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BIOLOGICAL ANALYSIS & REPORT *for the*
RANCHO POTRERO SUBDIVISION
***in* CARMEL VALLEY, MONTEREY COUNTY, CA**

Prepared for

HERITAGE DEVELOPMENT

c/o Maureen Wruck Planning Consultants, LLC

21 West Alisal Street, Suite 11

Salinas, CA 93901

(831) 771-2557

Contact: Joel R. Panzer

Prepared by

CALIFAUNA

3158 Bird Rock Road

Pebble Beach, CA 93953

(831) 224-8595

Contact: J.B. Froke, Ph.D.

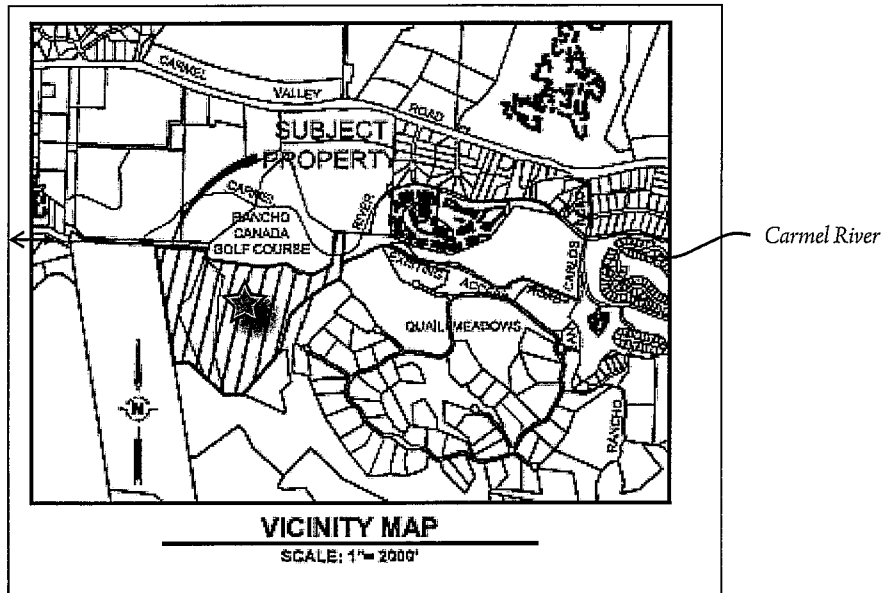
Wednesday, 30 July 2008

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INTRODUCTORY GEOGRAPHIC DATA:



APN	157-181-006, 007, 008
PLN	060603
STUDY AREA	103.2 acres
GEO-REFERENCE	lat 36.53276° x minus 121.88962° / 69 ft ASL @ Old Barn

BACKGROUND & INTRODUCTION TO REVISED DOCUMENT

In response to a previous submittal of the Project application package, which included an earlier version of this Biological Analysis & Report (BA&R), staff of Monterey County Resource Management Agency (RMA; Ms. Paula Bradley) returned the application for being incomplete, in part for shortcomings of the Biological Analysis & Report (16 Dec 2007, by CALIFAUNA). Below is a restated outline of staff's comments related to the biological report, as these were included in a memo (15 Feb 08) from Ms. Bradley to Mr. Joel Panzer, the project's representative.

CALIFAUNA : Wildlife & Landscape Science for the California Community

BIOLOGICAL ANALYSIS & REPORT for RANCHO POTRERO / 2008

Response to RMA's Key Points

- ★ Perform an in-season floristic survey. Information should be specific to the lots. Confirm that plant lists and descriptions refer to the property and not to elsewhere, including Rancho San Carlos. Identify what was surveyed on each lot and what if anything was found.
 - ✓ In-season floristic surveys were performed, and survey results per lot are reported in the current revision. References to RSC are provided for floristic context only, and none are reported to be resource data representative of the Rancho Potrero property.

- ★ The Santa Lucia Preserve Comprehensive Plan (SLPCP) requires Mitigation Measures for various plant and raptor species. Please review the SLP conditions and mitigations for any measures that may apply. Specifically, consider a mitigation measure for the riparian habitat identified in the report.
 - ✓ The SLPCP measures were revisited; and items appropriate to the present report , e.g., the presence of commonly and uncommonly occurring resources , are included herein.

- ★ Consider potential impacts to plants for fuel reduction for wildland fire areas (100 foot buffer). E.g., Condition No 26 and Mitigation Measures Nos. 30, 32, 33, 34, 35 -- for plants, animals and their habitat.
 - ✓ An evaluation of fuel management and its potential impact on protected plant species has been made.

- ★ Reconcile or clarify whether Monterey Pines are a special-status species. In so doing, refer to the project arborist's report, which does not ascribe status to the species. The original version of the BA&R (pg 17) states that special status is designated for the pine, and (pg 20) shows the area on a map and states that permanent protection [of a non-exclusive core forest site] is recommended, as by avoidance.

- ✓ The current report specifically answers whether the Monterey Pine is a special-status species. Note that the pine is given a special advisory designation by the California Native Plant Society (CNPS): the species is classified in CNPS (advisory) List 1B -- "plants that are rare, threatened or endangered in California or elsewhere." However, the species is not listed by either the State of California (CDFG) or the United States of America (USFWS).

- ★ It appeared that the BA&R first-delivered to the RMA (County Planning) suggested dedication of a conservation easement as a forest protection method: Clarify.
 - ✓ The previous draft did not mean to suggest the use of conservation easements, however laudable and appropriate they may be, especially in view of the largely successful easement program at Santa Lucia Preserve.

- ★ Mitigation Measure 37 (also Additional Mitigation Measure 17) of the SLP Comprehensive Development Plan requires riparian vegetation maintenance: state whether this applies to the project site.
 - ✓ The adopted measure provides for "long-term monitoring of riparian vegetation and revegetation, if necessary, to maintain a total riparian area equal to at least 95 percent of the existing area" (GMPAP, MM 16). Nevertheless, the measure does not apply to the present project because there is no development or impact planned in or near any of the associated riparian areas.

- ★ The report "recommended" project BMPs, but refers to requirements for field monitoring. Clarify if the "recommendations" are required per CEQA.
 - ✓ Changes made and recommendations clarified -- see text.

- ★ The plant species lists does not provide a key for the CNPS status – could this be provided?

- ✓ All plant species that are present on the property and that are listed by CNPS or a government authority (CDFG, USFWS) are indicated in Table 1.
- ★ Is a pre-construction survey needed for White-tailed Kite, or for Cooper's Hawk? Clarify, and in so doing refer to SLPCP MM No. 133.
 - ✓ Yes: the measure was adopted as Condition 27 of the Board's approval, and this report will specify the circumstances for and methods of making a survey for these and possibly additional species.
- ★ Review the arborist's report; also, the arborist needs to reference the BA&R.
 - ✓ The BA&R author read the arborist's report, i.e., endorsement of the project (Bradford 27 Oct 2007). The tree report, including pertinent technical corrections to that report, are discussed, herein.
- ★ The BA&R refers to "mitigation" (page 17): Is the mitigation as defined by CEQA?
 - ✓ Changes have been made in the BA&R -- see text.
- ★ California Department of Fish & Game staff will require a letter from the US Fish & Wildlife Service regarding whether the project may potentially result in takings of California Red-legged Frogs. Consult with [agency staff] about whether to request consultation before or during the environmental review period.
 - ✓ The BA&R now specifies an approach for communicating with the Wildlife Agencies.
- ★ Note that, pending conclusion of the amended biological and arborist's reports, County Planning may require designation of building envelopes, particularly on lots with sensitive environmental resources, e.g., 6, 7, 8 and 9.

- ✓ The current version of the BA&R specifically recommends that *building envelopes* be applied to lots that are confirmed to host sensitive plant(s) and/or wildlife habitat resources, or that otherwise have prominent ecological values.

GREEN DEVELOPMENT PREMISE

Throughout California and North America, citizens and community governments increasingly expect that any development of their neighborhood land and waters be environmentally sound, and they challenge developers to recognize and adapt to a sustainability imperative linked to nature protection. In parlance, people want their communities and new development to be green.

An important green objective of modern land development is improvement of properties while reducing or avoiding adverse impacts to biological resources that are inherent to the landscape. Applying the green premise to Rancho Potrero (*the project*), this report presents an inventory and welfare analysis of wildlife and plantlife that currently inhabit the project site and its immediate vicinity. Specifically, this report identifies and evaluates the potential for the project to impact an existing community of native vascular plants (the vegetation) and vertebrate animals (the wildlife).

STUDY OBJECTIVES

This study was guided by four objectives or tasks, each of which addresses the project site; present and future habitation of the site by plant and animal; and the physical elements of the proposal that might affect the biotic sustainability of the site.

- ▶ Identify plant and animal species that currently occupy the site;
- ▶ Identify project actions and outcomes that could affect the site's flora and fauna;
- ▶ Determine whether prospective impacts to special-status species within the site's flora and fauna may be significant.
- ▶ Recommend construction BMPs and post-construction strategies to prevent, reduce or mitigate significant threats to the identified biotic resources.

For this analysis, any effect that the project would have on biological resources would be viewed as significant if it would,

- ▶ Substantially affect or threaten the ecology and welfare of a rare, threatened, endangered, or other special-status species, or essential habitat that may be occupied by such rated species;
- ▶ Result in a net loss of a biotic community that is subject to local, state, and/or federal regulations or that is otherwise of very limited occurrence in the Carmel Valley region; or,
- ▶ Significantly interfere with the movement of any resident or migratory wild animal species.

STUDY APPROACH

Project Preview

The writer studied the Rancho Potrero Vesting Tentative Map to acquaint himself with the contents of the project layout as proposed by the owner/developer. The detailed, multi-layered map was prepared by Whitson Engineers and dated 27 Oct 2007. Numerous aerial images corresponding with the engineer's site map were studied in detail to gain greater insight to the location before (and after) field work.

Field Work

Study Schedule -- The approach to the reported biological study of Rancho Potrero involved making two all-day field visits in 2006 (July & September), four visits in 2007 (July & October), and four visits in 2008 (March & April). The field trips in 2008 focused on the site flora, and the well-timed two-month period allowed observations of plant phenology within the flora. The scale of the fieldwork extended from walkovers of the broader landscape to intensive on-the-ground searches for individual biotic and particularly botanical resources.

Santa Lucia Preserve -- In terms of the observer/writer's familiarity with the property and its natural resources, it is worth noting that, circa 1991-2004, he had been responsible for conducting and supervising the original collection and analysis of biological data used to determining the plant protection and open space boundaries for the entire Preserve project. The

