David Magney Environmental Consulting
P.O. Box 1346, Ojai, California 93024-1346 * E-mail: dmagney@aol.com
805/646-6045 Voice * 805/646-6975 FAX
28 June 2002

Lisa Allin
5033 Dante's View Drive
Calabasas, California 91301

Subject: Summary of Botanical Resources of the Allin Property on La Cam Road, Newbury Park (CCC-9908/PM-5231)

Dear Ms. Allin:

This letter provides a summary assessment of the botanical resources on the Allin property on La Cam Road in Newbury Park, Ventura County.

David Magney Environmental Consulting (DMEC) conducted a CEQA Initial Study, at the Allin property on 13 August 1999 for the County of Ventura, in order to legalize the 1.03-acre lot as a Single-Family Dwelling. To comply with CEQA requirements, you requested DMEC to conduct an additional seasonal botanical survey of the property to determine if any special-status plant species exist in the vicinity of the property, or if any have the potential to be impacted as a result of the property development. DMEC conducted a seasonal botanical field survey on 3 May 2002, which is an appropriate month in which most plant species (special-status or otherwise) are in bloom.

This report summarizes the botanical information obtained from the 13 August 1999 and the 3 May 2002 botanical field surveys of the property, a search of the California Department of Fish and Game's (CDFG's) California Natural Diversity Database (CNDDB) RareFind2[1], and a literature review, which are footnoted as appropriate. Figure 1, General Location Map of the Allin Property, illustrates the area addressed in this assessment.

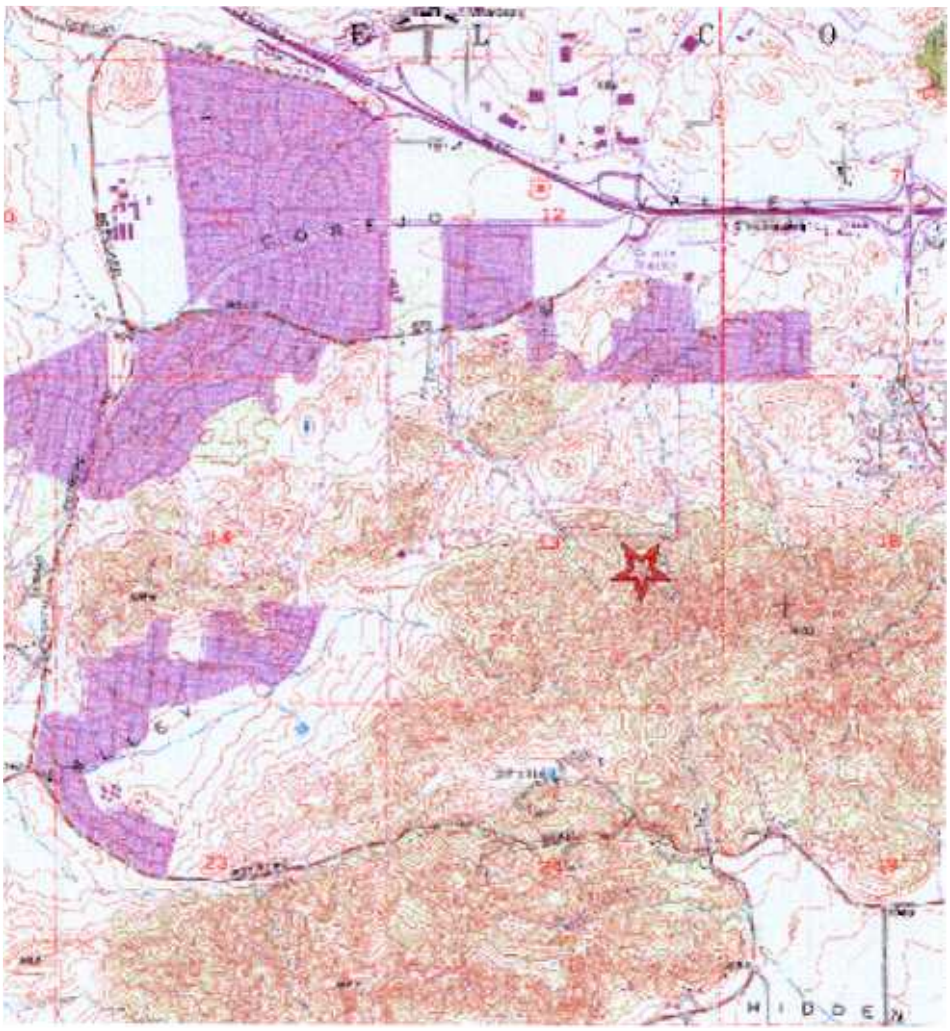
PHYSICAL SETTING

The Allin property address is unknown, but is located on La Cam Road (Moser Road) in Newbury Park. It is located in the Rancho El Conejo of the Newbury Park California 7½-minute quadrangle (S1/2, SEC13, T1N, R20W) and is centered at 34° 10.134'N latitude, 118° 55.449'W longitude.

