

# **RARE PLANT SURVEY OF THE WIND WOLVES PRESERVE, KERN COUNTY, CALIFORNIA**



*Prepared for:*  
**THE WILDLANDS CONSERVANCY**

**July 2010**

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**DMEC Mission Statement:**  
*To provide quality environmental consulting services, with integrity,  
that protect and enhance the human and natural environment.*

# **David Magney Environmental Consulting**

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## **Rare Plant Survey for the Wind Wolves Preserve, Kern County, California**

*Prepared for:*

### **The Wildlands Conservancy**

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**31 July 2010**

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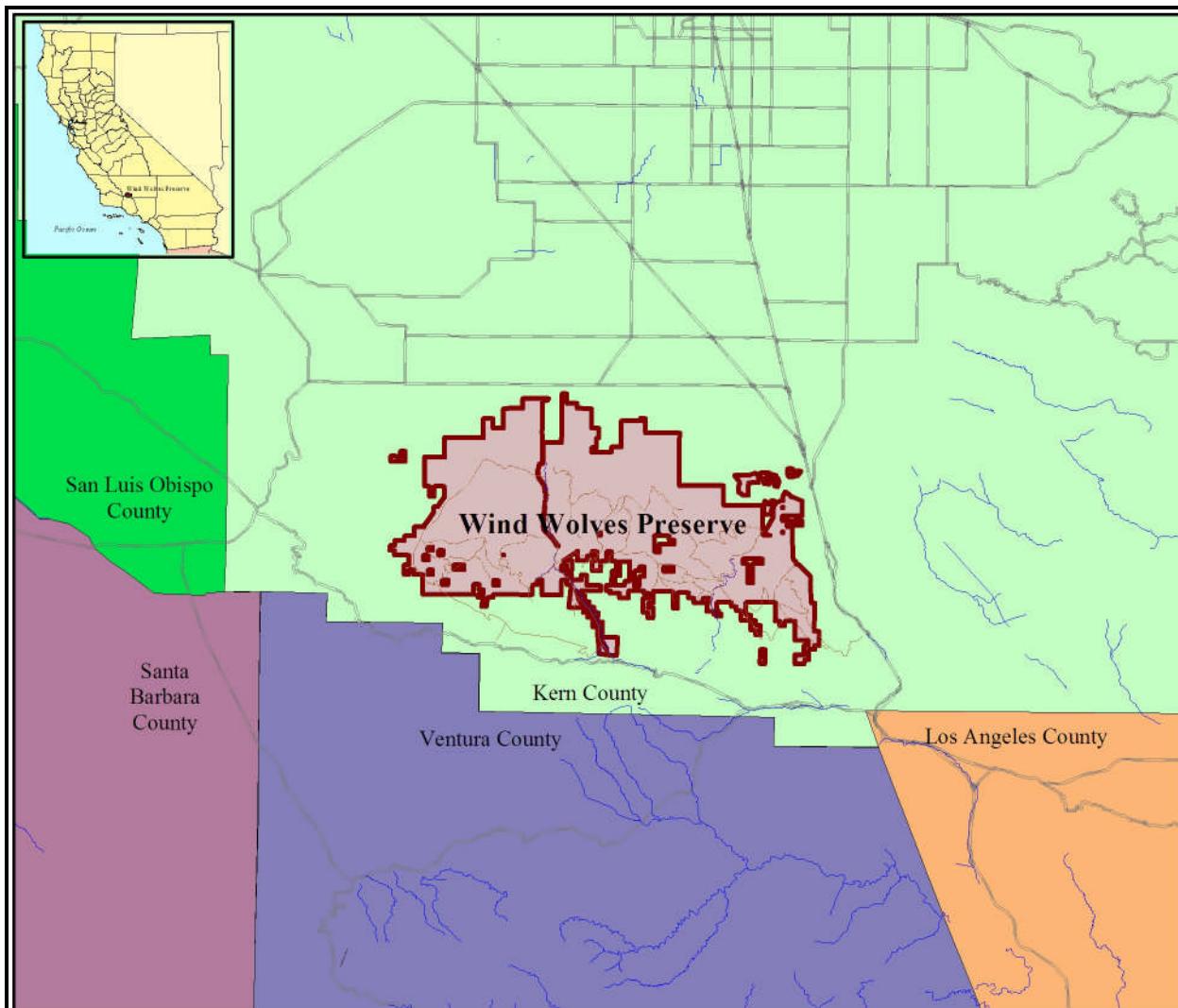
## SECTION 1. INTRODUCTION

This report provides a summary of the results of the spring and early summer special-status plant surveys, conducted by David Magney Environmental Consulting (DMEC), within the lower elevation areas of the Wind Wolves Preserve in Kern County, California. The Wind Wolves Preserve is owned and operated by The Wildlands Conservancy (TWC).

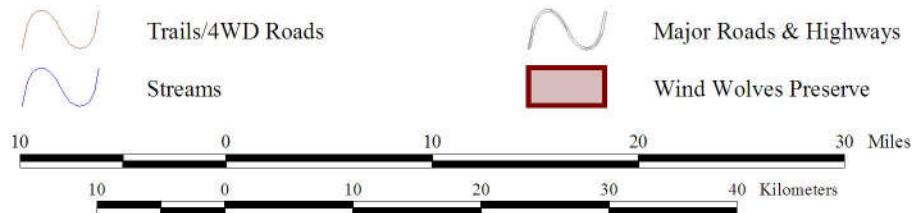
The Wind Wolves Preserve contains 97,000 acres (39,255 hectares) of grassland, shrubland, woodland, and riparian habitats. Elevation ranges onsite from approximately 640 feet on the floor of the Tulare Basin portion of the San Joaquin Valley to approximately 6,005 feet above mean sea level near the top of the San Emigdio Range. Figure 1, General Location Map of the Wind Wolves Preserve, illustrates the general location of the Preserve, located in southern Kern County, California.

DMEC conducted botanical surveys of the lowland (primarily the valley floor) portions of the Wind Wolves Preserve in order to find and document the presence of special-status vascular plant species in this area of the preserve. The survey area represents approximately 27,000 acres of the Wind Wolves Preserve. The surveys were conducted by DMEC in March, April, and June 2010.

**Figure 1. General Location Map of the Wind Wolves Preserve**



### Wind Wolves Preserve Location Legend



Map created by:  
David Magney Environmental Consulting, P.O. Box 1346, Ojai, CA 93024  
805/646-6045 \* [www.magney.org](http://www.magney.org)  
30 July 2010

Sources: ESRI, DMEC, The Wildlands Conservancy  
Datum: NAD 83 \* Projection: California State Plane, Zone V, feet



## SECTION 2. METHODS

### FIELD SURVEY METHODS

DMEC botanists, David Magney, Callen Huff, and David Brown, performed floristic surveys during the March, April, and June of 2010 to identify special-status plant species on the low elevation areas of the Wind Wolves Preserve. The survey dates and purposes are summarized in Table 1, Survey Dates and Details.

