County, including the CVFPD, provide fire protection pursuant to a Mutual Aid Master Plan with the California Department of Forestry (CDF).

The potential impact of increased fire hazard potential is **less than significant** because the local fire protection district, CVFPD, will not be required to hire additional personnel to maintain an acceptable level of service. In addition, there is a station within four miles of the project site that was constructed subsequent to the previous application to offset additional demands posed by development within the Preserve, including the Potrero Area Subdivision. The SLCSO will continue to implement the FSMP as required, as well as all applicable state and local regulations.

**Mitigation Measures: None Required.**

**Impact 16.7: Additional water will be required in the event of a structural or wild land fire on the project site. (Less than Significant)**

Water from storage tanks, stock ponds, lakes and swimming pools within the Preserve will provide water for emergency fire flow. The approved Comprehensive Development Plan included the construction of a water system that includes water tanks located throughout the Preserve area, including the Potrero Area Subdivision. The water system is currently under construction and has been designed to the standards of Title 15 of the Monterey County Code and Title 22 of the California Administrative Code. Adequate water supply for firefighting purposes has been demonstrated through the peer review of the water system, and impacts are considered **less than significant**.

**Mitigation Measures: None Required.**

## Medical Response

**Impact 16.8: The project will place additional demands upon medical response services. (Less than Significant)**

The project will result in the need for additional emergency medical response services to the project area. As described within the Santa Lucia Preserve Final EIR, the CVFPD will provide ambulance, paramedic, and first-response emergency life/safety personnel that are trained in advanced first-aid techniques for both residential and backwoods situations. The prior analysis addressed and assumed ranch-wide service, including the Potrero Area Subdivision. For these reasons, the project will have a **less than significant** impact.

**Mitigation Measures: None Required.**

## Utilities

**Impact 16.9: The project will require the extension of basic electricity and telephone service and related infrastructure. (Less than Significant)**

Power and utility services within the Santa Lucia Preserve are currently being installed underground in utility easements granted as a part of the infrastructure improvements approved with the Comprehensive Development Plan. Increased “backbone” capacity for the project site is already planned and readily available. All utility services within the project site will be located in accordance to County policy within road rights-of-way and driveways wherever feasible within a common trench. Increased demand for electricity and telephone service was anticipated on a ranch-wide basis, and represents a **less than significant** impact because the proposed project’s demand will not exceed the capacity of existing facilities or planned improvements.

**Mitigation Measures: None Required.**

## Public Trails

**Impact 16.10: The proposed project will increase demand for and use of public trails. (Less than Significant)**

The Comprehensive Development Plan includes the development of several private trails, one public trail, and five trail segments connecting with Garland Ranch public trails. A discussion of these plans can be found in Chapter 16, Public Services and Utilities, of the Santa Lucia Preserve FEIR. There are no existing or planned trails within the Potrero Area Subdivision site; however, trails were considered on a ranch-wide basis, which included the Potrero Area Subdivision. No significance thresholds are surpassed. Impacts are considered **less than significant**.

**Mitigation Measures: None Required.**

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## **Chapter 17. Cultural Resources**

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### **INTRODUCTION**

This chapter of the EIR discusses existing cultural and historic resources of the Potrero Area, and the potential impacts to those resources that could result from project implementation. “Cultural resources” is the term used to describe several different types of properties (prehistoric and historic archaeological resources and architectural properties, such as buildings, roads and other structures) and resources of importance to Native Americans.

The analysis is based upon previous studies prepared for the certified Santa Lucia Preserve EIR, within which the Potrero Subdivision is located, as well as new surveys conducted specifically for the Potrero Area. These new studies include a cultural resources inventory and cultural resources management plan prepared by Archaeological Consulting, Inc. (December 2000); and a historic archival report conducted for the Potrero Area Subdivision of the Santa Lucia Preserve prepared by Historic Preservation Associates (July 2000).

The original cultural resources survey addressed 8,000-9,000 acres of the 20,000-acre preserve, based upon predicted sensitivity for historic and prehistoric archaeological sites, and the likely locations of ground disturbing development. The earlier survey resulted in the identification of 45 prehistoric archaeological sites within the Preserve, three of which also contained elements of historic significance. The results of this survey were presented in an inventory report, from which a Preliminary Mitigation Plan was developed. The findings and mitigation measures presented within the Santa Lucia Preserve EIR, and the Preliminary Mitigation Plan, are incorporated in their entirety herein by reference.

### **SETTING**

#### **Cultural Resources Setting**

##### Prehistory and Ethnography

Sites excavated within the Santa Lucia Preserve area date from the Late Period (900-1300 B.P. to A.D. 1800). Late Period sites are common on the Monterey Peninsula; however most are small camps and resource processing locales. Late Period village sites are rare, which leads researchers to hypothesize that Late Period populations were more dispersed than during the Middle Period, from 2500 B.P. to 900-1300 B.P. Late Period sites excavated within the Santa Lucia Preserve include an area known to contain a village site, thought to be the Echilat village, which was inhabited by the Rumsen people.

The Rumsen people were a small group belonging to the Coastanoan (Ohlone) language family. The political organization of the Rumsen was focused around the tribelet, which consisted of one or more major villages and numerous smaller camps governed by a male headman or tribal captain. The Rumsen economy, like most Native American groups in California, centered on the

collection of vegetative sources and the hunting of animals. The primary vegetative source is acorn.

While European presence in the Monterey area began in 1602 with the arrival of Spanish explorer Sebastian Viscaïno, the area and its occupants were little affected until 1770 and the establishment of Mission San Carlos Borromeo de Carmelo (Carmel Mission), which converted native peoples to the Christian faith. The establishment of the Mission initiated the period of decline for native people in the area, including the Rumsen. Native people were not immune to the European diseases that were introduced along with Christianity by the missionaries, and the lives of significant numbers of native people were lost. While little is known about the years between 1790 and the end of the Mission period in 1834, the census of 1936 indicates that only five adult male Native American workers were living at Rancho San Francisquito, as it was referred to at the time. It is unknown whether these were descendants of former Echilat occupants, other Rumsen people, or members of tribes from more distant locales.

### History

In 1834 the Mission system was secularized and the Mission's holdings were disbursed. The Santa Lucia Preserve encompasses lands that were originally part of two land grants, the El Potrero de San Carlos and Rancho San Francisquito.

El Potrero de San Carlos was granted to Fructuoso de Real, described as a "Mission Indian", in 1837, who, in 1838 built an adobe in Potrero Canyon where he had been living with his wife, Ignacia, and their three daughters. A portion of this grant was cultivated and the rest was used as pasture land.

The second land grant, the 8,814-acre Rancho San Francisquito, was made in 1835 to Doña Catalina Manzanelli, wife of Estevan Munras. Manzanelli and Munras made several significant improvements to the Rancho while they owned it, including the addition of a house and corrals. Approximately 30 acres of the land was planted with a vineyard, fruit trees, a large wheat field and possibly barley. In addition, sheep, cattle and horses were raised. It was during the time of Manzanelli and Munras' ownership that the census takers documented five Native American laborers living at San Francisquito flat. After only seven years, in 1842, Rancho San Francisquito was sold to Francisco Soto; however, between 1842 and 1853 the land passed through several hands.

By the late 1850s, Bradley V. Sargent and his three brothers obtained ownership of both Rancho San Carlos de Potrero and Rancho San Francisquito. The Sargent family also owned many thousands of acres elsewhere in Monterey and Santa Clara Counties, but Bradley, his wife Julia, and their four children made their home on the ranch.

During the Sargent ownership of the land, two retired sea captains, Jonathan Wright and Anson Smith, occupied a section of the property on San Clemente Creek where they maintained a small vineyard, a peach orchard and a small herd of goats. In 1879 Wright and Smith found Robert Louis Stevenson "in a stupor" on the property. Stevenson had fallen ill during a solo camping

trip. For several weeks Stevenson remained with Wright and Smith, who nursed him back to health in their cabin until he was well enough to return to Monterey.

In 1890 the Sargent Brothers divided up their empire and the two Ranchos went to Bradley V. Sargent, who combined his holdings and called it San Francisquito y San Carlos. The land remained in Bradley Sargent's family until 1923, when it was purchased by George Gordon Moore, a millionaire from the East Coast. After buying the ranch, Moore reportedly spent more than one million dollars on improvements and amenities, which included a 14,000 square-foot hacienda-style house, a large guest house, polo fields, barns, an artificial lake, and employee quarters.

The Moore era was characterized by lavish parties, which continued through prohibition with the help of a "secret" door to the wine cellar that could easily be concealed if the local authorities decided to drop by. For hunting purposes, wild boars were introduced to the land. The introduction, consisting of three boars and nine sows imported from Moore's ranch in North Carolina, was the first introduction of wild boar into California.

The stock market crash of 1929 precipitated the beginning of the end of the Moore era. Although he was able to hang on to the ranch until 1939, during the latter years Moore had to resort to paying workers in poultry and eggs. Moore moved to Los Angeles after the property was foreclosed and sold to Arthur C. Oppenheimer, a businessman from San Francisco who owned the Rosenberg Fruit Company and longed to become a rancher. Under the management of his friend, George King, the property was returned once again to a working ranch, and for the next 45 years was well known for raising quality beef.

Although Oppenheimer longed to become a rancher, he and his family did not live there. Instead they used it as a family retreat. During the 1960s the ranch was the setting for the weekly television series, "Lancer", and a number of movies were also filmed there, including Woody Allen's *Sleeper*. In 1990 the ranch was sold to the Rancho San Carlos Partnership.

### **Cultural Resources Identified at the Potrero Area Subdivision Site**

The Potrero Area Subdivision site is a 1,286-acre portion of the larger 20,000-acre Santa Lucia Preserve. The entire site is shown on the Potrero Area Subdivision Preliminary Project Review/Vesting Tentative Map, dated August 17, 2000. Archival research and field reconnaissance of the Potrero Area Subdivision identified four prehistoric archaeological and two historical resources of significance. The locations of these sites are described in general terms and maps of their exact locations are kept confidential by Monterey County in order to protect the resources from indirect impacts.

#### Prehistoric Resources

**CA-MNT-1703.** This prehistoric resource is located adjacent to and south of Potrero Road, about two kilometers from its junction with Rancho San Carlos Road, and has an area of approximately 17,600 square meters (4.3 acres). Two areas of good midden soil were noted on

the terrace adjacent to the creek and scattered artifacts and other materials extend south into the grassy fields. Observed midden constituents include shell (mussel, chiton and barnacle); lithics (chert, andesite and quartz); fire-altered rock; animal bone; and dark soil. Artifacts noted include a granite mortar bowl rim fragment, a granite mortar bowl fragment, and a hammerstone. Minor damage from erosion was noted in gullies and along a creek. The site has been plowed for many years in the past and there is some evidence of bulldozing along the southern boundary of the site. The main midden areas are adjacent to the creek in the northern and central portions of the site. During the reconnaissance, a “ladrillo,” or floor tile possibly associated with a nearby adobe, was also found. Lastly, since the initial reconnaissance in the spring of 1991, a well had been drilled in the west-central portion of the site.