A short steep private road (or long driveway), heading south at the eastern end of La Cam Road, leads to the land of the property, which occurs on a steep (approximately 3:1), generally north-facing slope, in a highland area of Newbury Park. The site consists of dry, shallow, rocky/sandy soils, and occurs at an elevation of approximately 1,100 feet above mean sea level. The site is just south of (and more upslope from) three existing large homes, while a drainage with Coast Live Oak Riparian Woodland exists just to the north of the site.

California Natural Diversity Data Base. 4 April 2002. RareFind2. California Department of Fish and Game. Sacramento, California.

Figure 1. General Location Map of the Allin Property



BOTANICAL RESOURCES

The botanical resources of the Allin property on La Cam Road include the vascular and nonvascular plant taxa that occupy the landscapes of the area, referred to as the flora. The flora of any given area is dependent on the physical factors of the area, including geology, soils, elevation, prevailing winds, climate and weather, and cultural practices.

The flora is naturally segregated into groups or suites of species, which are aggregated into plant communities or vegetation types. Some species are dependent upon others; however, for the most part, individual species of plants grow along independent environmental gradients. These gradients happen to be similar for suites of species, and form what we call plant communities or vegetation types that are distinguishable at a macro level. For example: oak woodland versus chaparral or scrub versus grassland.

The general vegetation types, the flora, and any special-status species known or likely to occur in the vicinity of the property are described briefly below.

VEGETATION TYPES

The predominant vegetation types observed onsite are Mixed Ceanothus Chaparral and Coastal Sage Scrub. These plant communities are intermixed onsite, as many of the Coastal Sage Scrub plant species exist within, and as an understory to, the Mixed Chaparral openings. Annual and perennial grasses/forbs also help contribute to forming the groundlayer onsite. Depending on the slope-aspect, the structural diversity of these plant communities varies. For example, on the northeastern- and northwestern-facing slopes the vegetation tends to form a more intermittent to open canopy with significant bare ground exposed, while the direct north-facing slope supports a closed, dense, lush canopy of similar (and additional) plant species.

Mixed Ceanothus Chaparral

Chaparral is a type of shrubland dominated by woody evergreen shrubs with small, thick, leathery, dark green, sclerophyllous leaves. Chaparral shrubs are relatively tall and dense, and are adapted to periodic wildfires by stump sprouting or germination from a dormant seed bank. These shrubs are also adapted to drought by deep extensive root systems, while their small thick leaf structure prevents permanent damage from moisture loss. Many Coastal Sage Scrub (described below) species also grow intermixed as associates with chaparral species. Chaparral typically occurs on moderate to steep south-facing slopes with dry, rocky, shallow soils. It is more abundant at higher elevations where temperatures are lower and moisture supplies are more ample. [2]

The type of chaparral observed at the Allin property is Mixed Ceanothus Chaparral, which is co-dominated by *Ceanothus megacarpus* var. *megacarpus* (Bigpod Ceanothus) and *Ceanothus spinosus* (Greenbark Ceanothus). Mixed Ceanothus Chaparral is similar to Bigpod Ceanothus Series[3], except the percent ground cover is represented by an equal representation of the two species of Ceanothus rather than just by Bigpod Ceanothus alone. Bigpod Ceanothus Series forms a less than 4-meter, continuous to intermittent canopy over a sparse groundlayer (emergent trees may be present) on dry slopes, between 100 and 750 meters in elevation. Holland[4] describes Bigpod Ceanothus Chaparral as being pre-adapted to periodic wildfires by producing a large seed bank each year. It is long-lived absent fires; however, does not resprout after a wildfire. This chaparral occurs on xeric upland slopes, usually fairly near the coast, and grows in shallow, rocky, poorly differentiated soils.

The important native associate species contributing to the Mixed Ceanothus Chaparral observed growing on the predominant northeastern-facing slope onsite include: *Adenostoma fasciculatum* (Chamise), *Malosma laurina* (Laurelleaf Sumac), *Prunus ilicifolia* ssp. *ilicifolia* (Hollyleaf Cherry), *Quercus agrifolia* (Coast Live Oak [bush-size]), and *Ribes malvaceum* var. *viridifolium* (Sticky Chaparral Currant [Species of Local Concern[5]). The associate scrub and herbaceous species observed growing intermixed, below, and in openings of the chaparral species are listed below in Coastal Sage Scrub.

---

[2] Zedler, P., S. DeSimone, J. Giessow, D. Lawson, J. Else, and S. Bliss. 1997. The Plant Communities of Camp Pendleton Marine Corps Base, California. February. San Diego State University, Department of Biology, Ecology Program. San Diego, California.

