

APPENDICES

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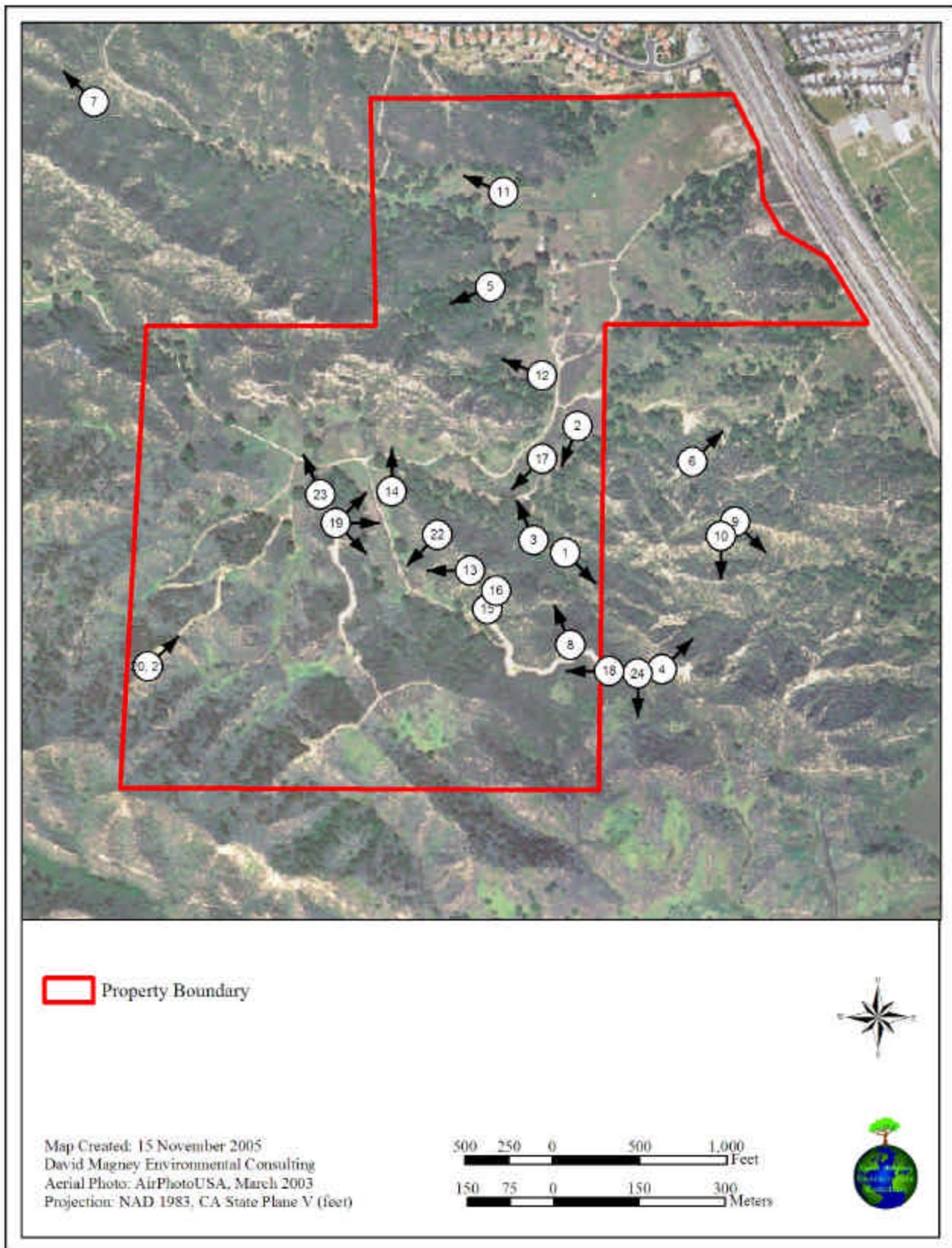
**APPENDIX D.
WILDLIFE OBSERVED AND EXPECTED
AT LYONS CANYON RANCH**

**OVERSIZED MAPS:
(1) COLOR U.S.G.S. OAT MOUNTAIN QUAD SHEET; AND
(2) LYONS CANYON RANCH SITE PLANS**

**APPENDIX A.
INITIAL STUDY QUESTIONNAIRE**

APPENDIX B.
PHOTOGRAPH KEY MAP OF LYONS CANYON RANCH
AND SURROUNDING AREA WITH PHOTOGRAPHS

Photograph Key Map of Lyons Canyon Ranch and Surrounding Area



Photographs for Key Map of Lyons Canyon Ranch and Surrounding Area Surrounding



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1: Steep canyon slope dominated by chaparral vegetation after fire. 2: Lyon Canyon Creek near east end of SEA 63 after fire.



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3: Steep canyon slope dominated by chaparral vegetation with Coast Live Oak Woodland in lowland areas of the site after fire; view NNW.
4: View NE from near SE corner of site after fire.



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5: Coast Live Oak Woodland vegetation after fire W of old house site; view W.
6: Small tributary canyon to Lyon Canyon after fire; view NNW.



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7: Steep canyon slope dominated by chaparral vegetation after fire W of project site; view W.
8: Lyon Canyon Creek near east end of SEA 63 after fire as seen from near top of ridge to the south; view NNW.



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9: Steep canyon dominated by chaparral vegetation after fire with Coast Live Oak Woodland in canyon bottom on adjacent Taylor-Prentice property; view SSE with I-5 in upper left of photo.
10: Same canyon as in right photo off project site.

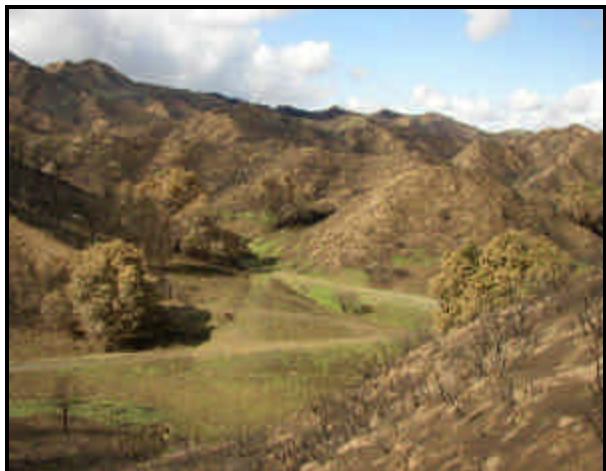


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11: Unnamed main tributary creek to Lyon Canyon Creek after fire; view W.
12: Man-made ponds just NW of east end of SEA 63 in Lyon Canyon after fire, dominated by Mulefat; view NW.



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13: SW area of project site dominated by chaparral vegetation and scattered Coast Live Oak trees after fire; view W from ridge between Lyon Canyon and first major southern tributary canyon.

14: Lyon Canyon Creek and SEA 63 after fire at confluence of first major southern tributary canyon; view N towards Lyon Canyon Creek.



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15: Resprouting Chamise after fire in first southern main tributary canyon to Lyon Canyon.

16: Fossils exposed on primary ridge south of Lyon Canyon.



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17: Lyon Canyon Creek within the eastern end of SEA 63 after fire and winter 2004 rains; view upstream/SW.

18: Burned Chamise Chaparral on S-facing slope at SW corner of project site; view W.



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Pseudo-panorama of first southern tributary canyon to Lyon Canyon; view eastward.



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20: Southwestern most onsite tributary canyon to Lyon Canyon Creek; view N.



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22: Southern tributary canyon to Lyon Canyon Creek; view WSW.



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23: View of Lyon Canyon from southern tributary canyon; view NNW.



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24: View south of Towsley Canyon tributary.

APPENDIX C.
PLANT SPECIES OBSERVED AT LYONS CANYON RANCH

Plant Species Observed at Lyons Canyon Ranch

Scientific Name ²⁷	Common Name	Habit ²⁸	WIS ²⁹	Reported By (Voucher No.) ³⁰	Estimated Abundance within the Project Site ³¹
PTERIDOPHYTES – FERNS & ALLIES					
Pteridaceae – Brake Fern Family					
<i>Pellaea andromedifolia</i>	Coffee Fern	PF	.	BonTerra	Uncommon
<i>Pellaea mucronata</i> var. <i>mucronata</i>	Birdsfoot Fern	PF	.	DMEC	Uncommon
<i>Pentagramma triangularis</i>	Goldenback Fern	PH	.	DMEC & BonTerra	Uncommon
Selaginellaceae – Spike-Moss Family					
<i>Selaginella bigelovii</i>	Bigelow Spike-moss	PF	.	DMEC & BonTerra	Uncommon
GYMNOSPERMS					
Cupressaceae – Cypress Family					
<i>Cupressus</i> sp.*	Cypress	T	.	BonTerra	Uncommon
Pinaceae – Pine Family					
<i>Pinus</i> sp.*	Pine	T	.	BonTerra	Scarce
ANGIOSPERMAE – FLOWERING PLANTS					
DICOTYLEDONES - DICOTS					
Amaranthaceae – Amaranth Family					
<i>Amaranthus albus</i> *	Tumbleweed	AH	FACU	DMEC (170-05) & BonTerra (10,487)	Common
Anacardiaceae – Sumac Family					
<i>Malosma laurina</i>	Laurelleaf Sumac	S	.	DMEC & BonTerra	Scarce
<i>Rhus ovata</i>	Sugar Bush	S	.	DMEC & BonTerra	Common
<i>Rhus trilobata</i> var. <i>quinata</i>	Slender-twig Skunkbrush	S	NI	DMEC (167-05) & BonTerra	Uncommon
<i>Toxicodendron diversilobum</i>	Poison Oak	PV	.	DMEC & BonTerra	Common
Apiaceae - Carrot Family					
<i>Bowlesia incana</i>	American Bowlesia	AH	FACU*	BonTerra	Scarce
<i>Conium maculatum</i> *	Poison Hemlock	PH	FACW	DMEC & BonTerra	Uncommon

²⁷* = Introduced/nonnative plant species. **Bold**= Special-status species (discussed below in the Special-Status Biological Resources section). Scientific names follow Hickman (1993), Flora of North America Editorial Committee (1993-2005), and Boyd (1999).