**Table 1. Survey Dates and Details**

Survey Location	Survey Date	Survey Type	Time Period	Methods/Constraints	GPS Unit	Surveyors
Wind Wolves	3/19/2010	Rare Plant survey	9 am-5 pm	Preliminary overview of Wind Wolves reserve	Garmin eTrex	David Magney, David Brown
Wind Wolves	3/24/2010	Rare Plant survey	9 am-5 pm	Locate and identify special-status plant species on Wind Wolves reserve	Garmin eTrex	David Magney, David Brown, Callen Huff
Wind Wolves	3/25/2010	Rare Plant survey	9 am-5 pm	Locate and identify special-status plant species on Wind Wolves reserve	Garmin eTrex	David Magney, David Brown, Callen Huff
Wind Wolves	3/29/2010	Rare Plant survey	9 am-5 pm	Locate and identify special-status plant species on Wind Wolves reserve	Garmin eTrex	David Magney, David Brown, Callen Huff
Wind Wolves	3/30/2010	Rare Plant survey	9 am-5 pm	Locate and identify special-status plant species on Wind Wolves reserve	Garmin eTrex	David Magney, David Brown, Callen Huff
Wind Wolves	3/31/2010	Rare Plant survey	9 am-5 pm	Locate and identify special-status plant species on Wind Wolves reserve	Garmin eTrex	David Magney, David Brown, Callen Huff
Wind Wolves	4/06/2010	Rare Plant survey	9 am-5 pm	Locate and identify special-status plant species on Wind Wolves reserve	Garmin eTrex	David Magney, David Brown, Callen Huff
Wind Wolves	4/07/2010	Rare Plant survey	9 am-5 pm	Locate and identify special-status plant species on Wind Wolves reserve	Garmin eTrex	David Magney, David Brown, Callen Huff
Wind Wolves	6/24/2010	Rare Plant survey	9 am-5 pm	Locate and identify special-status plant species on Wind Wolves reserve	Garmin eTrex	David Magney, David Brown

Global Positioning System (GPS) units were carried to track footpaths and to mark waypoints of findings of interest. Figure 2, Map of Survey of the Wind Wolves Preserve, generally illustrates

areas surveyed by DMEC botanists. The survey paths include areas traversed by vehicle and foot (1,672,238 feet [316.7 miles]). Portions of the preserve were walked over to search for special-status plant species, using existing roads to provide primary access to as much of the study area as possible.

Waypoints were established for each site where floristic data were gathered, and correspond to checklists in each DMEC botanist's field notes. A total of two hundred (200) waypoints were established during the field surveys. All vascular plants observed at each survey point were recorded, and representative voucher specimens for native species were collected for identification and verification. The specimens will be deposited into the herbarium at the University of California, Santa Barbara (UCSB).

Photographs were taken at most survey waypoints, with many of the species observed photographed with a digital camera. Photographs of general habitat conditions were also taken at most waypoints.

Voucher specimens were identified by using standard reference manuals (Twisselmann 1995, Hickman 1993, Munz 1974, Munz and Keck 1973).

## LITERATURE SURVEY

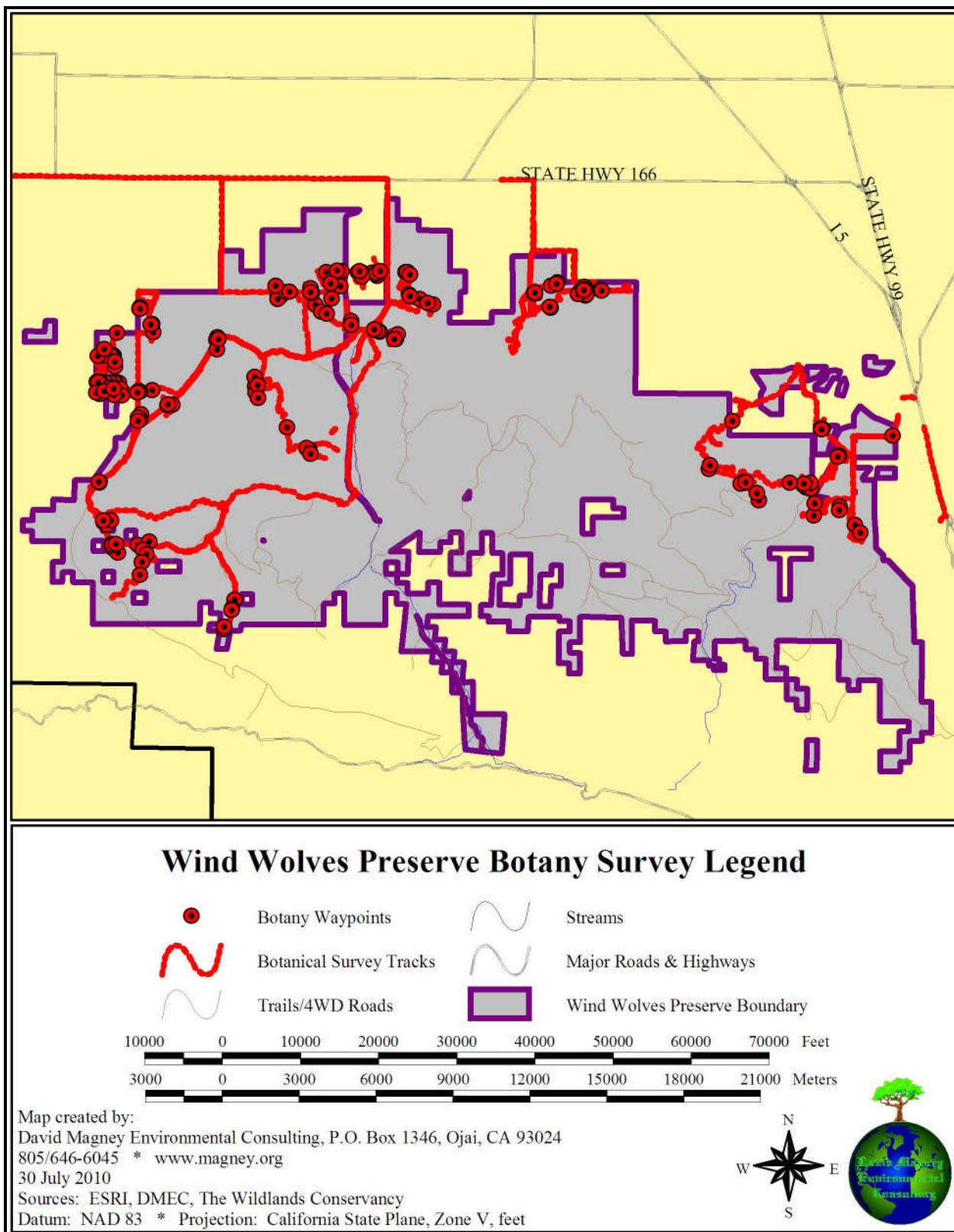
DMEC conducted a search of the California Department of Fish and Game's (CDFG's) California Natural Diversity Database (CNDDB) RareFind3 (CDFG 2009) for the Wind Wolves Preserve to identify which special-status species have been previously reported from the survey area. DMEC also conducted a literature/database search of California Native Plant Society's (CNPS') *Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2010) and the Flora of Kern County (Twisselmann 1995) to account for other special-status plant species not tracked by CNDDB with potential to occur in the vicinity of the proposed project site.

The Consortium of California Herbaria (CCH) and the Calflora online databases were consulted on numerous occasions for several purposes, including:

- determining which taxa have been collected previously from Wind Wolves Preserve, and specifically from one or more of the acquisition areas;
- determining the relative rarity/commonness of taxa found onsite but not previously reported from the Wind Wolves Preserve (formerly known as the San Emigdio Ranch) or Kern County; and
- determining the known distribution of selected taxa.

The *Flora of North America North of Mexico* (Flora of North America Editorial Committee 1993+), *The Jepson Manual: Higher Plants of California* (Hickman 1993), *A California Flora and Supplement* (Munz & Keck 1973), and *A Flora of Southern California* (Munz 1974), and more recent taxonomic treatments were used to identify various taxa found at one or more of the acquisition areas. Finally, botanist colleagues and taxonomic experts were consulted regarding identification of select taxa.