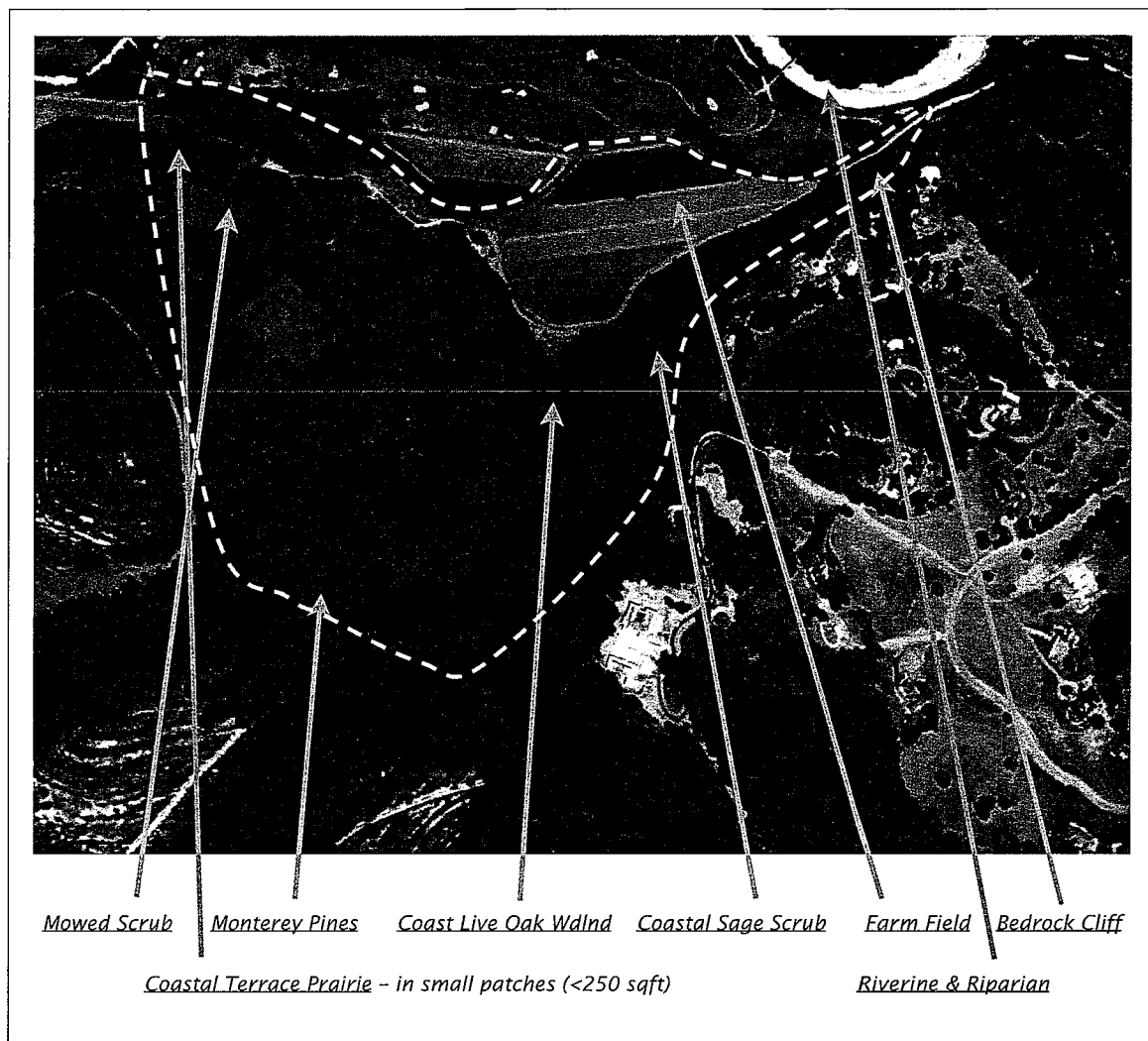
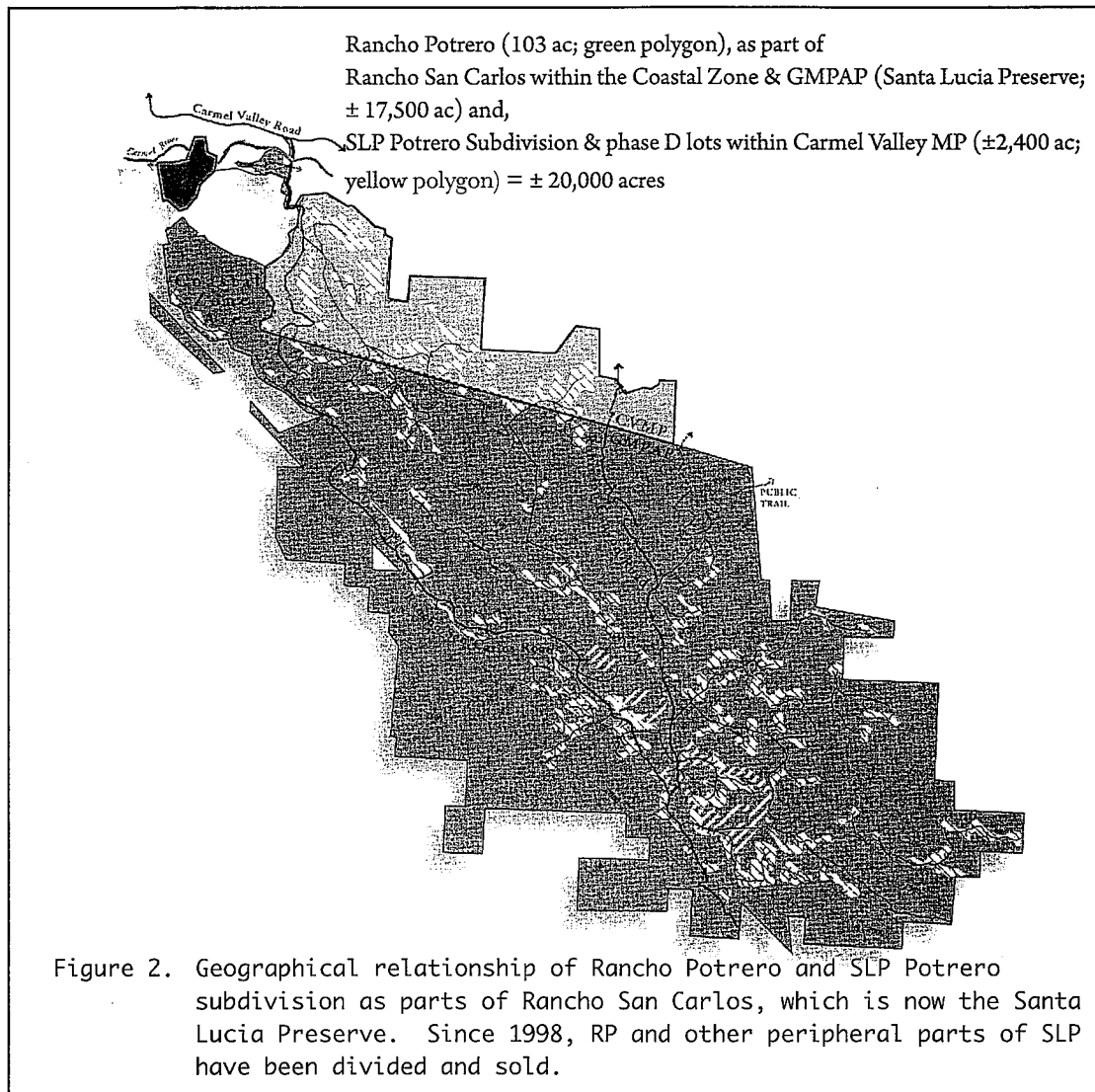


FIGURE 1. Identification of the major cover types inside Rancho Potrero. Dashed line indicates a rudimentary boundary of the project area that exists south of the Carmel River.

Preserve project -- as Rancho San Carlos (RSC) -- first incorporated the Rancho Potrero site; and thereby, the writer has comprehensive knowledge and experience specific to the project site.

Preceding searches and documentaries of plantlife, including those by professional and academic botanists who were on contract to RSC/SLP, took place directly on and immediately adjacent to the present project site. Helpfully, the preponderance of botanic searches took place during

spring (Mar - Jun) of the study years and, therefore, logged data representative of the reproductive (identifiable) period for most flowering plants onsite. At the time when Rancho Potrero (*the West Fields*) was part of Rancho San Carlos, ca 20,000 acres, the ranch was transitioning towards to become Santa Lucia Preserve. Also, during the early 2000s out-lying portions of land were carved-off and made ready for sale. Importantly, those parcels that were sold-off by the Rancho San Carlos Partnership, including to its own managers, were encumbered with certain environmentally-oriented prerequisites per the County of Monterey and its 1993



General Plan Amendment that highlighted the future uses and intensity of development for the historic San Carlos ranch.

Adding to *insitu* biological and resource observations, ca 1991 to present, this study employed moderately high quality aerial images for aids in determining gross habitat and cover boundaries over the mostly brush-covered and wooded property (Figure 1). Additionally, a large series of ground photos was taken during 2006-2008; and these digital images are kept on-file for potential future reference.

Species Preview

Prior to initiation of the 2006-2008 field work, it was necessary, or at least customary, to forecast species that would actually or potentially occur onsite. Lists of potential species, including *special-status species*, plants and animals, were gleaned, in part, from the roster of resources developed for the 1993 General Plan Amendment and later linked to the EIR for the Santa Lucia Preserve Project (EIR 94-005 by Jones & Stokes, 14 September 1995; Figure 2 is a map of the 20,000-ac Preserve, circa 1994).

Additionally, the list of special-status species was reviewed and updated in view of the certified EIR for the SLP Potrero Subdivision, the final stage of Preserve development (Pacific Mutual Consultants 2004; available on the County's website). Of all local land development projects, the resources associated with the SLP Potrero project are closest to and most biologically akin to the present Rancho Potrero property : the areas share elevation, relative proximity to Carmel River, and presence of Monterey Pines.

For present purposes, the list of potentially-occurring special-status plant resources was taken, in part, from the Santa Lucia Preserve EIR and the Potrero EIR, and it is presented as Table 1. Table 2 includes a list and evaluation of potentially occurring and proven wildlife inside and in the vicinity of the property.

PROJECT BACKGROUND

The owner/developer of the Rancho Potrero property intends to subdivide its three existing lots into a cluster of 10 smaller lots. The manner of clustering that assembles multi-acre home lots into a cluster that also incorporates a larger amount of open-space acreage, is derived from the development of several similarly sized clusters of homesites at the Preserve. Setting aside Lot 10, which is an outlier measuring roughly 82 ac, the remaining nine lots range in size from 1.20 ac to 4.20 ac (mean = 2.34 ac), very much like the successful formula for SLP. This comparison to the Preserve underscores how clustering of comparably sized and spaced homesites (the Preserve's *Homelands*) was identified and certified as the environmentally superior alternative for the larger property. Since its first implementation (1998), the Preserve cluster model has successfully contributed to the integrity of the Santa Lucia landscape and its diverse plant and wildlife communities.

Project Actions

Development of the project landscape, with respect to the landscape and onsite biological resources, would conform to those typical of most local development and subdivision projects in the lower Carmel Valley area. Neither a resort nor club facility, the project VTM represents locations of homesites only (10 lots), serving roads and drives, and distribution of appurtenant infrastructure. From mapped information, it appears that physical changes will include land excavation and grading, trenching and filling, widening and revamping the dimensions of the existing roadway system (in part), then compacting and covering the ground surface with permeable and impermeable materials, and finally all scraping and vegetation removal necessary to facilitate the total construction program.

RESOURCE OVERVIEW

Ecological Setting

Historical Context

The present-day 103-acre property was formerly a part of Rancho San Carlos, from the 1920s when its owner, George Gordon Moore, assembled the 20,000-acre ranch from numerous contiguous homesteads, grant holdings and other properties. This land relationship continued to the early 2000s when it was transferred by Rancho San Carlos Partnership to its own managing partner, Thomas Gray. Originally, the largest action of Moore's consolidation was the pairing of two Mexican Land Grants, Rancho Potrero de San Carlos (~4,300 ac) and Rancho San Francisquito (~8,800 ac), that he had purchased from their successor patentees.

Present-day Rancho Potrero once had been a prominent piece of Rancho Potrero de San Carlos since the grant of land to Doña Catarina Munras by the Viceroy of Mexico, circa 1837. From 1837 through the 1860s, Rancho Potrero de San Carlos was one of the largest Carmel Valley ranches, second only to Rancho Cañada de la Segunda (~6,000 acres) and the giant Rancho los Tularcitos (~27,000 acres), both of which were located higher up Carmel Valley. Figure 2 (above) illustrates the location of Rancho Potrero with respect to the entire Rancho San Carlos.

Having made basic 'improvements' to the property *sensu* its preparation for subdivision and development that included thorough brush removal and scraping of prospective lots [1-9]) and roads, Thomas Gray thence sold the property (a.k.a. *the West Fields*) in the early 2000s to Taylor/Heritage, the land's present owner.

Potentially Occurring Special-Status Plant & Animal Species

Special-status plants include species currently listed as Rare, Threatened, or Endangered by the U.S. Fish and Wildlife Service (USFWS) or by the State of California, Department of Fish and Game (CDFG). Species formally proposed for listing and federal Candidate species also are special-status species. Finally, special advisory status is conferred to plant species by the nonprofit, non-governmental California Native Plant Society (CNPS): see the following definitions -- 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); (CNPS Inventory of Rare and Endangered Vascular Plants of California). All species, plant or animal, in the preceding categories fall under California regulatory or advisory authority and/or federal regulatory or advisory authority. Also considered as special-status species are species included on CNPS List 3 (Plants About Which We Need More Information -- A Review List) or List 4 (Plants of Limited Distribution -- A Watch List). 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 per the California Environmental Quality Act (CEQA). See Table 1 and 2.

SPECIAL-STATUS PLANTLIFE & WILDLIFE

The following table (1) summarizes the status of certain plants called out by government and government-sponsored management lists: CDFG and USFWS Endangered and Threatened Species; CDFG Species of Concern; USFWS Species under Review (for listing); and, CNPS special-status species. The common name nomenclature follows Hickman (1993)¹ and Skinner & Pavlik (1994)². The next table (2) enumerates species of wildlife (vertebrate animals) that reasonably may have the potential to occur on site and its vicinity. The basis for selection is the writer's own experience and information from other credible and expert sources, these having been gleaned over the past 18 years of biological work in Carmel Valley.

Table to follow ...

¹ HICKMAN, J, (ed.) 1993. The Jepson manual: higher plants of California. UC Press.

² PAVLIK, B. and M. Skinner. 1994. Ecological characteristics of California's rare plants. pp. 4-6. In M.Skinner & B. Pavlik (eds.). Inventory of rare and endangered vascular plants of California. 5th edition. California Native Plant Society, Sacramento.