**CA-MNT-1704.** This prehistoric resource is located adjacent to and south of Potrero Road, about two kilometers from where it joins Rancho San Carlos Road, and has an area of approximately 7,150 square meters (1.8 acres). The site consists of a small, sparse village or campsite overlooking Potrero Creek. Midden constituents include abalone and mussel shell; chert and quartz lithics; animal bone; fire-altered rock; and dark (midden) soil. The site has been impacted by several historical uses. It was probably plowed or farmed at some point in the past and used for livestock. A dirt road crosses the site, which has been ramped down from the terrace to creek level.

**CA-MNT-1717.** This prehistoric source is located immediately adjacent to Potrero Road, less than two kilometers southeast of the junction with Rancho San Carlos Road, and has an area of approximately 825 square meters (0.2 acres). The resource is a small occupation site containing shell (abalone, mussel, chiton), animal bone, lithics (chert, quartz), and dark soil, as well as some historic trash, probably dating to the Moore or Oppenheimer periods. The depth of this site is unknown, but it has the appearance of a good, intact, midden, and may contain considerable information.

**CA-MNT-1719.** This prehistoric resource is located between Rancho San Carlos Road and Potrero Road, and has an approximate area of 2,350 square meters (0.58 acres). This is a sparse occupation site with some dark soil, shell (abalone and mussel), chert, and a two-hole bedrock mortar (BRM) in sandstone. The site is situated on a knoll and material spills down the east side toward the lower bench. The BRM is located most of the way down the slope.

### Historic Resources

The Potrero Area Subdivision site lies north of the original Rancho el Potrero de San Carlos. During the nineteenth century, U.S. Citizens established homesteads outside the Rancho el Potrero de San Carlos boundaries. During Bradley V. Sargent’s ownership of Rancho San Carlos (1865-1893), he bought many of the patented homesteads that lay at the periphery of his ranch. Sargent either purchased them from their original owners, came into ownership of them through foreclosed mortgages, or obtained them through payment of delinquent taxes.

**CA-MNT-1914/H.** Rancho San Carlos Road, Segment 2. Segment 2 of Rancho San Carlos Road is described in the Historic Preservation Plan and the Grazing Plan submitted to the County and

within the Cultural Resource Management Plan for Rancho San Carlos (1998) prepared by Historic Preservation Associates. This 1907 road segment was reported to have remained unchanged until 1929, however was changed prior to 1956. This segment, located to the east of the existing Rancho San Carlos Road, is maintained with decomposed granite gravel. It changes in width, disappears from view of the Rancho San Carlos Road, and again rejoins the Road. In the 1998 Resource Management Plan, the road was judged to have lost all historic value due to relocation and new pavement; the road's most recent pavement was in 1999. The historic segment of Rancho San Carlos Road has been abandoned in favor of the newer road segment. The road was evaluated as not an important historic resource; therefore, no negative impacts will result as a consequence of development.

**Simon Moore Homestead.** Simon Moore, age 50, placed his name on the "Great Register," a voting register, in 1892, giving his home precinct as Carmelo, Monterey County. Moore received patent certificate #5086 for 140 acres and thirty-seven hundredths of an acre on Section 27, T. 16S, R. 1E on March 19, 1894. The patent was recorded in Vol. 9A, Page 330 and described the property as follows:

"Lots numbered two and three, the North West quarter of the South East quarter, and the North East quarter of the South West quarter, of Section Twenty-seven."

Moore recorded the patent in the records of Monterey County on May 31, 1894 in Book H of Patents, page 73. He mortgaged his land to Martha Gragg, Bradley Sargent's daughter and Trustee, by Mortgage No. 17-385 on October 2, 1894. Upon ultimate foreclosure, the property became a part of the Sargent Ranch, and today's Rancho San Carlos.

The survey conducted by the consulting archaeologists recorded evidence of ceramics and a beavertail cactus cluster, "out the old road cut." This site lies very near the Homeland site boundary (developable building envelope) of Lot #25, but within the lot line. This historic site will be protected through a conservation easement over the open land portions (outside the building envelope) of Lot #25 where it exists.

## **Regulatory Setting**

### CEQA Guidelines

CEQA Guidelines state that, "A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment (Section 15064.5[b]). Substantial adverse change includes "...physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired" (Section 15064.5[b][2]).

CEQA Guidelines Section 15064.5 defines a "historical resource" as: a resource listed in or eligible for the California Register of Historical Resources; or listed in a local register of historical resources; or identified in a historical resource survey and meeting requirements in

section 5024.1(g) of the Public Resources Code; or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines historically significant, provided the determination is supported by substantial evidence in light of the whole record; or a resource so determined by a lead agency as defined in Public Resources Code sections 5020.1(j) or 5024.1.

While alteration of the setting of an archaeological site that is eligible only for its information potential may not affect the site's significant characteristics, alteration of a property's location (e.g., removing or damaging all or part of the site) may have a significant adverse effect.

CEQA Guidelines Section 15126.4(b)(3) states, "Public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource of an archaeological nature." The guidelines further state that preservation *in situ* is the preferred manner of mitigating impacts, and that preservation "...may be accomplished by, but is not limited to, the following:"

- 1) Planning construction to avoid archaeological sites;
- 2) Incorporation of sites within parks, green space, or other open space;
- 3) Covering the archaeological sites with a layer of chemically stable soil before building tennis courts, parking lots, or similar facilities on the site; or,
- 4) Deeding the site into a permanent conservation easement.

CEQA Guidelines state, "when data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken" (Section 15126.4[b][3][C]). However, "data recovery shall not be required for a historical resource if the lead agency determines that testing or studies already completed have adequately recovered the scientifically consequential information from and about the archaeological or historical resource" (Section 15126.4[b][3][D]).

#### California Office of Historic Preservation, Regional Information Centers

The California Office of Historic Preservation established the Regional Information Centers as local repositories for all archaeological reports prepared under cultural resource management regulations. State guidelines and current professional standards require a background search at the appropriate Regional Information Center. Following the completion of a project, a copy of the report must be deposited at the appropriate Regional Information Center to assist with future background searches.

#### California Register of Historical Resources

A brief discussion of the criteria for designation on the California Register of Historical Resources (CRHR) is included herein due to the possibility of future discovery of eligible resources on the proposed project site.

The guidelines for listing on the CRHR provide criteria to state and local agencies for establishing new listings to the Register (Public Resources Code, Section 4850 *et seq.*). The California Register is an authoritative listing and guide for state and local agencies and private groups and citizens in identifying historic resources. This listing and guide indicates which resources should be protected from substantial adverse change.

The criteria used for determining the eligibility of a historical or cultural resource for CRHR are similar to those developed by the National Park Service for designation on the National Register of Historic Places; however, criteria of eligibility for CRHR have been modified to more accurately assess the importance of resources within California history.

Any building, site, structure, object or historic district meeting one or more of the following criteria may be eligible for listing in CRHR:

- 1) It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
- 2) It is associated with the lives of persons important to local, California, or national history;
- 3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values;  
or
- 4) It has yielded, or has the potential to yield, information important to the prehistory or history of a local area, California, or the nation.

Eligibility for the California Register also depends on the integrity or survival of characteristics of the resource that existed during its period of significance. Eligible historic resources must meet one of the above criteria and must retain enough of their historic character or appearance to convey the reasons for their importance, or retain the potential to yield significant scientific or historical information or specific data.

Similar to the process of evaluating historical resources for National Register eligibility, evaluations for placement on the CRHR must include consideration of the integrity including location, design, setting, materials, workmanship, feeling and association of the resource. The evaluation of integrity must be judged with reference to the particular criterion or criteria under which resources may be eligible for the California Register. However, the implementing regulations specifically caution that alterations of a historic resource over time may themselves have historical, cultural, or architectural significance.

Most often, historical resources eligible for the California Register will be 50 years old or older; however, the regulations stipulate “a resource less than fifty years old may be considered for

listing in the California Register if it can be demonstrated that sufficient time has passed to understand its historical importance.”

## **IMPACTS AND MITIGATION MEASURES**

### **Approach and Methodology**

The cultural and historic resource surveys conducted for the Santa Lucia Preserve EIR and the Potrero Area Subdivision placed emphasis on areas that 1) might contain cultural resources, or 2) would be included within future development plans. As a result of this approach, it was possible to site building envelopes (Homelands) within the parcels shown on the Preliminary Vesting Tentative Map away from areas of potential sensitivity. Therefore, many of the potential impacts have been mitigated by design and avoidance to a less than significant level.

The methodology for the preparation of cultural and historic sensitivity reports entails two primary steps: background research and field reconnaissance.

#### Background Research

Cultural resources (prehistoric, archaeological) background research included an examination of the archaeological site records, maps, and project files of the Regional Information Center of the California Archaeological Inventory, located at Sonoma State University. In addition, personal files and maps of the archaeological consultant were examined for supplemental information. Furthermore, brief interviews were conducted with numerous individuals familiar with the ranch and its history during the course of the field reconnaissance.

Historical background research included an exhaustive archival search of existing archaeological reports, of historical evidence in the Santa Lucia Preserve Archives, Monterey County Offices, select California State archives Records of the General Land Office, the Bancroft Library at the U.C. Berkeley, local libraries, published works, and interviews with ranch personnel as well as persons who knew and worked for former owners.

#### Field Reconnaissance

The initial archaeological field reconnaissance at Rancho San Carlos was conducted between November 1990 and November 1993 for the Santa Lucia Preserve EIR. The investigation consisted of a “general surface reconnaissance” of areas of the ranch that could reasonably be expected to contain visible prehistoric cultural resources that could be viewed without major vegetation removal or excavation. The primary goal of this field reconnaissance was to locate prehistoric cultural resources, focusing on areas of the property that might contain cultural resources and areas that might be included within future development plans. However, at the time the initial reconnaissance began, the various environmental and developmental constraints were not completely known, so the initial investigation emphasized the location of cultural resources wherever they occurred within the preserve area. Once areas of potential development

were established (e.g. the Potrero Area Subdivision site), subsequent investigations were conducted that subjected potential development sites to 100% intensive archaeological reconnaissance. Details of the survey methodology are provided in the Cultural Resources Inventory and Preliminary Cultural Resources Management Plan for the Potrero Area Subdivision of the Santa Lucia Preserve, located in the Technical Appendices of this document.

Field reconnaissance of identified historic resources was conducted during January 2000. The field work consisted of exploration of areas of known historic sensitivity within the project area with a four-wheel drive vehicle using ranch roads. As sites were approached, the area of sensitivity was covered by foot in order to discover predetermined and/or newly found physical evidence of habitation, the presence of built features, or evidence of domestic agriculture or planting. Survey work was conducted in the wintertime when ground cover and vegetation is dormant, increasing visibility within the study area.

The project could affect, either directly or indirectly, prehistoric and historic archaeological properties that are considered significant or are presumed to be significant. Impacts could result from the physical disturbance of cultural resources during construction or construction-related activities and the management practices of preserve lands.

Direct effects or impacts result from destruction of historic properties or damage to the values that make them significant. Demolition of historic buildings or bulldozing an archaeological site are examples of direct effects. Indirect effects are secondary effects, such as vandalism, erosion or land management activities that follow construction.

The key assumption in assessing the effects of a project on cultural resources is that whenever possible, impacts on cultural resource sites will be avoided, regardless of whether they are considered significant by CEQA standards. Impacts were identified by comparing the locations of the resources in the archaeological and historic survey reports against the building envelopes, roads, and driveways identified in the Preliminary Vesting Tentative Map. This approach is consistent with the intent of the California Environmental Quality Act regarding cultural resources, as discussed below.