²⁸ Habit definitions: AG = annual grass or graminoid; AH = annual herb; PF = perennial fern or fern ally; PG = perennial grass or graminoid; PH = perennial herb; PV = perennial vine; S=shrub; T = tree.

²⁹ WIS = Wetland Indicator Status. The following code definitions are according to 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 (34-66% probability).

FACU = facultative upland species, usually found 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).

Parentheses around a status indicate a wetland status as suggested by David L. Magney based on extensive field observations.

³⁰ Species reported only by BonTerra Consulting (including Bowland & Associates and Scott White) were not observed by DMEC. DMEC did not conduct floristic surveys prior to the wildfire; however, DMEC conducted surveys approximately one year following the wildfire. Vouchers listed for BonTerra Consulting are those of Scott White, an independent consultant, who deposited his vouchers at RSA.

³¹ Scarce=less than 100 individuals; Uncommon=100 to less than 1,000 individuals; Common=1,000 individuals or more.

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<i>Daucus pusillus</i>	Rattlesnake Weed	AH	.	DMEC & BonTerra	Common
<i>Foeniculum vulgare*</i>	Sweet Fennel	PH	FACU	DMEC & BonTerra	Uncommon
<i>Sanicula crassicaulis</i>	Pacific Sanicle	PH	.	DMEC & BonTerra (10,424)	Common
<i>Tauschia arguta</i>	Tauschia	PH	.	DMEC	Uncommon
Apocynaceae – Dogbane Family					
<i>Vinca major*</i>	Periwinkle	PV	.	BonTerra	Uncommon
Asclepiadaceae – Milkweed Family					
<i>Asclepias californica</i>	California Milkweed	PH	.	BonTerra (10,402)	Uncommon
<i>Asclepias eriocarpa</i>	Indian Milkweed	PH	.	DMEC & BonTerra	Scarce
<i>Asclepias fascicularis</i>	Narrow-leaved Milkweed	PH	FAC	DMEC & BonTerra	Uncommon
Asteraceae – Sunflower Family					
<i>Achillea millefolium</i>	Common White Yarrow	PH	FACU	BonTerra (10,446)	Uncommon
<i>Achyranthaena mollis</i>	Blow-wives	AH	.	BonTerra (10,489)	Scarce
<i>Acourtia microcephala</i>	Sacapellote	PH	.	DMEC & BonTerra (10,434)	Scarce
<i>Agoseris grandiflora</i>	Large-flowered Mountain Dandelion	PH	.	BonTerra (10,442)	Uncommon
<i>Ambrosia acanthicarpa</i>	Burweed	AH	.	DMEC	Common
<i>Ambrosia confertiflora</i> ³²	Weakleaf Burweed	AH	.	BonTerra (10,484)	Uncommon
<i>Ambrosia psilostachya</i> var. <i>californica</i>	Western Ragweed	AH	FAC	DMEC & BonTerra	Common
<i>Ancistrocarphus filagineus</i>	Woolly Fish Hooks	AH	.	BonTerra	Uncommon
<i>Artemisia californica</i>	California Sagebrush	S	.	DMEC & BonTerra	Common
<i>Artemisia douglasiana</i>	Mugwort	PH	FACW	DMEC & BonTerra	Common
<i>Artemisia dracunculus</i>	Tarragon	PH	.	BonTerra	Uncommon
<i>Artemisia tridentata</i> spp. <i>Tridentata</i>	Great Basin Sagebrush	S	.	DMEC & BonTerra	Scarce
<i>Baccharis pilularis</i>	Coyote Brush	S	.	DMEC & BonTerra	Common
<i>Baccharis salicifolia</i>	Mulefat	S	FACW	DMEC & BonTerra	Common
<i>Carthamus tinctorius</i> *	Safflower	AH	.	BonTerra (10,444)	Scarce
<i>Bidens pilosa</i>	Common Beggar Ticks	AH	FACW	BonTerra	Uncommon
<i>Brickellia californica</i>	California Brickellbush	S	FACU	DMEC	Uncommon
<i>Carduus pycnocephalus</i> *	Italian Thistle	AH	.	DMEC & BonTerra	Common
<i>Centaurea melitensis</i> *	Tocalote	AH	.	DMEC & BonTerra	Common
<i>Chrysothamnus nauseosus</i> ssp. ?	Rubber Rabbitbrush	S	.	BonTerra	Uncommon
<i>Cirsium occidentale</i> var. <i>californica</i>	Red Western Thistle	AH	.	DMEC & BonTerra	Uncommon
<i>Cirsium occidentale</i> var. <i>occidentale</i>	Western Thistle	AH	.	BonTerra	Uncommon
<i>Cirsium vulgare</i> *	Bull Thistle	AH	FACU	DMEC & BonTerra	Common
<i>Cnicus benedictus</i> *	Blessed Thistle	PH	.	DMEC & BonTerra	Uncommon
<i>Conyza canadensis</i>	Horseweed	AH	FAC	DMEC & BonTerra	Common
<i>Corethrogyne filaginifolia</i>	California Cudweed-aster	PH	.	DMEC & BonTerra	Uncommon

³² Northernmost known occurrence of *Ambrosia confertiflora* in Los Angeles County and one of only eight known populations (based on Jepson Herbarium database search). Only one likely extirpated population in Ventura County (Marr Ranch in Simi Valley – A.C. Sanders 22916 UCR).

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<i>Deinandra fasciculata</i>	Fascicled Tarplant	AH	.	DMEC (181-05) & BonTerra (10,414)	Common
<i>Encelia californica</i>	California Bush Sunflower	S	.	DMEC & BonTerra	Uncommon
<i>Ericameria ericoides</i> ssp. <i>ericoides</i> ³³	Mock Heather	S	.	DMEC (822-03) ³⁴	Uncommon
<i>Ericameria palmeri</i> var. <i>pachylepis</i>	Palmer Goldenbush	S	.	Bowlard ³⁵	Uncommon
<i>Ericameria pinifolia</i>	Pine Goldenbush	S	.	BonTerra (10,403)	Uncommon
<i>Erigeron foliosus</i> var. ?	Leafy Fleabane Daisy	PH	.	BonTerra (10,412)	Uncommon
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	Golden Yarrow	PH	.	DMEC & BonTerra	Uncommon
<i>Filago californica</i>	Fluffweed	AH	.	BonTerra (10,427)	Common
<i>Ganzania linearis</i> *	Trailing Ganzania	S	.	BonTerra	Uncommon
<i>Hazardia squarrosa</i> var. <i>squarrosa</i> ?	Sawtooth Goldenbush	S	.	DMEC & BonTerra	Uncommon
<i>Hedypnois cretica</i> *	Crete Hedypnois	AH	.	BonTerra	Uncommon
<i>Helianthus annuus</i>	Western Sunflower	AH	FAC-	BonTerra	Uncommon
<i>Helianthus gracilentus</i>	Slender Sunflower	AH	.	BonTerra	Uncommon
<i>Heterotheca grandiflora</i>	Telegraph Weed	BH	.	DMEC & BonTerra	Uncommon
<i>Heterotheca sessiliflora</i> ssp. <i>echioides</i>	Hairy Golden Aster	BH	.	DMEC (178-05)	Scarce
<i>Heterotheca sessiliflora</i> ssp. <i>sessiliflora</i>	Hairy Golden Aster	BH	.	BonTerra	Scarce
<i>Heterotheca subaxillaris</i>	Camphor Weed	BH	.	BonTerra (10,498)	Scarce
<i>Lactuca biennis</i> *	Prickly Lettuce	BH	NI*	BonTerra	Uncommon
<i>Lactuca saligna</i> *	Willow Lettuce	AH	FACU	BonTerra	Uncommon
<i>Lactuca serriola</i> *	Prickly Wild Lettuce	AH	FAC	DMEC & BonTerra	Uncommon
<i>Madia elegans</i>	Elegant Madia	AH	.	BonTerra	Uncommon
<i>Madia gracilis</i>	Slender Madia	AH	.	DMEC & BonTerra	Uncommon
<i>Madia sativa</i> (or <i>gracilis</i>)	Common Tarplant	AH	.	BonTerra (10,490)	Scarce
<i>Malacothrix clevelandii</i>	Cleveland's Cliff-aster	AH	?	BonTerra	Scarce
<i>Malacothrix saxatilis</i> var. <i>tenuifolia</i>	Slenderleaf Cliff-aster	PH	.	DMEC & BonTerra	Common
<i>Micropus californicus</i> var. <i>californicus</i>	Slender Cottonseed	AH	(FAC)	BonTerra	Uncommon
<i>Microseris douglasii</i>	Douglas' Microseris	AH	.	BonTerra	Common
<i>Microseris lindleyi</i>	Silver Puffs	AH	.	BonTerra	Uncommon

³³ *Ericameria ericoides* typically occurs along the coast and its presence this far inland represents a significant disjunction and extralimital occurrence, and is therefore considered a locally rare species. It is possible that its presence along The Old Road represents a waif that was included in a hydroseed mulch applied for erosion control on the road cut immediately south of Lyon Canyon, along with the introduced *Eriogonum fasciculatum* var. *fasciculatum* at this site.