Figure 2. Map of Floristic Survey of the Wind Wolves Preserve



## SECTION 3. BOTANICAL RESOURCES

The botanical resources of the project site include the flora and plant communities occupying the preserve landscape, including special-status species and sensitive habitats.

### FLORA

The flora of the survey area of the Wind Wolves Preserve consists primarily of annual and perennial herb and graminoid, with scattered shrub and fewer tree species. The flora consists of common and rare species, as is typical for all natural terrestrial and wetland habitats.

Table 2, Plant Species Observed at the Wind Wolves Preserve, lists all native and naturalized vascular plant taxa observed during the botanical survey, as well as taxa previously collected by others from the Preserve, as available at one or more public herbaria in California based on a search of the Consortium of California Herbaria<sup>1</sup>. Table 2 also includes plant taxa that have been reported from the Preserve by others.

DMEC botanists found, including those taxa already known from the Presere, a total of approximately 581 taxa from observation and collections made at 200 locations (waypoints), made up of 78 families, 276 genera, 529 species, with the remainder consisting of subspecies or varieties. Of the 581 taxa, 499 (85.9%) are native and 82 (14.1%) are naturalized nonnative taxa. This ratio of native to nonnative is higher then for California as a whole, indicating the relatively undisturbed nature of the Preserve.

The flora of the lower elevations of the Preserve, that portion surveyed by DMEC for this project, is dominated or characterized by herbaceous annual and perennial herbs and graminoids, represented by:

- 1 annual fern,
- 32 annual graminoids,
- 249 annual herbs,
- 4 annual vines,
- 5 biennial herbs,
- 7 perennial ferns,
- 48 perennial graminoids,
- 115 perennial herbs, and
- 11 perennial vines.

This totals 472 herbaceous taxa, representing 81.2% of the flora. Considering that the lower elevations of the Preserve are almost entirely grasslands, this stands to reason. This also indicates, but not entirely, the localized patterns of these herbaceous taxa, in particular the annual herbs (wildflowers), which can create diverse and very colorful displays when they are in peak bloom. Peak bloom is during the spring, primarily in March and early April at the lowest

<sup>1</sup> Consortium of California Herbaria. 2010. An online database: <http://ucjeps.berkeley.edu/consortium/>

elevations, moving up slope as the temperatures rise. The characteristic and most spectacular displays are formed by *Amsinckia*, *Castilleja*, *Dienandra*, *Eschscholzia*, *Lasthenia*, *Layia*, *Lupinus*, *Mentzelia*, *Monolopia*, and *Plagiobothrys* species. Some examples are provided below:



The middle elevations, around 3,000 feet, can contain significant wildflower blooms in June, from early summer annuals, primarily by species of *Clarkia*. Some examples are shown below:



**Table 2. Plant Species Observed at the Wind Wolves Preserve**

Scientific Name	Common Name	Habit	Family	Voucher
<i>Acer macrophyllum</i> Pursh var. <i>macrophyllum</i>	Bigleaf Maple	T	Aceraceae	
<i>Acer negundo</i> var. <i>californicum</i> (Torrey & A. Gray) Sarg.	Box Elder	T	Aceraceae	
<i>Achillea millefolium</i> L.	White Yarrow	PH	Asteraceae	129-10; Sanders et al. 20351 UCR
<i>Achyrrachaena mollis</i> Schauer	Blow Wives	AH	Asteraceae	193-10
<i>Adiantum jordanii</i> Müller Halle	California Maidenhair	PF	Pteridaceae	
<i>Aesculus californica</i> (Spach) Nutt.	California Buckeye	T	Sapindaceae	
<i>Agoseris grandiflora</i> (Nutt.) Greene	Bigflower Dandelion	PH	Asteraceae	224-10
<i>Agrostis viridis</i> Gouan *	Green Bentgrass	PG	Poaceae	354-10
<i>Allium crispum</i> E. Greene	Crinkled Onion	PG	Alliaceae	
<i>Allium howellii</i> Eastw. var. <i>howellii</i>	Howell's Onion	PG	Alliaceae	
<i>Allium peninsulare</i> Lemmon	Peninsular Onion	PG	Alliaceae	
<i>Allophylum giliooides</i> (Benth.) A.D. Grant & V.E. Grant ssp. <i>giliooides</i>	Dense False-Gilia	AH	Polemoniaceae	Boyd et al. 9565 RSA
<i>Amaranthus albus</i> L.*	Pigweed Amaranth	AH	Amaranthaceae	
<i>Ambrosia acanthicarpa</i> Hooker	Annual Turweed	AH	Asteraceae	
<i>Amsinckia douglasiana</i> A. DC.	Douglas' Fiddleneck	AH	Boraginaceae	90-10, 132-10; Sanders et al. 20524 RSA
<i>Amsinckia menziesii</i> (Lehm.) Nelson & J.F. Macbr. var. <i>menziesii</i>	Menzies' Fiddleneck	AH	Boraginaceae	24-10, 115-10
<i>Amsinckia menziesii</i> var. <i>intermedia</i> (Fischer & C. Meyer) Ganders	Common Fiddleneck Checker Fiddleneck, Devil's Lettuce	AH	Boraginaceae	28-10
<i>Amsinckia tessellata</i> A. Gray var. <i>tessellata</i>	Checker Fiddleneck, Devil's Lettuce	AH	Boraginaceae	Boyd et al. 9567 RSA
<i>Amsinckia tessellatavar. gloriosa</i> (Suksd.) Hoover	Lettuce	AH	Boraginaceae	Sanders et al. 19783 UCR
<i>Amsinckia vernicosa</i> Hooker & Arnott var. <i>vernicosa</i>	Green Fiddleneck	AH	Boraginaceae	136-10, 138-10, 164-10
<i>Anagallis minima</i> (L.) Krause *	Chaffweed	AH	Myrsinaceae	80-10
<i>Ancistrocarphus filagineus</i> A. Gray	Woolly Fishhooks	AH	Asteraceae	Sanders 20543 RSA
<i>Ancistrocarphus filagineus</i> A. Gray [ <i>Stylocline filaginea</i> ]	Neststraw	AH	Asteraceae	Sanders et al. 20391 UCR
<i>Androsace elongatata</i> ssp. <i>acuta</i> (E. Greene) G.T. Robbins	Rock Jasmine	AH	Primulaceae	Sanders et al. 19828 RSA
<i>Anemopsis californica</i> (Nutt.) Hook. & Arn.	Yerba Manza	PH	Saurueraceae	
<i>Anisocoma acaulis</i> Torrey & A. Gray	Scale Bud	AH	Asteraceae	Boyd et al. 9574 RSA