A series of mitigation measures and conditions of approval were adopted in conjunction with the Santa Lucia Preserve. Some of those measures and conditions remain applicable to the Potrero Area, and are included where appropriate.

### **Significance Criteria**

Based upon the above regulatory framework for assessing cultural resources, a significant cultural resource impact will occur if project implementation will result in one or more of the following:

- 1) Cause a substantial adverse change in the significance of an historical or archaeological resource as defined in CEQA Guidelines Section 15064.5;

- 2) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- 3) Disturb any human remains, including those interred outside of formal cemeteries; or
- 4) Contributes significantly to any cumulative cultural resource impact.

## Prehistoric Resources

**Impact 17.1:**        **The project site contains prehistoric archaeological sites CA-MNT-1703 and CA-MNT-1719. Although within the project area and sensitive to development, the sites have been avoided by design. (Less than Significant)**

As a result of the initial site surveys, mitigation monitoring program and subsequent site planning, the potential impacts of the Potrero Area Subdivision on these two sites have been mitigated by design.

A total of four (4) prehistoric cultural resources have been identified on the project site. Sites CA-MNT-1703 and CA-MNT-1719 are both adjacent to, but outside of, building envelopes (Homelands) as shown on the Potrero Area Subdivision Preliminary Vesting Tentative Map. Site CA-MNT-1703, recorded for the Potrero Area Subdivision surveys, is actually closer to existing lots recorded for the Santa Lucia Preserve Tentative Map. Site CA-MNT-1719 is closest to the building envelopes of Lots 1 and 2. Both sites, however, are beyond areas allowed for physical disturbance, and thus will be avoided. Therefore, the potential for adverse impacts affecting these sites is **less than significant** and no resource-specific mitigation is necessary.

**Mitigation: None Required.**

**Impact 17.2:**        **The potential exists for damage or destruction of prehistoric archaeological sites CA-MNT-1704 and CA-MNT-1717 as a result of road improvements. (Potentially Significant)**

CA-MNT-1704 and CA-MNT-1717 have been determined to be significant archaeological resources for their ability to yield additional information. Both sites are outside the boundaries of any parcels within the proposed Potrero Area Subdivision. However, an existing ranch road crosses through the middle of Site CA-MNT-1704, and another road crosses the edge of Site CA-MNT-1717. The roads are planned for improvement, and the required work could affect the archaeological sites. Site CA-MNT-1704 was recorded during the environmental review for the Santa Lucia Preserve, and specific mitigation was required at that time. Disturbance to these resources represents a **potentially significant** impact.

The following measures are required based upon the recommendations of the consulting archaeologist and previous conditions of approval for the Santa Lucia Preserve:

**Mitigation 17.2a:** Prepare a Final Cultural Resources Management Plan for the Potrero Area Subdivision. A qualified Archaeologist shall prepare a Final Cultural Resources Management Plan (FCRMP) during the final planning of each phase of development of the project. The FCRMP shall be submitted and approved by the Planning and Building Inspection Department prior to approval of final maps. The FCRMP shall list all known prehistoric and historic sites within the phase, detail site specific mitigations that have been recommended for each site, and outline the measures necessary to ensure that the remaining resources will be avoided whenever feasible. The FCRMP shall include the appropriate methods, locations and time frames for internment of Native American remains, if applicable. The project Archaeologist shall review site-specific mitigations contained in the FCRMPs with the appropriate local Native American Heritage Commission and/or Concurring Native American Advisory Council.

**Mitigation 17.2b:** Establish On-Going Monitoring Plan. A monitoring plan shall be prepared and administered by a professional archaeologist to address the four (4) identified prehistoric resources on site. The monitoring plan shall be incorporated into the County's Mitigation Monitoring and Reporting Program for this project. The monitoring plan shall include, but is not limited to, the following elements:

- 1) Periodic (annual) field inspection of cultural resources CA-MNT-1703, and CA-MNT-1719 during project buildout and, where appropriate, photography to monitor and document the overall condition of these cultural resources, and;
- 2) Formulation and implementation of additional mitigation measures, as needed, to further the long-term preservation of the cultural resources identified within the project area.

**Significance after Mitigation:** Less than significant.

**Impact 17.3:** The potential exists for additional resources to be discovered during construction of the subdivision. (Potentially Significant)

As with any construction in an area identified as sensitive for cultural resources, the possibility exists that additional resources could be uncovered or identified in the process. The following measures are provided to address monitoring requirements, as well as the discovery of additional resources that may occur during project construction. These measures are to be included within the project's conditions of approval:

**Mitigation 17.3a:** If archaeological resources or human remains are discovered during construction, work shall be halted within 50 meters (165 feet) of the find until it can be evaluated by a qualified professional archaeologist and, as appropriate, by a Native American representative, as designated by the Native American Heritage Commission. If the find is determined to be significant, appropriate mitigation measures shall be formulated and submitted to the Planning and Building Inspection Department for review and approval.

**Mitigation 17.3b:** If cultural resources are identified, the qualified professional archaeologist and the Native American representative, as designated by the Native American Heritage Commission, shall determine the significance of the find. Discovered cultural resources shall be stored in a protected environment to prevent vandalism, damage, or theft, until such time as they are examined by an archaeologist and, as appropriate, by the Native American representative. The archaeologist, Native American representative, as designated by the Native American Heritage Commission, and County staff shall determine the most appropriate method for recovery and storage or other protective measures for any significant resources discovered.

**Mitigation 17.3c** If human remains are discovered, the County Coroner shall be notified. If the remains are determined to be Native American, the Coroner will notify the Native American Heritage Commission who will notify the person it believes to be the most likely descendant. The recommendations as outlined in the Final Cultural Resource Management Plan shall specify the appropriate method and location for reinterment of the remains.

**Mitigation 17.3d:** An Archaeological/Scenic easement shall be conveyed to the County of Monterey over areas where significant archaeological resources are located. An Archaeological/Scenic easement deed shall be submitted to and approved by the Director of Planning and Building Inspection, and recorded prior to filing of the final map. If significant resources are identified during construction, the easement will be recorded as soon as practicable.

**Significance after Mitigation:** Less than significant.

## **Historic Resource Impacts and Mitigation**

**Impact 17.4:**           **The project may affect HPA Site #39, Rancho San Carlos Road, Segment 2 (CA-MNT-1914/H). (Less than Significant)**

Segment 2 of Rancho San Carlos Road has been described within Phase II of the Historic Preservation Plan, as well as the Grazing Plan, submitted to the County. The road has also been described within the Cultural Resource Management Plan for Rancho San Carlos (Historic Preservation Associates). This 1907 road segment was reported to have remained unchanged until 1929, and was reportedly changed some time prior to 1956. The segment, located to the east of the existing Rancho San Carlos Road, is maintained with decomposed granite gravel. The road in its entirety was judged by the historical archaeologist to have lost all historic resource value due to relocation and new pavement. The road was most recently paved in 1999. The historic segment of Rancho San Carlos Road described above has subsequently been abandoned in favor of the modern road segment. The resource was not identified as significant. No negative impacts will occur as a result of the subdivision, and no mitigation is required.

**Mitigation: None required.**

**Impact 17.5:**           **Project development could negatively impact remnants of HPA Site #40, the Simon Moore Homestead. (Potentially Significant)**

The Breschini/Archaeological Consulting survey recorded evidence of ceramics and a Beavertail cactus cluster “out the old road cut”, which has been interpreted by the historian as the Simon Moore Homestead. In order to have been awarded a patent, Moore was required to have developed a water source, a house, and have lived there 5 years. However, these requirements were often sidestepped, and the existence of such improvements is not confirmed.

The site is approximately 100 feet northeast of proposed Homeland boundary of Lot #25. Although the site is within the lot line boundary of Lot #25, it is located within preserved lands that are not developable and thus will be protected by a conservation easement. Nonetheless, the proximity of the site to the future home site warranted specific recommendations for this resource, presented below as mitigation.

**Mitigation 17.5:**       **In the event that any historical resources such as wood frame structure, fence, stone, nails, tin roofing, stove pipe, etc. are discovered during the construction of the home on Lot #25, the contractor shall stop work within 150 feet of the find, contact the County, and call in a qualified historical consultant to evaluate the significance of the find to develop resource-specific mitigation measures. If significant, measures may include relocation of the development area, excavation or photo recordation, or other measures, as determined by the professional.**

**Significance after Mitigation: Less than Significant.**

## CITATIONS

Archaeological Consulting. Cultural Resources Inventory and Preliminary Cultural Resources Management Plan for the Potrero Area Subdivision of the Santa Lucia Preserve, Carmel Valley, California. May 26, 2000; rev. December 21, 2000.

Denise Duffy & Associates. Potrero Area Subdivision of the Santa Lucia Preserve. Project Description. April 2001.

Historical Preservation Associates. Preservation Plan for Rancho San Carlos, Potrero Area of the Santa Lucia Preserve, Carmel, Monterey County, California. July 20, 2000.

Jones & Stokes Associates, Inc. Santa Lucia Preserve Project Final Environmental Impact Report, Volume II: Environmental Impact Report. September 14, 1995.

County of Monterey, Santa Lucia Preserve (Rancho San Carlos) Mitigation Measure/Condition Compliance Audit, December 12, 2001.

## Chapter 18. Social Effects

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### INTRODUCTION

This section of the Supplemental Environmental Impact Report (SEIR) identifies potential effects of the project on the social structure of the local area. Social effects resulting from the implementation of the Santa Lucia Preserve project were discussed and evaluated in the *Santa Lucia Preserve Final Environmental Impact Report*, certified in 1996. The EIR described social characteristics of the local area, including racial composition, age, and income characteristics, using data from the 1990 Census of Population and Housing. This section summarizes social issues associated with the Potrero Area Subdivision component of the Santa Lucia Preserve Plan describing social characteristics of the area using data from the 2000 Census data. Emphasis is placed on changes to the social environment since the certification of the EIR. The study area includes the project site, adjacent properties, and the project site's nearest community, Carmel-by-the-Sea (Carmel).

### SETTING

#### **Social Characteristics of the Project Site**

Currently, there are no houses developed on the Potrero portion of the Santa Lucia Preserve. The 20,000-acre Preserve is a rural area characterized by grazing lands, low density residential and second-home development, and private and public recreational properties.

Because of the rural nature of the area, the social structure of the local area encompassing the project site is not highly developed. The area is characterized by isolated clusters of residents who rely on nearby communities for much of their social interaction.

#### **Social Characteristics of Carmel-by-the -Sea**

The closest community to the project site is Carmel, located approximately five miles northwest of the project site. Carmel is home to numerous specialty shops, restaurants, boutiques, and over 70 art and photography galleries. At the edge of the village is the Carmel Beach. Twelve miles east of Carmel is Carmel Valley. The village in Carmel Valley offers a variety of shops, restaurants, inns and wineries. Carmel Valley is also home to a variety of three championship golf courses and the Garland Ranch Regional Park. Future residents of the project site would likely travel to Carmel or Carmel Valley (among other distant communities in Monterey County) for those needs that are not met by the Santa Lucia Preserve, including shopping, restaurants, entertainment, social gatherings, and community events.