³⁴ The fact that three species of *Ericameria* have been identified as occurring onsite raises questions about proper identification of one or more of the species since all three species are morphologically similar; however, a search of the Jepson Herbarium online database found that *E. pinifolia* has been collected from Elizabeth Lake in the Liebre Mountains to the north south to Pacoima, including in Newhall both north and south of Lyon Canyon. Furthermore, *E. palmeri* var. *pachylepis* has been collected in the Newhall area, north and east of the project site.

³⁵ BonTerra reported *Ericameria palmeri* without designating which variety is present, for which protocol requires an assumption that the taxon is the type variety: *Ericameria palmeri* var. *palmeri*. Bowlard & Associates reported *E. palmeri* var. *pachylepis*. Scott White, subcontractor to BonTerra, tentatively identified it as *E. palmeri* var. *pachylepis*, which is probably why BonTerra's did not fully identify it as to variety in their report. DMEC concludes that *E. palmeri* var. *pachylepis* was present onsite.

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<i>Picris echioides</i> *	Bristly Ox-tongue	AH	FAC*	DMEC & BonTerra	Common
<i>Pseudognaphalium californicum</i>	Green Everlasting	PH	FACW-	DMEC & BonTerra (10,500)	Common
<i>Pseudognaphalium luteo-album</i> *	Cudweed Everlasting	AH	FACW-	DMEC & BonTerra	Uncommon
<i>Pseudognaphalium microcephalum</i>	White Everlasting	PH	.	BonTerra	Uncommon
<i>Psilocarphus tenellus</i> var. <i>tenellus</i>	Slender Woollyheads	AH	FAC	BonTerra	Scarce
<i>Rafinesquia californica</i>	California Chicory	AH	.	BonTerra	Scarce
<i>Senecio flaccidus</i> var. <i>douglasii</i>	Douglas Butterweed	S	.	BonTerra	Uncommon
<i>Senecio vulgaris</i> *	Common Groundsel	AH	NI*	BonTerra (10,429)	Uncommon
<i>Silybum marianum</i> *	Milk Thistle	AH	.	DMEC & BonTerra	Common
<i>Sonchus asper</i> *	Prickly Sow-thistle	AH	FAC	DMEC & BonTerra	Uncommon
<i>Sonchus oleraceus</i> *	Common Sow-thistle	AH	NI*	DMEC & BonTerra	Common
<i>Stephanomeria virgata</i>	Twiggy Wreath Plant	AH	.	DMEC	Uncommon
<i>Uropappus lindleyi</i>	Silverpuffs	AH	.	BonTerra	Uncommon
Boraginaceae – Borage Family					
<i>Amsinckia menziesii</i> var. <i>intermedia</i>	Rancher's Fire	AH	.	DMEC & BonTerra	Uncommon
<i>Cryptantha</i> sp.	a Forget-Me-Not	AH	.	BonTerra (10,419)	Uncommon
<i>Cryptantha intermedia</i>	Common Forget-Me-Not	AH	.	DMEC & BonTerra (10,423)	Common
<i>Cryptantha muricata</i>	Prickly Forget-Me-Not	AH	.	DMEC & BonTerra (10,441)	Common
<i>Heliotropium curassavicum</i>	Alkali Heliotrope	PH	OBL	DMEC & BonTerra	Uncommon
<i>Nemophila</i> sp.	Nemophila	AH	.	DMEC	Uncommon
<i>Pectocarya penicillata</i>	Winged Pectocarya	AH	.	BonTerra	Scarce
<i>Plagiobothrys nothofulvus</i>	Rusty Popcornflower	AH	FAC	BonTerra	Uncommon
Brassicaceae – Mustard Family					
<i>Brassica nigra</i> *	Black Mustard	AH	.	DMEC & BonTerra	Common
<i>Capsella bursa-pastoris</i> *	Shepherd's Purse	AH	FAC-	BonTerra	Uncommon
<i>Hirschfeldia incana</i> *	Summer Mustard	BH	.	DMEC & BonTerra	Common
<i>Lepidium latifolium</i> *	Broad-leaved Peppergrass	AH	FACW	BonTerra	Uncommon
<i>Sisymbrium altissimum</i> *	Tumble Mustard	AH	FACU	BonTerra	Common
<i>Sisymbrium irio</i> *	London Rocket	AH	.	DMEC & BonTerra	Common
<i>Sisymbrium officinale</i> *	Hedge-mustard	AH	.	BonTerra	Uncommon
<i>Sisymbrium orientale</i> *	Hare's Ear Cabbage	AH	.	BonTerra	Common
<i>Thysanocarpus laciniatus</i>	Narrow-leaved Lacepod	AH	.	BonTerra	Scarce
Caprifoliaceae – Honeysuckle Family					
<i>Lonicera interrupta</i>	Honeysuckle	S	.	BonTerra	Uncommon
<i>Sambucus mexicana</i>	Mexican Elderberry	S	FAC	DMEC & BonTerra	Common
Caryophyllaceae – Pink Family					
<i>Silene gallica</i> *	Windmill Pink	AH	.	BonTerra	Uncommon
<i>Spergula arvensis</i> *	Corn Spurry	AH	.	BonTerra	Uncommon
<i>Stellaria media</i> *	Common Chickweed	AH	FACU	DMEC & BonTerra	Uncommon



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Chenopodiaceae Goosefoot Family					
<i>Atriplex canescens</i>	Fourwing Saltbush	S	FACU	BonTerra	Uncommon
<i>Atriplex rosea</i>	Redscale	AH	FACU	BonTerra	Uncommon
<i>Atriplex semibaccata</i> *	Australian Saltbush	S	FAC	DMEC (177-05) & BonTerra	Uncommon
<i>Atriplex serenana</i> var. <i>serenana</i>	Bracted Saltscale	AH	.	DMEC (177-05) & BonTerra (10,497)	Uncommon
<i>Chenopodium album</i> *	Lambsquarters	AH	FAC	DMEC (182-05) & BonTerra	Uncommon
<i>Chenopodium californicum</i>	Californica Goosefoot	PH	.	BonTerra	Scarce
<i>Chenopodium murale</i> *	Nettle-leaved Goosefoot	AH	.	BonTerra	Common
<i>Chenopodium pumilo</i> *	Tasmanian Goosefoot	AH	.	BonTerra	Uncommon
<i>Chenopodium</i> sp.	a goosefoot	AH	?	BonTerra	Uncommon
<i>Salsola tragus</i> *	Russian Thistle	AH	FACU+	DMEC	Uncommon
Cistaceae – Rock Rose Family					
<i>Helianthemum scoparium</i>	Rush Rose	PH	.	BonTerra (10,486)	Scarce
Convolvulaceae – Morning-Glory Family					
<i>Calystegia macrostegia</i> ssp. <i>intermedia</i>	Chaparral Morning-glory	PV	.	DMEC & BonTerra	Scarce
<i>Calystegia peirsonii</i>	Pierson's Morning-glory	PV	.	BonTerra (10,443)	Scarce
<i>Convolvulus arvensis</i> *	Field Bindweed	PV	.	DMEC & BonTerra	Uncommon
<i>Cuscuta californica</i>	California Dodder	AV	.	DMEC & BonTerra	Uncommon
Crassulaceae – Stonecrop Family					
<i>Crassula connata</i>	Sand Pygmy Weed	AH	FAC	BonTerra	Scarce
<i>Dudleya lanceolata</i>	Lanceleaf Live-forever	PH	.	BonTerra	Scarce
Cucurbitaceae Gourd Family					
<i>Cucurbita foetidissima</i>	Coyote Melon	PV	.	BonTerra	Uncommon
<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	Large-fruited Man-root	PV	.	DMEC & BonTerra	Common
Ericaceae – Heath Family					
<i>Arctostaphylos glauca</i>	Bigberry Manzanita	S	.	DMEC & BonTerra	Uncommon
Euphorbiaceae – Spurge Family					
<i>Chamaesyce albomarginata</i>	Rattlesnake Weed	AH	.	DMEC & BonTerra	Scarce
<i>Chamaesyce maculata</i> *	Spotted Spurge	AH	.	BonTerra	Common
<i>Croton californicus</i> var. <i>californicus</i>	California Croton	PH	.	DMEC & BonTerra	Uncommon
<i>Eremocarpus setigerus</i>	Dove Weed	AH	.	DMEC & BonTerra	Common
<i>Euphorbia peplus</i> *	Petty Spurge	AH	.	DMEC & BonTerra	Uncommon
<i>Ricinus communis</i> *	Castor Bean	S	FACU	BonTerra	Uncommon
Fabaceae – Pea Family					
<i>Amorpha californica</i> var. <i>californica</i>	California False Indigo	S	FACU	DMEC (180-05) & BonTerra	Scarce
<i>Astragalus trichopodus</i> var. <i>phoxus</i>	Antisell Three-pod Milkvetch	PH	.	DMEC (168-05) & BonTerra	Uncommon
<i>Lathyrus vestitus</i> ssp. ?	Pacific Peavine	PV	.	DMEC & BonTerra	Uncommon
<i>Lotus corniculatus</i> *	Birdsfoot Trefoil	AH	FAC	BonTerra	Common
<i>Lotus micranthus</i>	Miniature Lotus	AH	.	BonTerra	Scarce
<i>Lotus purshianus</i> var. <i>purshianus</i>	Pursh's Lotus	AH	.	DMEC & BonTerra	Uncommon