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Scientific Name	Common Name	Habit	Family	Voucher
<i>Aphanes occidentalis</i> (Nuttall) Rydberg [ <i>Alchemilla occidentalis</i> ]	Lady's Mantle	AH	Rosaceae	228-10; Sanders et al. 19826 UCR
<i>Apium graveolens</i> L. *	Celery	PH	Apiaceae	P
<i>Apocynum cannabinum</i> L.	Indian Hemp	PH	Apocynaceae	
<i>Aquilegia formosa</i> Fischer ex de Candolle	Truncate Crimson Columbine	PH	Ranunculaceae	
<i>Arabis pulchra</i> M.E. Jones var. <i>pulchra</i>	Desert Rock Cress	PH	Brassicaceae	232-10
<i>Arctostaphylos glaua</i> Lindley	Bigberry Manzanita	S	Ericaceae	
<i>Artemisia californica</i> Less.	California Sagebrush	S	Asteraceae	
<i>Artemisia douglasiana</i> Besser	Mugwort	PH	Asteraceae	X
<i>Artemisia dracunculus</i> L.	Tarragon	PH	Asteraceae	X
<i>Artemisia ludoviciana</i> Nutt. ssp. <i>ludoviciana</i>	Silver Wormwood	PH	Asteraceae	
<i>Artemisia tridentata</i> Nutt. ssp. <i>tridentata</i>	Great Basin Sagebrush	S	Asteraceae	X
<i>Asclepias californica</i> E. Greene ssp. <i>californica</i>	California Milkweed	PH	Apocynaceae	Boyd et al. 9580 RSA
<i>Asclepias eriocarpa</i> Bentham	Indian Milkweed	PH	Apocynaceae	Short & Johnson S-161 UC
<i>Asclepias erosa</i> Torrey	Desert Milkweed	PH	Apocynaceae	Short & Johnson S-161 UC
<i>Asclepias fascicularis</i> Decne.	Narrowleaf Milkweed	PH	Apocynaceae	Bitter Creek Ranch
<i>Astragalus didymocarpus</i> Hook. & Arn. var. <i>didymocarpus</i>	Two-seeded Milkvetch	AH	Fabaceae	23-10, 121-10, 125-10
<i>Astragalus douglasii</i> (Torrey & A. Gray) A. Gray var. <i>douglasii</i>	Douglas Milkvetch	AH	Fabaceae	J.Burtt Davy 6380 POM
<i>Astragalus gambelianus</i> E. Sheldon	Gambel's Dwarf Milkvetch	PH	Fabaceae	Sanders et al. 20490 UCR
<i>Astragalus lentiginosus</i> var. <i>nigricalycis</i> M.E. Jones	Black-sealed Freckled Locoweed	PH	Fabaceae	22-10, 74-10
<i>Astragalus oxyphysus</i> A. Gray	Mount Diablo Milkvetch	PH	Fabaceae	
<i>Astragalus pachypus</i> E. Greene var. <i>pachypus</i>	Bush Milkvetch	PH	Fabaceae	J.Burtt Davy 2018 UC
<i>Astragalus purshii</i> var. <i>tinctus</i> M.E. Jones	Purple Woollypod Milkvetch	PH	Fabaceae	Sanders et al. 20452 UCR
<i>Astragalus trichopodus</i> var. <i>phoxus</i> (M.E. Jones) Barneby	Santa Barbara Milkvetch	PH	Fabaceae	
<i>Athyrsus pusillus</i> (Hook.) E. Greene	Dwarf Athysanus	AH	Brassicaceae	Sanders et al. 19827 RSA
<i>Athyrsus unilateralis</i> (M.E. Jones) Jeps.	Lady's Tongue Mustard	AH	Brassicaceae	Sanders et al. 19816 RSA
<i>Atriplex coronata</i> S. Watson	Crown Scale	AH	Chenopodiaceae	J.Burtt Davy 2135 UC
<i>Atriplex lentiformis</i> (Torrey) S. Watson ssp. <i>lentiformis</i>	Big Saltbush, Quailbrush	S	Chenopodiaceae	Bitter Creek Ranch
<i>Atriplex linearis</i> S. Watson	Slenderleaf Saltbush	S	Chenopodiaceae	63-10
<i>Atriplex polycarpa</i> (Torrey) S. Watson	Allscale	S	Chenopodiaceae	X; J. Burtt Davy 2132 UC
<i>Atriplex rosea</i> L. *	Redscale	AH	Chenopodiaceae	

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<i>Avena barbata</i> Link. *	Slender Wild Oat	AG	Poaceae	X; Sanders 20501 SD
<i>Avena fatua</i> L. *	Wild Oat	AG	Poaceae	152-10; Sanders & Boyd 20497 UCR
<i>Azolla filiculoides</i> Lam.	Mosquito Fern	AF	Azollaceae	Sanders 20557 UC
<i>Baccharis douglasii</i> de Candolle in A.P. de Candolle & A.L.P.P. de Candolle	Marsh Baccharis	S	Asteraceae	Bitter Creek Ranch
<i>Baccharis salicifolia</i> (Ruiz Lopez & Pavon) Pers.	Mulefat	S	Asteraceae	94-10
<i>Balsamorhiza deltoidea</i> Nuttall	Balsamroot, Chuchupate	PH	Asteraceae	328-10; Sanders et al. 20356 RSA
<i>Bloomeria crocea</i> (Torrey) Cov. var. <i>crocea</i>	Common Goldenstars	PG	Themidaceae	Bitter Creek Ranch
<i>Bolboschoenus maritimus</i> var. <i>paludosus</i> (A. Nelson) T. Koyama	Prairie Rush	PG	Cyperaceae	
<i>Bowlesia incana</i> Ruiz Lopez & Pavón	Hoary Bowlesia	AH	Apiaceae	82-10; Sanders et al. 20464 UCR
<i>Brickellia californica</i> (Torrey & A. Gray) A. Gray	California Brickellbush	S	Asteraceae	C.B. Wolf sn 16-Sep-1931 POM
<i>Brickellia nevinitii</i> A. Gray	Nevin's Brickellbush	S	Asteraceae	C.B. Wolf 2444 RSA
<i>Brodiaea terrestris</i> ssp. <i>kernensis</i> (Hoover) Niehaus	Harvest Brodiaea	PH	Amaryllidiaceae	
<i>Bromus arenarius</i> Labill. *	Australian Brome	AG	Poaceae	Sanders et al. 20365 RSA
<i>Bromus arizonicus</i> (Shear) Stebbins	Arizona Brome	AG	Poaceae	146-10
<i>Bromus carinatus</i> Hooker & Arnott var. <i>carinatus</i>	California Broom	AG	Poaceae	332-10
<i>Bromus diandrus</i> Roth ssp. <i>diandrus</i> *	Ripgut Grass	AG	Poaceae	X; Sanders et al. 20502 SD
<i>Bromus hordeaceus</i> L. *	Soft Chess	AG	Poaceae	X; Sanders & Boyd 20504 UCR
<i>Bromus madritensis</i> L. ssp. <i>madritensis</i> *	Madrid Brome	AG	Poaceae	X; Sanders & Boyd 20537 UCR
<i>Bromus madritensis</i> ssp. <i>rubens</i> (L.) Husnot *	Red Brome	AG	Poaceae	X; Sanders & Boyd 20503 UCR
<i>Bromus sterilis</i> L. *	Poverty Brome	AG	Poaceae	Sanders et al. 20537 RSA
<i>Bromus tectorum</i> L. var. <i>tectorum</i> *	Downy Brome, Cheat Grass	AG	Poaceae	Sanders et al. 20363 UCR
<i>Calandrinia ciliata</i> (Ruiz Lopez & Pavon) DC.	Redmaids	AH	Portulacaceae	196-10; Sanders et al. 19803 RSA
<i>California macrophylla</i> (Hooker & Arnott) Aldas., C. Navarro, P. Vargas, Ll. Saez & Aedo	Large-leaved Filaree	AH	Geraniaceae	Sanders et al. 19818 RSA
<i>Calocedrus decurrens</i> (Torrey) Florin	Incense-cedar	T	Cupressaceae	Twisselmann 8322 SBBG
<i>Calochortus cf. weedii</i> var. <i>vestus</i> Purdy	Weed's Mariposa Lily	PH	Liliaceae	329-10
<i>Calochortus kennedyi</i> Porter X <i>venustus</i> Douglas ex Bentham	Desert Mariposa Lily	PH	Liliaceae	
<i>Calochortus venustus</i> Douglas ex Bentham	Butterfly Mariposa Lily	PH	Liliaceae	345-10
<i>Calyptidium monandrum</i> Nutt.	Common Calyptidium	AH	Portulacaceae	Boyd et al. 9551 RSA
<i>Calyptidium parryi</i> A. Gray var. <i>parryi</i>	Parry's Pussypaws	AH	Portulacaceae	