Demographic data from the 1990 Census was used in the Santa Lucia Preserve EIR to describe the social characteristics of Carmel and Monterey County. For the purposes of this supplemental EIR, the 1990 Census data was compared with the more current 2000 Census data (see **Table 18-1**).

According to the Census data, the social characteristics observed in the previous EIR have not changed. Data from the both the 1990 and 2000 Census indicate that the social characteristics of Carmel are very different from those of Monterey County as a whole. The population of Carmel is less racially diverse, older and wealthier than the population of Monterey County.

**Table 18-1  
Comparison of 1990 and 2000 Census Data**

Characteristics	1990 Census*		2000 Census	
	Carmel	Monterey County	Carmel	Monterey County
Distribution of Population by Race (%):				
White	96.8	63.8	94.6	55.9
Black	0.3	6.4	0.4	3.7
American Indian and Alaskan Native			0.3	1.0
Asian or Pacific Islander	1.7	7.8	2.4	6.4
Other race or two or more races	1.2	21.9	0.9	32.8
Hispanic origin	3.1	33.6	2.9	46.8
Distribution of Population by Age (%):				
Under 24 years of age	14.3	40.7	12.8	39.3
25 to 44	23.8	34.2	18.3	31.3
45 to 64	27.1	15.4	38.1	19.4
Over 64	34.8	9.7	30.8	10.0
Median age (years)	53.0	29.6	54.3	31.7
Income Characteristics (\$):				
Mean household income	48,800	43,200	NA	NA
Median household income	36,800	33,600	58,163	48,305
Per capita income	26,600	14,600	48,739	20,165
Median value of owner-occupied housing	434,700	198,200	675,300	265,800

\* as analyzed in the Santa Lucia Preserve Final EIR

## IMPACTS AND MITIGATION MEASURES

### Approach and Methodology

Social impacts can result from projects that introduce a new population with substantially different social characteristics to an existing neighborhood or community. Social tensions and stresses can result from an existing community adjusting to the values, beliefs, customs and needs of a new demographic group. Projects that can result in economic dislocations or physical division of existing neighborhoods or communities can also result in social impacts.

Since the project and the future community has not been developed, the approach to evaluating social compatibility is somewhat speculative and qualitative. To assess the likely social characteristics of the project site, characteristics of the project site, such as probable housing

prices and project design were used. The characteristics were then compared to the social characteristics of nearby areas to assess the social compatibility of the project with these areas.

### **Significance Criteria**

Similar to economic effects under CEQA, the social effects of a project are not treated as significant effects on the environment. The anticipated social changes that may occur from project approval may be evaluated to determine if physical changes to the environment may result. An EIR may also use the severity of a project's social effects to determine the significance of physical changes resulting from the implementation of a project. Since the social effects are not considered to be significant environmental effects under CEQA, no significance criteria were developed for the social effects of the project.

### Social Effects

**Impact 18.1:           The proposed project has the potential to cause adverse social effects.  
(Less than Significant)**

The previous certified EIR found that the Santa Lucia Preserve project is not expected to result in the development of facilities that would physically divide an existing community and cause adverse social effects. This SEIR has evaluated the current social characteristics of the Potrero component of the Santa Lucia Preserve and surrounding areas and found that the social characteristics identified in the previous EIR have essentially remained the same. Therefore, the Potrero Subdivision Project, as part of the previously approved Santa Lucia Preserve, will have a **less than significant** social effect and no mitigation measures are necessary.

**Mitigation: None Required.**

## CITATIONS

Denise Duffy & Associates, *Potrero Area Subdivision of the Santa Lucia Preserve*, Project Description, April 2001.

Denise Duffy and Associates. 1994. *Santa Lucia Preserve Mitigation and Monitoring Plan*. Prepared for the Rancho San Carlos Partnership, Carmel California.

County of Monterey, *Draft Monterey County General Plan*, December 2001.

County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including *Addendum to EIR*, August 1997).

Potrero Area Subdivision EIR Project File.

U.S. Census Bureau, Maintained By: Laura K. Yax (Population Division), Last revised: May 10, 2002, *2000 Census*, <http://www.census.gov> (May 29, 2002).

## Chapter 19. Cumulative Impacts

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### CEQA REQUIREMENTS

CEQA requires that an EIR contain an assessment of the cumulative impacts that could occur as a result of the proposed project. Pursuant to CEQA Guidelines Section 15130(a), “an EIR shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable.” A cumulative impact refers to two or more individual effects which, when considered together, are substantial or which compound or increase other environmental impacts. A cumulative impact occurs from:

*...the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.*

Three elements are necessary for an adequate cumulative analysis:

- Either a list of past, present, and probably future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency (list approach); or a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact (plan approach);
- A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and
- A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project’s contribution to any significant cumulative effects. With some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis.

This EIR uses the “list approach.”

Where a lead agency is examining a project with an incremental effect that is not “cumulatively considerable,” a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulatively considerable. CEQA Guidelines Section 15130(a) also states the following with regard to cumulative impacts that are not significant:

- An EIR is not required to discuss impacts that do not result in part from the project evaluated in the EIR (Section 15130(a)(1)).

- When the combined cumulative impact associated with the project’s incremental effect and the effects of other projects is not significant, the EIR shall briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR (Section 15130(a)(2)).
- An EIR may determine that a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project’s contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact (Section 15130(a)(3)).

When utilizing the “list method”, the CEQA Guidelines state the following:

1. *When utilizing a list...factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.*
2. *“Probable future projects” may be limited to those projects requiring an agency approval for an application which has been received at the time the notice of preparation is released, unless abandoned by the applicant; projects included in an adopted capital improvements program, general plan, regional transportation plan, or other similar plan; projects included in a summary of projections of projects (or development areas designated) in a general plan or a similar plan; projects anticipated as later phase of a previously approved project (e.g. subdivision); or those public agency projects for which money has been budgeted.*
3. *Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used (§§15130(b)(1)(A)1., 2., 3).*

The following analysis is based on these Guidelines.

## List of Pending and Approved Projects in the Project Vicinity

**Figure 19-1** illustrates the locations of the significant projects assumed within the cumulative impacts analysis. The geographic scope of the analysis is essentially the same as the area analyzed within the Santa Lucia Preserve FEIR. The projects within this geographic area, however, have been updated to reflect current conditions and pending applications.

**Table 19-1** provides a list of pending and approved projects in the vicinity of the Potrero Area Subdivision that could contribute to cumulative impacts. The list of projects has been updated from the Santa Lucia Preserve FEIR to reflect existing conditions and reasonably foreseeable projects as compiled by the Planning and Building Inspection Department.

The Santa Lucia Preserve FEIR assumed complete buildout of the preserve (350 dwelling units, 150 visitor serving units and related land uses), in addition to a list of anticipated projects as compiled in 1995. The analysis assumed the development of the 29-unit Potrero Area Subdivision within the 350-unit maximum of the Comprehensive Development Plan. As a result, the only difference between the cumulative impact analysis from the Santa Lucia Preserve FEIR and this EIR is the change in anticipated development projects that has occurred since 1995. In comparing foreseeable projects between 1995 and 2002, the total number of anticipated dwelling units within the geographic area of the Potrero Area Subdivision has decreased.

Projects listed as reasonably foreseeable in 1995, but have since been approved and constructed, are assumed as part of the “existing condition” for the purposes of this EIR. The effects of these projects, if any, are assumed to be representative of existing environmental conditions of the region at the time of publication of the Notice of Preparation of this EIR. For example, the traffic generated from built projects is assumed to be on the roadway, and reflected in existing Levels of Service and traffic counts.

Given the prior approvals for the entire Comprehensive Development Plan and the fact that the Potrero Area is assumed as part of that Plan, the approach to the cumulative analysis for this EIR is to determine if, based upon the modified list of projects, the analysis in the certified Santa Lucia Preserve EIR changes in any significant way.

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Figure 19-1 Cumulative Project Locations

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**TABLE 19-1  
CUMULATIVE PROJECTS, 2003**

PROJECT NAME OR APPLICATION	DWELLING UNITS	NON-RESIDENTIAL UNITS	STATUS	FUTURE TRIPS	
				DAILY	PM
<b>Santa Lucia Preserve (excluding Potrero Subdivision's 29 units) <sup>1</sup></b>					
Santa Lucia Preserve (SLP) Residences (excluding Potrero)	321 units		Intermittent Construction (10% Completed)	2,768	292
SLP Visitor Accommodations		150 visitor serving	Not Approved	0	0
SLP Neighborhood Commercial			Not Approved		
<b>Commercial/Non Residential Projects Approved or Foreseeable</b>					
Quail Lodge (Quail Meadow)		40 visitor serving	Not built	300	12
Carmel Valley Ranch		44 visitor serving	Not built	330	14
Carmel Valley Ranch guest spa		19,000 s.f.	Not built	818	82
White Oak Plaza Commercial		7,267 s.f.	Not built	296	35
Community Life Center		29,424	Not built	674	51
Rancho Chiquita Pt. Lobos		10 visitor serving	Not built	102	11
Crossroads Expansion (Grocery)		+21,260 s.f. exp.	Not built	1,953	134
Gamboa Elvira (Assisted Care fac.)		78- beds	Not approved	151	12
Rancho Canada Golf Club (Hotel)		175 visitor serving	Not approved	933	66
Rancho Canada Employee Housing	50 units		Not approved	618	33
<b>Subdivisions Approved</b>					
Quail Lodge (Quail Meadow)	52 units		Intermittent Construction (50% Complete)	250	26
Canada Woods	59 units		Not built	1,052	124
990386	3 units		Not built	28	3
010004 (prev. 980664)	5 units		Not built	48	5
980343	3 units		Not built	28	3
Fox Creek Ranch	10 units		Not Approved	96	11
010238	2 units		Not built	20	2
<b>Projects Not Approved But Considered Foreseeable</b>					
September Ranch	117 units		Not approved	887	124
<b>Totals</b>	<b>303 DWELLING UNITS (272 UNITS IN ADDITION TO SANTA LUCIA PRESERVE)</b>	<b>419 Visitor Serving units; approx. 58,300 s.f. commercial; 19,000 s.f. guest spa; 78-bed care facility; approx. 29,400 s.f. community center.</b>		<b>8,022</b>	<b>1,124</b>

Notes:

<sup>1</sup> The 150 room lodge and neighborhood commercial components of the Preserve were included in an early development phase of the project in 1995. They are not being proposed by RSC nor are they part of any pending County application. The Chamisal Subdivision, approved in 2003, is also a portion of the total unit count within the Santa Lucia Preserve.

In addition to these projects, this EIR considers the effects of development of auxiliary units that could be developed on lots proposed for low-density residential zoning (i.e., market rate lots). Auxiliary units are defined for the purposes of this EIR as senior citizen units, and caretaker units. These uses are defined and regulated in the following sections of the Monterey County Zoning Ordinance:

- Senior citizen units are defined in Monterey County Zoning Ordinance Section 21.06.1000 and regulated by Section 21.64.010.
- Caretaker units are defined in Section 21.06.160 and regulated by Section 21.64.030.

All auxiliary units require a discretionary permit, either an administrative permit or a conditional use permit. The residential areas of the proposed project are proposed to be zoned low-density residential, which requires an administrative permit for any senior citizen or caretaker unit.