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<i>Lotus salsuginosus</i> var. <i>salsuginosus</i>	Coastal Lotus	AH	.	DMEC & BonTerra (10,406)	Common
<i>Lotus scoparius</i> var. <i>scoparius</i>	Deerweed	S	.	BonTerra	Common
<i>Lotus strigosus</i>	Strigose Lotus	AH	.	DMEC & BonTerra (10,413)	Uncommon
<i>Lupinus bicolor</i>	Bicolored Lupine	AH	.	DMEC & BonTerra	Common
<i>Lupinus hirsutissimus</i>	Stinging Lupine	AH	.	DMEC & BonTerra (10,417)	Scarce
<i>Lupinus microcarpus</i> var. ?	Chick Lupine	AH	.	BonTerra	Scarce
<i>Lupinus sparsiflorus</i> ssp. <i>sparsiflorus</i>	Few-flowered Lupine	AH	.	DMEC & BonTerra (10,485)	Uncommon
<i>Lupinus succulentus</i>	Fleshy Lupine	AH	.	DMEC & BonTerra (10,408)	Common
<i>Lupinus truncatus</i>	Truncate-leaved Lupine	AH	.	DMEC & BonTerra	Scarce
<i>Medicago polymorpha</i> *	Bur-clover	AH	(FACU)	DMEC & BonTerra	Common
<i>Melilotus alba</i> *	White Sweetclover	AH	FACU+	DMEC & BonTerra	Common
<i>Melilotus indica</i> *	Sourclover	AH	FAC	DMEC & BonTerra	Common
<i>Robinia pseudoacacia</i> *	Black Locust	T	.	BonTerra	Uncommon
<i>Spartium junceum</i> *	Spanish Broom	S	.	BonTerra	Uncommon
<i>Trifolium gracilentum</i> (?)	Pin-point Clover	AH	.	BonTerra	Uncommon
<i>Trifolium hirtum</i> *	Rose Clover	AH	.	DMEC (174-05) & BonTerra	Uncommon
<i>Trifolium willdenovii</i>	Tomcat Clover	AH	.	BonTerra	Uncommon
Fagaceae – Oak Family					
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	Coast Live Oak	T	(FACU)	DMEC & BonTerra	Common
<i>Quercus berberidifolia</i>	Scrub Oak	S	.	DMEC & BonTerra	Uncommon
<i>Quercus douglasii</i>	Blue Oak (outside of project site)	T	.	DMEC & BonTerra	Scarce
<i>Quercus john-tuckeri</i> ³⁶	Tucker Oak (outside project site)	S	.	BonTerra	Scarce
<i>Quercus lobata</i>	Valley Oak	T	FAC*	DMEC & BonTerra	Uncommon
Geraniaceae – Geranium Family					
<i>Erodium botrys</i> *	Long-beaked Filaree	AH	.	BonTerra	Common
<i>Erodium cicutarium</i> *	Redstem Filaree	AH	.	DMEC & BonTerra	Common
Grossulariaceae – Gooseberry Family					
<i>Ribes aureum</i> var. <i>gracillimum</i>	Golden Current	S	.	BonTerra	Uncommon
<i>Ribes cf. malvaceum</i>	Chaparral Current	S	.	DMEC & BonTerra	Uncommon
Hydrophyllaceae – Waterleaf Family					
<i>Emmenanthe penduliflora</i> var. <i>penduliflora</i>	Whispering Bells	AH	.	DMEC & BonTerra	Uncommon
<i>Eriodictyon crassifolium</i> var. <i>nigrescens</i>	Thickleaf Yerba Santa	S	.	DMEC (183-05) & BonTerra	Uncommon
<i>Eucrypta chrysanthemifolia</i> var. <i>chrysanthemifolia</i>	Common Eucrypta	AH	.	DMEC & BonTerra (10,409)	Common
<i>Phacelia cf. brachyloba</i>	Lobed Phacelia	AH	.	DMEC	Uncommon
<i>Phacelia cicutaria</i> var. <i>hispida</i>	Caterpillar Phacelia	AH	.	DMEC & BonTerra	Uncommon

³⁶ The presence of *Quercus john-tuckeri* in this area is highly questionable as it is not known to occur in the Santa Susana Mountains. It more typically occurs at the edge of the Mojave Desert and Liebre Mountains in Los Angeles County and in the Cuyama Badlands in Ventura County. Furthermore, no vouchers were collected to support this claim by BonTerra, Scott White did not find it, and none of the arborists that surveyed the site found it.

Scientific Name ²⁷	Common Name	Habit ²⁸	WIS ²⁹	Reported By (Voucher No.) ³⁰	Estimated Abundance within the Project Site ³¹
<i>Phacelia distans</i>	Common Phacelia	AH	.	BonTerra	Uncommon
<i>Phacelia cf. imbricata</i>	Imbricate Phacelia	AH	.	DMEC & BonTerra	Uncommon
<i>Phacelia ramosissima</i> var. <i>latifolia</i>	Branching Phacelia	PH	.	BonTerra	Uncommon
<i>Phacelia tanacetifolia</i>	Tansy Phacelia	AH	.	BonTerra	Uncommon
<i>Phacelia viscida</i>	Sticky Phacelia	AH	.	BonTerra	Uncommon
Juglandaceae – Walnut Family					
<i>Juglans californica</i> var. <i>californica</i>	Southern Calif. Black Walnut	T	FAC	DMEC, BonTerra, and Bowland & Associates	Uncommon
Lamiaceae – Mint Family					
<i>Lamium amplexicaule</i> *	Henbit	AH	.	DMEC & BonTerra	Uncommon
<i>Marrubium vulgare</i> *	White Horehound	S	FAC	DMEC & BonTerra	Uncommon
<i>Salvia apiana</i>	White Sage	S	.	DMEC & BonTerra	Scarce
<i>Salvia columbariae</i>	Chia	AH	.	BonTerra	Scarce
<i>Salvia leucophylla</i>	Purple Sage	S	.	DMEC & BonTerra	Uncommon
<i>Salvia mellifera</i>	Black Sage	S	.	DMEC & BonTerra	Common
<i>Trichostema lanatum</i>	Woolly Blue-curls	S	.	BonTerra	Uncommon
<i>Trichostema lanceolatum</i>	Vinegar Weed	AH	.	DMEC (171-05) & BonTerra	Uncommon
Loasaceae – Stickleleaf Family					
<i>Mentzelia laevicaulis</i>	Blazing Star	AH	.	BonTerra	Scarce
<i>Mentzelia micrantha</i>	Tiny-flowered Stickleleaf	AH	.	DMEC (172-05) & BonTerra (10,418)	Scarce
Lythraceae – Loosestrife Family					
<i>Lagerstroemia indica</i> +	Crape-myrtle	T	.	BonTerra	Scarce
Magnoliaceae – Magnolia Family					
<i>Magnolia</i> sp. (probably <i>grandiflora</i>)+	Southern Magnolia	T	.	BonTerra	Scarce
Malvaceae – Mallow Family					
<i>Malacothamnus fasciculatus</i>	Chaparral Bush Mallow	S	.	DMEC (184-05) & BonTerra	Common
<i>Malva parviflora</i> *	Cheeseweed	AH	.	DMEC & BonTerra	Common
Myoporaceae-Myoporum Family					
<i>Myoporum laetum</i> +	Myoporum	S	.	DMEC & BonTerra	Common
Nyctaginaceae – Four-O'clock Family					
<i>Mirabilis laevis</i> var. <i>crassifolia</i>	California Wishbone Bush	PH	.	DMEC & BonTerra	Scarce
Oleaceae-Olive Family					
<i>Fraxinus dipetala</i>	California Flowering Ash	T	.	BonTerra	Scarce
Onagraceae-Primrose Family					
<i>Camissonia bistorta</i>	California Sun-cup	AH	.	BonTerra (10,440)	Uncommon
<i>Camissonia boothii</i>	Shredding Primrose	AH	.	BonTerra	Uncommon
<i>Camissonia californica</i>	Mustard Primrose	AH	.	DMEC & BonTerra	Uncommon
<i>Camissonia hirtella</i> (?)	Field Suncup	AH	.	BonTerra (10,432)	Uncommon
<i>Clarkia cylindrica</i>	Willow-herb Clarkia	AH	.	BonTerra (10,422) & Bowland & Assoc	Common