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<i>Calystegia malacophylla</i> ssp. <i>pedicellata</i> (Jepson) Munz	Jepson's Morning Glory	PV	Convolvulaceae	
<i>Calystegia occidentalis</i> ssp. <i>fulcrata</i> (A. Gray) Brummitt	Sonora Morning Glory	PV	Convolvulaceae	
<i>Camissonia boothii</i> ssp. <i>decorticans</i> (Hooker & Arnott) Raven	Booth Shredding Primrose	AH	Onagraceae	X
<i>Camissonia californica</i> (Torrey & A. Gray) Raven	Mustard Primrose	AH	Onagraceae	Boyd et al. 9590 RSA
<i>Camissonia campestris</i> (Greene) Raven ssp. <i>campestris</i>	Mojave Sun-cup	AH	Onagraceae	22-10
<i>Camissonia graciliflora</i> (Hook. & Arn.) Raven	Hill Sun-cup	AH	Onagraceae	Sanders et al. 19800 RSA
<i>Camissonia intermedia</i> Raven	Intermediate Sun-cup	AH	Onagraceae	Boyd et al. 9547 RSA
<i>Camissonia kernensis</i> ssp. <i>gilmanii</i> (Munz) Raven	Gilman's Evening Primrose	AH	Onagraceae	309-10
<i>Camissonia pallida</i> (Abrams) Raven	Pale Yellow Suncups	AH	Onagraceae	Sanders et al. 20456 UCR
<i>Camissonia strigulosa</i> (Fischer & C. Meyer) Raven	Contorted Primrose	AH	Onagraceae	
<i>Capsella bursa-pastoris</i> (L.) Medikus *	Shephard's Purse	AH	Brassicaceae	X
<i>Cardamine californica</i> (T. & G.) Greene var. <i>californica</i>	California Milkmaids	AH	Brassicaceae	
<i>Cardaria pubescens</i> (C. Meyer) Jamol. *	White-top	PH	Brassicaceae	
<i>Carex praegracilis</i> W. Boott	Field Sedge	PG	Cyperaceae	Sanders 20559 RSA
<i>Castilleja affinis</i> Hooker & Arnott ssp. <i>affinis</i>	Coast Indian Paintbrush	PH	Orobanchaceae	338-10; Sanders et al. 20349 UCR
<i>Castilleja applegatei</i> ssp. <i>martinii</i> (Abrams) Chuang & Heckard	Wavy-leaved Paintbrush	AH	Orobanchaceae	
<i>Castilleja attenuata</i> (Gray) Chuang & Heckard	Valley Tassels	AH	Orobanchaceae	Sanders et al. 20431 UCR
<i>Castilleja exserta</i> (A.A. Heller) Chuang & Heckard ssp. <i>exserta</i>	Purple Owl's Clover	AH	Orobanchaceae	25-10, 98-10
<i>Castilleja minor</i> ssp. <i>spiralis</i> (Jepson) Chuang & Heckard	Lesser Indian Paintbrush	AH	Orobanchaceae	
<i>Castilleja subinclusa</i> E. Greene ssp. <i>subinclusa</i>	Long-leaved Indian Paintbrush	PH	Orobanchaceae	139-10
<i>Castilleja tenuis</i> (A.A. Heller) Chuang & Heckard	Hairy Indian Paintbrush	AH	Orobanchaceae	76-10, 153-10, 197-10
<i>Catalpa bignonioides</i> Walt. +	Common or Southern Catalpa	T	Bignoniaceae	351-10
<i>Caulanthus anceps</i> Payson	Lemmon's Mustard	AH	Brassicaceae	Sanders et al. 20409 RSA
<i>Caulanthus coulteri</i> S. Watson var. <i>coulteri</i>	Coulter Jewelflower	AH	Brassicaceae	51-10, 140-10
<i>Caulanthus lasiophyllum</i> (Hooker & Arnott) Payson	California Mustard	AH	Brassicaceae	47-10, 128-10; Sanders et al. 19780 RSA
<i>Ceanothus cf integrerrimus</i> Hooker & Arnott	Deer Brush	S	Rhamnaceae	
<i>Ceanothus cuneatus</i> (Hook.) Nutt. Ex T. & G. var. <i>cuneatus</i>	Buck Brush, Wedgeleaf Ceanothus	S	Rhamnaceae	
<i>Ceanothus greggii</i> ssp. <i>vestitus</i> (Greene) McMinn	Mojave Ceanothus	S	Rhamnaceae	
<i>Centaurea maculosa</i> Lam. *	Spotted Knapweed	AH	Asteraceae	
<i>Centaurea melitensis</i> L. *	Tocalote, Napa Thistle	AH	Asteraceae	X

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<i>Centaurea solstitialis</i> L. *	Yellow Star-thistle	AH	Asteraceae	
<i>Cerastium glomeratum</i> Thuill. *	Mouse-ear Chickweed	AH	Caryophyllaceae	Sanders et al. 19834 UCR
<i>Cercocarpus betuloides</i> Torrey & A. Gray var.	Birchleaf Mountain Mahogany	S	Rosaceae	
<i>Cercocarpus ledifolius</i> Nuttall var. <i>ledifolius</i>	Curl-leaf Mountain Mahogany	S	Rosaceae	
<i>Chaenactis fremontii</i> A. Gray	Desert Pincushion	AH	Asteraceae	155-10
<i>Chaenactis glabriuscula</i> DC. var. <i>glabriuscula</i>	Common Yellow Pincushion	AH	Asteraceae	Sanders et al. 20459 UCR
<i>Chaenactis xantiana</i> Gray	Xantus Pincushion	AH	Asteraceae	Boyd et al. 9575 UCR
<i>Chamaesyce ocellata</i> (Durand & Hilg.) Millsp. ssp. <i>ocellata</i>	Littleye Spurge	AH	Euphorbiaceae	
<i>Chamomilla suaveolens</i> (Pursh) Rydberg [ <i>Matricaria matricarioides</i> ]	Pineapple Weed	AH	Asteraceae	Sanders et al. 20485 UCR
<i>Chaenactis</i> sp.	Pincushion	AH	Asteraceae	X
<i>Cheilanthes</i> sp.	Fern	PF	Pteridaceae	
<i>Chenopodium berlandieri</i> Moq. var. ?	Netseed Lambquarters	AH	Chenopodiaceae	
<i>Chenopodium californicum</i> (S. Watson) S. Watson	California Tea	PH	Chenopodiaceae	Sanders et al. 20410 RSA
<i>Chenopodium incognitum</i> Wahl	Masked Goosefoot	AH	Chenopodiaceae	358-10
<i>Chenopodium murale</i> L. *	Nettle-leaved Goosefoot	AH	Chenopodiaceae	
<i>Chorizanthe staticoides</i> Bentham var. <i>staticoides</i>	Turkish Rugging	AH	Polygonaceae	341-10
<i>Chorizanthe xanti</i> S. Watson var. <i>xanti</i>	Xantus Spineflower	AH	Polygonaceae	Boyd et al. 9549 RSA
<i>Cicuta douglasii</i> (DC.) Coulter & Rose	Water Hemlock	PH	Apiaceae	
<i>Cirsium occidentale</i> (Nuttall) Jepson var. <i>occidentale</i>	Cobweb Thistle	BH	Asteraceae	Sanders et al. 20371 UCR
<i>Cirsium occidentale</i> var. <i>californicum</i> (Gray) Keil & C. Turner	California Thistle	BH	Asteraceae	
<i>Cirsium occidentale</i> var. <i>venustum</i> (E. Greene) Jepson	Red or Venus Thistle	BH	Asteraceae	343-10
<i>Cirsium vulgare</i> (Savi) Tenore *	Bull Thistle	BH	Asteraceae	
<i>Clarkia cylindrica</i> (Jepson) Harlan Lewis & M. Lewis ssp. <i>cylindrica</i>	Speckled Clarkia	AH	Onagraceae	310-10, 312-10, 322-10
<i>Clarkia heterandra</i> (Torrey) H. Lewis & Raven	California Gaura	AH	Onagraceae	356-10
<i>Clarkia purpurea</i> ssp. <i>quadrivulnera</i> (Douglas) Harlan Lewis & M. Lewis	Purple Clarkia	Ah	Onagraceae	311-10, 313-10, 318-10, 342-10
<i>Clarkia sp.</i>	Clarkia	AH	Onagraceae	X
<i>Clarkia unguiculata</i> Lindley	Elegant Farewell-to-Spring	AH	Onagraceae	Sanders & Boyd 20523 UCR
<i>Claytonia exigua</i> Torrey & A. Gray ssp. <i>exigua</i>	Small Miner's Lettuce	AH	Portulacaceae	Sanders et al. 19817 RSA
<i>Claytonia parviflora</i> Hook. ssp. <i>parviflora</i>	Small-flowered Miner's Lettuce	AH	Portulacaceae	231-10, 235-10; Sanders et al. 19823 RSA