The present application does not include any entitlements for auxiliary units, and whether auxiliary units are subsequently applied for by purchasers of the lots is speculative. However, it is possible that at least some purchasers will apply. Because of these facts, auxiliary units are treated in this EIR as cumulative development. This is consistent with the approach of the certified Santa Lucia Preserve FEIR.

This EIR also assumes that senior and caretaker units represent a small percentage of “background” development activity occurring in Carmel Valley and the region. However, this unit-by-unit development activity is not considered significant to the analysis, is not quantified, and would require unnecessary level of detail beyond the standards required for an EIR cumulative analysis.

The following development standards are noted and assumptions made for this EIR for the purposes of evaluating this reasonably foreseeable use of the project site:

- Senior citizen units are limited to 700 square feet if attached and 850 square feet if detached; caretaker units are limited to 1,000 square feet if the lot is less than 10 acres, and 1,200 square feet if the lot is larger than 10 acres. It is assumed that 50% of the market rate residences would have either a senior citizen or a caretaker unit. At full buildout of the comprehensive development plan, this means that 15 units (0.50 x 29) are assumed.

As stated previously, all assumptions for additional senior and caretaker units were accounted for in the cumulative impact analysis of the certified Santa Lucia Preserve FEIR.

## CUMULATIVE IMPACTS AND MITIGATION MEASURES

The following topics are evaluated in this chapter:

- Land use;
- Geology and soils;
- Groundwater hydrology, stream base flow, and water supply and demand;
- Runoff, flooding and water quality;
- Fisheries;
- Biological resources;
- Traffic;
- Air quality;
- Noise;
- Public services and utilities; and
- Cultural resources.

### Land Use

#### Impact 19-1: Conversion of Open Space to Urban Development

Analysis: The Santa Lucia Preserve Final EIR identified that the CDP would contribute to the cumulative conversion of open space to urban development in the Carmel Valley/Monterey Peninsula area of Monterey County. The EIR concluded that these cumulative effects were less than significant and no mitigation was warranted.

Although the list of cumulative projects has been modified since that EIR was certified, these changes do not result in a more severe impact than previously assumed. In fact, the overall level of assumed development has decreased, as compared to the assumptions within Santa Lucia Preserve Final EIR. Therefore, the Potrero Area Subdivision will not contribute to cumulative land use impacts beyond the levels assumed within the Santa Lucia Preserve FEIR.

Resulting Cumulative Effect: Less than Significant

### Geology and Soils

#### Impact 19-2: Cumulative Consumption of Aggregate Mineral Resources

Analysis: The certified EIR identified that the CDP, in combination with other cumulative projects, would contribute to the consumption of these nonrenewable resources. The impact was identified as less than significant, and no mitigation was warranted. Although the list of cumulative projects has been modified since that EIR was certified, these changes do not result in a more severe impact than previously assumed. In fact, the overall level of assumed development has decreased, resulting in fewer opportunities for the use of these materials within

the Preserve. Therefore, the Potrero Area Subdivision will not contribute to the cumulative impact identified above beyond the levels assumed within the Santa Lucia Preserve FEIR.

Resulting Cumulative Effect: Less than Significant

#### Impact 19-3: Increased Sediment Loads in the Carmel River

Analysis: The certified EIR identified that cumulative projects within the Carmel River watershed could cause increased sediment loads within the Carmel River, and that such impacts may be significant. The Potrero Area Subdivision is located within the Potrero Creek watershed, which ultimately drains to the Carmel River. Although the list of cumulative projects has been modified since that EIR was certified, these changes do not result in a more severe impact than previously assumed. In fact, the overall level of assumed development has decreased, and the number of lots anticipated within the Potrero Area has decreased from 62 to 29.

The prior EIR, as well as this SEIR, identifies mitigation that all new development within the Carmel River watershed include erosion and sediment control measures. The project itself incorporates extensive erosion control measures that have been implemented successfully elsewhere within the Santa Lucia Preserve on previous development phases. These measures are required to carry over to all phases of development, including the Potrero Area Subdivision. Cumulative effects of the proposal have been adequately addressed by the project-specific mitigation provided.

Resulting Cumulative Effect: Less than Significant

### **Groundwater Hydrology, Stream Base Flow, and Water Supply and Demand**

#### Impact 19-4: Increased Consumptive Use of the Groundwater Aquifer at the Project Site

Analysis: The Santa Lucia Preserve Final EIR assessed the cumulative effects of full buildout of the project site, in addition to additional caretaker and senior citizen units. No significant impacts were identified. As the EIR assumed impacts for the entire project, including the units within the Potrero Area, these effects are considered adequately addressed within the prior EIR. The updated cumulative projects list of this EIR does not alter the conclusions of the prior EIR. The prior EIR concluded that cumulative groundwater impacts would not be significant with the incorporation of ranch-wide mitigation measures. This finding remains valid, as no additional projects will use the aquifer at the project site.

Resulting Cumulative Effect: Less than Significant.

#### Impact 19-5: Increased Consumptive Use of Carmel Valley Aquifer

Analysis: The prior EIR identified that the list of cumulative projects, when combined with the Santa Lucia Preserve, could impact offsite water users downstream from the projects. This effect,

however, was determined to be less than significant, primarily because some of the larger cumulative projects listed proposed to convert land from agricultural (grazing and ranching) to residential use. In many cases with such conversions, the overall net consumptive use of water decreases, as water demands for irrigation are greater than low-density residential use. The updated list of projects consists of smaller commercial and residential applications.

Although the list of cumulative projects has been modified since that EIR was certified, these changes do not result in a more severe impact than previously assumed. In fact, the overall level of assumed development has decreased, and the number of lots anticipated within the Potrero Area has decreased from 62 to 29. Considering that cumulative aquifer impacts were assessed on a ranch-wide basis in 1995 and the overall development assumptions have decreased since that time, the conclusions from the prior EIR remain valid. Impacts for this project remain less than significant.

Resulting Cumulative Effect: Less than Significant.

### **Runoff, Flooding and Water Quality**

#### Impact 19-6: Increased Floodflows on the Carmel River

Analysis: The prior EIR concluded that the Santa Lucia Preserve, when combined with other reasonably foreseeable cumulative projects and auxiliary units, could increase floodflows on the Carmel River and subject people and property flooding. This potential cumulative impact was considered significant in the prior analysis.

As mitigation for this cumulative effect, the prior EIR cites the measures required for the entire Santa Lucia Preserve (“Design and Implement Stormwater Runoff BMPs so That Flooding in the Carmel Valley is Not Aggravated”). The EIR also recommended that other projects within Carmel Valley develop 100-year floodflow hydrographs for discharges, for submittal to the MCWRA. Cumulative flooding impacts can be avoided or mitigated by controlling runoff volumes for individual projects.

As the development thresholds of the Potrero Area were considered within the ranch-wide cumulative analysis with regard to flooding, and the number of assumed lots within the Potrero Area has been reduced from 62 to 29, this impact has been adequately addressed. Stormwater runoff Best Management Practices (BMPs) consistent with those required for the Santa Lucia Preserve are also required within this SEIR. These measures adequately address and mitigate for the project’s contribution to cumulative runoff volumes into the Carmel River.

Resulting Cumulative Effect: Less than Significant.

#### Impact 19-7: Potential Degradation of Carmel River Water Quality

Analysis: The prior EIR concluded that the Santa Lucia Preserve, when combined with other reasonably foreseeable cumulative projects in the Carmel Valley, could degrade water quality by increasing urban stormwater runoff and increasing the surface water pollutants in the Carmel River. This potential cumulative impact was considered significant in the prior analysis. As mitigation for this cumulative effect, the prior EIR cites the measures required for the entire Santa Lucia Preserve (“Implement BMPs to control Urban Pollutants”).

As the development thresholds of the Potrero Area were considered within the ranch-wide cumulative analysis with regard to degradation of Carmel Valley River Water Quality, and the number of assumed lots within the Potrero Area has been reduced from 62 to 29, the impact has been adequately addressed. The urban pollutants Best Management Practices (BMPs) required for the Santa Lucia Preserve (and the Potrero Area Subdivision) adequately address and mitigate for the project’s contribution to cumulative runoff pollutants into the Carmel River.

Resulting Cumulative Effect: Less than Significant.

## **Fisheries**

### Impact 19-8: Loss of Fisheries Habitat

Analysis: The prior EIR concluded that the Santa Lucia Preserve in combination with pending, approved and proposed projects, would result in a potentially significant impact on fisheries of the Carmel Valley through degradation of water quality. The cumulative impact resulting from the degradation of water quality is addressed by the measures prescribed within the Runoff, Flooding and Water Quality section detailed above. With incorporation of these project-specific measures, the cumulative impact attributable to the Potrero Area is also rendered less than significant.

Resulting Cumulative Effect: Less than Significant.

## **Biological Resources**

### Impact 19-9: Ongoing Cumulative Loss and Degradation of Regional Native Communities and Associated Wildlife Habitats

Analysis: The Santa Lucia Preserve EIR assessed loss of up to 2,000 acres of native habitat representing the cumulative development of the proposed project and potential auxiliary units. The cumulative impacts associated with this loss were considered to be significant in the prior EIR.

The prior EIR identifies general mitigation that projects should continue to be required to minimize impacts on important habitats. The project itself proposed resource management plans and site-specific mitigation designed to protect and enhance sensitive habitats and to reduce

impacts on biological resources to a less than significant level. Central to these measures is the designation of 14,467 acres as permanent open space within the Preserve, as well as the location of Homelands on the least sensitive land areas. These measures and the implementation of the adopted ranch-wide management plans are required to carry over to all phases of development within the Preserve, including the Potrero Area Subdivision. In addition, the Santa Lucia Conservancy is developing a Habitat Conservation Plan (HCP) for the programmatic mitigation of development within the Preserve.

The updated cumulative projects list will result in a lower intensity of development within Carmel Valley, and therefore fewer potential impacts to habitat areas on a cumulative level. Cumulative effects of the proposal have been adequately addressed and mitigated by the previous EIR and the site-specific measures of this SEIR. Consistent with the requirements of the previous EIR, project specific impacts and mitigation are addressed in this document (Chapter 11. Biology). The prior EIR also recommended that the Planning and Building Inspection Department continue to require projects to minimize habitat impacts through project review, site sensitive planning, and avoidance. This practice is already in place, and has been applied to the Potrero Area.

Resulting Cumulative Effect: Less than Significant.

## **Traffic**

### Impact 19-10: Increased Traffic From Cumulative Projects and Auxiliary Units

Analysis: The certified EIR assessed the traffic impacts resulting from auxiliary units based on full buildout of the Preserve (297 market-rate units) and a daily off-ranch trip rate of 1.4. The prior EIR determined that a projected maximum of 149 caretaker/senior citizen units at buildout would result in 209 daily off-ranch trips, ten of which would occur during the peak p.m. hour (a 4.7% increase over the forecasted off-ranch peak hour trip generation). This potential increase resulting from the addition of caretaker/senior units was found to be less than significant and not large enough to change the conclusions of the EIR.

The projected maximum of 149 caretaker/senior units analyzed in the prior EIR included 37 potential such units within the Potrero Subdivision. As the Santa Lucia Preserve FEIR assumed impacts for the entire project, including the units within the Potrero Area, these effects are considered adequately addressed within the previous EIR.