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<i>Clarkia epilobioides</i>	Willow-herb Clarkia	AH	.	BonTerra and Bowland & Assoc.	Common
<i>Clarkia purpurea</i> ssp. <i>quadrigivulnera</i>	Four-spotted Purple Clarkia	AH	.	BonTerra and Bowland & Assoc. (10,436)	Uncommon
<i>Clarkia unguiculata</i>	Elegant Clarkia	AH	.	BonTerra	Common
<i>Epilobium canum</i>	California Fuchsia	PH	.	BonTerra	Common
<i>Epilobium ciliatum</i> ssp. <i>ciliatum</i>	Northern Willow-herb	PH	FACW	DMEC	Uncommon
<i>Oenothera californica</i>	California Evening Primrose	PH	.	BonTerra	Common
Orobanchaceae – Broom-Rape Family					
<i>Castilleja exserta</i>	Purple Owl's Clover	AH	.	BonTerra	Uncommon
<i>Castilleja foliolosa</i>	Woolly Indian Paintbrush	PH	.	DMEC (173-05)	Scarce
<i>Cordylanthus rigidus</i> ssp. <i>setigerus</i>	Dark-tipped Rigid Bird's-beak	AH	.	DMEC (169-05)	Uncommon
<i>Orobanche bulbosa</i>	Chaparral Broom-rape	PH	.	BonTerra	Uncommon
<i>Orobanche fasciculata</i>	Pine Broom-rape	PH	.	BonTerra	Uncommon
Paeoniaceae – Peony Family					
<i>Paeonia californica</i>	California Peony	PH	.	DMEC & BonTerra (10,435)	Scarce
Papaveraceae – Poppy Family					
<i>Dendromecon rigida</i>	California Bush Poppy	S	.	BonTerra	Scarce
<i>Eschscholzia californica</i>	California Poppy	PH	.	DMEC & BonTerra	Uncommon
Phrymaceae – Monkeyflower Family					
<i>Mimulus longiflorus</i> [M. aurantiacus]	Bush Monkeyflower	S	.	DMEC & BonTerra	Uncommon
<i>Mimulus brevipes</i>	Wide-throat Monkeyflower	AH	.	BonTerra (10,421)	Scarce
Plantaginaceae – Plantain Family					
<i>Antirrhinum coulterianum</i>	White Snapdragon	AH	.	BonTerra	Scarce
<i>Antirrhinum multiflorum</i>	Sticky Snapdragon	S	.	DMEC (250-04)	Scarce
<i>Collinsia heterophylla</i>	Chinese Houses	AH	.	BonTerra	Uncommon
<i>KeckIELLA cordifolia</i>	Heart-leaved Bush Beardtongue	S	.	DMEC & BonTerra	Scarce
<i>KeckIELLA ternata</i> ssp. <i>ternata</i>	Blue-stemmed Bush Beardtongue	S	.	BonTerra	Scarce
<i>Penstemon centranthifolius</i>	Scarlet Bugler	PH	.	BonTerra	Uncommon
<i>Penstemon heterophyllus</i>	Foothill Beardtongue	PH	.	BonTerra (10,437)	Uncommon
<i>Plantago erecta</i>	California Plantain	AH	OBL	BonTerra	Scarce
<i>Plantago lanceolata</i> *	English Plantain	PH	FAC-	BonTerra	Common
<i>Plantago major</i> *	Broadleaf Plantain	PH	FACW-	BonTerra	Uncommon
Platanaceae – Sycamore Family					
<i>Platanus racemosa</i> var. <i>racemosa</i>	California Sycamore	T	FACW	DMEC	Uncommon
Polemoniaceae – Phlox Family					
<i>Allophylum giliooides</i>	Straggling Allophylum	AH	.	BonTerra	Uncommon
<i>Allophylum glutinosum</i>	Sticky Allophylum	AH	.	DMEC (176-05) & BonTerra (10,433)	Uncommon
<i>Eriastrum sapphirinum</i>	Sapphire Woollystar	AH	.	BonTerra (10,502)	Common (locally)
<i>Gilia ochroleuca</i>	Gilia	AH	.	BonTerra	Uncommon
<i>Leptodactylon californicum</i> ssp. <i>glandulosum</i>	Glandular Prickly Phlox	S	.	DMEC & BonTerra	Scarce

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<i>Linanthus liniflorus</i>	Flax-flowered Linanthus	AH	.	BonTerra (10,416)	Scarce
<i>Navarretia atractyloides</i>	Rough Navarretia	AH	.	BonTerra	Uncommon
<i>Navarretia hamata</i> ssp. <i>hamata</i> ³⁷	Skunk Navarretia	AH	.	DMEC (175-05)	Uncommon
<i>Navarretia</i> sp. (likely one of the above)	Navarretia	AH	.	BonTerra	Uncommon
Polygonaceae – Buckwheat Family					
<i>Chorizanthe staticoides</i>	Turkish Rugging	AH	.	DMEC (251-04) & BonTerra (10,420)	Uncommon
<i>Chorizanthe xantii</i>	Riverside Spineflower	AH	.	BonTerra	Uncommon
<i>Eriogonum angulosum</i>	Angle-stemmed Buckwheat	AH	.	DMEC & BonTerra	Uncommon
<i>Eriogonum elongatum</i>	Long-stemmed Buckwheat	PH	.	BonTerra	Uncommon
<i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i> *	California Buckwheat	S	.	DMEC (166-05) & BonTerra	Uncommon
<i>Eriogonum fasciculatum</i> var. <i>polifolium</i>	Hoary California Buckwheat	S	.	DMEC	Common
<i>Polygonum arenastrum</i> *	Common Knotweed	AH	FAC	DMEC & BonTerra	Uncommon
<i>Polygonum argyrocoleon</i> *	Silver-sheath Knotweed	AH	FAC+	BonTerra	Uncommon
<i>Pterostegia drymariooides</i>	Fairy Mist	PF	.	DMEC & BonTerra (10,405)	Scarce
<i>Rumex crispus</i> *	Curly Dock	PH	FACW-	DMEC & BonTerra	Uncommon
<i>Rumex hymenosepalus</i>	Wild Rhubarb	PH	.	DMEC	Scarce
<i>Rumex salicifolius</i> (var. <i>salicifolius</i>)	Willow Dock	PH	FACW	BonTerra (10,491)	Uncommon
Portulacaceae – Purslane Family					
<i>Calandrinia ciliata</i>	Red Maids	AH	FAC	BonTerra (10,438)	Uncommon
<i>Claytonia parviflora</i>	Small-flowered Miner's Lettuce	AH	FAC	DMEC	Common
<i>Claytonia perfoliata</i> ssp. <i>mexicana</i>	Mexican Miner's Lettuce	AH	FAC	DMEC	Common
<i>Claytonia</i> sp. (likely one of the above)	Miner's Lettuce	AH	FAC	BonTerra	Common
Primulaceae - Primrose					
<i>Anagallis arvensis</i> *	Scarlet Pimpernel	AH	FAC	DMEC & BonTerra	Common
Ranunculaceae – Crowfoot Family					
<i>Clematis ligusticifolia</i>	Western Virgin's Bower	PV	FAC	BonTerra	Uncommon
<i>Delphinium parryi</i> ssp. <i>parryi</i>	Parry's Larkspur	PH	.	BonTerra (10,431)	Scarce
Rhamnaceae – Buckthorn Family					
<i>Ceanothus crassifolius</i> var. <i>crassifolius</i>	Snowball Ceanothus	S	.	DMEC & BonTerra	Uncommon
<i>Rhamnus californica</i> ssp. <i>californica</i> ?	California Coffeeberry	S	.	BonTerra	Uncommon
<i>Rhamnus ilicifolia</i>	Hollyleaf Redberry	S	.	DMEC & BonTerra	Uncommon
<i>Rhamnus tomentella</i> ssp. <i>tomentella</i> ?	Hoary Coffeeberry	S	.	BonTerra	Uncommon
Rosaceae – Rose Family					
<i>Adenostoma fasciculatum</i>	Chamise	S	.	DMEC & BonTerra	Common
<i>Cercocarpus betuloides</i> var. <i>betuloides</i> ?	Birchleaf Mountain Mahogany	S	.	BonTerra	Uncommon
<i>Heteromeles arbutifolia</i>	Toyon	S	.	DMEC & BonTerra	Scarce
<i>Prunus ilicifolia</i>	Hollyleaf Cherry	S	.	DMEC & BonTerra	Scarce
<i>Pyracantha</i> sp.+	Firethorn	S	.	BonTerra	Uncommon

³⁷ This taxon is treated as a locally rare species. It is considered a locally rare species in Ventura County (Magney 2005) and is not reported in the Liebre Mountains flora by Boyd (1999). No collections are reported this far north in Los Angeles County in the Jepson Herbarium online database for this variety.