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<i>Claytonia perfoliata</i> ssp. <i>mexicana</i> (Rydberg) J.M. Miller & Chambers	Mexican Miner's Lettuce	AH	Portulacaceae	
<i>Claytonia perfoliata</i> Willd. ssp. <i>pefoliata</i>	Miner's Lettuce	AH	Portulacaceae	52-10; Sanders et al. 20403 UCR
<i>Clematis ligusticifolia</i> (Nutt.)	Virgin's Bower	PV	Ranunculaceae	
<i>Collinsia bartsiifolia</i> Benth. var. <i>bartsiiifolia</i>	White Chinese Houses	AH	Plantaginaceae	190-10, 216-10; Sanders et al. 20487 UCR
<i>Collinsia bartsiifolia</i> var. <i>davidsonii</i> (Parish) V. Newsom	Davidson White Chinese Houses	AH	Plantaginaceae	Twisselmann 4380 JEPS
<i>Collinsia heterophylla</i> Buist var. <i>heterophylla</i>	Chinese Houses	AH	Plantaginaceae	355-10
<i>Convolvulus arvensis</i> L. *	Bindweed	AV	Convolvulaceae	
<i>Conyza canadensis</i> (L.) Cronq.	Horseweed	AH	Asteraceae	
<i>Cordylanthus nevinii</i> A. Gray	Nevin's Bird Beak	AH	Orobanchaceae	
<i>Coreopsis biglovei</i> (A. Gray) H.M. Hall	Bigelow Coreopsis	AH	Asteraceae	Boyd et al. 9572 UCR
<i>Coreopsis calliopsidea</i> (DC.) A. Gray	Leafy-stemmed Coreopsis	AH	Asteraceae	144-10
<i>Corethrogyne filaginifolia</i> (Hook. & Arn.) Nuttall	California Cudweed-aster	PH	Asteraceae	X
<i>Crassula connata</i> (Ruiz, Lopez & Pavon) A. Berger	Pygmy Sand-weed	AH	Crassulaceae	X; Sanders et al. 19805 UCR
<i>Cryptantha echinella</i> E. Greene	Prickly Cryptantha	AH	Boraginaceae	314-10
<i>Cryptantha flaccida</i> (Lehm.) E. Greene	Flaccid Forget-Me-Not	AH	Boraginaceae	Boyd et al. 9543 RSA
<i>Cryptantha microstachys</i> (A. Gray) E. Greene	Tejon Cryptantha	AH	Boraginaceae	
<i>Cryptantha muricata</i> (Hook. & Arn.) Nelson & J.F. Macbrvar. <i>muricata</i>	Pointed Cryptantha	AH	Boraginaceae	Boyd et al. 9554 UCR
<i>Cryptantha nemaclada</i> E. Greene	Colusa Cryptantha	AH	Boraginaceae	Sanders et al. 20412 RSA
<i>Cryptantha nevadensis</i> A. Nelson & Kennedy var. <i>nevadensis</i>	Nevada Forget-Me-Not	AH	Boraginaceae	
<i>Cryptantha nevadensis</i> var. <i>rigida</i> I.M. Johnst.	Nevada Forget-Me-Not	AH	Boraginaceae	Sanders et al. 20364 RSA
<i>Cryptantha oxygona</i> (A. Gray) E. Greene	Sharp-not Forget-Me-Not	AH	Boraginaceae	Boyd et al. 9555 RSA
<i>Cucurbita foetidissima</i> Kunth	Calabazilla	PV	Cucurbitaceae	
<i>Cucurbita palmata</i> S. Watson	Coyote Melon	PV	Cucurbitaceae	
<i>Cuscata californica</i> var. <i>papillosa</i> Yuncker	Papillose California Dodder	AV	Cuscutaceae	X
<i>Cynodon dactylon</i> (L.) Pers. *	Bermuda Grass	PG	Poaceae	
<i>Datura wrightii</i> Regel	Jimson Weed	AH	Solanaceae	X
<i>Daucus pusillus</i> Michaux	Southwestern Carrot	AH	Apiaceae	
<i>Deinandra pallida</i> (D.D. Keck) B.G. Baldwin [ <i>Hemizonia pallida</i> ]	Kern Tarplant	AH	Asteraceae	36-10, 103-10, 116-10
<i>Delphinium gypsophilum</i> Ewan ssp. <i>gypsophilum</i>	Gypsum Larkspur	PH	Ranunculaceae	73-10, 99-10, 182-10, 185-10, 215-10
<i>Delphinium parishii</i> A. Gray ssp. ?	Parish Larkspur	PH	Ranunculaceae	

