

April 28, 2006
Project No. 0402-0041

Andrea Ozdy
Ventura County Resource Management Agency
Planning Division
800 S. Victoria Avenue
Ventura, California 93009

Botanical Survey of the Holly Property (SD05-0043) Sulphur Mountain

Introduction

The project consists of a parcel map waiver and large lot subdivision for four parcels on Sulphur Mountain. A biological resources assessment and initial study checklist was completed for the project by David Magney Environmental Consulting (DMEC) on December 8, 2005. As part of the biological resources assessment, DMEC recommended a spring botanical survey be conducted within areas proposed for development. The purpose of this letter report is to provide the results of the spring botanical survey conducted in response to DMEC's recommendation.

Methodology

The property owner (Richard Holly) and County biologist Liz Chattin identified potential development areas on the property including home sites and access roads. Padre Associates conducted a botanical survey of the potential development areas on April 21, 2006, including six home sites (4 primary and 2 alternate) with access roads from Sulphur Mountain Road. All access roads would follow the alignment of existing unpaved roads. The survey included a 10 to 20 foot wide buffer area surrounding potential development areas to ensure all potentially affected plant species were identified.

Mr. Holly stated that all oak trees within the potential development areas would be preserved. Therefore, a tree survey was not conducted. All potential development areas were surveyed and all vascular plant species observed were recorded. Samples were taken as needed and plant identity was verified using a dissecting microscope and the *Jepson Manual, Higher Plants of California* (Hickman [ed.], 1993). Most species were in flower or otherwise exhibited diagnostic features. Therefore, the majority of plants encountered could be positively identified.

Results

Padre Associates identified 111 plant species within the potential development areas, including 85 native species. The percentage of non-native species was relatively low (23 percent), given that most of the potential development areas consist of existing unpaved roads or historically cleared areas. In contrast, DMEC found 103 plant species within the entire property during a less intensive fall survey.

The Ventura County Locally Important Plant Species list (February 2006 version) and California Native Plant Society Inventory of Rare and Endangered Plants of California were used to determine the conservation status of plant species found. Four (or five) species on these lists were found during the botanical survey (see Table below).

Special-Status Species within/adjacent to Development Areas

Common Name	Scientific Name	Status	Impacts
Catalina mariposa lily Club-haired mariposa lily	<i>Calochortus catalinae</i> <i>Calochortus clavatus</i>	CNPS List 4	Adjacent to access road to home site 3
Mesa horkelia	<i>Horkelia cuneata</i> ssp. <i>puberula</i>	CNPS List 1B	Adjacent to access road to home sites 3 and 4, adjacent to home site 1A
Southern California black walnut	<i>Juglans californica</i> var. <i>californica</i>	CNPS List 4	Adjacent and within access road to home site 4
Plectritis	<i>Plectritis ciliosa</i> ssp. <i>insignis</i>	Locally important species	Adjacent to access road to home sites 3 and 4

Mariposa Lilies. These species are bulb-forming perennial herbs in the lily family. Both Catalina and club-haired mariposa lily have been placed on List 4 by the California Native Plant Society, noting it is a plant of limited distribution, but not rare or endangered. Based on Padre Associates experience, Catalina mariposa lily is the most common mariposa lily in Ventura County. The mariposa lilies had not begun to flower at the time of the April 21, 2006 field survey and could not be positively identified. Due to the lack of flowers, Padre Associates could not determine if mariposa lilies found were Catalina or club-haired. However, GPS coordinates provided in the DMEC report and field observations by Padre Associates indicate both species occur along the access road to home site 3.

The access road to home site 3 would follow the existing alignment with only minor widening and paving. No loss of Catalina mariposa lily or club-haired mariposa lily would occur based on the development plans provided to Padre Associates. However, we recommend the area supporting these species be flagged or monitored during construction to prevent inadvertent impacts.

Mesa Horkelia. This species is a low-growing perennial herb in the rose family, and vegetatively resembles strawberry. Mesa horkelia has been placed on List 1B by the California Native Plant Society, noting it is rare, threatened or endangered in California and elsewhere. This species had not begun to flower at the time of the April 21, 2006 field survey and could not be positively identified. Therefore, we are not certain of the species identification. Mesa horkelia is located about 10 feet from home site 3 and 4 access roads and home site 1A. No loss of mesa horkelia would occur based on the development plans provided to Padre Associates. However, we recommend areas supporting this species be flagged or monitored during construction to prevent inadvertent impacts.