Table 1. Status, distribution & habitat of special-status plants with potential to occur on or in the vicinity of Carmel Valley & Rancho Potrero (2008)			
COMMON NAME	USFWS Listing	CDFG Listing	CNPS Status ¹
Hickman's Onion	SOC	None	2-2-3 List 1B
Little Sur Manzanita	SOC	None	3-2-3 List 1B
Hooker's Manzanita	None	None	2-2-3 List 1B
Monterey Manzanita	SOC	None	3-2-3 List 1B
Pajaro Manzanita	SOC	None	2-3-3 List 1B
Sandmat Manzanita	SOC	None	3-2-3 List 1B
Brewer's Calandrina	None	None	1-2-2 List 4
Monterey Ceanothus	None	None	1-2-3 List 4
Douglas' Spineflower	None	None	1-1-3 List 4
Robust Spineflower	Endangered	None	3-3-3 List 1B
Lewis' Clarkia	None	None	1-1-3 List 4
Seaside Birds-beak	SOC	Endangered	3-3-3 List 1B
Hutchinson's Larkspur	SOC	None	3-2-3 List 1B
Virgate Eriastrum	None	None	1-1-3 List 4
Eastwood's Goldenbush	SOC	None	3-3-3 List 1B
Pinnacles Buckwheat	None	None	2-1-3 List 1B
Coast Wallflower	SOC	None	2-2-3 List 1B

Table 1. Status, distribution & habitat of special-status plants with potential to occur on or in the vicinity of Carmel Valley & Rancho Potrero (2008)			
Fragrant Fritillary	SOC	None	1-2-3 List 1B
San Benito Fritillary	SOC	None	1-2-3 List 4
Cone Peak Bedstraw	SOC	None	3-1-3 List 1B
Sand Gilia	Endangered	Threatened	3-2-3 List 1B
San Francisco Gumplant	SOC	None	2-2-3 List 1B
Congdon's Tarplant	SOC	None	3-3-3 List 1B
Kellogg's Horkelia	SOC	None	3-3-3 List 1B
Salinas Valley Goldfields	None	None	1-1-3 List 4
Small-leaved Lomatium	None	None	1-2-3 List 4
SLO County Bush Mallow	None	None	1-1-3 List 4
Carmel Valley Bush Mallow	SOC	None	1-2-3 List 1B
Arroyo Seco Bush Mallow	SOC	None	3-2-3 List 1B
Carmel Valley Cliff Aster	SOC	None	3-2-3 List 1B
Mount Diablo Cottonweed	None	None	1-1-3 List 4
Curly-leaved Monardella	None	None	1-2-3 List 4
California Spineflower	None	None	1-2-3 List 4
Dudley's Lousewort	SOC	Rare	3-2-3 List 1B
Gairdner's Yampah	SOC	None	1-2-3 List 4
Monterey Pine	SOC	None	3-2-2 List 1B

Table 1. Status, distribution & habitat of special-status plants with potential to occur on or in the vicinity of Carmel Valley & Rancho Potrero (2008)			
Michael's Rein Orchid	None	None	1-2-3 List 4
Yadon's Rein Orchid	Endangered	None	3-3-3 List 1B
Hooked Popcorn-flower	SOC	None	2-2-3 List 1B
Round Woolly-marbles	None	None	1-2-1 List 4
Muir's Raillardella	None	None	2-1-3 List 1B
Hoffmann's Sanicle	None	None	1-1-3 List 4
Adobe Sanicle	SOC	Rare	3-3-3 List 1B
Maple-leaved Checkerbloom	None	None	2-2-2 List 1B
Vortreides Spineflower	None	None	1-1-3 List 4
Santa Cruz Microseris	SOC	None	2-2-3 List 1B
Santa Cruz Clover	None	None	3-3-3 List 1B
Pacific Grove Clover	SOC	Rare	3-3-3 List 1B

Table 1. Status, distribution & habitat of special-status plants with potential to occur on or in the vicinity of Carmel Valley & Rancho Potrero (2008)

[1]

CNPS Lists:

- List 1A Plants Presumed Extinct in California
- List 1B Plants Rare, Threatened or Endangered in California and Elsewhere
- List 2 Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- List 3 Plants About Which We Need More Information, A Review List
- List 4 Plants of Limited Distribution, A Watch List

CNPS List Assignment

- If the plant is presumed extinct in California, it is assigned to List 1A.
- If the plant has significant taxonomic and/or distributional uncertainty, it is assigned to List 3.
- Placement on List 1B, 2, and 4 is based on rarity and on the relevant biological factors known about the taxon. The ranking guidelines must be flexible to account for all the different cases and situations for rare plants in California.
 - < 50 extant occurrences in CA, and either endemic to CA or very rare outside CA, usually assigned to List 1B.
 - < 50 extant occurrences in CA, but more widespread outside CA, usually assigned to List 2.
 - > 50 extant occurrences in CA, but limited distribution usually assigned to List 4.
- Most taxa also receive a threat code extension following the CNPS List (e.g. 1B.1, 2.3 etc.). This code indicates the level of endangerment within the state.

New Threat Code extensions and their meanings:

- .1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2 - Fairly endangered in California (20-80% occurrences threatened)
- .3 - Not very endangered in California (<20% of occurrences threatened)

Table 2. Status and potential presence of special-status wildlife species on Rancho Potrero and its vicinity				
COMMON NAME	STATUS FED/STATE ¹	PRESENCE @ SL PRESERVE ²	PRESENCE @ RANCHO POTRERO	REQUIRED SPECIES' HABITAT THAT POTENTIALLY MAY BE PRESENT AT RANCHO POTRERO
INSECTS				
Smith's Blue Butterfly	E/--	K(nown)	P(otential)	Coastal Scrub
FISHES				
Steelhead Trout (Central California Coast ESU)	T/--	K	K	Riverine Aquatic
AMPHIBIANS				
California Red-legged Frog	T/SC	K	K	Riverine Aquatic
California Tiger Salamander	T/SC	K	U(nknown)	Ponded Waters
Coast Range Newt	--/SC	P	U	Riverine Aquatic
REPTILES				
Western Pond Turtle	--/SC	K	K	Riverine Aquatic
Two-striped Garter Snake	--/SC	P	P	Riverine Aquatic
CA Coast Horned Lizard	--/SC	K	U	Open sites w/ loose soils
Legless Lizard	--/SC	U	U	Open sites w/ loose, sandy soils
BIRDS				
Olive-sided Flycatcher	--/SC	K	K	Old Growth Forest
Purple Martin	--/SC	K	P	Old Growth Forest
Yellow Warbler	--/SC	K	K	Riparian
Willow Flycatcher	--/E	K	P	Riparian
Yellow-breasted Chat	--/SC	K	K	Riparian Scrub

Table 2. Status and potential presence of special-status wildlife species on Rancho Potrero and its vicinity				
Bank Swallow	--/T	K	P	Cliff Face
Vaux's Swift	--/SC	K	U	Cliffs
Black Swift	--/SC	K	U	Cliffs
Least Bell's Vireo	E/E	U	U	Riverine Willows
CA Horned Lark	--/SC	K	P	Grassland
Loggerhead Shrike	--/SC	K	P	Patchy Scrub & Grassland
Tricolored Blackbird	--/SC	K	U	Ponded Waters
Burrowing Owl	C/SC	K	P	Grassland
Northern Harrier	--/SC	K	K	Grassland
White-tailed Kite	--/FP	K	P	Grassland
Golden Eagle	--/FP	K	P	Overhead
Merlin	--/SC	K	P	Patchy Scrub & Grassland
Long-eared Owl	--/SC	K	P	Forest
Short-eared Owl	--/SC	U	U	Grassland Wetlands
Spotted Owl (CA subspecies)	--/SC	K	U	Old Growth Forest
Peregrine Falcon	--/E	K	P	Overhead
Prairie Falcon	--/SC	K	U	--
MAMMALS				
Pallid Bat	--/SC	K	P	Forest & Woodland
Townsend's Western Big-eared Bat	C/SC	P	U	Old Growth Redwood Forest

Table 2. Status and potential presence of special-status wildlife species on Rancho Potrero and its vicinity				
Fringed Myotis	C/**	K	P	Old Growth Forest
Long-legged Myotis	--/SC**	K	P	Scrub, Forest, Woodland, Buildings
Western Red Bat	--/**	P	P	Riparian Woodland
Mountain Lion	--/FP	K	K	All terrestrial habitats

Table 2 continues...

Table 2. Status and potential presence of special-status wildlife species on Rancho Potrero and its vicinity

WILDLIFE SPECIES STATUS SOURCE & DEFINITIONS

Federal

- 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

- 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 (see below)
- FP = Fully Protected per California Fish and Game Code
- ** Included on 1996 California Department of Fish and Game preliminary list of revised Mammal Species of Special Concern

Current definition of SC (=SSC):

A Species of Special Concern (SSC) is a species, subspecies, or distinct population of an animal* native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- ✓ is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- ✓ is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- ✓ is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- ✓ has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status. Source: CDFG 2008

BIOLOGICAL FINDINGS

Vegetation Communities & Species

For a 103 ac, the property has an interesting albeit fairly common variety of plants and cover conditions. The major cover groups include natural, cultivated and ruderal elements. The *patchy* pattern of the landscape and its vegetation reflect the geographic location and history of settlement of Rancho Potrero. Specifically, the property, which is a distinct piece of the historic Rancho San Carlos, is located at the northernmost tip of the Santa Lucia Range, on the edge of the Carmel River floodplain, and less than two miles from the seacoast. It also is adjacent to the urbanized Carmel Valley and Carmel Valley Road, and virtually its entire north boundary is adjacent to a continuous 36-hole golf course.

Description of Habitats

Throughout the legal history of the present Rancho el Potrero, from the 1830s to the 1980s and later, the landscape had been extensively grazed and farmed. Evidence of present-day farming can be seen where two portions of the property are still cultivated. Lasting evidence of earlier grazing is told by old and extant fencing as well as persistent browse lines on small trees and larger shrubs. Ecologically, the widespread coverage of the site by nonnative weeds is testimony to the local history of grazing and overgrazing onsite and throughout Carmel Valley, i.e., grazing beyond the natural capacity of the native soils and plants to sustain themselves, and to recent land clearing and soil scraping.

Following is a brief profile of the major cover types inside Rancho Potrero. Whether native, the vegetation of all sites reflect the byproducts of two centuries of grazing and cultivation, and mechanized land clearing during the present decade.

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- Coast Live Oak Woodland.** On mesic (moist) sites, the oak woodland is dominated by Coast Live Oak, *Quercus agrifolia*, and grows in areas with deep, well-drained soil and a variety of topographic conditions. The main woodland is within the bowl-like drainage that runs up the center of the property – uphill from the barn.

- **Coast Live Oak Savanna.** Less common, CLO Savanna is similar to CLO Woodland, except that its density of oaks is less (< 15 percent coverage) and the scattered trees are separated by larger areas of grass and low-growing forb species. The intermingled patches of grass and herbaceous plants consist of both native and nonnative species. CLO Savanna occupies sites that are more exposed, drier and better drained than CLO Woodland.

- **Monterey Pine Forest.** The property lies within one of three regions along the California coast where native Monterey Pines, *Pinus radiata*, occur. Most pine stands on the property are younger, more recently planted – whether by nature or by hand – but several large stands are obviously “old growth,” with well-developed and undisturbed undergrowth and notably large specimen trees (e.g., 42 in. dbh).

- **Coastal Sage Scrub ('CSS').** Like sage scrubs in other parts of coastal California, the local Central California type is dominated by California Sagebrush, *Artemisia californica*, and complementary or co-dominant species including Black Sage, *Salvia mellifera*, White Sage, *Salvia apiana*, Poison Oak, *Toxicodendron diversiloba*, California Blackberry, *Rubus ursinus* (*Rubus discolor* (= *procerus*) also is present), and stands of California Buckwheat, *Eriogonum fasciculatum*, Toyon, *Heteromeles arbutifolia*, and California Lilac or Blue Blossom, *Ceanothus thrysiflorus*. As a reminder to readers, Coastal Sage Scrubs are not a form of chaparral. Further, onsite stands of CSS bear no relationship to “Maritime Chaparral;” and there are neither chaparrals nor their primary constituents such as *Arctostaphylos* spp. present on the property.

- **Coastal Terrace Prairie.** Native perennial grasslands go by any of several names, but Coastal Terrace Prairie ('CTP') is the most apt in this region. Although the scattered and small patches of CTP found on site are predominantly native, many of the main grass and forb species are nonnative, some problematic. Hence, the cover type shares many characteristics with *ruderal* grassland, or sites that have been disturbed and are covered with exotic weedy plants and other physical evidence of past or current dereliction (e.g., vacant lots and abandoned paddocks will often evolve as ruderal sites).

- *Disturbed & Ruderal.* "Disturbed" is a general site condition that may be associated with a variable cover type and having been affected by historic and recent heavy human disturbances such as grading, abandoned cultivation and overgrazing: activities that typically result in clearing, compaction, and the removal or coincident loss of native soils, vegetation (and wildlife). Disturbed sites also may be unvegetated, or they often support an array of *weedy* species. The ruderal aspect of disturbed sites indicates that vegetation is intact and growing, whether it is conformed of nonnative and aggressively weedy species. Existing and abandoned ranch roads, and abandoned building sites are familiarly 'disturbed' habitat.

- *Springs.* A single small spring that was developed possibly 50-60 years ago is located at the head of the principal canyon drainage, adjacent to a dirt road and uphill from the abandoned barn and and drainage that runs through dense CLO Woodland. The spring, which is protected by an old wooden spring box, appears to be perennial: it was producing water during July-October (2006-2007) field visits; also, it is remembered from numerous tours of the cite during 1991-2003. The spring maintains a one-of-a-kind (for the property) and very much limited (20 sqft) plant cover consisting of Spike-rush, *Eleocharis* spp., Stinging Nettles, *Urtica dioica* ssp. *holosericea*, Western Water Hemlock, *Cicuta douglasii*, nonnative Green Dock, *Rumex conglomeratus*, and a few Red Willows, *Salix laevigata*.

The following list of species identifies plants and animals that are useful to describe the principal biological communities established onsite (Table 3). With exception of mammals, which include bats and can be identified by direct and indirect observation, i.e., using their spoor, tracks and emitted sounds, the species noted in Table 3 (*versus* Tables 1 and 2) were each observed during this study. It is helpful to understand that onsite community types – whether cultural or natural – broadly overlap, and few have distinct boundaries or species lists. For example, a highly invasive broom, *Genista monspessulana*, which is a noxious weed, occurs in virtually all terrestrial communities onsite and throughout Carmel Valley.