As discussed previously, the total number of cumulative project trips within Carmel Valley have decreased, and the development assumptions for the Potrero Area have also decreased. A number of large projects are no longer in the planning stages, including the New Los Padres Dam, which was anticipated to contribute significant construction traffic. The Potrero Area will therefore have less of an impact than previously assumed, and the cumulative effect remains less than significant. A series of traffic improvements have been implemented as a result of the Santa

Lucia Preserve and other projects, and the contribution of fees is still required of the Potrero Area Subdivision consistent with the final ranch-wide conditions of approval and this SEIR.

Resulting Cumulative Effect: Less than Significant.

## **Air Quality**

### Impact 19-11: Increased PM10 Emissions

Analysis: As identified in the prior EIR, a project will normally have a significant adverse cumulative effect on air quality if it is found to be inconsistent with the most recent Monterey Bay Unified Air Pollution Control District (MBUAPCD) air quality management plan (AQMP) and/or will violate any ambient air quality standard. The certified EIR found that the population increase associated with the Santa Lucia Preserve project was included in the MBUAPCD's 1994 AQMP and therefore, was considered consistent with that plan. The EIR also found that the cumulative increase in air pollutants would be less than District thresholds. Therefore, the CDP (including the Potrero Area), in combination with other cumulative projects would have a less than significant impact on air quality and no mitigation was warranted.

Although the development of the Potrero Area was considered within the ranch-wide cumulative air quality analysis, and found to be insignificant, the impact was evaluated in terms of any changes that may have occurred since certification of the EIR

Since the certification of the Santa Lucia Preserve EIR, the MBUAPCD has developed the *2000 Air Quality Management Plan for the Monterey Bay Region*. As described in Chapter 14 (Climate and Air Quality) of this SEIR, the population increase associated with the proposed project has been included in the 2000 AQMP, and therefore is consistent with that document.

The prior EIR also evaluated cumulative impact for the localized air pollutants based on District thresholds of daily PM10 and CO. The prior EIR found that the cumulative increase in these pollutants would be less than significant. The 29 pounds per day of PM 10 for the entire Preserve is, and remains, significantly below the District threshold of 82 pounds per day. There have been no changes to the District standards of the pollutants evaluated in the prior EIR.

Considering that cumulative air pollutant impacts were assessed on a ranch-wide basis (including the Potrero area) in 1995, the project remains consistent with the most recent AQMP, there have been no changes in the District standards for the pollutants analyzed, and the overall development assumptions have decreased since that time, the conclusions of the prior EIR remain valid. Impacts for this project remain less than significant.

Resulting Cumulative Effect: Less than Significant.

## Noise

### Impact 19-12: Imperceptible Increase in Noise Levels

Analysis: The certified EIR identified that the CDP, in combination with other cumulative projects, would contribute to noise impacts in the area. These impacts included cumulative traffic noise and construction noise. These impacts were identified as less than significant, and no mitigation was warranted. Although the list of cumulative projects has been modified since that EIR was certified, these changes do not result in a more severe impact than previously assumed. In fact, the overall level of assumed development has decreased. Therefore, the Potrero Area Subdivision will not contribute to a cumulative impact beyond the levels determined within the Santa Lucia Preserve FEIR and the analysis in the prior EIR is considered adequate.

Resulting Cumulative Effect: Less than Significant.

## Public Services and Utilities

### Impact 19-13: Cumulative Demand for Law Enforcement

Analysis: The prior EIR concluded that the Santa Lucia Preserve, when combined with other reasonably foreseeable cumulative projects could result in a significant impact on law enforcement services. As mitigation for this cumulative effect, the prior EIR requires that developers contribute to a law enforcement fund to offset demand caused by new development.

Development of the Potrero Area was considered within the prior ranch-wide cumulative analysis. Although the list of cumulative projects has been modified since that EIR was certified, these changes do not result in a more severe impact than previously assumed. In fact, the overall level of assumed development has decreased. Therefore, the Potrero Area Subdivision will not contribute to cumulative impacts beyond the levels assumed within the Santa Lucia Preserve FEIR. The mitigation required for the Santa Lucia Preserve (including the Potrero Area Subdivision) adequately addresses and mitigates the project's contribution to cumulative demand for law enforcement.

Resulting Cumulative Effect: Less than Significant.

### Impact 19-14: Cumulative Demand for Fire Protection

Analysis: The certified EIR concluded that the Santa Lucia Preserve, when combined with other reasonably foreseeable cumulative projects would not have a cumulative effect on demand for fire protection because the project proposed an onsite fire station.

As the EIR assumed impacts for the entire project, including the units within the Potrero Area, these effects are considered adequately addressed within the prior EIR. The updated cumulative

projects list of this EIR does not alter the conclusions of the prior EIR, and with the construction of the on-site fire station, the cumulative impact remains less than significant.

Resulting Cumulative Effect: Less than Significant.

#### Impact 19-15: Cumulative Increased Demand for Schools

Analysis: The Santa Lucia Preserve EIR determined that the proposed project would contribute to a significant cumulative demand for school facilities in the Carmel Unified School District (CUSD). To reduce school impacts to a less than significant level, the prior EIR identified as mitigation, the implementation of school impact fees (Monterey County General Plan Policy 47.2.1) as well as the implementation of year-round schools within the CUSD.

Considering that the total number of dwelling units within the cumulative project assumptions has decreased since certification of the prior EIR, the degree of cumulative effects have also decreased accordingly.

The contribution of the Potrero Subdivision would be eleven elementary, four middle and seven high school students. As described in Chapter 16 of this document, these student generation estimates are likely to be exaggerated, considering that the demographics of the project area are anticipated to result in a high percentage of retired individuals without school-aged children and many of the residences are also expected to be used as second homes. In addition, full buildout of the cumulative proposals could take ten or more years to develop (depending on the actions of individual property owners), and thus the facility requirements of the District would not materialize at one time.

Based upon 2002 statistics, all public schools within the CUSD are significantly below capacity. Cumulative development, even using the likely exaggerated generation figures above, is within the capacity of the District. Since the proposed development would take place over many years, it is even more likely that additional students generated by area development would be within the capacity of the District for any given school year. The impact to school facilities is considered to be less than significant.

The applicant shall be required to contribute the designated school impact fees, in accordance with the provisions of the State Education Code and School Facilities Act of 1998, currently calculated at \$2.05 per square foot for new residential development.

Resulting Cumulative Effect: Less than Significant.

#### Impact 19-16: Cumulative Generation of Solid Waste

Analysis: The certified EIR stated that landfills servicing development in Monterey County were projected to have approximately 90 years of remaining capacity. The EIR concluded that the proposed project's cumulative impact on solid waste disposal was less than significant.

As the EIR assumed impacts for the entire project, including the units within the Potrero Area, these effects are considered adequately addressed within the prior EIR. The updated cumulative projects list of this EIR does not alter the conclusions of the prior EIR and the cumulative impact remains less than significant.

Resulting Cumulative Effect: Less than Significant.

## **Cultural Resources**

### Impact 19-17: Potential Degradation or Loss of Important Cultural Resources

Analysis: As documented in the previous EIR, development of the Santa Lucia Preserve project in combination with cumulative development could result in damage to, or loss of, important historic and prehistoric archaeological resources in the region. However, because Monterey County development requires site-specific environmental review including the evaluation of cultural resources and implementation of mitigation measures, the prior EIR found the cumulative impact on cultural resources to be less than significant.

As the EIR assumed impacts for the entire project, including the units within the Potrero Area, these effects are considered adequately addressed within the prior EIR. The updated cumulative projects list of this EIR does not alter the conclusions of the prior EIR. The cumulative impact on cultural resources has been adequately addressed in the certified EIR and the cumulative impact continues to be less than significant.

Resulting Cumulative Effect: Less than Significant.

## **CITATIONS**

Denise Duffy & Associates, *Potrero Area Subdivision of the Santa Lucia Preserve*, Project Description, April 2001.

Denise Duffy and Associates. 1994. *Santa Lucia Preserve Mitigation and Monitoring Plan*. Prepared for the Rancho San Carlos Partnership, Carmel California.

County of Monterey, *Draft Monterey County General Plan*, December 2001.

County of Monterey, Planning and Building Inspection Department, *Santa Lucia Preserve Project - Final Environmental Impact Report*, September 1995 (including *Addendum to EIR*, August 1997).

Leonard, Steven, California-American Water Company, Monterey District, Personal  
Communication, September, 2002.

Potrero Area Subdivision EIR Project File.

## **Chapter 20. Alternatives**

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### **CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS**

CEQA requires that a reasonable range of alternatives to the proposed project be described and considered within an EIR. The alternatives considered should represent scenarios that could feasibly attain most of the basic objectives of the project, but will avoid or substantially lessen any of the significant environmental effects. The purpose of this process is to provide decision makers and the public with a discussion of viable development options, and to document that other options to the proposal were considered that would reduce the significant environmental effects of the proposal (CEQA Guidelines, §15126.6).

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Where a lead agency has determined that, even after the adoption of all feasible mitigation measures, a project as proposed will still cause significant environmental effects that cannot be substantially lessened or avoided, the agency, prior to approving the project as mitigated, must first determine whether, with respect to such impacts, there remain any project alternatives that are both environmentally superior and feasible within the meaning of CEQA.

CEQA provides the following guidelines for discussing project alternatives:

- An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation (§15126.6(a)).
- An EIR is not required to consider alternatives that are infeasible (§15126.6(a)).
- The discussion of alternatives shall focus on alternatives to the project, or its location, which are capable of avoiding or substantially lessening any significant effects of the project (§15126.6(b)).
- The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects (§15126.6(c)).
- The EIR should briefly describe the rationale for selecting the alternatives to be discussed (§15126.6(c)).
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project (§15126.6(d)).

## **RELATIONSHIP TO PROJECT OBJECTIVES**

A project's objectives provide an important benchmark in conducting the comparative alternatives analysis and the feasibility of each. As discussed above, an alternative is only meaningful for consideration if it can meet the basic objectives of the project as proposed. The objectives of this project are two-tiered: the objectives of the project in and of itself, and as a component of the Santa Lucia Preserve Comprehensive Development Plan. The project objectives are stated below:

### **Project Objectives**

The Rancho San Carlos Partnership is the project applicant. According to the applicant, a primary objective is to secure approval for a Combined Development Permit to create the Potrero Area residential subdivision within the greater Santa Lucia Preserve. The Partnership seeks to establish a permanent preserve for native plant and wildlife habitat while pursuing limited development of the least environmentally sensitive land. The applicant intends to create 29 additional homesites on 77 acres within the Santa Lucia Preserve utilizing and supporting the previously constructed ranch-wide infrastructure while supporting the activities and services of the Community Services District. Open space ("preserve lands") will comprise the remaining 1,209 acres of the 1,286-acre project site.

Another key objective of the Potrero Area Subdivision is to continue the phased implementation of the previously approved Santa Lucia Preserve Comprehensive Development Plan. Objectives of the CDP are outlined below.

### Resource Protection

- Actively promote the native biological diversity and integral ecosystems; guide all development and ranching activities consistent with resource-oriented principles and standards.
- Secure long-term protection of natural resources by the creation of an independent conservation organization, the Santa Lucia Conservancy, which will manage, restore, protect, and enhance the resources in perpetuity.