[3] Sawyer, J.O., and T. Keeler-Wolf. 1995. *A Manual of California Vegetation*. California Native Plant Society, Sacramento, California.

[4] Holland, R.F. 1986. Preliminary Description of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento, California.

[5] Magney, D.L. 2002. Checklist of Ventura County Rare Plant Species. 29 March 2002. California Native Plant Society, Channel Islands Chapter, Ojai, California. Published on CNPS website: *www.cnps.org*.

Coastal Sage Scrub

Coastal Sage Scrub is a shrubland dominated by drought-deciduous, low-growing shrubs and subshrubs that are soft-leaved and grayish-green in color. It forms variable stands with specific characteristics and site requirements; it occupies dry, gentle to steep, more or less rocky slopes with shallow or heavy soils; and it generally occurs at lower elevations. Shrub plant size is relative to the available water supply present onsite; however, these semi-woody plants are generally low growing since high temperatures and drying winds cause severe moisture stress. Many Coastal Sage Scrub species resprout between and after recurring fires, and they typically respond to seasonal drought by reducing transpiring surface area through leaf curling and loss of larger leaves. Coastal Sage Scrub is common in California generally along the coastward slopes of the Transverse, Central Coast, and Peninsular Ranges, and stands of this vegetation type are adapted to a Mediterranean climate[6].

Venturan Coastal Sage Scrub[7] consists of low, mostly soft-woody shrubs 0.5 to 2 meters tall, with crowns usually touching (but less dense than other coastal scrubs), and typically with bare ground below. Growth occurs in late winter and spring, following the onset of winter rains, and most flowering occurs in spring (and summer). The shrubs are dormant and more or less deciduous in summer and fall, and are adapted to fire by crown-sprouting. The Coastal Sage Scrub observed at the Allin property consists of several species of shrubs (no one shrub dominating) and herbaceous plants growing on dry slopes. It contains moderate to low species diversity and forms an open to intermittent canopy growing below some chaparral plant species. Coastal Sage Scrub covers what is left of the undisturbed portions of the vicinity of the property and is becoming reestablished on the disturbed portions of the property.

The native predominant Coastal Sage Scrub plant species observed onsite include: *Artemisia californica* (California Sagebrush), *Baccharis pilularis* (Coyote Brush), *Eriogonum fasciculatum* var. *polifolium* and *E. fasciculatum* var. *foliolosum* (California Buckwheats), *Lotus scoparius* (Deerweed), and *Salvia mellifera* (Black Sage). Other important shrub species include *Hazardia squarrosa* var. *grindelioides* (Saw-toothed Goldenbush), *Helianthemum scoparium* (Peak Rushrose [Species of Special Concern[8]]), *Keckiella cordifolia* (Heart-leaved Bush Penstemon), *Leptodactylon californicum* ssp. *californicum* (Prickly Phlox), *Mimulus aurantiacus* ([*M. longiflorus* ssp. *longiflorus*] Bush Monkeyflower), emergent *Sambucus mexicana* (Blue Elderberry), *Solanum xantii* var. *xantii* (Chaparral Nightshade), and *Venegasia carpesioides* (Canyon Sunflower). Nonnative scrub plants observed are *Carpobrotus chilensis* (Hottentot Fig) and *Nicotiana glauca* (Tree Tobacco).

The grasses contributing to the groundlayer growing under the shrubland habitat onsite include: *Avena barbata* (Slender Oats), *Bromus diandrus* (Ripgut Grass), *B. madritensis* ssp. *rubens* (Red Brome), *Hordeum murinum* ssp. *leporinum* (Hair Barley), *Melica imperfecta* (Coast Melic Grass [native]), *Nassella pulchra* (Purple Needlegrass [native]), *Piptatherum miliaceum* (Smilo Grass), and *Vulpia myuros* var. *myuros* (Rattail Fescue).

The native annual and perennial herbs and vines contributing to the groundlayer include: *Allium haematochiton* (Red-skinned Onion [Species of Local Concern[9]]), *Calystegia macrostegia* ssp. *cyclostegia* (Morning-glory), *Cuscuta californica* var. *californica* (California Dodder [native parasitic annual vine growing on *Eriogonum fasciculatum* var. *foliolosum*]), *Eriophyllum confertiflorum* var.

[6] Zedler et al. 1997. see footnote 2.
[7] Holland 1986. see footnote 4.
[8] Magney, D.L. 2002. see footnote 5.
[9] Ibid.

confertiflorum (Golden Yarrow), *Eschscholzia californica* ssp. *californica* (California Poppy), *Gnaphalium bicolor* (Bicolored Everlasting), *G. californicum* (Green Everlasting), *G. canescens* ssp. *microcephalum* (White Everlasting), *Heterotheca grandiflora* (Telegraph Weed), *Lessingia filaginifolia* var. *filaginifolia* (Cudweed Aster), and *Malacothrix saxatilis* var. *tenuifolia* (Tenuated Cliff-aster), *Marah fabaceus* (California Man-root), and *Phacelia ramosissima* (Branching Phacelia).