Circa 1993, the vegetation cover of the entire San Carlos ranch, including Rancho Potrero (then, the *West Fields*), was assembled and submitted to the County as a part of a Combined

Development Permit application for the General Plan area of the larger ranch. The fundamental cover types ascribed to the West Fields included, in order of acreage, Baccharis Scrub (CA 02; 50 pct of total cover), Farm (CA 62), Golf Course (CA 63), Coast Live Oak (CA 40), and Monterey Pine (CA 21; 50 pct of all MPine habitat on Rancho San Carlos).

Table 3 Principal cover types and representative plant and animal species for Rancho Potrero, Carmel Valley, CA (2008).

COVER TYPE	PLANT SPECIES	ANIMAL SPECIES
<i>MONTEREY PINE FOREST</i>	Monterey Pine	Pygmy Nuthatch
	Bracken Fern	Dark-eyed Junco
	Poison Oak	Acorn Woodpecker
	California Huckleberry	Steller's Jay
	Hedge Nettle	Western Gray Squirrel
<i>COAST LIVE OAK WOODLAND</i>	Coast Live Oak	Western Scrub-Jay
	Yerba Buena	Nuttall's Woodpecker
	Fuchsia-flowering Gooseberry	Cooper's Hawk
	Toyon	White-breasted Nuthatch
	Snowberry	Bobcat
<i>DEVELOPED & RUDERAL</i>	Poison Hemlock (nonnative = <i>nn</i>)	House Finch
	Kikuya Grass (<i>nn</i>)	Bushtit
	French Broom (<i>nn</i>)	House Cat (<i>nn - feral</i>)
<i>NORTHERN COASTAL SCRUB</i>	California Sagebrush	Rufous-crowned Sparrow
	Black Sage	Wrentit
	California Blackberry	Gray Fox
<i>BEDROCK CLIFFS</i>	Coast Morning Glory	White-throated Swift
	Bush Monkeyflower	American Kestrel
	Pacific (Giant) Wildrye	Dusky-footed Woodrat
<i>COASTAL TERRACE GRASSLAND</i>	Creeping Wildrye	Ash-throated Flycatcher
	Nodding Needlegrass	Western Meadowlark
	California Wild Oat	Botta's Pocket-Gopher

Plantlife -- Table 4 presents the *complete list of plant species* observed onsite during the course of this study. Per lot occurrence is noted; however, not all 'offsite' occurrences (found outside of the lots) are identified as such. The observed list does not include every species that is reasonably *expected* to occur onsite: In particular, not all emerging grass and forb species (mostly nonnative annuals) could be identified during spring surveys as some are summer flowering; and flowers are necessary for identification of some species. Nevertheless, only common species are expected in this case.

Table 4. Complete list of (72) plant species found on the Rancho el Potrero property during visits and surveys made during 2006-2008. Species are organized alphabetically, by botanical names. Species are sorted by botanical name versus phylogenetically. ⁽¹⁾ The term "general" for Lot Distribution indicates the widespread frequency of common and often nonnative species without a certain habitat affiliation/s. The term <i>nn</i> refers to nonnative species [24 counted; 33 percent of total].		
BOTANICAL NAME	PLANT NAME	LOT DISTRIBUTION ¹
<i>Anagallis arvensis</i> ⁿⁿ	Scarlet Pimpernel	1, 9, 10, all dirtroads
<i>Anaphalis margaritacea</i>	Pearly Everlasting	general
<i>Arbutus menziesii</i>	Pacific Madrone	6,7,8,9
<i>Artemisia californica</i>	California Sagebrush	4,5
<i>Artemisia douglasiana</i>	Mugwort	general
<i>Avena barbata</i> ⁿⁿ	Slender Wild Oats	1,2,10
<i>Avena fatua</i> ⁿⁿ	California Wild Oats	general
<i>Baccharis pilularis</i>	Coyotebush	general
<i>Baccharis salicifolia</i>	Mulefat	6,7,10
<i>Bloomeria crocea</i>	Golden Stars	8,9
<i>Brassica nigra</i> ⁿⁿ	Black Mustard	general
<i>Bromus diandrus</i> ⁿⁿ	Ripgut	general
<i>Calystegia macrostegia</i> <i>cyclostegia</i>	Western Morning-Glory	1,2,3,4,9,10
<i>Castilleja affinis</i>	Coast Paintbrush	2,3,4,5,6

Table 4. Complete list of (72) plant species found on the Rancho el Potrero property during visits and surveys made during 2006-2008. Species are organized alphabetically, by botanical names. Species are sorted by botanical name versus phylogenetically. ⁽¹⁾ The term "general" for Lot Distribution indicates the widespread frequency of common and often nonnative species without a certain habitat affiliation/s. The term *nn* refers to nonnative species [24 counted; 33 percent of total].

BOTANICAL NAME	PLANT NAME	LOT DISTRIBUTION ¹
<i>Ceanothus thrysiflorus</i>	California Lilac	2,3,4
<i>Cicuta douglasii</i> <i>nn</i>	Western Water-Hemlock	7
<i>Cirsium vulgare</i> <i>nn</i>	Bull Thistle	general
<i>Claytonia perfoliata</i>	Miner's Lettuce	6,7,8,9
<i>Conium maculatum</i> <i>nn</i>	Poison Hemlock	general
<i>Cornus sericea occidentalis</i>	Western Red Dogwood	1,7,8,9,10
<i>Cortaderia jubata</i> <i>nn</i>	Pampas Grass	1
<i>Dichelostoma capitatum</i>	Blue Dicks	2,3,4
<i>Echinochloa crus-galli</i> <i>nn</i>	Barnyard Grass	1, 10
<i>Eleocharis</i> spp.	Spike-rush	7
<i>Erechtitis glomerata</i>	Fireweed	offsite
<i>Eriogonum fasciatum</i>	California Buckwheat	offsite
<i>Erodium botrys</i> <i>nn</i>	Long-beaked Filaree	1,9,10, roadbeds
<i>Eschscholzia californica</i>	California Poppy	2,3,4,5
<i>Fragaria californica</i>	California Strawberry	2,3,4
<i>Genista monspessulana</i> <i>nn</i>	French Broom	general
<i>Heteromeles arbutifolia</i>	Toyon	2,3,4,5,6,7,8
<i>Leymus condensatus</i>	Pacific Wildrye	6,7,8,9
<i>Lonicera hispidula</i>	Hairy Honeysuckle	6,7,8,9
<i>Lotus scoparius</i>	Deerweed	1,2,3,4,5,6,7,8,9
<i>Lupinus arboreus</i>	Tree Lupine	5,6,7
<i>Marah fabaceus</i>	Wild Cucumber	1,2,3,4,5,6,7,8,9

Table 4. Complete list of (72) plant species found on the Rancho el Potrero property during visits and surveys made during 2006-2008. Species are organized alphabetically, by botanical names. Species are sorted by botanical name versus phylogenetically. ⁽¹⁾ The term "general" for Lot Distribution indicates the widespread frequency of common and often nonnative species without a certain habitat affiliation/s. The term *nn* refers to nonnative species [24 counted; 33 percent of total].

BOTANICAL NAME	PLANT NAME	LOT DISTRIBUTION ¹
<i>Marrubium vulgare</i> <i>nn</i>	Horehound	1,2,3,4,5,6,7,8,9
<i>Mimulus congdonii</i>	Congdon's Monkeyflower	2,3,4,5,6,7,8,9
<i>Nassella cernua</i>	Nodding Needlegrass	2,3,4,5,6
<i>Nassella pulchra</i>	Purple Needlegrass	2,3,4,5,6,9
<i>Oxalis pes-caprae</i> <i>nn</i>	Bermuda Buttercup	6,7,8,9
<i>Penstemon centranthifolius</i>	Scarlet Bugler	5
<i>Plagiobothrys nothofulvus</i>	Popcorn Flower	2,3,4,5
<i>Plantago cornopus</i> <i>nn</i>	Cut-leaved Plantain	6,7
<i>Plantago major</i> <i>nn</i>	Common Plantain	general
<i>Poa annua</i> <i>nn</i>	Annual Bluegrass	general
<i>Populus balsamifera trichocarpa</i>	Black Cottonwood	2,3,10
<i>Pteridium aquilinum</i>	Bracken	2,3,4,5,6,7,8,9
<i>Quercus agrifolia</i>	California Live Oak	1,2,3,4,5,6,7,8,9
<i>Rhamnus californica</i>	Coffeeberry	2,3,4,5,6,7,8,9
<i>Ribes sanguineum</i>	California Currant	2,3,4,5,6
<i>Ribes speciosum</i>	Fuschia-flowered Gooseberry	2,3,4,5
<i>Rosa californica</i>	California Wild Rose	2,3,4,5,6
<i>Rubus ursinus</i>	California Blackberry	2,3,4,5
<i>Rumex conglomeratus</i> <i>nn</i>	Green Dock	7
<i>Salix laevigata</i>	Red Willow	10
<i>Sambucus mexicanus</i>	Mexican Elderberry	1,2,3,4,5,6,7,8,9

Table 4. Complete list of (72) plant species found on the Rancho el Potrero property during visits and surveys made during 2006-2008. Species are organized alphabetically, by botanical names. Species are sorted by botanical name versus phylogenetically. ⁽¹⁾ The term "general" for Lot Distribution indicates the widespread frequency of common and often nonnative species without a certain habitat affiliation/s. The term <i>nn</i> refers to nonnative species [24 counted; 33 percent of total].		
BOTANICAL NAME	PLANT NAME	LOT DISTRIBUTION ¹
<i>Satureja douglasii</i>	Yerba Buena	6,7,8,9
<i>Sequoia sempervirens</i>	Coast Redwood	offsite
<i>Silybum marianum</i> ⁿⁿ	Milk Thistle	general
<i>Sisyrinchium bellum</i>	Blue-eyed Grass	6,7,8,9
<i>Solanum douglasii</i>	Greenspot Nightshade	2,3,4,5
<i>Solanum umbellarium</i>	Blue Witch	6,7,8,9
<i>Stachys bullata</i>	Wood Mint	6,7,8,9
<i>Symphoricarpus albus</i>	Snowberry	2,3,4
<i>Toxicodendron diversilobum</i>	Poison Oak	general
<i>Urtica urens</i> ⁿⁿ	Dwarf Nettle	1,2,9,10
<i>Vaccinium ovatum</i>	Coast Huckleberry	6,7,8,9
<i>Verbascum thapsus</i> ⁿⁿ	Woolly Mullein	1,2,3,10
<i>Vicia ludoviciana</i>	Spring Vetch	6,7,8,9
<i>Vinca major</i> ⁿⁿ	Periwinkle	1,9
<i>Vulpia myuros</i> ⁿⁿ	Rattail Fescue	1,9

Wildlife -- Table 5, below, presents a roster of all wildlife species (wild vertebrates) that were observed onsite during 2006-2008, as well as species that were observed by the writer during 1991-2004. The list does not include all species that can be imagined to occur onsite, rather, it is limited to actual visual and aural (by ear) observations, and to species whose tracks and sign

could be identified, confidently and expertly. Riparian and aquatic species are highlighted because the inclusive portion of the property may not be directly affected by the proposed development.

Table 5. Wildlife confirmed onsite during 1991-2004, and 2006-2008, or previously during. 3rd column: R= riparian and aquatic species only; 4th column: special-status species are noted. Current sources for Species of Special Concern: Birds - CDFG 2008; Mammals - CDFG 2008 Draft Revision of 1986 list; Reptiles - Jennings & Hayes 1994; Amphibians - Jennings & Hayes 1994; Fishes - CDFG 1995.			
ZOOLOGICAL NAME	COMMON NAME	R	SPECIAL-STATUS
<i>Birds</i>			
<i>Accipiter cooperii</i>	Cooper's Hawk		note: formerly SC
<i>Accipiter striatus</i>	Sharp-shinned Hawk		note: formerly SC
<i>Aeronautes saxatalis</i>	White-throated Swift		
<i>Aphelocoma coerulescens</i>	Western Scrub-Jay		
<i>Archilochus alexandri</i>	Black-chinned Hummingbird		
<i>Ardea herodias</i>	Great Blue Heron	R	
<i>Baeolophus inornatus</i>	Oak Titmouse		
<i>Bombycilla cedrorum</i>	Cedar Waxwing		
<i>Bubo virginianus</i>	Great Horned Owl		
<i>Buteo jamaicensis</i>	Red-tailed Hawk		
<i>Buteo lineatus</i>	Red-shouldered Hawk		
<i>Callipepla californica</i>	California Quail		
<i>Calypte anna</i>	Anna's Hummingbird		
<i>Carduelis tristis</i>	American Goldfinch		
<i>Carpodacus mexicanus</i>	House Finch		
<i>Cathartes aura</i>	Turkey Vulture		
<i>Chamaea fasciata</i>	Wrentit		
<i>Charadrius vociferus</i>	Killdeer	R	

Table 5. Wildlife confirmed onsite during 1991-2004, and 2006-2008, or previously during. 3rd column: R= riparian and aquatic species only; 4th column: special-status species are noted. Current sources for Species of Special Concern: Birds - CDFG 2008; Mammals - CDFG 2008 Draft Revision of 1986 list; Reptiles - Jennings & Hayes 1994; Amphibians - Jennings & Hayes 1994; Fishes - CDFG 1995.