Scientific Name ²⁷	Common Name	Habit ²⁸	WIS ²⁹	Reported By (Voucher No.) ³⁰	Estimated Abundance within the Project Site ³¹
<i>Rosa californica</i>	California Wild Rose	S	FAC+	BonTerra	Uncommon
<i>Rubus ursinus</i>	Pacific Blackberry	PV	FACW*	BonTerra	Uncommon
Rubiaceae – Madder Family					
<i>Galium angustifolium</i> var. <i>angustifolium</i>	Chaparral Bedstraw	PV	.	DMEC	Uncommon
<i>Galium aparine</i>	Common Bedstraw	AH	.	BonTerra	Uncommon
<i>Galium porrigens</i> var. <i>porrigens</i>	Climbing Bedstraw	PV	.	DMEC (179-05) & BonTerra (10,499)	Scarce
Salicaceae – Willow Family					
<i>Populus fremontii</i> ssp. <i>fremontii</i>	Fremont Cottonwood	T	FACW	DMEC & BonTerra	Uncommon
<i>Salix laevigata</i>	Red Willow	T	FACW	DMEC	Uncommon
<i>Salix lasiolepis</i> var. <i>lasiolepis</i>	Arroyo Willow	T	FACW	DMEC & BonTerra	Common
Simaroubaceae – Quassia Family					
<i>Ailanthus altissima</i> *	Tree-of-heaven	T	FACU	DMEC & BonTerra	Uncommon
Solanaceae – Nightshade Family					
<i>Datura wrightii</i>	Jimson Weed	AH	.	DMEC & BonTerra	Uncommon
<i>Nicotiana glauca</i> *	Tree Tobacco	S	FAC	DMEC & BonTerra	Uncommon
<i>Nicotiana quadrivalvis</i>	Indian Tobacco	PH	.	BonTerra (10,488)	Uncommon
<i>Solanum americanum</i> *	White Nightshade	S	.	BonTerra (10,483)	Common
<i>Solanum douglasii</i>	Douglas' Nightshade	S	.	BonTerra	Uncommon
<i>Solanum xantii</i> var. <i>xantii</i>	Chaparral Nightshade	S	.	DMEC & BonTerra (10,410)	Uncommon
Verbenaceae – Vervain Family					
<i>Verbena lasiostachys</i>	Western Verbena	PH	FAC-	DMEC & BonTerra (10,426)	Uncommon
Viscaceae – Mistletoe Family					
<i>Phoradendron villosum</i>	Oak Mistletoe	PH	.	DMEC	Uncommon
Violaceae – Violet Family					
<i>Viola pedunculata</i>	Johnny-jump-up	PH	.	BonTerra	Scarce
Zygophyllaceae – Caltrop Family					
<i>Tribulus terrestris</i> *	Puncture Weed	AH	.	DMEC	Common
MONOCOTYLEDONES - MONOCOTS					
Agavaceae – Agave Family					
<i>Hesperoyucca whipplei</i>	Our Lord's Candle	S	.	DMEC	Uncommon
Cyperaceae – Sedge Family					
<i>Carex</i> sp.	Sedge	PG	(OBL)	BonTerra	Uncommon
Iridaceae – Iris Family					
<i>Sisyrinchium bellum</i>	Blue-eyed Grass	PG	.	DMEC & BonTerra	Uncommon
Juncaceae – Rush Family					
<i>Juncus cf balticus</i>	Baltic Rush	PG	OBL	DMEC	Uncommon
<i>Juncus mexicanus</i>	Mexican Rush	PG	FACW	BonTerra	Uncommon

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Liliaceae – Lily Family					
<i>Calochortus clavatus</i> var. <i>clavatus</i> X <i>C. clavatus</i> var. <i>gracilis</i>	Club-haired Mariposa Lily X Slender Mariposa Lily	PG	.	BonTerra (10,430)	Scarce
<i>Calochortus clavatus</i> var. <i>gracilis</i>	Slender Mariposa Lily	PG	.	BonTerra and Bowland & Assoc.	Scarce
<i>Calochortus plummerae</i>	Plummer's Mariposa Lily	PG	.	BonTerra and Bowland & Assoc. (10,428)	Scarce
<i>Calochortus venustus</i>	Butterfly Mariposa Lily	PG	.	BonTerra	Scarce
<i>Chlorogalum pomeridianum</i> var. <i>pomeridianum</i>	Common Soap Lily	PG	.	DMEC & BonTerra (10,407)	Uncommon
Poaceae – Grass Family					
<i>Achnatherum coronatum</i>	Giant Needlegrass	PG	.	BonTerra	Uncommon
<i>Avena barbata</i> *	Slender Wild Oat	AG	.	DMEC & BonTerra	Common
<i>Avena fatua</i> *	Wild Oat	AG	.	BonTerra	Common
<i>Bromus carinatus</i>	California Brome	AG	.	BonTerra	Uncommon
<i>Bromus diandrus</i> *	Ripgut Grass	AG	(FACU)	DMEC & BonTerra	Common
<i>Bromus hordeaceus</i> *	Soft Chess	AG	FACU-	DMEC & BonTerra	Common
<i>Bromus madritensis</i> ssp. <i>rubens</i> *	Red Brome	AG	NI	DMEC & BonTerra	Common
<i>Bromus madritensis</i> ssp. <i>madritensis</i>	Madrid Brome	AG	NI	BonTerra (10,411)	Uncommon
<i>Bromus tectorum</i> *	Cheat Grass	AG	.	BonTerra	Common
<i>Cynodon dactylon</i> *	Bermuda Grass	PG	FAC	BonTerra	Uncommon
<i>Distichlis spicata</i>	Salt Grass	PG	FACW	DMEC & BonTerra	Uncommon
<i>Elymus elymoides</i>	Bottlebrush Squirreltail	PG	FACU-	BonTerra	Uncommon
<i>Elymus glaucus</i>	Blue Wildrye	PG	FACU	BonTerra (10,425)	Uncommon
<i>Hordeum murinum</i> (ssp. <i>murinum</i>)*	Winter Barley	AG	.	BonTerra	Common
<i>Hordeum vulgare</i> *	Cultivated Barley	AG	.	BonTerra	Uncommon
<i>Lamarcchia aurea</i> *	Goldentop	AG	.	DMEC & BonTerra	Uncommon
<i>Leymus condensatus</i>	Giant Wildrye	PG	FACU	DMEC & BonTerra	Common
<i>Leymus triticoides</i>	Creeping Wildrye	PG	FAC+	DMEC & BonTerra	Uncommon
<i>Lolium multiflorum</i> *	Italian Ryegrass	AG	FAC*	DMEC & BonTerra	Common
<i>Melica imperfecta</i>	Coast Melic Grass	PG	.	BonTerra	Uncommon
<i>Muhlenbergia microsperma</i>	Littleseed Muhly	PG	.	BonTerra (10,404)	Scarce
<i>Nassella cernua</i>	Nodding Needlegrass	PG	.	BonTerra (10,492)	Scarce
<i>Nassella lepida</i>	Foothill Needlegrass	PG	.	BonTerra	Scarce
<i>Nassella pulchra</i>	Purple Needlegrass	PG	.	DMEC & BonTerra	Scarce
<i>Piptatherum miliaceum</i> *	Smilo Grass	PG	(FACU)	DMEC & BonTerra	Uncommon
<i>Poa secunda</i>	Nodding Bluegrass	PG	.	BonTerra	Uncommon
<i>Polypogon monspeliensis</i> *	Rabbitsfoot Grass	AG	FACW+	DMEC & BonTerra	Uncommon
<i>Schismus barbatus</i> *	Mediterranean Grass	AG	.	DMEC & BonTerra	Uncommon
<i>Vulpia microstachys</i> (var. <i>microstachys</i>)	Annual Fescue	AG	.	BonTerra (10,415)	Uncommon
<i>Vulpia myuros</i> *	Rattail Fescue	AG	FACU*	DMEC & BonTerra	Uncommon
Themidaceae – Brodiae Family					
<i>Bloomeria crocea</i> var. <i>crocea</i>	Goldenstars	PG	.	DMEC & BonTerra	Uncommon
<i>Dichelostemma capitatum</i> ssp. <i>capitatum</i>	Blue Dicks	PG	.	DMEC & BonTerra	Common