Southern California Black Walnut. This species is a tree with long, pinnate leaves and hard, round fruits. Southern California black walnut has been placed on List 4 by the California Native Plant Society, noting it is a plant of limited distribution, but not rare or endangered. Based on Padre Associates experience, this species is very common on Sulphur Mountain, mostly on north-facing slopes. A seedling (3 feet tall) is located within the access road to home site 4 and would be removed. This impact is considered less than significant due to the abundance of this species in the project area and immature status of the plant to be removed.

Plectritis. This species is a tiny spring-flowering annual herb in the valerian family. Plectritis is considered a locally important plant species based on a consensus of opinion by local botanists. This species is not recognized as needing conservation by the California Native Plant Society. Plectritis was found along the access roads to home sites 3 and 4, but is unlikely to be removed by planned minor widening and paving. However, we recommend areas supporting this species be flagged or monitored during construction to prevent inadvertent impacts.

Conclusion

No significant impacts to special-status species would occur based on development plans provided to Padre Associates. However, special-status plant species are located in close proximity to proposed access road improvements and/or home sites and may be inadvertently affected. Therefore, we recommend these areas be flagged or monitored during construction.

*

*

*

Should you have any questions, please contact me at extension 13 at your earliest convenience.

Sincerely,

Padre Associates, Inc.

Matt Ingamells
Senior Biologist

Attachment: Plant species list

**Vascular Plants Observed within/adjacent to Proposed Improvements
at the Holly Property (SD05-0043), Sulphur Mountain, California**