<i>Colaptes auratus</i>	Northern Flicker		
<i>Contopus cooperi</i>	Olive-sided Flycatcher		SSC - breeding season
<i>Corvus brachyrhynchos</i>	American Crow		
<i>Dendroica coronata</i>	Yellow-rumped Warbler		
<i>Dendroica petechia</i>	Yellow Warbler	R	SSC - breeding season
<i>Egretta thula</i>	Snowy Egret	R	
<i>Elanus leucurus</i>	White-tailed Kite		CA Fully Protected
<i>Empidonax difficilis</i>	Pacific-slope Flycatcher		
<i>Falco sparverius</i>	American Kestrel		
<i>Geothypis trichas</i>	Common Yellowthroat		
<i>Hirundo pyrrhonota</i>	Cliff Swallow		
<i>Icteria virens</i>	Yellow-breasted Chat	R	SSC - breeding season
<i>Icterus galbula</i>	Northern Oriole		
<i>Junco hyemalis</i>	Dark-eyed Junco		
<i>Lanius ludovicianus</i>	Loggerhead Shrike		
<i>Melanerpes formicivorus</i>	Acorn Woodpecker		
<i>Meleagris gallopavo</i>	Wild Turkey		
<i>Melospiza melodia</i>	Song Sparrow		
<i>Patagionas fasciata</i>	Band-tailed Pigeon		
<i>Picoides nuttallii</i>	Nuttall's Woodpecker		
<i>Picoides pubescens</i>	Downy Woodpecker		
<i>Pipilo crissalis</i>	California Towhee		
<i>Pipilo erythrophthalmus</i>	Spotted Towhee		

Table 5. Wildlife confirmed onsite during 1991-2004, and 2006-2008, or previously during. 3rd column: R= riparian and aquatic species only; 4th column: special-status species are noted. Current sources for Species of Special Concern: Birds - CDFG 2008; Mammals - CDFG 2008 Draft Revision of 1986 list; Reptiles - Jennings & Hayes 1994; Amphibians - Jennings & Hayes 1994; Fishes - CDFG 1995.			
<i>Poecile rufescens</i>	Chestnut-backed Chickadee		
<i>Polioptila caerulea</i>	Blue-gray Gnatcatcher		
<i>Psaltiparus minima</i>	Bushtit		
<i>Regulus satrapa</i>	Golden-crowned Kinglet		
<i>Sayornis nigricans</i>	Black Phoebe		
<i>Sayornis saya</i>	Say's Phoebe		
<i>Sitta carolinensis</i>	White-breasted Nuthatch		
<i>Sturnella neglecta</i>	Western Meadowlark		
<i>Sturnus vulgaris</i>	European Starling		
<i>Tachycineta bicolor</i>	Tree Swallow		
<i>Thryomanes bewickii</i>	Bewick's Wren		
<i>Toxostoma redivivum</i>	California Thrasher		
<i>Turdus migratorius</i>	American Robin		
<i>Tyto alba</i>	Barn Owl		
<i>Vermivora celata</i>	Orange-crowned Warbler		
<i>Vireo gilvus</i>	Warbling Vireo		
<i>Zenaidura macroura</i>	Mourning Dove		
<i>Zonotrichia atricapilla</i>	Golden-crowned Sparrow		
Mammals			
<i>Canis latrans</i>	Coyote		
<i>Felis concolor</i>	Mountain Lion		CA Fully Protected
<i>Lynx rufus</i>	Bobcat		
<i>Microtus maniculatus</i>	California Vole		

Table 5. Wildlife confirmed onsite during 1991-2004, and 2006-2008, or previously during. 3rd column: R= riparian and aquatic species only; 4th column: special-status species are noted. Current sources for Species of Special Concern: Birds - CDFG 2008; Mammals - CDFG 2008 Draft Revision of 1986 list; Reptiles - Jennings & Hayes 1994; Amphibians - Jennings & Hayes 1994; Fishes - CDFG 1995.			
<i>Myotis lucifugus</i>	Little Brown Bat		
<i>Neotoma fuscipes</i>	Dusky-tailed Woodrat		note: formerly SC
<i>Odocoileus hemionus</i>	Mule Deer		
<i>Peromyscus maniculatus</i>	Deer Mouse		
<i>Sciurus griseus</i>	Western Gray Squirrel		
<i>Sylvilagus audubonii</i>	Audubon's Cottontail		
<i>Thomomys bottae</i>	Botta's Pocket-Gopher		
Fishes			
<i>Onchorynchus mykiss</i>	Steelhead Trout	R	USA Threatened
Amphibians			
<i>Pseudacris regilla</i>	Pacific Chorus-frog		
<i>Rana aurora draytonii</i>	California Red-legged Frog	R	USA Threatened
Reptiles			
<i>Clemmys marmorata</i>	Western Pond Turtle	R	SSC year-round
<i>Thamnophis elegans</i>	Western Garter Snake		

Table 5 continues ...

Table 5. Wildlife confirmed onsite during 1991-2004, and 2006-2008, or previously during. 3rd column: R= riparian and aquatic species only; 4th column: special-status species are noted. Current sources for Species of Special Concern: Birds - CDFG 2008; Mammals - CDFG 2008 Draft Revision of 1986 list; Reptiles - Jennings & Hayes 1994; Amphibians - Jennings & Hayes 1994; Fishes - CDFG 1995.

A Species of Special Concern (SSC) is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:*

- *is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;*
- *is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed;*
- *is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;*
- *has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.*

Additional Community & Species Information

Figures 1 and 2 represented the full extent of the property, including a N-S projection at its E/NE corner that crosses the river onto Rancho Cañada Golf Club (a Rancho Potrero leasehold). This particular site encompasses both riverine and riparian woodland cover types, as well as a portion of the developed (and wooded) golf course. The chief arboreal species of the wooded portions are Coast Live Oak and Black Cottonwood; the riverine site contains open gravel banks, clear and willow sand bars, and flow channels. The river is lined with willows, and through it pass flows that, depending on winter and spring rainfall, are seasonally intermittent to perennial.

As previously stated, the lists of species noted in Tables 4 and 5 are partial with respect to the full assemblage of plants and animals that is known to occur in the greater Carmel Valley region; but,

the lists are thoroughly representative of the expected onsite biota. Among the list of potentially occurring special-status plants, only the Monterey Pine has been discovered onsite.

More special-status animals are known to inhabit or regularly visit the property, and chief among them are two hallmark species in Carmel Valley, the California Red-legged Frog and the Steelhead Trout. Both frog and trout are absent from the main upland parts of the property (south of the river); but both animals and several other special-status species are present offsite and nearby in the river and its associated riparian habitat. That said, individual CRLFrogs will occupy areas around springs and seeps, but their likelihood on the terrestrial property diminishes by the distance and existence of the large cultivated fields between the uplands and the river: the existing fields likely act as a barrier to the uphill (terrestrial) movement of the frogs. The frog and the fish are federally threatened species and are protected by the Endangered Species Act.

In addition to the aforementioned fish and frog, three other special animals inhabit the riverine and riparian habitats of the property and adjacent properties up and down the river: First among these is the Yellow Warbler (a species of special concern), which breeds in the taller cottonwoods and willows of the riparian corridor, at least from the property east to Rancho San Carlos bridge. Occupying lower-elevation habitats like the brushy understory and edges of the riparian woodlands, the Yellow-breasted Chat is also a species of special concern. One reptile that is a species of special concern at both state and federal levels of protection, the Western Pond Turtle inhabits the river and contiguous upland habitats throughout the year. But, as with CRLFrogs, the cultivated fields present a barrier to uphill movement for which the turtle is occasionally known to undertake.

Away from the river environment, the Olive-sided Flycatcher (a species of special concern) nests in small numbers (two territories identified, 2008) within the Monterey Pine forest on hillside portions of the property. The flycatchers' habitat includes large pine trees and snags; and generally covers sites 6, 7, and 8, and adjacent forested areas.

Several species of bats likely are present on the rancho property, and these would occupy wooded and cliff sites; as well, some common bats prefer roosting in old barns and buildings.

Nevertheless, this survey did not include a bat species survey other than to confirm the presence of unidentified bats at dusk, and to investigate presence in the old onsite barn (observed were Little Brown Bats, *Myotis lucifugus*).

Two California fully protected animals, the Mountain Lion and White-tailed Kite each occasionally inhabit the property, as on their hunting forays, but neither has been confirmed to den or nest onsite, respectively.

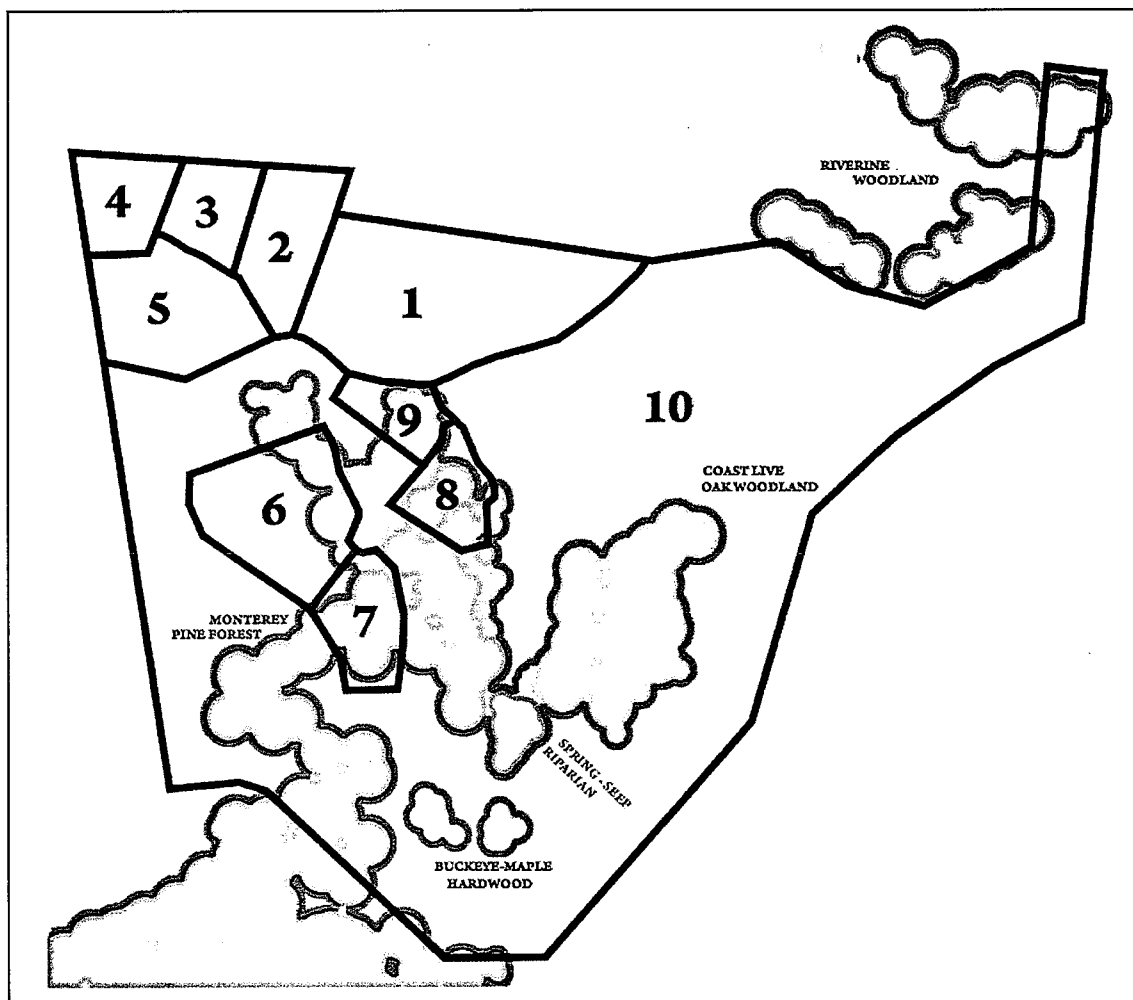


FIGURE 3. Spatial relationships of the Rancho Potrero boundary, the individual lot boundaries (1-10), and the presence and configuration of the principal native habitat areas located onsite.

Note: Additional details about the onsite distribution and abundance of Monterey Pines, Pacific Madrone, and Coast Live Oak is contained in the project arborist's report.

EVALUATION OF FINDINGS

The findings of this study accurately represent the ecological character of the landscape and the specific biotic constituents of Rancho Potrero. The timing of surveys, which intentionally and repeatedly covered the months of spring, was sufficient to reveal the onsite flora when most species were either in bloom or otherwise identifiable. The surveys uncovered whether any special-status species contribute to the known flora: As a result, one special-status -- Monterey Pine -- was confirmed growing onsite. The same is said with respect to wildlife: The present study (2006-2008), combined with complete surveys made by the writer and others during 1991-2004, was adequate to track down and describe the onsite fauna, which includes six special-status species. From this study and all previous studies by the writer, there is a clear distinction between the terrestrial portion of the property that is south of the southern riverbank and the riparian and aquatic portion of the property that lays north of the riverbank. This distinction is drawn from prominent geomorphic, elevation and cover differences between the two areas; and the exclusive presence of the three aquatic and semiaquatic animals (California Red-legged Frog, Western Pond Turtle, and Steelhead Trout) further distinguishes the riverside habitat area at the extreme northern limit of the property.

Impacts & Their Significance on Biological Resources

The results of this study have allowed the writer to determine whether the proposed subdivision might have adverse impacts on biological resources, and if so, to what degree of significance. To be of use, Figure 3 simplifies and summarizes the spatial relationships among the development lots and the principal, higher quality, habitat areas of the Rancho Potrero property. Representative vegetation patches that coincide with the *highest quality* stands and patches are adopted from recent accurate aerial images (<2 yrs; <5m resolution); and the ten lot-polygons are taken from the project VTM (Whitson Engineers, 26 Oct 2008).