APPENDIX D.
WILDLIFE SPECIES OBSERVED AND EXPECTED
AT LYONS CANYON RANCH

Wildlife Observed and Expected at Lyons Canyon Ranch

Scientific Name ³⁸	Common Name	Observed By ³⁹	Estimated Abundance Onsite ⁴⁰
AMPHIBIANS			
Plethodontidae - Lungless Salamanders			
<i>Batrachoseps nigriventris</i>	Black-bellied Slender Salamander	BonTerra	Uncommon
Bufoontidae - True Toads			
<i>Bufo boreas halophilus</i>	California Western Toad	BonTerra	Scarce
Hylidae - Treefrogs			
<i>Hyla regilla</i>	Pacific Treefrog	Expected	Common
Ranidae - True Frogs			
<i>Rana catesbeiana</i> *	Bullfrog	Expected	Common
REPTILES			
Iguanidae – Iguanid Lizards			
<i>Sceloporus occidentalis</i>	Western Fence Lizard	8 DMEC; BonTerra	Common
<i>Uta stansburiana elegans</i>	Western Side-blotched Lizard	6 DMEC; BonTerra	Common
Scincidae - Skinks			
<i>Eumeces skiltonianus</i>	Western Skink	Expected	Uncommon
Anguidae – Alligator Lizards			
<i>Elgaria multicarinata</i>	Southern Alligator Lizard	BonTerra	Scarce
Colubridae – Colubrids			
<i>Charina trivargata</i>	Coastal Rosy Boa	Possible	Scarce
<i>Masticophis lateralis</i>	California Whipsnake	Expected	Uncommon
<i>Pituophis melanoleucus</i>	Gopher Snake (tracks)	BonTerra	Scarce
<i>Pituophis melanoleucus annectens</i>	San Diego Gopher Snake	Expected	Uncommon
<i>Hypsiglena torquata</i>	Night Snake	Expected	Uncommon
<i>Lampropeltis getula californiae</i>	California Kingsnake	Expected	Scarce
<i>Masticophis lateralis lateralis</i>	California Striped Racer	Expected	Uncommon
Viperidae – Vipers			
<i>Crotalus viridis</i>	Western Rattle Snake (tracks)	BonTerra	Uncommon
BIRDS			
Ardeidae – Herons, Egrets			
<i>Ardea herodias</i>	Great Blue Heron	Expected	Scarce
<i>Ardea alba</i>	Great Egret	Expected	Scarce
Anatidae - Screamers, Ducks, & Relatives			
<i>Anas platyrhynchos</i>	Mallard	2 W.Langhans (nesting) ⁴¹	Scarce

³⁸ * = nonnative species. Note: DMEC's wildlife observation data were incidental to field work, focused on the delineation of wetlands and assessment of oak trees, and are not intended to be considered complete by any definition. BonTerra had primary responsibility for determining wildlife species presence.

³⁹ The number in front of DMEC indicates the total number of individuals for each wildlife species that was observed during the biological surveys onsite.

⁴⁰ Scarce = less than 100 individuals; Uncommon = 100 to less than 1,000 individuals; Common = more than 1,000 individuals.

⁴¹ Personal communication with Wendy Langhans, Mountains Recreation and Conservation Authority (wendy.langhans@mrc.ca.gov) regarding bird observations at Towsley Park, 21 July 2005.

Scientific Name ³⁸	Common Name	Observed By ³⁹	Estimated Abundance Onsite ⁴⁰
Cathartidae - New World Vultures			
<i>Cathartes aura</i>	Turkey Vulture	BonTerra	Scarce
<i>Gymnogyps californianus</i>	California Condor	2 W. Langhans	Scarce
Accipitridae - Hawks			
<i>Elanus leucurus</i>	White-tailed Kite	Expected	Scarce
<i>Circus cyaneus</i>	Northern Harrier	Expected	Scarce
<i>Accipiter striatus</i>	Sharp-shinned Hawk	Expected	Scarce
<i>Accipiter cooperii</i>	Cooper's Hawk	1 DMEC; BonTerra	Scarce
<i>Buteo lineatus</i>	Red-shouldered Hawk	2 W. Langhans (nesting)	Scarce
<i>Buteo jamaicensis</i>	Red-tailed Hawk	3 DMEC; BonTerra	Scarce
Falconidae - Falcons			
<i>Falco sparverius</i>	American Kestrel	BonTerra	Scarce
Odontophoridae - Quail			
<i>Callipepla californica</i>	California Quail	5 DMEC; BonTerra	Scarce
Charadriidae - Plovers			
<i>Charadrius vociferous</i>	Killdeer	BonTerra	Uncommon
Columbidae - Pigeons & Doves			
<i>Columba fasciata</i>	Band-tailed Pigeon	1 DMEC	Scarce
<i>Columba livia</i>	Rock Pigeon	BonTerra	Scarce
<i>Zenaida macroura</i>	Mourning Dove	7 DMEC; BonTerra	Common
Cuculidae - Cuckoos & Roadrunners			
<i>Geococcyx californianus</i>	Greater Roadrunner	BonTerra	Scarce
Tytonidae - Owls			
<i>Tyto alba</i>	Barn Owl	1 DMEC: observed flying from nest in a <i>Quercus agrifolia</i> onsite. Nest appeared occupied and active. All raptor nests are protected by California Fish and Game Code §3503.5.	Uncommon
<i>Otus kennicotti</i>	Western Screech-Owl	Expected	Scarce
<i>Bubo virginianus</i>	Great Horned Owl	Expected	Scarce
<i>Glaucidium gnoma</i>	Northern Pygmy-owl	Expected	Scarce
<i>Athene cunicularia</i>	Burrowing Owl	Expected	Scarce
<i>Asio otus</i>	Long-eared Owl	Expected	Scarce
Trochilidae - Hummingbirds			
<i>Archilochus colubris</i>	Ruby-throated Hummingbird	Expected	Uncommon
<i>Archilochus alexandri</i>	Black-chinned Hummingbird	Expected	Uncommon
<i>Calypte anna</i>	Anna's Hummingbird	2 DMEC; BonTerra	Common
<i>Calypte costae</i>	Costa's Hummingbird	Expected	Uncommon
<i>Selasphorus rufus</i>	Rufous Hummingbird	Expected	Common
<i>Selasphorus sasin</i>	Allen's Hummingbird	Expected	Common
Picidae - Woodpeckers			
<i>Colaptes auratus</i>	Northern Flicker	2 DMEC; BonTerra	Scarce
<i>Melanerpes formicivorus</i>	Acorn Woodpecker	3 DMEC; BonTerra	Common
<i>Picoides nuttallii</i>	Nuttall's Woodpecker	1 W. Langhans	Scarce

Scientific Name ³⁸	Common Name	Observed By ³⁹	Estimated Abundance Onsite ⁴⁰
<i>Picoides pubescens</i>	Downy Woodpecker	Expected	Scarce
Tyrannidae - Tyrant Flycatchers			
<i>Empidonax difficilis</i>	Pacific Slope Flycatcher	Expected	Scarce
<i>Empidonax hammondi</i>	Hammond's Flycatcher	Expected	Scarce
<i>Sayornis nigricans</i>	Black Phoebe	3 DMEC; BonTerra	Scarce
<i>Sayornis saya</i>	Say's Phoebe	BonTerra	Uncommon
Corvidae - Jays & Crows			
<i>Aphelocoma coerulescens</i>	Western Scrub-jay	10 DMEC; BonTerra	Common
<i>Corvus brachyrhynchos</i>	American Crow	3 DMEC; BonTerra	Common
<i>Corvus corvax</i>	Common Raven	8 DMEC	Uncommon
Hirundinidae - Swallows			
<i>Tachycineta thalassina</i>	Violet-green Swallow	Expected	Uncommon
<i>Petrochelidon pyrrhonota</i>	Cliff Swallow	Expected	Common
<i>Hirundo rustica</i>	Barn Swallow	Expected	Common
Paridae - Titmice			
<i>Baeolophus ridgwayi</i>	Oak Titmouse	2 DMEC; BonTerra	Scarce
Aegithalidae - Bushtits			
<i>Psaltriparus minimus</i>	Bushtit	15 DMEC; BonTerra	Common
Sittidae - Nuthatches			
<i>Sitta carolinensis</i>	White-breasted Nuthatch	Expected	Scarce
Troglodytidae - Wrens			
<i>Thromanes bewickii</i>	Bewick's Wren	BonTerra	Uncommon
Turididae - Thrushes & Robins			
<i>Sialia mexicana</i>	Western Bluebird	1 DMEC; BonTerra	Scarce
<i>Ixoreus naevius</i>	Varied Thrush	Los Angeles Rare Bird Alert ⁴²	Uncommon
<i>Turdus migratorius</i>	American Robin	4 DMEC; BonTerra	Scarce
Timaliidae - Wrentits			
<i>Chamaea fasciata</i>	Wrentit	BonTerra	Common
Mimidae - Thrashers			
<i>Mimus polyglottos</i>	Northern Mockingbird	2 DMEC; BonTerra	Common
Sturnidae - Starlings			
<i>Sturnus vulgaris*</i>	European Starling	3 DMEC; BonTerra	Common
Bombycillidae			
<i>Bombycilla cedrorum</i>	Cedar Waxwing	Expected	Scarce
Ptilogonatidae - Silky Flycatchers			
<i>Phainopepla nitens</i>	Phainopepla	3 DMEC	Scarce
Parulidae - Warblers			
<i>Dendroica coronata</i>	Yellow-rumped Warbler	BonTerra	Scarce
<i>Geothlypis trichas</i>	Common Yellowthroat	1 DMEC; BonTerra	Scarce

⁴² Obtained from <http://listserv.arizona.edu/cgi-bin/wa?A2=ind0211d&L=birdwest&F=&S=&P=72>.