Scientific Name	Common Name	Habit	Wetland Indicator		Family
			Status		
<i>Achillea millefolium</i>	Yarrow	PH	FACU	.	Asteraceae
<i>Adenostoma fasciculatum</i>	Chamise	S	.	.	Rosaceae
<i>Amsinckia menziesii</i>	Fiddleneck	AH	.	.	Boraginaceae
<i>Anagallis arvensis</i> *	Scarlet pimpernel	AH	FAC	.	Primulaceae
<i>Artemisia californica</i>	California sagebrush	S	.	.	Asteraceae
<i>Astragalus gambelianus</i>	Small milk-vetch	AH	.	.	Fabaceae
<i>Astragalus trichopodus</i> var. <i>phoxus</i>	Milk-vetch	PH	.	.	Fabaceae
<i>Avena barbata</i> *	Slender wild oat	AG	.	.	Poaceae
<i>Baccharis pilularis</i> [B.p. var. <i>consanguinea</i>]	Coyote brush	S	.	.	Asteraceae
<i>Baccharis salicifolia</i> [B. <i>viminea</i> ; B. <i>glutinosa</i>]	Mule fat, seep-willow	S	FACW	.	Asteraceae
<i>Bromus carinatus</i> var. <i>carinatus</i>	California brome	AG	.	.	Poaceae
<i>Bromus diandrus</i> *	Ripgut grass	AG	.	.	Poaceae
<i>Bromus hordeaceus</i> *	Soft chess	AG	FACU-	.	Poaceae
<i>Bromus madritensis</i> ssp. <i>rubens</i> *	Red brome	AG	NI	.	Poaceae
<i>Calandrinia ciliata</i>	Red maids	AH	FACU	.	Portulacaceae
<i>Calochortus</i> sp.	Mariposa lily	PH	.	.	Liliaceae
<i>Calystegia macrostegia</i> ssp. <i>cyclostegia</i>	Morning-glory	PV	.	.	Convolvulaceae
<i>Camissonia confusa</i>	Evening primrose	AH	.	.	Onagraceae
<i>Cardamine californica</i>	Milk maids	AH	.	.	Brassicaceae
<i>Carduus pycnocephalus</i> *	Italian thistle	AH	.	.	Asteraceae
<i>Castilleja affinis</i> ssp. <i>affinis</i>	Indian paintbrush	PH	.	.	Scrophulariaceae
<i>Castilleja exerta</i> ssp. <i>exerta</i>	Purple owl's clover	PH	.	.	Scrophulariaceae
<i>Cercocarpus betuloides</i> var. <i>betuloides</i>	Birchleaf mountain mahogany	S	.	.	Rosaceae
<i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i>	Soap lily	PH	.	.	Liliaceae
<i>Clarkia</i> sp.	Clarkia	AH	.	.	Onagraceae
<i>Claytonia perfoliata</i>	Miner's lettuce	AH	FACU	.	Potulacaceae
<i>Cordylanthus rigidus</i> ssp. <i>rigidus</i>	Birds beak	AH	.	.	Scrophulariaceae
<i>Crassula connata</i>	Pygmy weec	AH	FAC	.	Crassulaceae
<i>Cryptantha muricata</i>	Cryptantha	AH	.	.	Boraginaceae
<i>Daucus pusillus</i>	Daucus	AH	.	.	Apiaceae
<i>Dichelostemma capitatum</i> ssp. <i>capitatum</i>	Blue dicks	PH	.	.	Liliaceae
<i>Dryopteris arguta</i>	Wood fern	PF	.	.	Dryopteridaceae
<i>Emmenanthe peduliflora</i>	Whispering bells	AH	.	.	Hydrophyllaceae
<i>Epilobium canum</i> ssp. <i>canum</i>	Californian fuschia	S	.	.	Onagraceae
<i>Eremocarpus setigerus</i>	Dove weec	AH	.	.	Euphorbiaceae
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	Golden yarrow	PH	.	.	Asteraceae
<i>Erodium cicutarium</i> *	Redstem filaree	AH	.	.	Geraniaceae
<i>Filago californica</i>	California filago	AH	.	.	Asteraceae
<i>Gilia angelensis</i>	Gilia	AH	.	.	Polemoniaceae
<i>Galium aparine</i> *	Goose grass	AH	.	.	Rubiaceae
<i>Galium angustifolium</i> ssp. <i>angustifolium</i>	Chaparral bedstraw	S	.	.	Rubiaceae
<i>Galium porrigens</i> var. <i>porrigens</i>	Climbing bedstraw	PH	.	.	Rubiaceae
<i>Geranium molle</i> *	Geranium	AH	.	.	Geraniaceae
<i>Gnaphalium californicum</i>	Green everlasting	A/BH	.	.	Asteraceae
<i>Heteromeles arbutifolia</i> [var. <i>macrocarpa</i>]	Toyon	S	.	.	Rosaceae
<i>Hirschfeldia incana</i> *	Summer mustard	BH	.	.	Brassicaceae
<i>Hordeum murinum</i> ssp. <i>leporinum</i> *	Wild barley	AG	.	.	Poaceae
<i>Horkelia cuneata</i>	Horkelia	PH	.	.	Rosaceae
<i>Juglans californica</i> var. <i>californica</i>	Southern California black walnut	T	FAC	.	Juglandaceae
<i>Keckiella cordifolia</i> [Penstemon <i>cordifolius</i>]	Heart-leaved bush penstemon	S	.	.	Scrophulariaceae
<i>Lactuca serriola</i> *	Prickly lettuce	AH	.	.	Asteraceae
<i>Lasthenia californica</i>	California goldfields	AH	.	.	Asteraceae
<i>Lathyrus vestitus</i>	Chaparral pea	PV	.	.	Fabaceae
<i>Lessingia filaginifolia</i> var. <i>filaginifolia</i>	Cudweed-aster	PH	.	.	Asteraceae
<i>Lolium multiflorum</i> *	Italian rye-grass	AG	FAC*	.	Poaceae
<i>Lomatium dasycarpum</i>	Lomatium	PH	.	.	Apiaceae
<i>Lomatium lucidum</i>	Lomatium	PH	.	.	Apiaceae
<i>Lotus scoparius</i> var. [ssp.] <i>scoparius</i>	Deerweed, California broom	PH	.	.	Fabaceae
<i>Lotus wrangelianus</i>	Annual lotus	AH	.	.	Fabaceae
<i>Lupinus bicolor</i>	Minature lupine	AH	.	.	Fabaceae
<i>Lupinus longifolius</i>	Bush lupine	S	.	.	Fabaceae
<i>Lupinus succulentus</i>	Succulent lupine	AH	.	.	Fabaceae
<i>Madia gracilis</i>	Slender tarplant	AH	.	.	Asteraceae
<i>Malacothamnus fasciculatus</i>	Chaparral mallow	S	.	.	Malvaceae
<i>Malacothrix clevelandii</i>	Annual malacothrix	AH	.	.	Asteraceae
<i>Malacothrix saxatilis</i> ssp. <i>tenuifolia</i>	Malacothrix	AH	.	.	Asteraceae
<i>Malosma laurina</i>	Laurel sumac	S	.	.	Anacardiaceae
<i>Malva parviflora</i> *	Cheese weec	AH	.	.	Malvaceae
<i>Marrubium vulgare</i> *	Horehound	PH	.	.	Lamiaceae

**Vascular Plants Observed within/adjacent to Proposed Improvements
at the Holly Property (SD05-0043), Sulphur Mountain, California**