The introduced/exotic (some invasive) groundlayer species observed onsite (in greater numbers than in 1999) include: *Brassica nigra* (Black Mustard), *Carduus pycnocephalus* (Italian Thistle), *Centaurea melitensis* (Tocalote), *Erodium botrys* (Whitestem Filaree), *E. cicutarium* (Redstem Filaree), *Gnaphalium luteo-album* (Cudweed Everlasting), *Hirschfeldia incana* (Summer Mustard), and *Silene gallica* (Windmill Pink).

FLORA

A flora of an area includes the vascular and nonvascular plant taxa that occupy the landscapes of the area. The Allin property supports a depauperate flora of low vascular plant species richness; however, it should be noted that the small size of the property does not allow for the structural diversity and species richness that a larger survey area might support. Fifty-one (51) vascular plant taxa were observed onsite. Of those 51, 35 taxa are native species, and 16 are nonnative/invasive species. All 51 plant species observed onsite are listed above in the vegetation type that they were observed growing in.

The flora also includes nonvascular plants, such as bryophytes (mosses and liverworts) and lichens. The bryophyte flora is quite depauperate, since most species occurring in perennially or seasonally wet microhabitats; however, a copper wire moss was observed growing in shaded soil below a scrub shrub. Lichens are the most abundant types of nonvascular plants, and are typically dominated by crustose types (those that are closely attached to their preferred substrate, such as rocks and bark). No lichens were observed during the botanical surveys; however, no specific field surveys of the lichen flora have been conducted onsite.

Table 1. Vascular Plant Species Observed at the Allin Property, La Cam Road

Scientific Name[10]	Common Name	Habit[11]	Family
Adenostoma fasciculatum	Chamise	S	Rosaceae
Allium haematochiton	**Red-skinned Onion**	**PH**	**Alliaceae**
Artemisia californica	California Sagebrush	S	Asteraceae
*Avena barbata**	Slender Wild Oat	AG	Poaceae
Baccharis pilularis	Coyote Brush	S	Asteraceae
*Bromus diandrus**	Ripgut Grass	AG	Poaceae
Bromus madritensis var. *rubens**	Red Brome	AG	Poaceae
Calystegia macrostegia var. *cyclostegia*	Morning-glory	PV	Convolvulaceae
Carduus pycnocephalus *	Italian Thistle	Ah	Asteraceae
Ceanothus megacarpus var. *megacarpus*	Bigpod Ceanothus	S	Rhamnaceae
Ceanothus spinosus	Greenbark Ceanothus	S	Rhamnaceae
*Centaurea melitensis**	Tocalote	AH	Asteraceae

[10] * = naturalized nonnative taxa; **bold** typeface = special-status species (defined below).

[11] AG=annual grass; AH=annual herb; BH=biennial herb; PF=perennial fern or fern ally; PG=perennial grass; PH=perennial herb; PV=perennial vine; S=shrub; T=tree.

Scientific Name[10]	Common Name	Habit[11]	Family
Cuscuta californica var. *californica*	California Dodder	AV	Cuscutaceae
Eriogonum fasciculatum var. *foliolosum*	California Buckwheat	S	Polygonaceae
Eriogonum fasciculatum var. *polifolium*	California Buckwheat	S	Polygonaceae
Eriophyllum confertiflorum var. *confertiflorum*	Golden Yarrow	PH	Asteraceae
Erodium botrys *	Broadleaf Filaree	AH	Geraniaceae
Erodium cicutarium *	Redstem Filaree	AH	Geraniaceae
Eschscholzia californica ssp. *californica*	California Poppy	AH	Papaveraceae
Gnaphalium bicolor	Bicolored Everlasting	BH	Asteraceae
Gnaphalium californicum	Green Everlasting	A/BH	Asteraceae
Gnaphalium canescens ssp. *microcephalum*	White Everlasting	PH	Asteraceae
Gnaphalium luteo-album *	Cudweed Everlasting	PH	Asteraceae
Hazardia squarrosa ssp. *grindelioides*	Saw-toothed Goldenbush	S	Asteraceae
Helianthemum scoparium	Peak Rushrose	S	Cistaceae
Heterotheca grandiflora	Telegraph Weed	BH	Asteraceae
Hirschfeldia incana *	Summer Mustard	BH	Brassicaceae
Hordeum murinum ssp. leporinum *	Hare Barley	AG	Poaceae
Keckiella cordifolia	Heartleaf Penstemon	S	Scrophulariaceae
Leptodactylon californicum ssp. *californicum*		S	Polemoniaceae
Lessingia filaginifolia var. *filaginifolia*		PH	Asteraceae
Lotus scoparius ssp. *scoparius*		S	Fabaceae
Malacothrix saxatilis var. *tenuifolia*	Cliff-aster	PH	Asteraceae
Malosma laurina	Laurelleaf Sumac	S	Anacardiaceae
Marah fabaceus	California Man-root	PV	Cucurbitaceae
Melica imperfecta	Coast Melic Grass	PG	Poaceae
Mimulus longiflorus ssp. *longiflorus*	Sticky Bush Monkeyflower	S	Scrophulariaceae
Nassella cf. *pulchra*	Purple Needlegrass	PG	Poaceae
*Nicotiana glauca**	Tree Tobacco	S	Solanaceae
Phacelia ramosissima	Branching Phacelia	AH	Hydrophyllaceae
*Piptatherum miliaceum**		PG	Poaceae
Prunus ilicifolia	Hollyleaf Cherry	S	Rosaceae
Quercus agrifolia	Coast Live Oak	T	Fagaceae
Ribes malvaceum var. *viridifolium*	Sticky Chaparral Currant	S	Grossulariaceae
Salvia mellifera	Black Sage	S	Lamiaceae
Sambucus mexicana	Blue Elderberry	S	Adoxaceae
Solanum xantii var. *xantii*	Chaparral Nightshade	S	Solanaceae
Venegasia carpesioides	Canyon Bush Sunflower	S	Asteraceae
Vulpia myuros var. *myuros*	Rattail Fescue	AG	Poaceae