### Community within a Preserve

- Incorporate a residential settlement - limited in perpetuity - as an integral, interactive part of a healthy rural ecosystem - a community within a preserve.
- Preserve a sense of place by providing support uses (e.g., employee housing, commercial and recreational uses) capable of sustaining the community by itself while reducing impacts (e.g., traffic) on the surrounding community.

## Sustainability

- Incorporate a small vital residential community that provides the philosophical, cultural, and financial support required for the long-term preservation of the natural resources.

## **SIGNIFICANT IMPACTS OF THE PROJECT**

All of the impacts of the proposed Potrero Area Subdivision project could be reduced to a less-than-significant level through implementation of mitigation measures as specified in this SEIR. Through the applicant's resource constraints planning process, the project avoids many of the sensitive biological and cultural resources onsite. All of the identified significant impacts on these sensitive resources can be reduced to a less-than-significant level through additional avoidance, compensation, and other appropriate mitigation measures. The Potrero Area Subdivision, consistent with the Santa Lucia Preserve CDP, will not result in significant unavoidable (residual) impacts. This is an important fact when determining if an alternative will reduce or avoid any significant environmental impacts of the proposal.

## **ALTERNATIVES CONSIDERED**

### **Screening Criteria**

The Santa Lucia Preserve EIR utilized a list of screening criteria to determine if the alternatives considered should be included in the evaluation. Based on this criteria, an alternative must:

- result in the long-term protection of open space for grazing, recreation, and resource conservation of at least 14,467 acres of Rancho San Carlos in perpetuity;
- provide a mix of land uses on the least sensitive habitats to support a residential community so that offsite travel is reduced and a viable community is established;
- generate sufficient revenues both initially and over the long term to fully support the growth limitation, the resource management program, and the residential management program;
- be consistent with the Monterey County Inclusionary Housing Ordinance Chapter 18.40, which requires 15% of the total number of housing units to be reserved for inclusionary housing; and
- be consistent with the GP, the GMPAP, and Board Resolution No. 93-115.

This Supplemental EIR for the Potrero Area Subdivision uses similar criteria for developing the alternatives to be considered. A viable alternative must result in significant open space areas, avoid the most sensitive areas of the project site, and be consistent with the Carmel Valley Master Plan, General Plan, and Board Resolution No. 93-115.

## Developing the List of Alternatives

Considering the status of this document as a Supplemental EIR (SEIR) to the Santa Lucia Preserve EIR, the alternatives analysis and range of feasible alternatives available are somewhat constrained. The prior EIR pre-screened nine (9) potential alternatives to the entire CDP development program. These pre-screened alternatives, and the results of the screening, consisted of the following:

1. No Project (Existing Lots of Record): Passed screening. Evaluated in prior EIR.
2. Dense-Cluster Alternative: Did not pass screening. Not evaluated in prior EIR.
3. No Commercial Alternative: Did not pass screening. Not evaluated in prior EIR.
4. Reduced Lodge Alternative: Passed screening. Evaluated in prior EIR.
5. No-Lodge Alternative: Passed screening. Evaluated in prior EIR.
6. No Golf Trail Alternative: Passed screening. Evaluated in prior EIR.
7. Relocated Golf Trail Alternative: Did not pass screening. Not evaluated in prior EIR.
8. Offsite Alternative. Did not pass screening. Not evaluated in prior EIR.
9. No Project (Maintenance of Existing Conditions). Passed screening. Evaluated in prior EIR.

Of the five alternatives that passed the screening criteria, only the two No Project options remain viable for evaluation within this SEIR. The other alternatives addressed commercial and lodge components of the Preserve that are not applicable to the Potrero Area Subdivision. The findings for rejecting the Offsite Alternative remain valid, as the proposal was considered as part of the prior approvals, and there is no other property in the County bearing an appropriate land use designation to allow for a similar project.

With the rejection of the alternatives above, additional alternatives to the Potrero Area Subdivision (beyond the No Project options) were considered for evaluation. These included:

**Potrero Dense Cluster Alternative.** This alternative assumes development of the proposed 29 units clustered primarily in three locations on the project site, the general vicinity of Lots 1-6, Lots 17-21, and Lots 22-25. Clustered development of the 29 lots would be concentrated on approximately 40 acres of Homeland area (compared to 77 acres) leaving the remainder of the area as Preserve Lands.

This alternative would result in greater environmental impact than the proposal, for reasons similar to those stated in the prior EIR for the Preserve. A tightly clustered alternative would concentrate impacts in central areas, resulting in larger areas of contiguous ground disturbance,

tree removal, higher visibility, and concentrated impacts to geologic resources and groundwater. For these reasons, this alternative does not meet the screening criteria and is rejected from consideration.

**Resource Avoidance Alternative.** This alternative was considered to avoid potentially significant impacts to natural resources or from geologic hazards as identified within the environmental analysis. The SEIR has identified potentially significant impacts associated with development on or in close proximity to sensitive natural (biological) resources and hazards, and provides measures to effectively mitigate potential impacts. This alternative would therefore recommend the relocation of lots or adjustment of Homeland boundaries within the subdivision to avoid identified impacts.

Upon review of the mitigation measures within the SEIR, this alternative was determined to have no resulting environmental benefit over the project as proposed. Through the project design process, the proposal avoided most of the sensitive areas of the site, consistent with Board Resolution 93-115. With the incorporation of site-specific mitigation, and with the siting requirements for individual home sites within the Homeland areas, the project as conditioned successfully avoids significant impacts. For this reason, a Resource Avoidance alternative does not provide any quantifiable benefits over the proposal with mitigation measures and is rejected from further detailed analysis.

**Reduced Density Alternative.** It is common for an EIR to consider a reduced version of a proposal, which assumes a proportionate reduction in environmental effect. This concept has been rejected from consideration for the following reasons: 1) The Potrero Area Subdivision already reflects a reduction from 62 to 29 lots relative to the assumptions within the existing approvals; 2) all impacts have been mitigated to a less than significant level, and 3) with a maximum ranch-wide development threshold of 350 units, a further reduction of development intensity within the Potrero Area may translate to additional intensity elsewhere within the Preserve, effectively negating any environmental benefit.

**No Project – Transfer of Density Alternative.** This alternative assumes that the Potrero Area project site would remain undeveloped, but that the 29 lots would be transferred elsewhere within the Preserve, either within the GMPAP area, Coastal Zone, or both. This alternative assumes that the applicant intends to provide the maximum number of units (350) ranch-wide in the long term.

This alternative was rejected from consideration because tentative maps for the GMPAP area are complete, and were the subject of considerable previous environmental review. Returning to the GMPAP area for more concentrated development and map amendments at this time would prove difficult from a processing standpoint. Secondly, loading the 29 lots into the future phase within the Coastal Zone, with limited site area and additional environmental constraints, is not considered realistic if project objectives are to be maintained. Thirdly, concentrating development elsewhere within the Preserve would exacerbate impacts to those areas, thus undermining the intent of a meaningful alternatives analysis intended to identify options that will reduce significant environmental effects.

Based upon the above reasoning, and the fact that this document is a Supplemental EIR to the certified Santa Lucia Preserve EIR, only the two No Project options are considered for evaluation.

## **DESCRIPTION AND EVALUATION OF ALTERNATIVES TO THE PROPOSED PROJECT**

### **No Project Alternative 1: (No Development/Maintenance of Existing Conditions)**

#### Description

This “No Development” Alternative considers the comparative environmental effects of not approving the proposed project, with the site remaining in its existing undeveloped state. Through Resolution No. 93-115, the Board states, “the total density included within the entire comprehensive development plan does not exceed 150 visitor accommodation units and 350 single-family residential dwelling units...” However, as the majority of the Preserve consists of the GMPAP Area (which has already been planned, subdivided and is under construction), the baseline environmental conditions assume that Potrero’s 29 lots will not be applied elsewhere within the Preserve. Under this alternative, the entire 1,286-acre Potrero Area would be considered permanent Preserve Land.

#### Impact Discussion

The following qualitative analysis determines if the alternative will have “similar”, “greater” or “lesser” environmental impact as compared to the proposed project.

**Land Use (lesser).** Allowing the project site to remain in its current undeveloped state would result in no impact with respect to land use compatibility issues, and would be consistent with applicable planning policies affecting Carmel Valley. The proposed project’s compatibility with the site’s current land use, historic land use, and adjacent land uses would continue to be less than significant under this alternative. Use permits for tree removal and development on slopes of greater than 30% would not be required, resulting in fewer planning and permitting requirements.

**Population and Housing (lesser).** Impacts of the proposal were found to be less than significant. With no development, the proposal would have no effect on population and housing issues.

**Economics (greater).** With no additional job generation from project construction, the alternative would not benefit from the project’s incremental economic impacts. This alternative would also make the economic objectives on a ranch-wide basis more difficult to obtain.

**Geology and Minerals (lesser).** All project impacts have been mitigated to a less than significant level. However, with no development, this alternative would result in no impacts regarding geologic hazards.

**Soils (lesser).** No project and no development will result in no impacts with regard to soil disturbance or erosion resulting from construction. All soil and natural erosion conditions would remain unchanged.

**Groundwater, Hydrology, Stream Base Flow, and Water Supply and Demand (lesser).** All project impacts have been mitigated to a less than significant level. However, with no development, this alternative would result in no impact regarding groundwater resources, water quality or stream base flows. The site would remain in its existing state, and would not require the extension of the approved water system to this portion of the Preserve. The removal of 29 lots from the ranch-wide water system would proportionally reduce demands on the aquifer at the site; however, the water system will operate as designed with or without development of the Potrero Area, and groundwater conditions would be essentially the same with or without the project as mitigated.

**Runoff, Flooding, Water Quality (lesser).** With no development within the project boundaries, this alternative would not contribute to flood flows in the Carmel River or alter drainage patterns. No surface water degradation would occur as a result of construction, and no stormwater pollution prevention plans would be required. Grazing would continue, which could impede some of the benefits sought by management of the preserve areas under the original proposal. Although the project as mitigated would result in less than significant impacts, this no development scenario would result in no impact and require no mitigation.

**Fisheries (lesser).** All project impacts to fisheries were determined to be less than significant as mitigated by erosion control plans and measures to reduce sediment. Under the no development scenario, there would be no impact to onsite fisheries beyond the effects of upstream development.

**Biological Resources (lesser).** The applicant's resource constraints planning process has resulted in the siting and placement of lots within the Potrero Area Subdivision in a manner that avoids significant unmitigable impacts to sensitive biological resources. Although all project impacts were mitigated to a less than significant level through avoidance and mitigation, the no development scenario would essentially have no impact to on-site resources.

**Aesthetics (lesser).** No development of the project site will result in no changes to the aesthetic character of the area, and would create no visible development from any public or private viewing area. Although the project's impacts were found to be less than significant, this alternative would result in no environmental impact.

**Traffic (lesser).** With 29 fewer lots developed, incremental trip generation from the project would not occur. Although the project's impacts were determined to be less than significant, this alternative would have no impact under this scenario.

**Noise (lesser).** With 29 fewer lots developed, incremental noise from project traffic and construction would not occur. Although the project's impacts were determined to be less than significant, this alternative would have no impact.

**Public Services and Utilities (lesser).** This alternative would result in no additional demands for (or extension of) public service and utility systems, and thus would have no impact.