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<i>Delphinium</i> sp.	Larkspur	PH	Ranunculaceae	X
<i>Descurainia pinnata</i> (Walter) Britton ssp. <i>menziesii</i>	Western Tansy Mustard	AH	Brassicaceae	Boyd et al. 9568 RSA
<i>Descurainia sophia</i> (L.) Webb *	Flix Weed	AH	Brassicaceae	Sanders et al. 19814 UCR
<i>Dichelostemma capitatum</i> Alph. Wood ssp. <i>capitatum</i>	Blue Dicks	PG	Themidaceae	26-10; Sanders et al. 19784 UCR
<i>Dichelostemma congestum</i> (Smith) Kunth	Ookow	PG	Themidaceae	
<i>Distichlis spicata</i> (L.) E. Greene	Saltgrass	PG	Poaceae	X
<i>Dudleya cymosa</i> (Lemaire) Britton & Rose ssp. <i>cymosa</i>	Canyon Live-forever	PH	Crassulaceae	
<i>Dudleya lanceolata</i> (Nuttall) Britton & Rose	Lanceleaf Live-forever	PH	Crassulaceae	
<i>Eastwoodia elegans</i> Brandegee	Yellow Mock Aster	S	Asteraceae	54-10, 145-10
<i>Eleocharis parishii</i> Britt.	Parish Spikerush	PG	Cyperaceae	Twisselmann 2339 CAS
<i>Eleocharis rostellata</i> (Torrey) Torrey	Walking Sedge	PG	Cyperaceae	
<i>Elymus cinereus</i> Scribn. & Merr.	<u>Great Basin Wildrye</u>	PG	Poaceae	
<i>Elymus condensatus</i> C. Presl.	Giant Wildrye	PG	Poaceae	X; Sanders et al. 20335 UCR
<i>Elymus elymoides</i> (Raf.) Swezey ssp. [ <i>Sitanon hystrrix</i> ]	Squirreltail	PG	Poaceae	X
<i>Elymus</i> sp.	Wildrye	PG	Poaceae	X
<i>Elymus triticoides</i> Buckl.	Valley Wildrye	PG	Poaceae	348-10
<i>Elymus triticoides</i> ssp. <i>multiflorus</i> Gould	<u>Alkali Rye</u>	PG	Poaceae	
<i>Emmena the penduliflora</i> Benth. var. <i>penduliflora</i>	Whispering Bells	AH	Boraginaceae	Sanders et al. 20461 UCR
<i>Ephedra viridis</i> Cov.	Green Mormon Tea	S	Ephedraceae	Sanders et al. 20417 UCR
<i>Epilobium ciliatum</i> Raf. ssp. <i>ciliatum</i>	Northern Willow-herb	AH	Onagraceae	
<i>Epilobium</i> sp.	Willow-herb	AH	Onagraceae	X
<i>Equisetum laevigatum</i> A. Braun	Smooth Scouring Rush	PF	Equisetaceae	
<i>Eragrostis cf pectinacea</i> (Michx.) Nees var. <i>pectinacea</i>	Tufted Lovegrass	PG	Poaceae	
<i>Eremalche parryi</i> (E. Greene) E. Greene	Parry's Mallow	AH	Malvaceae	
<i>Eremocarpus setigerus</i> (Hooker) Bentham [ <i>Croton setigerus</i> ]	Dove Weed	AH	Euphorbiaceae	X
<i>Eriastrum densifolium</i> (Benth.) H. Mason ssp. <i>austromontanum</i>	Shrubby Woollystar	PH	Polemoniaceae	326-10; Boyd et al. 9556 RSA
<b><i>Eriastrum pluriflorum</i> (A.A. Heller) H. Mason</b>	<b>Many-Flowered Eristrium</b>	AH	Polemoniaceae	
<i>Ericameria linearifolia</i> (DC.) Urb. & Wussow	Linear-leaved Goldenbush	S	Asteraceae	229-10; Sanders et al. 20488 UCR
<i>Ericameria naseosa</i> var. <i>mohavensis</i> (Greene) G.L. Nesom & G.I. Baird	Mojave Rubber Rabbitbrush	S	Asteraceae	141-10, 230-10, Twisselmann 8000 RSA
<i>Erigeron foliosus</i> Nuttall var. <i>foliosus</i>	Leafy Fleabane or Daisy	PH	Asteraceae	X

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<i>Eriodictyon crassifolium</i> var. <i>nigrescens</i> Brand	Thick-leaved Yerba Santa	S	Boraginaceae	Sanders et al. 2484 RSA
<i>Eriogonum angulosum</i> Benth.	Angle-stemmed Buckwheat	AH	Polygonaceae	Sanders et al. 20531 RSA
<i>Eriogonum elongatum</i> Benth.	Long-stemmed Buckwheat	PH	Polygonaceae	
<i>Eriogonum fasciculatum</i> var. <i>polifolium</i> (A. DC.) Torrey & A. Gray	California Wild Buckwheat	S	Polygonaceae	X; Sanders et al. 20479 UCR
<i>Eriogonum gracillimum</i> S. Watson	Slender Buckwheat	AH	Polygonaceae	154-10
<i>Eriogonum heermannii</i> Durand & Hilg. var. <i>heermannii</i>	Heermann's Buckwheat	S	Polygonaceae	Boyd et al. 9553 RSA
<i>Eriogonum nudum</i> var. <i>pauciflorum</i> S. Watson or <i>pubiflorum</i> Benth.	Nude Buckwheat	PH	Polygonaceae	X
<i>Eriogonum ordii</i> S. Watson	Ord Buckwheat	AH	Polygonaceae	161-10
<i>Eriogonum parvifolium</i> Smith	Dune Eriogonum	S	Polygonaceae	X
<i>Eriogonum roseum</i> Durand & Hilg.	Wand Buckwheat	AH	Polygonaceae	
<i>Eriogonum</i> sp.	Buckwheat		Polygonaceae	308-10
<i>Eriogonum temblorense</i> J. Howell & Twisselmann	Tremblor Buckwheat	AH	Polygonaceae	
<i>Eriogonum viridescens</i> A.A. Heller	Bright Green Eriogonum	AH	Polygonaceae	
<i>Eriogonum wrightii</i> var. cf <i>subscaposum</i> S. Watson	Wright's Buckwheat	PH/ S	Polygonaceae	
<i>Eriophyllum ambiguum</i> var. <i>paleaceum</i> (Brandegee) Ferris	Annual Woolly Sunflower	AH	Asteraceae	
<i>Eriophyllum confertiflorum</i> (DC.) A. Gray var. <i>confertiflorum</i>	Golden Yarrow	PH	Asteraceae	163-10, 331-10; Sanders et al. 20338 UCR
<i>Eriophyllum lanatum</i> var. <i>hallii</i> Constance	Fort Tejon Wooly Sunflower	PH	Asteraceae	
<i>Erodium botrys</i> (Cav.) Bertol. *	Long-beaked Filaree	AH	Geraniaceae	X
<i>Erodium brachycarpum</i> (Godron) Thell. *	Short-fruited Filaree	AH	Geraniaceae	Sanders et al. 2443 RSA
<i>Erodium cicutarium</i> (L.) L'Her *	Redstem Filaree	AH	Geraniaceae	X; Sanders et al. 19798 UCR
<i>Erodium moschatum</i> (L.) L'Her *	Whiteleaf Filaree	AH	Geraniaceae	X
<i>Erysimum capitatum</i> (Douglas) E. Greene ssp. <i>capitatum</i>	Western Wallflower	PH	Brassicaceae	
<b><i>Erysimum moniliforme</i> Eastwood</b>	<b>Yellow-flowered Wallflower</b>	PH	Brassicaceae	133-10, 323-10; Twisselmann 8089 SBBG
<i>Eschscholzia californica</i> Chamisso in C.G.D. ssp. <i>californica</i>	California Poppy	AH	Papaveraceae	92-10
<i>Eschscholzia lemmonii</i> E. Greene ssp. <i>lemmonii</i>	Lemmon's Poppy	AH	Papaveraceae	48-10, 127-10
<b><i>Eschscholzia lemmonii</i> ssp. <i>kernensis</i> (Munz) C. Clark</b>	<b>Tejon Poppy</b>	AH	Papaveraceae	
<i>Euphorbia spathulata</i> Lam.	Spoonleaf Spurge	AH	Euphorbiaceae	Boyd et al. 9562 RSA
<i>Filago californica</i> Nutt.	California Filago	AH	Asteraceae	35-10, 67-10; Sanders et al. 20472 UCR
<i>Forestiera pubescens</i> Nuttall	Desert Olive	S	Oleaceae	Magney et al. 149-10 UCSB
<i>Frankenia salina</i> (Molina) I.M. Johnston	Alkali Heath	S	Frankeniaceae	Bitter Creek Ranch