SPECIAL-STATUS SPECIES DEFINITIONS

Special-status species are plants (including nonvascular plants) and animals that are either listed as endangered or threatened under the Federal or California Endangered Special Acts; or considered to be rare under the California Native Plant Protection Act; or considered to be rare (but not formally listed) by resource agencies, professional organizations (e.g. Audubon Society, California Native Plant Society [CNPS], The Wildlife Society, California Lichen Society), and the scientific community. For the purposes of this project, special-status species are further defined in Table 2 (below).

Table 2. Definitions of Special-Status Species

- Plants & animals legally protected under the California and Federal Endangered Species Acts or under other regulations.
- Plants and animals considered sufficiently rare by the scientific community to qualify for such listing; or
- Plants and animals considered to be sensitive because they are unique, declining regionally or locally, or are at the extent of their natural range.

Special-Status Plant Species	Special-Status Animal Species
• Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species). • Plants that are Category 1 or 2 (species of special concern) candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (55 CFR 6184, February 21, 1990). • Plants that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, Section 15380). • Plants considered by the CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2 in CNPS [2001][12]). • Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Lists 3 and 4 in CNPS [2001]). • Plants listed by the California Lichen Society as rare in California (Magney 1999[13]). • Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5). • Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.). • Plants considered sensitive by other federal agencies (i.e. U.S. Forest Service, Bureau of Land Management) or state and local agencies or jurisdictions. • Plants considered sensitive or unique by the scientific community or occurring at the limits of its natural range (State CEQA Guidelines, Appendix G).	• Animals listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species). • Animals that are Category 1 or 2 candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (54 CFR 554). • Animals that meet the definitions of rare or endangered species under the CEQA (State CEQA Guidelines, Section 15380). • Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5). • Animal species of special concern to the CDFG (Remsen [1978][14] for birds; Williams [1986][15] for mammals). • Animal species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

To determine which special-status species are likely to occur in the vicinity of the study area, a literature survey (including a review of CNPS's *Inventory of Rare and Endangered Vascular Plants of California*[16] and a search of the CNDDB RareFind2[17]) was conducted for known occurrences in the study area. Included in the assessment of special-status species, the following information is included on each special-status species either observed in the study area, or believed to occur based on the presence of suitable habitat:

- Scientific and common (vernacular) names;
- Species Status (including federal, state, CDFG's CNDDB Element Ranking [Global and State ranking], and CNPS List and Rarity-Endangerment-Distribution [R-E-D] Code;

[12] California Native Plant Society. 2001. Inventory of Rare and Endangered Vascular Plants of California. Sixth Edition.
[13] Magney, D.L. 1999. Preliminary List of Rare California Lichens. California Lichen Society Bulletin 6(2)::22-27
[14] Remsen, J.V., Jr. 1978. Bird Species of Special Concern in California: An Annotated List of Declining or Vulnerable Bird Species. June 1978. Prepared for the California Department of Fish and Game, Sacramento, California.
[15] Williams, D.F. 1986. Mammalian Species of Special Concern in California. (Wildlife Management Division Administrative Report 86-1.) California Department of Fish and Game, Sacramento, California.
[16] California Native Plant Society. 2001.
[17] California Natural Diversity Data Base. 4 April 2002. RareFind2. California Department of Fish and Game. Sacramento, California.

- Habitat requirements;
- Distribution; and
- Survey results.