**Cultural Resources (lesser).** The project as proposed resulted in potentially significant impacts to two identified cultural resources that were mitigated to a less than significant level. With no development of the project, no impacts would occur.

**Social Effects (similar).** No development would result in no changes to the social characteristics of the area. All effects of the project were found to be inconsequential.

## **No Project Alternative 2: (Existing Lots of Record/Existing Zoning)**

### Description

This No Project Alternative assumes that development would occur on the 49 lots of record currently in existence within the Carmel Valley Master Plan Area. Because a number of existing lots exceed the minimum land use densities provided for in the Master Plan, additional subdivision of these lots could be pursued by the applicant. Using a ranch-wide density of 40 acres per unit pursuant to Board Resolution 93-115, the Potrero Area could yield approximately 32 lots, similar to the proposed project. Using the land use densities under the existing zoning within the CVMP (Rural Grazing 10 acres per unit) the existing CVMP area could yield up to 199 lots.

This maximum figure does not account for existing site and resource constraints that could reduce the number of viable buildable lots. Therefore, the mean between the range of 32 and 199 lots (116 lots) is used for this comparative analysis.

### Impact Discussion

The following qualitative analysis determines if the alternative will have “similar”, “greater” or “lesser” environmental impact that the proposed project.

**Land Use (greater).** Project impacts associated with the development of 116 lots would be greater than the project, primarily due to land use and policy consistency with the Carmel Valley Master Plan. Although all project impacts were determined to be less than significant, the environmental goals of the Master Plan would be more difficult to achieve under this alternative. Development under this scenario is also assumed to require Use Permits for tree removal and development on slopes of greater than 30%.

**Population and Housing (similar).** Although this alternative would generate additional population compared to the project, all increases would be within AMBAG projections. A proposal for 116 units may require additional inclusionary housing units if not provided elsewhere within the Preserve. Impacts of the project were found to be less than significant, and this alternative would not change those conclusions.

**Economics (similar).** Development of 116 units would create an increase in employment opportunities associated with construction of individual homes, and slightly improve the County's jobs/housing balance. These variations would not be significant on a county-wide basis, and resulting economic effects would be considered similar.

**Geology and Minerals (greater).** With up to 116 individual lots, it is assumed that the geologic constraints and hazard areas identified on the site would be more prominent and more difficult to avoid. Although all project impacts have been mitigated to a less than significant level, additional units under this scenario would create additional development challenges with regard to geologic constraints.

**Soils (greater).** With up to 116 individual lots, it is assumed that impacts associated with soil erosion and sedimentation would be exacerbated. A higher risk of health hazard and/or odor may also occur with the addition of a higher concentration of onsite septic systems. Although all project impacts have been mitigated to a less than significant level, additional units would create additional development challenges and require more extensive mitigation.

**Groundwater, Hydrology, Stream Base Flow, and Water Supply and Demand (similar).** Although 116 lots would represent a significant increase in development for the Potrero Area over the project's proposed 29 lots, the ranch-wide development threshold is limited to 350 dwelling units. The water system is designed and permitted to accommodate the entire Preserve, and the development intensity within the Potrero Area would not affect this threshold. All impacts (as identified by the SLP EIR) would remain less than significant.

**Runoff, Flooding, Water Quality (greater).** With the development of up to 116 individual lots rather than 29, there would be greater potential for impacts associated with downstream flooding and surface water quality. Although such issues could continue to be mitigated onsite through measures similar to those required by the EIR, more extensive mitigation and stormwater facilities would be required under this alternative, requiring larger development areas and disturbances.

**Fisheries (greater).** All project impacts to affected fisheries were determined to be less than significant as mitigated by erosion control plans and measures to reduce sedimentation. With up to 116 units rather than 29, control of sediment, water temperature and base stream flows within the Potrero Canyon area would be more difficult to regulate.

**Biological Resources (greater).** With a higher concentration of development in the Potrero Area, avoidance of habitat areas and sensitive biological resources (as accomplished by the project) would be more difficult to achieve. Such an alternative would fragment habitat areas and require more extensive mitigation. It is assumed that additional trees would require removal, additional vegetation would be cleared, and common species would be displaced.

**Aesthetics (greater).** Up to 116 individual lots would result in a more dramatic change to the aesthetic character of the area, and provide additional challenges to develop in a manner that would not be in violation of public viewsheds. Less land area would be available for preserve

lands, compromising the intended aesthetics and community character of the Santa Lucia Preserve as stated by the project objectives.

**Traffic (greater).** Additional trip generation from additional lots would incrementally affect roadways both within and outside the Preserve. Although it is unknown if the trips from 116 units (rather than 29) would trigger the need for additional traffic improvements, it can be assumed that the overall traffic pattern would be intensified proportionally.

**Noise (similar).** An overall increase in development activity within the Potrero Area is assumed to raise or prolong construction related noise and additional noise from vehicle trips. Compared to the project, however, noise levels would not be predicted to significantly increase, and noise conditions would be similar in the general area.

**Public Services and Utilities (greater).** The development of 116 individual lots (rather than 29) would incrementally increase demands upon schools, county services, law enforcement, fire protection and utility providers. No impacts would be anticipated to trigger significance thresholds; however, demand for services would require additional funding and possibly additional facilities that would not be needed under the project.

**Cultural Resources (greater).** Although this alternative would result in a more intensive development pattern within the Potrero Area, it is assumed that the four identified cultural resources on site could be avoided and properly mitigated to a less than significant level. Additional resources, if discovered, would not benefit from the protection of extensive preserve areas, and thus the potential for additional impacts could occur.

**Social Effects (similar).** Development in accordance with existing zoning, up to 116 individual lots, would not change the social fabric of the region or other areas of the project site. Effects for this alternative, similar to the project, are inconsequential.

## **ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

CEQA Guidelines Section 15126.6(e)(2) requires that the environmentally superior alternative be identified. If the environmentally superior alternative is the “No Project” alternative, the EIR shall identify an environmentally superior alternative among the other alternatives. Considering that no other viable alternatives to the project could be identified, the No Project 1 – Maintenance of Existing Conditions option remains the only environmentally superior option. No Project 2 – Existing Lots of Record would have greater environmental impact overall.

## **Chapter 21. Other Sections Required By CEQA**

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This section discusses the potential long-term implications of the project. The topics discussed include significant irreversible environmental changes/irretrievable commitment of resources, growth-inducing impacts and significant and unavoidable environmental effects.

### **IRREVERSIBLE ENVIRONMENTAL CHANGES**

#### **CEQA Requirement**

Public Resources Code Section 21100(b)(2)(B) requires an Environmental Impact Report to include a detailed statement setting forth any significant effects on the environment that would be irreversible if a project is implemented. Examples of irreversible environmental changes, as set forth in CEQA Guidelines Section 15126.2(c), include the following:

- The project would involve a large commitment of nonrenewable resources such that removal or reuse thereafter is unlikely;
- The primary and secondary impacts of a project would generally commit future generations to similar uses (e.g. a highway providing access to a previously inaccessible area);
- The project involves uses in which irreversible damage could result from any potential environmental accidents associated with the project; or,
- The phasing of the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

A proposed project would result in significant irreversible effects if it is determined that key resources would be degraded or destroyed to the extent that there is little possibility of restoring them. Irreversible environmental changes should be evaluated to assure that such current consumption is justified (CEQA Guidelines Section 15126.2(c)).

#### **Analysis**

The Potrero Area Subdivision would result in an increased intensity of development, with the conversion of land that is currently void of residential uses. A variety of nonrenewable and limited resources would be irretrievably committed for project construction and maintenance, including, but not limited to, oil, natural gas, gasoline, lumber, sand and gravel, asphalt, steel, water, land, energy, construction materials and human resources. In addition, the project would result in an increase in demand on public services and utilities.

An increase in the intensity of land uses on the site would result in an increase in regional electric energy consumption to satisfy additional electricity demands from the project. These energy resource demands relate to construction, transportation, and use. Development of the site to support the proposed uses may be regarded as a permanent and irreversible change. The

project site is currently open land, used occasionally for grazing. Despite extensive efforts to minimize impacts to the greatest extent possible, grading, utility extensions, drainage improvements, new and improved roadways, and construction of buildings would permanently alter the character of the site to that of a residential, albeit dispersed, neighborhood. The project would generally commit future generations to similar residential uses on the site.

## **GROWTH INDUCING IMPACTS**

### **CEQA Requirement**

Public Resources Code Section 21100(a)(5) requires that the growth-inducing impacts of a project be addressed in the EIR. A project may be growth-inducing if it directly or indirectly fosters economic or population growth or additional housing, removes obstacles to growth, taxes community services facilities, or encourages or facilitates other activities that cause significant environmental effects (CEQA Guidelines Section 15126.2(d)). Direct growth-inducing impacts result when the development associated with a project directly induces population growth or the construction of additional developments within the same geographic area. These impacts may impose burdens on a community or encourage new local development, thereby triggering subsequent growth-related impacts.

The analysis of potential growth-inducing impacts includes a determination of whether a project would remove physical obstacles to population growth. This often occurs with the extension of infrastructure facilities that can provide services to new development. Indirect growth-inducing impacts result from projects that serve as catalysts for future unrelated development in an area. Development of public institutions, such as colleges, and the introduction of employment opportunities within an area are examples of projects that may result in direct growth-inducing impacts.

CEQA provides no criteria for determining if induced growth is detrimental or beneficial. Induced growth is considered a significant impact only if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth could significantly affect the environment in some other way.

### **Analysis**

The proposed project is not considered to be growth inducing. The project is within the Santa Lucia Preserve Comprehensive Development Plan area, which was approved by the Monterey County Board of Supervisors via Resolution No. 93-115. The Potrero Area Subdivision is designed according to the Santa Lucia Preserve Comprehensive Development Plan, which was submitted to and approved by Monterey County pursuant to the requirements of Resolution No. 93-115. A key objective of the Potrero Area Subdivision is to continue the phased implementation of the Santa Lucia Preserve Comprehensive Development Plan, which endeavors to create a permanent preserve for native plants and wildlife habitat while allowing limited, sustainable, development.

By approving Resolution No. 93-115, the County Board of Supervisors has restricted development within the Preserve to no more than 350 residential units. The Potrero Area Subdivision will provide 29 of the allowable units. Services and infrastructure within the Preserve are designed and sized to serve only a fixed number of residences and will not induce additional population growth. In addition, the project is not projected to generate substantial economic growth.

The Potrero Area Subdivision will not remove any barriers to growth. North of the project site, between the project site and Carmel Valley Road, are low-density residential neighborhoods that are already supplied with infrastructure and services. The project site is bordered to the south and east by more areas of the Santa Lucia Preserve and Robinson Canyon Road. West of the project is the portion of the Preserve within the Coastal Zone.

**REPORT PREPARERS**

**County of Monterey Staff**

Mike Novo, Planning and Building Services Manager

Laura Lawrence, Division of Environmental Health

**Pacific Municipal Consultants**

Tad Stearn

Bert Verrips

Barb Kinison Brown

Jason Chafin

**Biotic Resource Group**

Kathy Lyons

Dana Bland

**Weber, Hayes & Associates**

Joseph Hayes

G.E. Weber

**Hexagon Transportation Consultants, Inc.**

Gary Black