Specifically, it is the writer's opinion that,

1. Development of the project should not substantially affect or threaten the ecology and welfare of any rare, threatened, endangered, or other special-status plant species, including Monterey Pines. Furthermore, if the essential "core" or interior of the older pine forest, which includes old-growth and a diverse understory, is substantially diminished by development, i.e., construction of roads and homesites, the impact from those actions could be considered significant.
2. The project would significantly affect the habitat and reproductive status of nesting Olive-sided Flycatchers if more than ± 10 percent of the old growth and core pine forest - the flycatcher's main habitat - were disturbed by the project. Here, it is important that readers understand that even a 10 percent loss of forest area feasibly could impact the Olive-sided Flycatcher by as much as 100 pct: For many birds that occupy the core area or interior of a forest, the loss of surrounding "edge forest" can be enough to cause nest failure and site abandonment, in part because the birds could not tolerate the effects of encroachment into the protective outer layer of the forest that surrounds the interior habitat. The loss of reproductive Olive-sided Flycatchers due to effects of the project would be a significant impact on a special-status animal species.
3. As presented, the proposed project would not necessarily affect the riparian and riverine habitats located at the northern limits of the Rancho Potrero property. Regardless of whether it is just a small portion of lot 10 and of the whole property, the river and riverbank habitat are the most environmentally sensitive features of Rancho Potrero. Development close to the river -- which is not indicated by the VTM, would be subjected to federal regulatory conditions, i.e., the Clean Water Act and Endangered Species Act. An additional layer of concern and regulations would be promulgated by the California Department of Fish and Game. *In toto*, and realistically, the land close to the river would be virtually unbuildable. Any decisions or actions that might cause the project to encroach on the river and its riparian habitat would jeopardize the environmental values therein e.g., the nesting habitat and welfare of at least five species of special concern, two of which are federally listed as threatened; and any adverse effect on these species would represent a highly significant impact.

4. Outside of the old growth pine forest, including its core areas, the current proposal does not appear to cause a net loss of biotic communities that are subject to local, state, and/or federal regulations or that are otherwise of very limited occurrence in the Carmel Valley region; and,
5. If to outright avoid the old growth pine forest and the special habitats along the Carmel River, the project would not substantially interfere with the movement of any resident or migratory wild animal species, at least through those habitat areas. Otherwise, the impacts of encroachment would be significant. Finally,
6. If the project were to permit or allow individual lot-owners to erect fencing within 50 ft of the perimeter of their lot, the result could be a series of landscape barriers that would significantly interfere with the movement of several resident or migratory wild animal species, e.g., Black-tailed Mule Deer. To exemplify this in extreme, there are *numerous* country properties in the Carmel Valley area that post fences of up to eight feet high ("deer fences," a physical presence that is *highly offensive and deleterious* to the natural movements of numerous wildlife species. Even at 3-ft in height, fences preclude natural movement of doe and fawns; and if made with woven cloth or orchard fencing, several additional species would be affected. Thereby, fencing within 50 ft of the boundary of any lot (1-10) would potentially result in a significant biological impact.

RECOMMENDATIONS

Overview -- Altogether, the project could cause a spatially varied impact on natural resources of the historically developed property. Certain elements of the project including, for example, the possible encroachment or disruption of the wilder areas, e.g., the core and old growth Monterey Pine forest, clearly would signal the need for Mitigation Measures, including implementation of BMPs. Specific impacts and protective actions are outlined below.

Project Actions and Mitigation Measures

Action 1: Unless there is a long-term observance of enforceable protective measures intended to benefit special-status wildlife, whether by way of formal or informal field practices made at a community and individual property level, project actions could go astray to the detriment of sensitive and protected resources.

Mitigation Measure 1: As has been the case with all preceding development inside the Santa Lucia Preserve, the developer of Rancho Potrero should ensure (a) appropriate environmental training of contractors and construction foremen by a qualified ecologist/monitor, (b) adequacy of temporary protective barriers and other adopted methods intended to avoid or minimize construction impacts on protected resources, and (c) periodical monitoring of special-status habitat and species welfare to ensure effective avoidance and protection.

Figure 4 demonstrates the area (shown as a yellow polygon) wherein the specific measures (a, b, c) would apply.

Action 2: Development in oak woodlands would potentially disrupt breeding birds of prey, particularly White-tailed Kites, a CA fully protected species, and Cooper's Hawk (formerly a Species of Special Concern), by construction activities near their nest sites and thereby would threaten the birds' nest success and site fidelity.

Mitigation Measure 2: During the species' nesting seasons -- generally from early March through mid-June -- the project should assign a highly qualified resource specialist with a strong ornithological background (*minimum 10 years in the field*), to survey for and, if found, monitor Cooper's Hawk and White-tailed Kite nesting activities in the vicinity (within 300 ft) of planned construction. The surveys should be undertaken no less than 60 days prior to the commencement of construction, including mobilization, in pre-identified areas. If active nesting-activities are discovered, construction in the affected area shall not commence until after all reproductive activities have ended for the season (confirmed fledge, or extended absence or failure). Following completion or termination of nesting in any affected construction area, the ecologist/monitor should make a full report of the previous nesting and construction avoidance activities, and their conclusion, to the appropriate County Planning and Building Inspection managers prior to the issuance of building permits. This measure should be made to apply to lots 1 and 5-9.

- Action 3: The project has the potential to invade the forested nesting habitats of Olive-sided Flycatchers, and if to do so, the action would significantly impact the welfare of the special-status species.
- Mitigation Measure 3: Same as MM # 2, above.
- Action 4: Damage to sensitive wildlife species and their habitat may occur as the result of homeowner's independent decisions regarding the siting, design and construction of the exterior features of their homes and landscapes, and would, if not guided, potentially cause an adverse effect to sensitive species.
- Mitigation Measure 4: As has been the case with preceding development inside the Santa Lucia Preserve, the property owner and applicant should engage the services of a qualified resource specialist to evaluate the site and *advise* homesite placement and landscape planning and design, on a site by site basis. It is recommended that this measure be required as a condition of each building permit for the for lots that are encompassed in the yellow polygon on Figure 4 (lots 6-9).
- Action 5: In the event individual property owners (lot buyers) were to install fences or walls along the perimeter of the respective property, or within 50 ft of each site perimeter or boundary, such fences and walls would potentially act as barriers to the free movement of wildlife, and would thus degrade the ecological assets of the entire Rancho Potrero. Thus, the obstruction to wildlife movement, as described and without mitigation, would create a significant adverse effect , or impact.
- Mitigation Measure 5: The creation of obstacles to free movement of wildlife across the Rancho Potrero and in/out of the larger surrounding landscape should be prohibited by County action, including a project condition that clearly disallows the construction of fences and walls along the lot borders or anywhere within 50 ft

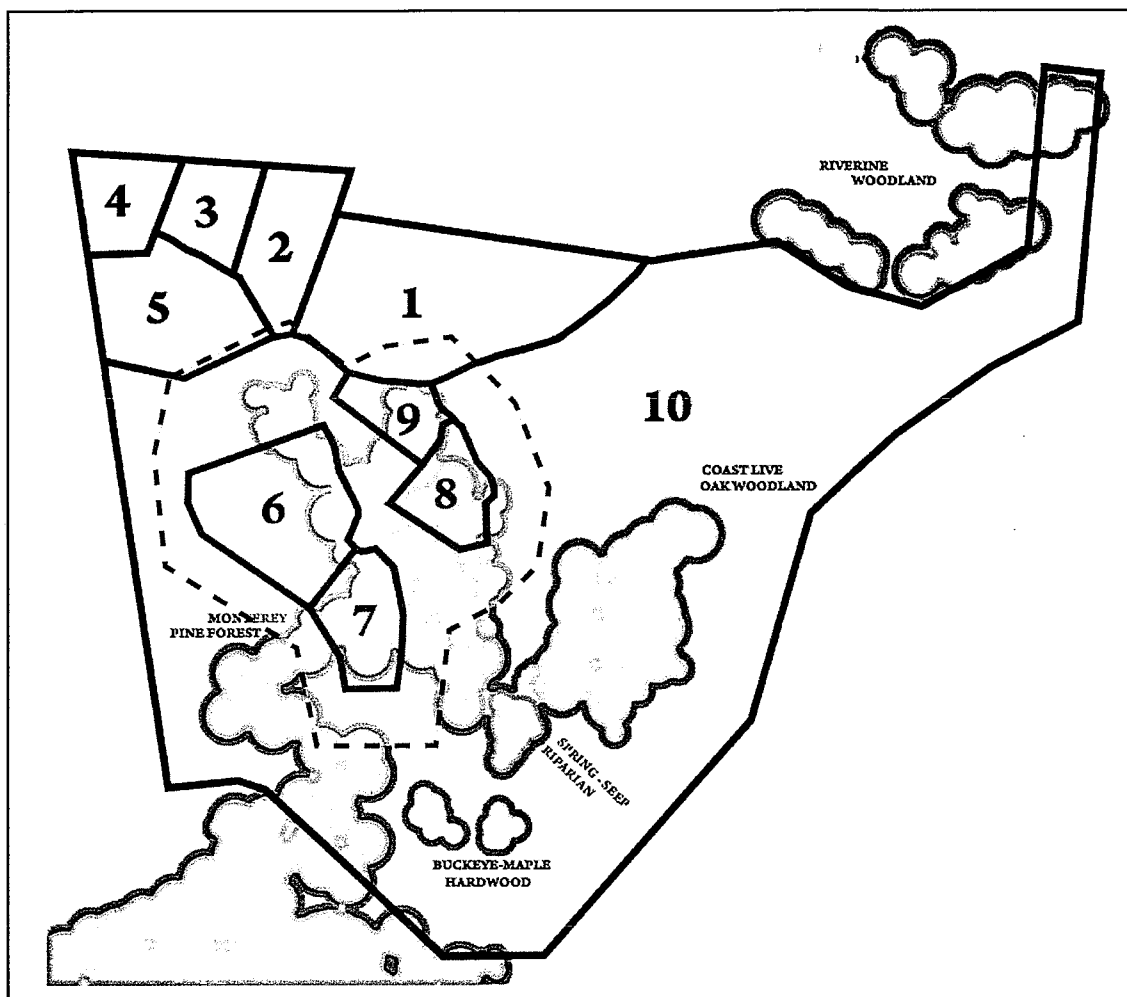


FIGURE 4 The yellow polygon overlaid on the key habitat map (Figure 3) represents an area in which resource status and welfare monitoring should take place, in conjunction with project infrastructure and individual lot construction. Principal targets would include nesting individuals of Olive-sided Flycatcher, Cooper's Hawk, and White-tailed Kite. Riparian species (lot 10) would be covered by MM # 6.

Action 6: Project encroachment onto Carmel River and associated habitats would threaten to disrupt the *ecological privacy* of sensitive wildlife species, including California Red-legged Frogs and Steelhead Trout. Additional species, including Western Pond Turtle, Yellow Warbler, and Yellow-breasted Chat, all *Species of Special Concern*, likewise would be affected by disturbance to their

protective habitat. Adverse effects on any one of the seven special-status species would constitute a significant impact.

Mitigation Measure 6: Removal of project features and construction from within at least 150 ft from the proximal riverbank, a distance that is greater than prescribed by MM # 5, above, would adequately avoid or mitigate potential adverse effects of encroachment (see Figure 4).

Mitigation Measure 7: As with all preceding development inside the Santa Lucia Preserve, and prior to issuance of final approvals, the developer should commit to conform with the Rancho San Carlos Resource Management Plan (1994) during construction of the project infrastructure and 10 (custom) homesites.

Mitigation Measure 8: Notably, the recommended Mitigation Measures do not prescribe the per plant replacement (of Monterey Pines) as mitigation. The writer's opinion is that such formulae do not effectively serve conservation objectives on a local scale. Instead this Mitigation Measure focuses on a more important and effective rule, to wit, with limited exception of bordered or potted plantings inside residential courtyards and dooryards maintained by homeowners, or landscaping outward from the inhabited residential structure(s) to a maximum distance of 100 ft, all revegetation and planting by the developer and successor property owners shall be made with species that are native to the Santa Lucia Preserve, a portion of which are enumerated by Table 4, above. In the case of permitted domestic plantings, none should include nonnative plants that are known to be invasive of native communities in California.

Further, maintenance of all plant materials within a 100-ft distance of the residence and other onsite inhabitable buildings should include the reduction or removal of combustible materials, and at all times be in conformance with the California Fire Code of 2007, and revisions. Maintenance of Monterey Pines may include removal of dead or dry "ladder materials" in and at the base of the tree, but should not remove any live pine tree without a County permit.

Mitigation Measure 9: Crucially, a set of prescriptive building envelopes for lots 6-9, including optional envelopes if appropriate, should be required to ensure protection of Rancho Potrero's biological resources, during both construction and long-range residential phases of the project. The envelopes should be assured prior to filing a Final Map for the project; and the placement of the envelopes inside lots 6-9 should incorporate the counsel of a qualified ecologist who is closely familiar with the nature and distribution of special resources on the property.

Best Management Practices

Following is an outline of BMPs that are intended to serve the proposed project through all phases of construction. Specific practices and detailed procedures ought to be provided by the resource specialist and collaboratively reviewed and revised, as appropriate, with the developer and/or general contractor, then submitted to the County as a proposed condition of final permits.