Listed species are those taxa that are formally listed as endangered or threatened by the federal government (e.g. U.S. Fish and Wildlife Service [USFWS]), pursuant to the Federal Endangered Species Act or as endangered, threatened, or rare (for plants only) by the State of California (i.e. California Fish and Game Commission), pursuant to the California Endangered Species Act or the California Native Plant Protection Act.

CNPS's *Inventory of Rare and Endangered Vascular Plants of California* categorizes rare California plants into one of five lists (1A, 1B, 2, 3, & 4) representing the five levels of species status, one of which is assigned to a sensitive species to indicate its status of rarity or endangerment and distribution. A CNPS List is a more general designation than the three separate sets of information provided in a CNPS R-E-D Code (defined in Table 6, California Native Plant Society R-E-D Code). However, the CNPS List is a significant designation in terms of a species' overall status throughout all of California, and it works well in conjunction to the specifications of the R-E-D Code. Table 3, California Native Plant Society List, provides a definition for each List code number.

Table 3. California Native Plant Society List (CNPS List)

CNPS List	Definition
1A	Presumed Extinct in California
1B	Rare or Endangered in California and elsewhere
2	Rare and Endangered in California, more common elsewhere
3	Need more information
4	Plants of Limited Distribution

The CNPS R-E-D Code is a three-numbered numeric ranking, which is assigned to a special-status species, consisting of one number (1, 2, or 3) for each of the three categories (Rarity-Endangerment-Distribution). Each number accurately describes the species' population levels and distribution patterns within each category. The three number-codes are described for each category in Table 4, California Native Plant Society R-E-D Code, and are specific for each category.

Table 4. California Native Plant Society R-E-D Code

Rarity (R)	
1	Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time
2	Distributed in a limited number of occurrences, occasionally more if each occurrence is small
3	Distributed in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported
Endangerment (E)	
1	Not endangered

2	Endangered in a portion of its range
3	Endangered throughout its range
Distribution (D)	
1	More or less widespread outside California
2	Rare outside California
3	Endemic to California

The CNDDB Element Ranking system provides a numeric global and state ranking system for all special-status species tracked by the CNDDB. The global rank (G-rank) is a reflection of the overall condition of an element (species or natural community) throughout its global range. The state ranking (S-rank) is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S-rank. This Element Ranking system is defined below in Table 5, CNDDB Element Ranking System[18].

SPECIAL-STATUS PLANTS

To determine which special-status species are likely to occur in the vicinity of the study area, a literature survey - including a review of CNPS's *Inventory of Rare and Endangered Vascular Plants of California*[19], a review of the *Checklist of Ventura County Rare Plant Species*[20], and a search of the CNDDB RareFind2[21] (Thousand Oaks, Newbury Park, and Triunfo Pass Quadrangles [7.5 minute series maps]) - was conducted for known occurrences in the study area. Several special-status plant species are known to occur in the region of the project site, and the site contains suitable habitat for several special-status species as well. In fact, three plant species considered rare in Ventura County were observed on the Allin property during the two field surveys of 13 August 1999 and 3 May 2002.

Table 6, Likelihood of Occurrence for Special-Status Plant Species with Potential to Occur on the Allin Property, summarizes the database search, literature search, and field survey results for special-status vascular plant species in the property vicinity. The table indicates each plant species habitat requirements and whether or not those requirements are present onsite. Table 6 also provides each species' scientific and common name, rarity status (Species of Local Concern[22] [SLC] *or* federal and state designation, CNDDB global- and state-rank, and CNPS List and R-E-D Code), and whether or not the species were observed onsite.

[18] California Natural Diversity Database. 4 April 2002. RareFind2. California Department of Fish and Game. Sacramento, California.
[19] California Native Plant Society. 2001. see footnote 12
[20] Magney, D.L. 2002. see footnote 5.
[21] CNDDB. 2002. see footnote 18.
[22] Magney, D.L. 2002. see footnote 5.