Scientific Name ³⁸	Common Name	Observed By ³⁹	Estimated Abundance Onsite ⁴⁰
Emberizidae - Sparrows & Juncos			
<i>Pipilo crissalis</i>	California Towhee	4 DMEC; BonTerra	Common
<i>Pipilo maculatus</i>	Spotted Towhee	2 DMEC; BonTerra	Scarce
<i>Aimophila ruficeps</i>	Rufous-crowned Sparrow	Expected	Uncommon
<i>Chondestes grammacus</i>	Lark Sparrow	Expected	Uncommon
<i>Amphispiza belli</i>	Sage Sparrow	Expected	Uncommon
<i>Melospiza melodia</i>	Song Sparrow	BonTerra	Common
<i>Zonotrichia leucophrys</i>	White-crowned Sparrow	4 DMEC	Common
<i>Junco hyemalis</i>	Dark-eyed Junco	Expected	Uncommon
<i>Sturnella neglecta</i>	Western Meadowlark	1 DMEC; BonTerra	Scarce
<i>Euphagus cyanocephalus</i>	Brewer's Blackbird	6 DMEC; BonTerra	Common
<i>Quiscalus mexicanus</i>	Great-tailed Grackle	BonTerra	Uncommon
<i>Molothrus ater</i>	Brown-headed Cowbird	Expected	Uncommon
<i>Icterus bullockii</i>	Bullock's Oriole	Expected	Scarce
Fringillidae - Finches			
<i>Carpodacus mexicanus</i>	House Finch	3 DMEC; BonTerra	Common
<i>Carduelis tristis</i>	American Goldfinch	Expected	Common
<i>Carduelis psaltria</i>	Lesser Goldfinch	BonTerra	Scarce
Passeridae - Old World Sparrows			
<i>Passer domesticus*</i>	House Sparrow	BonTerra	Common
MAMMALS			
Didelphidae - New World Opossums			
<i>Didelphis virginiana</i>	Virginia Opossum	BonTerra	Uncommon
Soricidae - Shrews			
<i>Notiosorex crawfordi</i>	Desert Shrew	BonTerra	Common
Talpidae - Moles			
<i>Scapanus</i> sp.	Mole	1 DMEC	Common
Vespertilionidae - Vespertilionid Bats			
<i>Myotis volans</i>	Long-legged Myotis	Expected	Uncommon
<i>Myotis californicus</i>	California Myotis	Expected	Uncommon
<i>Pipistrellus hesperus</i>	Western Pipistrelle	Expected	Uncommon
<i>Eptesicus fuscus</i>	Big Brown Bat	Expected	Uncommon
<i>Lasiurus cinereus</i>	Hoary Bat	Expected	Uncommon
<i>Myotis evotis</i>	Long-eared Myotis	Expected	Uncommon
<i>Myotis thysanodes</i>	Fringed Myotis	Expected	Uncommon
<i>Tadarida brasiliensis</i>	Brazilian Free-tailed Bat	Expected	Uncommon
Molossidae - Free-Tailed Bats			
<i>Tadarida brasiliensis</i>	Brazilian Free-tailed Bat	Expected	Uncommon
Leporidae - Rabbits & Hares			
<i>Sylvilagus audubonii</i>	Desert Cottontail	BonTerra	Common
Sciuridae - Squirrels, Chipmunks, & Marmots			
<i>Spermophilus beecheyi</i>	California Ground Squirrel	2 DMEC; BonTerra	Common

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Geomysidae - Pocket Gophers			
<i>Thomomys bottae</i>	Botta's Pocket Gopher	1 DMEC; BonTerra	Common
Heteromyidae - Kangaroo Rats & Pocket Mice			
<i>Perognathus californicus</i>	California Pocket Mouse	16 DMEC; BonTerra	Common
<i>Dipodomys agilis</i>	Pacific Kangaroo Rat	Expected	Uncommon
Cricetidae - Deer Mice, Voles, & Relatives			
<i>Mus Musculus</i>	House Mouse	Expected	Common
<i>Peromyscus californicus</i>	California Mouse	Expected	Common
<i>Peromyscus boylii</i>	Brush Mouse	Expected	Common
<i>Peromyscus californicus</i>	Parasitic Mouse	Expected	Common
<i>Peromyscus eremicus</i>	Cactus Mouse	Expected	Uncommon
<i>Peromyscus maniculatus</i>	Deer Mouse	102 DMEC	Common
<i>Reithrodontomys megalotis</i>	Western Harvest Mouse	9 DMEC	Common
<i>Microtus californicus</i>	California Meadow Vole	Expected	Common
<i>Neotoma fuscipes</i>	Dusky-footed Woodrat	Expected	Scarce
<i>Neotoma macrotis</i>	Southern Dusky-footed Woodrat	Expected	Scarce
<i>Neotoma lepida intermedia</i>	San Diego Desert Woodrat	Detected (nest) DMEC	Scarce
Canidae - Wolves & Foxes			
<i>Canis latrans</i>	Coyote	10 (scat, skeleton) DMEC; BonTerra	Uncommon
<i>Urocyon cinereoargenteus</i>	Gray Fox	1 (skeleton) DMEC	Scarce
Ursidae - Bears			
<i>Ursus americanus</i>	Black Bear	Expected	Scarce
Procyonidae - Raccoons & Relatives			
<i>Procyon lotor</i>	Raccoon	BonTerra	Scarce
<i>Bassariscus astutus</i>	Ring-tailed Cat	Expected	Scarce
Mustelidae - Weasels, Badgers, & Relatives			
<i>Mustela frenata</i>	Long-tailed Weasel	Expected	Uncommon
<i>Mephitis mephitis</i>	Striped Skunk	BonTerra	Scarce
Felidae – Cats			
<i>Puma concolor</i>	Mountain Lion	Expected	Scarce
<i>Lynx rufus</i>	Bobcat	2 (skull & leg) DMEC	Scarce
Cervidae - Deer, Elk, & Relatives			
<i>Odocoileus hemionus</i>	Mule Deer	1 (Buck observed) 5 (tracks, skeleton) DMEC; BonTerra	Uncommon
INVERTEBRATES			
<i>Agelenopsis</i> sp.	Funnel Web Spider	1 DMEC	Common
<i>Ctenolepisma longicaudata</i>	Long-tailed Silverfish	3 DMEC	Common
<i>Octogomphus cf. specularis</i>	Small Western Gomphid	1 DMEC	Uncommon
<i>Libellula saturata</i>	Red Skimmer	1 DMEC	Uncommon
<i>Enallagma cyanigerum</i>	Circumpolar Bluet	1 DMEC	Uncommon
<i>Schistocerca nitens</i>	Gray Bird Grasshopper	10 DMEC	Uncommon
<i>Trimerotropis pallidipennis</i>	Pallid Band-wing	1 DMEC	Common

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<i>Supella longipalpa</i>	Brown-Banded Cockroach	1 DMEC	Common
(Cicadidae)	Cicada	1 DMEC	Uncommon
(Culicidae)	Mosquito	1 DMEC	Common
<i>Noserus plicatus</i>	Plicate Beetle	1 DMEC	Common
<i>Coelocnemis californicus</i>	Darkling Beetle	1 DMEC	Common
<i>Hippodamia convergens</i>	Convergent Ladybird Beetle	1 DMEC	Common
(Coleoptera)	Tiny flower beetle	Many DMEC	Common
<i>Mischocyttarus flavitarsus</i>	Polybiine Paper Wasp	3 DMEC	Uncommon
<i>Apis mellifera*</i>	European Honey Bee	20 DMEC	Common
<i>Bombus vosnesenskii</i>	Vosnesenski's Bumble Bee	3 DMEC	Uncommon
Lepidoptera - Butterflies & Moths⁴³			
<i>Hylephila phyleus</i>	Fiery Skipper	1 DMEC	Scarce
<i>Glaucopsyche lygdamus</i>	Silvery Blue	Expected	Scarce
<i>Pontia protodice</i>	Checkered White	Expected	Common
<i>Anthocharis sara</i>	Sara Orangetip	Expected	Scarce
<i>Leptotes marina</i>	Marine Blue	40 DMEC	Common
<i>Limenitis lorquini</i>	Lorquin's Admiral	Expected	Common
<i>Vanessa atalanta</i>	Red Admiral	Expected	Uncommon
<i>Euphydryas chalcedona</i>	Variable Checkerspot	Expected	Scarce
<i>Vanessa cardui</i>	Painted Lady	3 DMEC	Common
<i>Papilio eurymedon</i>	Pale Swallowtail	1 DMEC	Uncommon
<i>Phoebeis sennae</i>	Senna Sulphur	50 DMEC	Common
<i>Coenonympha tullia</i>	California Ringlet	Expected	Scarce
<i>Colias eurydice</i>	California Dog Face	1 DMEC	Scarce
<i>Pieris rapae</i>	Cabbage White	50 DMEC	Common
<i>Adelpha bredowii</i>	California Sister	Expected	Common
<i>Erynnis funeralis</i>	Funeral Duskywing	Expected	Scarce
<i>Strymon melinus</i>	Gray Hairstreak	Expected	Common
<i>Plebeius [Icaricia] acmon</i>	Acmon Blue	Expected	Scarce
<i>Danaus plexippus</i>	Monarch Butterfly	Expected	Scarce
<i>Junonia coenia</i>	Buckeye	4 DMEC	Scarce
<i>Apodemia virgulti</i>	Behr's Metalmark	Expected	Scarce

⁴³ Expected butterflies: <http://www.lamountains.com/pdf/Butterfly%20Brochure-screen.pdf> (www.lamountains.com, 2004, *Butterflies of Towsley Canyon*).

OVERSIZED MAPS:

- (1) COLOR U.S.G.S. OAT MOUNTAIN QUAD SHEET; AND
(2) LYONS CANYON RANCH SITE PLANS**