Scientific Name	Common Name	Habit	Wetland Indicator		Family
			Status		
<i>Medicago polymorpha</i> *	Bur clover	AH	.		Fabaceae
<i>Melica imperfecta</i>	Melic grass	PG	.		Poaceae
<i>Melilotus indica</i> *	Yellow sweet-clover	AH	FAC		Fabaceae
<i>Nassella lepida</i>	Foothill needlegrass	PG	.		Poaceae
<i>Navarretia atractylodes</i>	Navarretia	AH	.		Polemoniaceae
<i>Paeonia californica</i>	California peony	PH	.		Paeoniaceae
<i>Penstemon heterophyllus</i>	Penstemon	PH	.		Scrophulariaceae
<i>Phacelia imbricata</i>	Imbricate phacelia	PH	.		Hydrophyllaceae
<i>Phacelia ramosissima</i>	Branching phacelia	PH	.		Hydrophyllaceae
<i>Phacelia viscida</i>	Sticky phacelia	AH	.		Hydrophyllaceae
<i>Pholistoma auritum</i> var. <i>auritum</i>	Fiesta flower	PH	.		Hydrophyllaceae
<i>Picris echioides</i> *	Prockly ox tongue	AH	.		Asteraceae
<i>Platystemon californicus</i>	Cream cups	AH	.		Papaveraceae
<i>Plectritis ciliosa</i> ssp. <i>insignis</i>	Plectritis	AH	.		Valerianaceae
<i>Poa secunda</i> ssp. <i>secunda</i>	One-sided bluegrass	PG	.		Poaceae
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	Coast live oak	T	.		Fagaceae
<i>Ranunculus californicus</i>	California buttercup	PH	.		Ranunculaceae
<i>Rhamnus ilicifolia</i>	Holly-leaf redberry	S	.		Rhamnaceae
<i>Ribes malvaceum</i>	Chaparral currant	S	.		Grossulariaceae
<i>Ribes californica</i>	California gooseberry	S	.		Grossulariaceae
<i>Salvia leucophylla</i>	Purple sage	S	.		Lamiaceae
<i>Sambucus mexicana</i>	Mexican elderberry	T	FAC		Caprifoliaceae
<i>Sanicula bipinnata</i>	Sanicle	PH	.		Apiaceae
<i>Sanicula crassicaulis</i>	Pacific sanicle	PH	.		Apiaceae
<i>Silene gallica</i> *	Windmill pink	AH	.		Caryophyllaceae
<i>Silybum marianum</i> *	Milk thistle	AH	.		Asteraceae
<i>Sisyrinchium bellum</i>	Blue-eyed grass	PH	.		Iridaceae
<i>Sisymbrium orientale</i> *	Sisymbrium	AH	.		Brassicaceae
<i>Solanum xanthi</i>	Purple nightshade	PH	.		Solanaceae
<i>Sonchus asper</i> *	Prickly sow thistle	AH	.		Asteraceae
<i>Sonchus oleraceus</i> *	Sow thistle	AH	.		Asteraceae
<i>Stachys bullata</i>	Hedge nettle	AH	.		Scrophulariaceae
<i>Stellaria media</i> *	Chickweed	AH	.		Caryophyllaceae
<i>Thysanocarpus laciniatus</i>	Lace pod	AH	.		Brassicaceae
<i>Toxicodendron diversilobum</i> [<i>Rhus diversiloba</i>]	Poison oak	S/V	.		Anacardiaceae
<i>Trifolium gracilentum</i>	Clover	AH	.		Fabaceae
<i>Trifolium wildenovii</i>	Tomcat clover	AH	.		Fabaceae
<i>Verbena lasiostachys</i> var. <i>scabrida</i>	Verbena	PH	.		Verbenaceae
<i>Vicia benghalensis</i> *	Purple vetch	AV	.		Fabaceae
<i>Vicia sativa</i> ssp. <i>nigra</i> *	Narrow-leaf vetch	AV	FACU		Fabaceae
<i>Viola pedunculata</i>	Johnny jump-up	PH	.		Violaceae
<i>Vulpia microstachys</i> var. <i>pauciflora</i>	Annual fescue	AG	.		Poaceae

Notes: Scientific nomenclature follows Hickman (1993) and California Native Plant Society (2001)

(1): eastern portion of Oilfield not as intensively surveyed, some species found in western portion may occur in eastern portion

An "*" indicates non-native species which have become naturalized or persist without cultivation

Habit definitions:

- AF = annual fern or fern ally.
- 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.

Wetland indicator status (Reed 1988): OBL = obligate wetland species, occurs almost always in wetlands (>99% probability)

FACW = facultative wetland species, usually found in wetlands (67-99% probability)

FAC = facultative species, equally likely to occur in wetlands or nonwetlands (34-67% probability)

FACU = facultative upland species, usually occur in nonwetlands (67-99% probability)

+ or - symbols are modifiers that indicate greater or lesser affinity for wetland habitats

NI = no indicator has been assigned due to a lack of information to determine indicator status

* = a tentative assignment to that indicator status by Reed (1988)

A period "." indicates that no wetland indicator status has been given in Reed (1988)