Table 5. Natural Diversity Data Base Element Ranking System

Global Ranking (G)	
G1	<6 viable elements occurrences (populations for species), OR < 1,000 individuals, OR < 809.4 hectares (ha) (2,000 acres [ac]).
G2	6 to 20 element occurrences OR 809.4 to 4,047 ha (2,000 to 10,000 ac).
G3	21 to 100 element occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac).
G4	Apparently secure; this rank is clearly lower than G3, but factors exist to cause some concern (i.e. there is some threat, or somewhat narrow habitat).
G5	Population, or stand, demonstrably secure to ineradicable due to being commonly found in the world.
GH	All sites are **historic**; the element has not been seen for at least 20 years, but suitable habitat still exists.
GX	All sites are **extirpated;** this element is extinct in the wild.
GXC	Extinct in the wild; exists in cultivation.
G1Q	The element is very rare, but there is a taxonomic question associated with it.
Subspecies Level: Subspecies receive a **T-rank** attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety. ***For example:** *Chorizanthe robusta* var. *hartwegii* is ranked G2T1. The G-rank refers to the whole species range (*Chorizanthe robusta*), whereas the T-rank refers only to the global condition of the variety (var. *hartwegii*).	
State Ranking (S)	
S1	Less than 6 element occurrences OR less than 1,000 individuals OR less than 809.4 ha (2,000 ac). S1.1 = very threatened S1.2 = threatened S1.3 = no current threats known
S2	6 to 20 element occurrences OR 3,000 individuals OR 809.4 to 4,047 ha (2,000 to 10,000 ac). S2.1 = very threatened S2.2 = threatened S2.3 = no current threats known..
S3	21 to 100 element occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac). S3.1 = very threatened S3.2 = threatened S3.3 = no current threats known
S4	Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern (i.e., there is some threat, or somewhat narrow habitat). NO THREAT RANK.
S5	Demonstrably secure to ineradicable in California. NO THREAT RANK.
SH	All California sites are **historic**; the element has not been seen for at least 20 years, but suitable habitat still exists.
SX	All California sites are **extirpated;** this element is extinct in the wild.
Notes	
1. Other considerations used when ranking a species or natural community include the pattern of distribution of the element on the landscape, fragmentation of the population/stands, and historical extent as compared to its modern range. It is important to take an aerial view when ranking sensitive elements rather than simply counting element occurrences.	
2. Uncertainty about the rank of an element is expressed in two major ways: by expressing the rank as a range of values (e.g. S2S3 means the rank is somewhere between S2 and S3), and by adding a ? to the rank (e.g. S2?). This represents more certainty than S2S3, but less than S2.	

Table 6. Likelihood of Occurrence for Special-Status Plant Species with Potential to Occur on the Allin Property

Scientific Name	Common Name	Status: Fed/State/ G-rank, S-rank/CNPS[23]	Preferred Habitat[24]	Likelihood of Occurrence[25]
Allium haematochiton	Red-skinned Onion	-/-/SLC	Dry slopes and ridges; Chaparral, CSS	**Observed**
Astragalus brauntonii	Braunton's Milk-vetch	E/-/G2, S2.1/1B, 3-3-3	Closed-cone Coniferous Forest, Chap, CSS, V&F Grassland	Possible, CSS and Chaparral onsite
Calochortus plummerae	Plummer Mariposa Lily	-/-/G3, S3.2/1B, 2-2-3	CSS, Chap, V&F Grassland, Cismontane Woodland, Lower Montane Conifer Forest	Likely, CSS and Chaparral habitats onsite
Centromadia parryi ssp. *australis*	Southern Tarplant	-/-/G5T2, S2.1/1B, 2-3-3	Marshes and swamps (margins), V&F Grassland, Vernal Pools	Not Likely
Deinandra minthornii	Santa Susana Tarplant	-/R/G2, S2.2/1B, 2-2-3	Chaparral, CSS (in LA & Ventura Counties only)	Possible, habitat present onsite
Delphinium parryi ssp. *blochmaniae*	Dune Larkspur	-/-/G4T2, S2.2/4, 1-1-3	Chaparral, Coastal Dunes (Maritime)	Not Likely
Dudleya blochmaniae ssp. *blochmaniae*	Blochman's Dudleya	-/-/G2T2, S2.1/1B, 2-3-2	CSS, Coastal Bluff Scrub, V&F Grassland	Not Likely
Dudleya cymosa ssp. *agourensis*	Santa Monica Mountains Dudleya	T/-/G5T1, S1.2/1B, 3-2-3	Chaparral, Cismontane Woodland	Possible, Chap habitat onsite
Dudleya cymosa ssp. *marcescens*	Marcescent Dudleya	T/R/G5T2, S2.2/1B, 3-2-3	Chaparral (known only from 7 occurrences in Los Angeles and Ventura Counties)	Possible, Chaparral habitat present onsite
Dudleya cymosa ssp. *ovatifolia*	Santa Monica Mountains Dudleya	T/-/G5T2, S2.2/1B, 3-2-3	Chaparral, CSS	Possible, CSS & Chaparral onsite
Dudleya parva	Conejo Dudleya	T/-/G2, S2.1/1B, 3-2-3	CSS, V&F Grassland (endemic to Ventura County)	Possible, CSS habitat onsite
Dudleya verityi	Verity's Dudleya	T/-/G1, S1.1/1B, 3-2-3	Chaparral, Cismontane Woodland, CSS (endemic to Ventura County)	Possible, Chaparral habitat present onsite
Eriogonum crocatum	Conejo Buckwheat	-/R/G2, S2.1/1B, 2-2-3	Chaparral, CSS, V&F Grassland (endemic to Ventura County)	Possible, CSS & Chaparral habitats onsite
Helianthemum scoparium	Peak Rushrose	SLC	Dry sandy/rocky soils of hills, slopes, ridges; Chap, CSS	**Observed**
Orcuttia californica	Calif. Orcutt Grass	E/E/G2, S2.1.1B, 3-3-2	Vernal Pools	Not Likely
Pentachaeta lyonii	Lyon's Pentachaeta	E/E/G1, S1.1/1B, 3-3-3	Chaparral, V&F Grassland	Possible, Chap habitat onsite
Ribes malvaceum var. *viridifolium*	Sticky Chaparral Currant	SLC	Chaparral	**Observed**
Senecio aphanactis	Rayless Ragwort	-/-/G3?, S1.2 / 2, 3-2-1	Cismontane Woodland, CSS	Possible, CSS habitat onsite
Thelypteris puberula var. *sonorensis*	Sonoran Maiden Fern	-/-/G5T3T4, S2.2?/2, 2-2-1	Meadows and seeps	Not Likely