Table 6. Standard Best Management Practices useful to support construction and protect sensitive biological resources during construction.		
	<i>Issue</i>	<i>Practice</i>
6.1	Definition and defense of restricted, no-construction and limited-access areas	The resource specialist and contractor shall coordinate mapping, staking and flagging, and regular monitoring of out-of-bounds areas prior to and during construction. Additionally, the resource specialist and contractor should coordinate resource training sessions for operating personnel, and develop pre-con materials that interpret especially CRL Frogs. See Figure 4 for areas affected by this BMP (yellow polygon).
6.2	Protection of biological resources from accidental loss due to unguarded human-encroachment during construction activities (see Figure 4 for specific monitoring areas and target species)	The resource specialist and contractor shall communicate to confirm boundary definitions and monitoring procedures meant to preclude unauthorized personnel access and disturbance of sensitive species sites, especially to habitats overlapping with and adjacent to construction locations.

Table 6. Standard Best Management Practices useful to support construction and protect sensitive biological resources during construction.		
6.3	Prevention of equipment and operations damages	Contractor and contract ecologist/monitor will cooperatively assure that overnight parking, repairs and fueling of heavy equipment be specifically restricted to established safety and maintenance zones, thereby to avoid damage to sensitive and protected resource.
6.4	Minimization of project induced damages as by trampling or predation	Contractor will assure, and resource specialist shall monitor compliance with policies that prohibit worker's pets from the total Rancho property; enforce anti-littering and provide sufficient covered dumpsters with instructions on use; maintain onsite fencing to deter vehicle access; and establish a rule to prohibit after-work access to the property by workers and their vehicles;
6.5	Avoidance of incursions by nonnative species onto protected and valuable resource sites	Contractor will enforce against project and after hours dumping; and, resource specialist shall continuously check for weed invasions onto freshly disturbed sites, especially as may be related to construction activities.
6.6	Protection of environmental quality and safeguards on work sites	In addition to littering and dumpster provisions (above), the contractor shall develop and enforce measures to limit disposal of wet wastes (excess concrete, washdown and polluted water) to immediate, non-polluting sites; and, finally to prohibit workers' use of radios and music-players.

CONCLUSION & OPINION

Provided the adoption and faithful adherence to the previous mitigation measures and attached BMPs, the proposed subdivision and development of Rancho Potrero likely will not create an adverse effect on any special-status species, plant or animal, that are known to inhabit the site. The certain loss of Monterey Pines will be nominal provided that removal and damage to the principal old growth and mature forested sites on property are avoided. Where sensitive and

high value resources have been identified, these can and should be avoided throughout the course of development - for both infrastructure features and individual home lots.

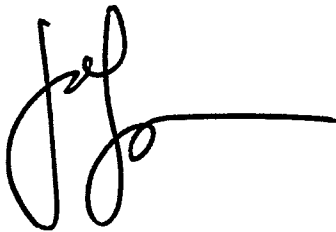
Additional Considerations - Lot and Homesite Placement

Previously, this document discussed higher resource values that include the location of Monterey Pine forest both within and adjacent to proposed lots. In view of such values, the writer suggests that a reasonable effort be made to relocate lots 6, 7, 8 and 9 to an area of lesser resource values, such as inside the larger lot 10. As previously stated, the project should prescribe building envelopes (possibly with alternative choice locations) specifically for lots 6, 7, 8, and 9, only.

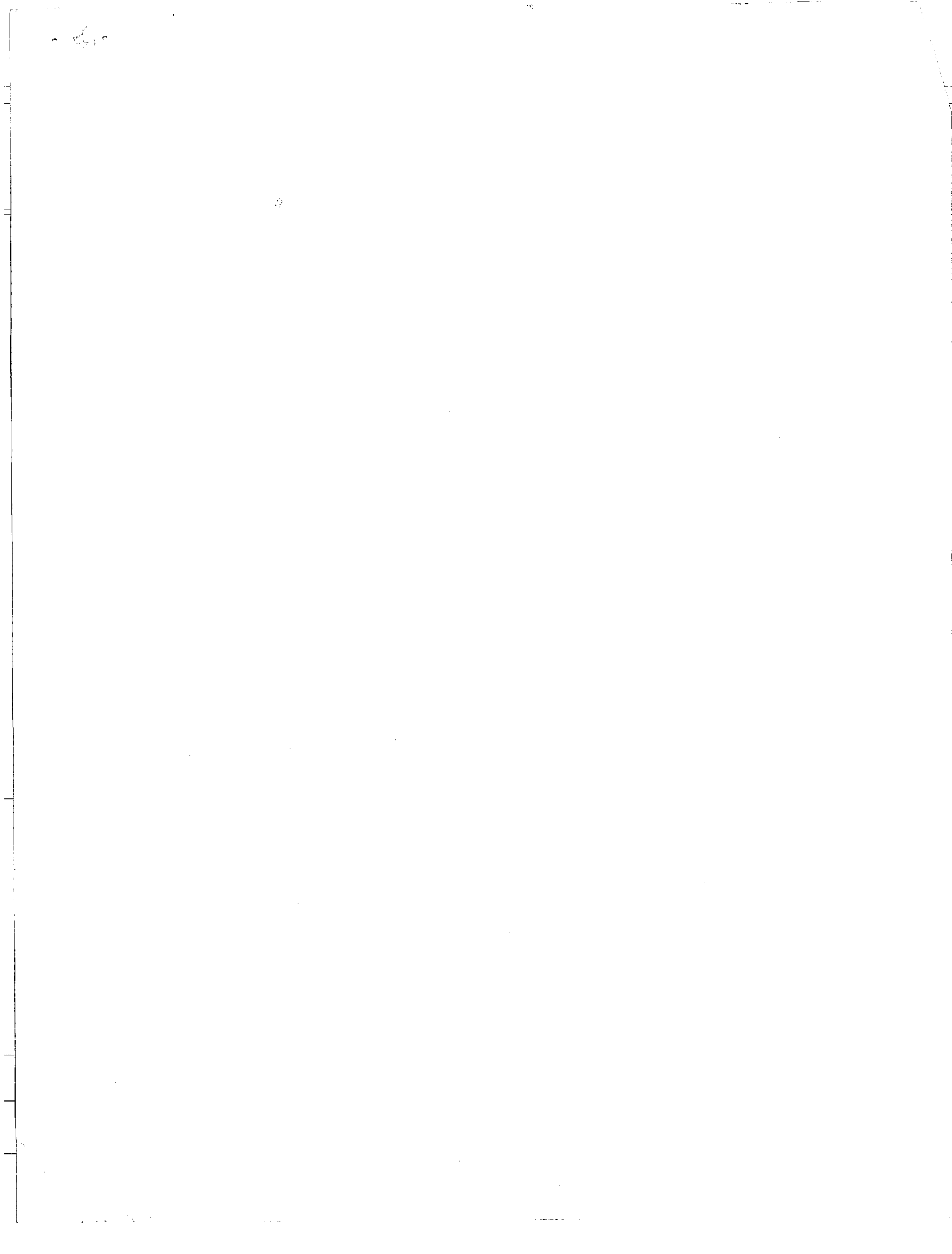
The present findings and recommendations, including Mitigation Measures and BMPs, and which are added to more than a decade of onsite ecological research and monitoring experience, lead to the writer's opinion that the proposed subdivision of the property could proceed without diminishing protected and special-status plant and wildlife resources. Provided these recommendations and conclusions, no special-status plant or animal species will be adversely affected to a significant degree.

This concludes my study and recommendations dealing with the biological resources associated with the current VTM (27 Oct 2007) for Rancho Potrero.

Signed,

A handwritten signature in black ink, appearing to read 'Jeff', with a long horizontal line extending to the right.

Jeffrey B. Froke, Ph.D.



- ✓ The current report specifically answers whether the Monterey Pine is a special-status species. Note that the pine is given a special advisory designation by the California Native Plant Society (CNPS): the species is classified in CNPS (advisory) List 1B -- "plants that are rare, threatened or endangered in California or elsewhere." However, the species is not listed by either the State of California (CDFG) or the United States of America (USFWS).

- ★ It appeared that the BA&R first-delivered to the RMA (County Planning) suggested dedication of a conservation easement as a forest protection method: Clarify.
 - ✓ The previous draft did not mean to suggest the use of conservation easements, however laudable and appropriate they may be, especially in view of the largely successful easement program at Santa Lucia Preserve.

- ★ Mitigation Measure 37 (also Additional Mitigation Measure 17) of the SLP Comprehensive Development Plan requires riparian vegetation maintenance: state whether this applies to the project site.
 - ✓ The adopted measure provides for "long-term monitoring of riparian vegetation and revegetation, if necessary, to maintain a total riparian area equal to at least 95 percent of the existing area" (GMPAP, MM 16). Nevertheless, the measure does not apply to the present project because there is no development or impact planned in or near any of the associated riparian areas.

- ★ The report "recommended" project BMPs, but refers to requirements for field monitoring. Clarify if the "recommendations" are required per CEQA.
 - ✓ Changes made and recommendations clarified -- see text.

- ★ The plant species lists does not provide a key for the CNPS status – could this be provided?

- ✓ All plant species that are present on the property and that are listed by CNPS or a government authority (CDFG, USFWS) are indicated in Table 1.
- ★ Is a pre-construction survey needed for White-tailed Kite, or for Cooper's Hawk? Clarify, and in so doing refer to SLPCP MM No. 133.
 - ✓ Yes: the measure was adopted as Condition 27 of the Board's approval, and this report will specify the circumstances for and methods of making a survey for these and possibly additional species.
- ★ Review the arborist's report; also, the arborist needs to reference the BA&R.
 - ✓ The BA&R author read the arborist's report, i.e., endorsement of the project (Bradford 27 Oct 2007). The tree report, including pertinent technical corrections to that report, are discussed, herein.
- ★ The BA&R refers to "mitigation" (page 17): Is the mitigation as defined by CEQA?
 - ✓ Changes have been made in the BA&R -- see text.
- ★ California Department of Fish & Game staff will require a letter from the US Fish & Wildlife Service regarding whether the project may potentially result in takings of California Red-legged Frogs. Consult with [agency staff] about whether to request consultation before or during the environmental review period.
 - ✓ The BA&R now specifies an approach for communicating with the Wildlife Agencies.
- ★ Note that, pending conclusion of the amended biological and arborist's reports, County Planning may require designation of building envelopes, particularly on lots with sensitive environmental resources, e.g., 6, 7, 8 and 9.

- ✓ The current version of the BA&R specifically recommends that *building envelopes* be applied to lots that are confirmed to host sensitive plant(s) and/or wildlife habitat resources, or that otherwise have prominent ecological values.

GREEN DEVELOPMENT PREMISE

Throughout California and North America, citizens and community governments increasingly expect that any development of their neighborhood land and waters be environmentally sound, and they challenge developers to recognize and adapt to a sustainability imperative linked to nature protection. In parlance, people want their communities and new development to be green.

An important green objective of modern land development is improvement of properties while reducing or avoiding adverse impacts to biological resources that are inherent to the landscape. Applying the green premise to Rancho Potrero (*the project*), this report presents an inventory and welfare analysis of wildlife and plantlife that currently inhabit the project site and its immediate vicinity. Specifically, this report identifies and evaluates the potential for the project to impact an existing community of native vascular plants (the vegetation) and vertebrate animals (the wildlife).

STUDY OBJECTIVES

This study was guided by four objectives or tasks, each of which addresses the project site; present and future habitation of the site by plant and animal; and the physical elements of the proposal that might affect the biotic sustainability of the site.

- ▶ Identify plant and animal species that currently occupy the site;
- ▶ Identify project actions and outcomes that could affect the site's flora and fauna;
- ▶ Determine whether prospective impacts to special-status species within the site's flora and fauna may be significant.
- ▶ Recommend construction BMPs and post-construction strategies to prevent, reduce or mitigate significant threats to the identified biotic resources.

For this analysis, any effect that the project would have on biological resources would be viewed as significant if it would,

- ▶ Substantially affect or threaten the ecology and welfare of a rare, threatened, endangered, or other special-status species, or essential habitat that may be occupied by such rated species;
- ▶ Result in a net loss of a biotic community that is subject to local, state, and/or federal regulations or that is otherwise of very limited occurrence in the Carmel Valley region; or,
- ▶ Significantly interfere with the movement of any resident or migratory wild animal species.

STUDY APPROACH

Project Preview

The writer studied the Rancho Potrero Vesting Tentative Map to acquaint himself with the contents of the project layout as proposed by the owner/developer. The detailed, multi-layered map was prepared by Whitson Engineers and dated 27 Oct 2007. Numerous aerial images corresponding with the engineer's site map were studied in detail to gain greater insight to the location before (and after) field work.

Field Work

Study Schedule -- The approach to the reported biological study of Rancho Potrero involved making two all-day field visits in 2006 (July & September), four visits in 2007 (July & October), and four visits in 2008 (March & April). The field trips in 2008 focused on the site flora, and the well-timed two-month period allowed observations of plant phenology within the flora. The scale of the fieldwork extended from walkovers of the broader landscape to intensive on-the-ground searches for individual biotic and particularly botanical resources.

Santa Lucia Preserve -- In terms of the observer/writer's familiarity with the property and its natural resources, it is worth noting that, circa 1991-2004, he had been responsible for conducting and supervising the original collection and analysis of biological data used to determining the plant protection and open space boundaries for the entire Preserve project. The

Table 1. Status, distribution & habitat of special-status plants with potential to occur on or in the vicinity of Carmel Valley & Rancho Potrero (2008)			
Fragrant Fritillary	SOC	None	1-2-3 List 1B
San Benito Fritillary	SOC	None	1-2-3 List 4
Cone Peak Bedstraw	SOC	None	3-1-3 List 1B
Sand Gilia	Endangered	Threatened	3-2-3 List 1B
San Francisco Gumplant	SOC	None	2-2-3 List 1B
Congdon's Tarplant	SOC	None	3-3-3 List 1B
Kellogg's Horkelia	SOC	None	3-3-3 List 1B
Salinas Valley Goldfields	None	None	1-1-3 List 4
Small-leaved Lomatium	None	None	1-2-3 List 4
SLO County Bush Mallow	None	None	1-1-3 List 4
Carmel Valley Bush Mallow	SOC	None	1-2-3 List 1B
Arroyo Seco Bush Mallow	SOC	None	3-2-3 List 1B
Carmel Valley Cliff Aster	SOC	None	3-2-3 List 1B
Mount Diablo Cottonweed	None	None	1-1-3 List 4
Curly-leaved Monardella	None	None	1-2-3 List 4
California Spineflower	None	None	1-2-3 List 4
Dudley's Lousewort	SOC	Rare	3-2-3 List 1B
Gairdner's Yampah	SOC	None	1-2-3 List 4
Monterey Pine	SOC	None	3-2-2 List 1B

Table 1. Status, distribution & habitat of special-status plants with potential to occur on or in the vicinity of Carmel Valley & Rancho Potrero (2008)			
Michael's Rein Orchid	None	None	1-2-3 List 4
Yadon's Rein Orchid	Endangered	None	3-3-3 List 1B
Hooked Popcorn-flower	SOC	None	2-2-3 List 1B
Round Woolly-marbles	None	None	1-2-1 List 4
Muir's Raillardella	None	None	2-1-3 List 1B
Hoffmann's Sanicle	None	None	1-1-3 List 4
Adobe Sanicle	SOC	Rare	3-3-3 List 1B
Maple-leaved Checkerbloom	None	None	2-2-2 List 1B
Vortreides Spineflower	None	None	1-1-3 List 4
Santa Cruz Microseris	SOC	None	2-2-3 List 1B
Santa Cruz Clover	None	None	3-3-3 List 1B
Pacific Grove Clover	SOC	Rare	3-3-3 List 1B

Table 1. Status, distribution & habitat of special-status plants with potential to occur on or in the vicinity of Carmel Valley & Rancho Potrero (2008)

[1]

CNPS Lists:

- List 1A Plants Presumed Extinct in California
- List 1B Plants Rare, Threatened or Endangered in California and Elsewhere
- List 2 Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
- List 3 Plants About Which We Need More Information, A Review List
- List 4 Plants of Limited Distribution, A Watch List

CNPS List Assignment

- If the plant is presumed extinct in California, it is assigned to List 1A.
 - If the plant has significant taxonomic and/or distributional uncertainty, it is assigned to List 3.
 - Placement on List 1B, 2, and 4 is based on rarity and on the relevant biological factors known about the taxon. The ranking guidelines must be flexible to account for all the different cases and situations for rare plants in California.
 - < 50 extant occurrences in CA, and either endemic to CA or very rare outside CA, usually assigned to List 1B.
 - < 50 extant occurrences in CA, but more widespread outside CA, usually assigned to List 2.
 - > 50 extant occurrences in CA, but limited distribution usually assigned to List 4.
 - Most taxa also receive a threat code extension following the CNPS List (e.g. 1B.1, 2.3 etc.). This code indicates the level of endangerment within the state.
- New Threat Code extensions and their meanings:
- .1 - Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
 - .2 - Fairly endangered in California (20-80% occurrences threatened)
 - .3 - Not very endangered in California (<20% of occurrences threatened)

Table 2. Status and potential presence of special-status wildlife species on Rancho Potrero and its vicinity				
Bank Swallow	--/T	K	P	Cliff Face
Vaux's Swift	--/SC	K	U	Cliffs
Black Swift	--/SC	K	U	Cliffs
Least Bell's Vireo	E/E	U	U	Riverine Willows
CA Horned Lark	--/SC	K	P	Grassland
Loggerhead Shrike	--/SC	K	P	Patchy Scrub & Grassland
Tricolored Blackbird	--/SC	K	U	Ponded Waters
Burrowing Owl	C/SC	K	P	Grassland
Northern Harrier	--/SC	K	K	Grassland
White-tailed Kite	--/FP	K	P	Grassland
Golden Eagle	--/FP	K	P	Overhead
Merlin	--/SC	K	P	Patchy Scrub & Grassland
Long-eared Owl	--/SC	K	P	Forest
Short-eared Owl	--/SC	U	U	Grassland Wetlands
Spotted Owl (CA subspecies)	--/SC	K	U	Old Growth Forest
Peregrine Falcon	--/E	K	P	Overhead
Prairie Falcon	--/SC	K	U	--
MAMMALS				
Pallid Bat	--/SC	K	P	Forest & Woodland
Townsend's Western Big-eared Bat	C/SC	P	U	Old Growth Redwood Forest

Table 2. Status and potential presence of special-status wildlife species on Rancho Potrero and its vicinity				
Fringed Myotis	C/**	K	P	Old Growth Forest
Long-legged Myotis	--/SC**	K	P	Scrub, Forest, Woodland, Buildings
Western Red Bat	--/**	P	P	Riparian Woodland
Mountain Lion	--/FP	K	K	All terrestrial habitats

Table 2 continues...

Table 2. Status and potential presence of special-status wildlife species on Rancho Potrero and its vicinity

WILDLIFE SPECIES STATUS SOURCE & DEFINITIONS

Federal

- 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

- 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 (see below)
- FP = Fully Protected per California Fish and Game Code
- ** Included on 1996 California Department of Fish and Game preliminary list of revised Mammal Species of Special Concern

Current definition of SC (=SSC):

A Species of Special Concern (SSC) is a species, subspecies, or distinct population of an animal* native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- ✓ is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;
- ✓ is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed;
- ✓ is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;
- ✓ has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status. Source: CDFG 2008

- ✓ The current report specifically answers whether the Monterey Pine is a special-status species. Note that the pine is given a special advisory designation by the California Native Plant Society (CNPS): the species is classified in CNPS (advisory) List 1B -- "plants that are rare, threatened or endangered in California or elsewhere." However, the species is not listed by either the State of California (CDFG) or the United States of America (USFWS).

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 - ✓ The previous draft did not mean to suggest the use of conservation easements, however laudable and appropriate they may be, especially in view of the largely successful easement program at Santa Lucia Preserve.

- ★ Mitigation Measure 37 (also Additional Mitigation Measure 17) of the SLP Comprehensive Development Plan requires riparian vegetation maintenance: state whether this applies to the project site.
 - ✓ The adopted measure provides for "long-term monitoring of riparian vegetation and revegetation, if necessary, to maintain a total riparian area equal to at least 95 percent of the existing area" (GMPAP, MM 16). Nevertheless, the measure does not apply to the present project because there is no development or impact planned in or near any of the associated riparian areas.

- ★ The report "recommended" project BMPs, but refers to requirements for field monitoring. Clarify if the "recommendations" are required per CEQA.
 - ✓ Changes made and recommendations clarified -- see text.

- ★ The plant species lists does not provide a key for the CNPS status – could this be provided?

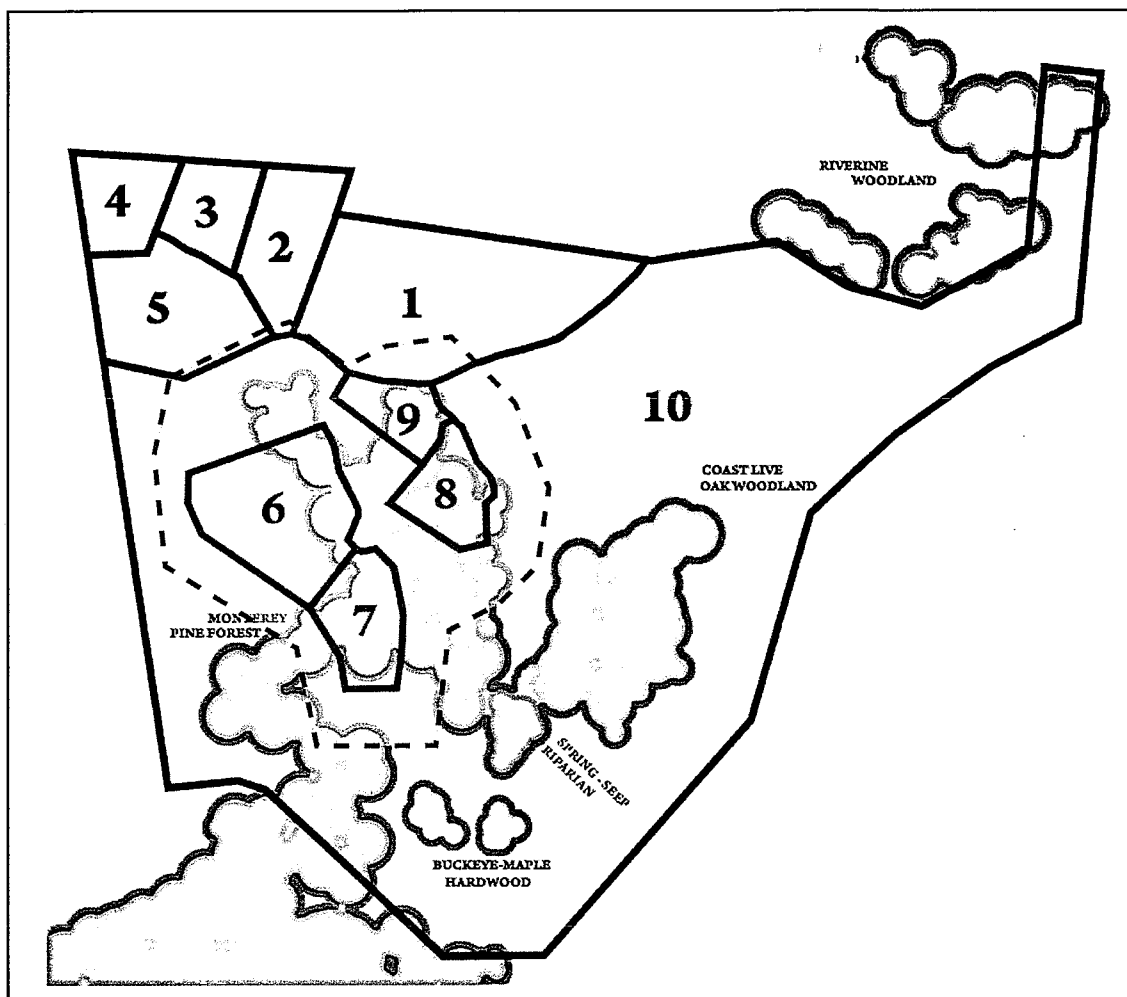


FIGURE 4 The yellow polygon overlaid on the key habitat map (Figure 3) represents an area in which resource status and welfare monitoring should take place, in conjunction with project infrastructure and individual lot construction. Principal targets would include nesting individuals of Olive-sided Flycatcher, Cooper's Hawk, and White-tailed Kite. Riparian species (lot 10) would be covered by MM # 6.

Action 6: Project encroachment onto Carmel River and associated habitats would threaten to disrupt the *ecological privacy* of sensitive wildlife species, including California Red-legged Frogs and Steelhead Trout. Additional species, including Western Pond Turtle, Yellow Warbler, and Yellow-breasted Chat, all *Species of Special Concern*, likewise would be affected by disturbance to their

Table 6. Standard Best Management Practices useful to support construction and protect sensitive biological resources during construction.		
6.3	Prevention of equipment and operations damages	Contractor and contract ecologist/monitor will cooperatively assure that overnight parking, repairs and fueling of heavy equipment be specifically restricted to established safety and maintenance zones, thereby to avoid damage to sensitive and protected resource.
6.4	Minimization of project induced damages as by trampling or predation	Contractor will assure, and resource specialist shall monitor compliance with policies that prohibit worker's pets from the total Rancho property; enforce anti-littering and provide sufficient covered dumpsters with instructions on use; maintain onsite fencing to deter vehicle access; and establish a rule to prohibit after-work access to the property by workers and their vehicles;
6.5	Avoidance of incursions by nonnative species onto protected and valuable resource sites	Contractor will enforce against project and after hours dumping; and, resource specialist shall continuously check for weed invasions onto freshly disturbed sites, especially as may be related to construction activities.
6.6	Protection of environmental quality and safeguards on work sites	In addition to littering and dumpster provisions (above), the contractor shall develop and enforce measures to limit disposal of wet wastes (excess concrete, washdown and polluted water) to immediate, non-polluting sites; and, finally to prohibit workers' use of radios and music-players.

CONCLUSION & OPINION

Provided the adoption and faithful adherence to the previous mitigation measures and attached BMPs, the proposed subdivision and development of Rancho Potrero likely will not create an adverse effect on any special-status species, plant or animal, that are known to inhabit the site. The certain loss of Monterey Pines will be nominal provided that removal and damage to the principal old growth and mature forested sites on property are avoided. Where sensitive and