[23] SLC=Species of Local Concern in Ventura County, E=listed Endangered, R=listed Rare, T=listed Threatened. Refer to Tables 3 and 4 for CNPS List and R-E-D Code definitions, and refer to Table 5 for G- and S-rank definitions.

[24] Definitions of abbreviations: Chap=Chaparral, CSS=coastal sage scrub, V&F=valley and foothill, LA=Los Angeles

[25] Likelihood of occurrence is based on CNDDB search, regional occurrences not tracked by the CNDDB, and best professional judgment.

Of the eleven special-status plant species known to occur in the region of the project site, three species (Species of Local Concern for Ventura County) were observed onsite. Impacts to these rare plants can be avoided, since they occur away from (down-slope of) the actual building pad and access road, and all three species were observed in close proximity to each other. For example, *Helianthemum scoparium* and *Allium haemaetochiton* were observed as understory to mature chaparral shrubs on the steep north-facing slope approximately 150 feet below the building pad, and *Ribes malvaceum* var. *viridifolium* was observed directly up-slope from the *Helianthemum* and *Allium* species approximately 80 feet from the building pad. No changes to the natural vegetation at the sites of these plants should be allowed to ensure avoidance of direct and indirect impacts. The location of these special-status plant species is shown on Figure 2, Rare Plant Locations on the La Cam Property.

SPECIAL-STATUS HABITATS

No sensitive habitat types were observed at the Allin property. Table 7, Likelihood of Occurrence for Sensitive Habitats at the Allin Property, summarizes the literature and field survey results for sensitive and rare habitat types that have the potential to become established in the vicinity of the project site. It includes the plant community name, rarity and endangerment status, and the likelihood of occurrence within the property boundaries if not directly observed.

Table 7. Likelihood of Occurrence of Sensitive Habitats at the Allin Property

Special-Status Habitat Type	Status: CNDDB[26]	Likelihood of Occurrence[27]
California Walnut Woodland	G2, S2.1	Possible
Southern Coast Live Oak Riparian Forest	G4, S4	Not Likely
Southern Riparian Forest	G4, S4	Not Likely
Southern Sycamore-Alder Riparian Woodland	G4, S4	Not Likely
Valley Needlegrass Grassland	G1, S3.1	Not Likely
Valley Oak Woodland	G3, S2.1	Not Likely

While DMEC found three special-status plant species onsite, the locations of these plants are not expected to be disturbed by the proposed development. However, to ensure these plants are not adversely impacted by accident, DMEC recommends that the bounds of the grading area be flagged or fenced during construction, and that monitoring be conducted to ensure compliance.

If for some reason these plants should be disturbed, appropriate mitigation should be implemented. The *Ribes* may likely survive transplanting to a suitable location onsite, if performed properly and by professional familiar with native plant care. The *Allium* is a bulb plant, and may possibly be excavated and relocated to a suitable location onsite; however, most attempts to transplant rare plants have failed, so the likelihood of success is low and should be avoided. Collecting seed from this plant and germinating them under proper conditions, followed by planting in a suitable location onsite may have a higher probability of success. This is also true for the *Helianthemum*.

[26] See Table 5 for definitions and explanations of CNDDB G- and S-rank rarity status codes.
[27] Likelihood of occurrence is based on a CNDDB search, regional occurrences not tracked by the CNDDB, and best professional judgment.

DMEC

Figure 2. Rare Plant Locations on the La Cam Property

DMEC recommends avoidance of these plants unless entirely impossible. If avoidance is not possible, DMEC recommends that a mitigation plan for each species be developed, which would include developing specifications for obtaining propagules, transplanting, site preparation, planting, maintenance, and monitoring. However, since avoidance is likely feasible, no such mitigation plan should be necessary.

It has been a pleasure to assist you with your botanical resource assessment needs. Please call if you have any questions or comments about this letter report.

Sincerely,

Chr Batcher for

David L. Magney
President

D:\DMEC\Jobs\Ventura\Allin\AllinPropBotanicalResLetter-LaCAmRd2002.doc