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<i>Fraxinus</i> sp. ( <i>latifolia</i> or <i>velutina</i> )	Ash	T	Oleaceae	
<i>Fremontodendron californicum</i> (Torrey) Cov. ssp. <i>californicum</i>	California Flannel Bush	S	Sterculiaceae	C.B. Wolf sn 16-Sep-1931 UC
<i>Fritillaria agrestis</i> E. Greene	<b>Stink Bells</b>	PG	Liliaceae	Sanders et al. 2470 RSA
<i>Galium andrewsii</i> ssp. <i>intermedium</i> Dempster & Stebb.	Intermediate Pine Mat	PH	Rubiaceae	Bitter Creek Ranch
<i>Galium angustifolium</i> Nutt. ssp. <i>angustifolium</i>	Narrowleaf Bedstraw	PH	Rubiaceae	Boyd et al. 9576 RSA
<i>Galium aparine</i> L.	Goosegrass	AH	Rubiaceae	Sanders & Boyd 20533 UCR
<i>Galium cf. californicum</i> Hook. & Arn.	California Bedstraw	PH	Rubiaceae	335-10
<i>Garrya flavescens</i> S. Watson ssp. <i>flavescens</i>	Ashy Silk-tassel Bush	S	Garryaceae	J.Burtt Davy 2126 UC
<i>Gilia brecciarum</i> M.E. Jones ssp. <i>brecciarum</i>	Breccia Gilia	AH	Polemoniaceae	40-10, 114-10, 186-10
<i>Gilia brecciarum</i> ssp. <i>jacens</i> (A. Grant & V. Grant) Day	Purple-flowered Breccia Gilia	AH	Polemoniaceae	Boyd et al. 9564A UCR
<i>Gilia capitata</i> Sims	Globe Gilia	AH	Polemoniaceae	221-10; Sanders et al. 20378 UCR
<i>Gilia capitata</i> ssp. <i>abrotanifolia</i> (E. Greene) V. Grant	Blue Field Gilia	AH	Polemoniaceae	J.Burtt Davy 2060 UC
<i>Gilia latiflora</i> ssp. <i>cuyamensis</i> A. & V. Grant	Cuyama Gilia	AH	Polemoniaceae	Boyd et al. 9564B RSA
<i>Gilia latiflora</i> ssp. <i>davyi</i> (Milliken) A. & V. Grant	Davy Broad-flowered Gilia	AH	Polemoniaceae	Bitter Creek Ranch
<i>Gilia</i> sp.	Gilia	AH	Polemoniaceae	61-10
<i>Gilia tricolor</i> ssp. <i>diffusa</i> (Congdon) H. Mason & A. D. Grant	Diffuse Birds-eye Gilia	AH	Polemoniaceae	Sanders et al 19790 RSA
<i>Gutierrezia californica</i> (de Candolle) Torrey & A. Gray	California Matchweed	S	Asteraceae	X
<i>Hazardia squarrosa</i> var. <i>obtusa</i> (E. Greene) Jepson	Prickly Sawtooth Goldenbush	S	Asteraceae	Eastwood sn Oct-1894 UC
<i>Helianthus annuus</i> L.	Annual Sunflower	AH	Asteraceae	X
<i>Helianthus</i> sp.	Sunflower	AH	Asteraceae	X
<i>Heliotropium curassavicum</i> L.	Salt Heliotrope	PH	Boraginaceae	Bitter Creek Ranch
<i>Hemizonia</i> sp.	Tarplant	AH	Asteraceae	31-10
<i>Herniaria hirsuta</i> ssp. <i>cinerea</i> (DC.) Coutinho *	Hairy Herniawort	AH	Caryophyllaceae	71-10; Sanders & Boyd 20509 UCR
<i>Hesperostipa</i> [ <i>Nassella</i> ] <i>comata</i> (Trin. & Rupr.) Barkworth ssp. <i>comata</i>	Needle and Thread	PG	Poaceae	
<i>Hesperoyucca whipplei</i> (Torr.) Baker	Our Lord's Candle	S	Agavaceae	X; C. Davidson 2917 RSA
<i>Heterodraba unilateralis</i> (M.E. Jones) E. Greene	Ladies' Tongue	PH	Brassicaceae	Sanders et al. 19816 UCR
<i>Heterotheca sessiliflora</i> ssp. <i>echioides</i> (Benth.) Semple	Bristly Golden-aster	PH	Asteraceae	327-10
<i>Heuchera cespitosa</i> Eastwood	Tufted Alumroot	PH	Saxifragaceae	
<i>Hirschfeldia incana</i> (L.) Lagr.-Fossat *	Summer Mustard	BH	Brassicaceae	X
<i>Hollisteria lanata</i> S. Watson	False Spineflower	AH	Polygonaceae	

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<i>Holodiscus cf discolor</i> (Pursh) Maxim.	Oceanspray	S	Rosaceae	
<i>Hordeum brachyantherum</i> Nevski ssp. <i>brachyantherum</i>	Meadow Barley	AG	Poaceae	Sanders & Boyd 20507 UCR
<i>Hordeum marinum</i> ssp. <i>gussoneanum</i> (Parl.) Thell.*	Mediterranean Barley	AG	Poaceae	
<i>Hordeum murinum</i> L. ssp. <i>murinum</i> *	Winter Barley	AG	Poaceae	Bitter Creek Ranch
<i>Hordeum murinum</i> ssp. <i>glaucum</i> (Steudel) Tzvelev	Summer Barley	AG	Poaceae	Bitter Creek Ranch
<i>Hordeum murinum</i> ssp. <i>leporinum</i> (Link) Arcang. *	Hare Barley	AG	Poaceae	X; Sanders 20556 RSA
<i>Hordeum vulgare</i> L. *	Barley	AG	Poaceae	
<i>Hymenoclea salsola</i>	Cheesebush	S	Chenopodiaceae	147-10
<i>Hypochaeris glabra</i> L. *	Smooth Cat's-ear	AH	Asteraceae	
<i>Hypochaeris radicata</i> L. *	Rough Cat's ear	AH	Asteraceae	
<i>Isocoma acradenia</i> var. <i>bracteosa</i> (Greene) G.L. Nesom	Desert Goldenbush	S	Asteraceae	143-10
<i>Isomeris arborea</i> var. <i>globosa</i> Coville	Globe Bladderpod	S	Capparaceae	53-10; Sanders et al. 20484 UCR
<i>Isopyrum occidentale</i> Hook. & Arn. [ <i>Enemion occidentale</i> ]	Western Rue-anemone	PH	Ranunculaceae	
<i>Iva axillaris</i> ssp. <i>robustior</i> (Hook.) Bassett	Povertyweed	PH	Asteraceae	
<i>Juncus balticus</i> var. <i>ater</i> (Rydberg) Snogerup	Baltic Rush	PG	Juncaceae	Sanders & Boyd 20518 RSA
<i>Juncus balticus</i> Willd. var. <i>balticus</i>	Baltic Rush	PG	Juncaceae	Sanders & Boyd 20518 UCR
<i>Juncus bufonius</i> L. var. ?	Toad Rush	AG	Juncaceae	Sanders & Boyd 20517 UCR
<i>Juncus ensifolius</i> Wikstrom	Swordleaf Rush	PG	Juncaceae	
<i>Juncus mexicanus</i> Willd.	Wire Grass	PG	Juncaceae	X; C. Davidson 2918 RSA
<i>Juncus oxymeris</i> Engelm.	Pointed Rush	PH	Juncaceae	
<i>Juncus</i> sp.	Rush	PG	Juncaceae	78-10, 83-10, 84-10
<i>Juncus textilis</i> Buchenau	Basket Rush	PH	Juncaceae	X
<i>Juniperus californica</i> Carrière	California Juniper	S	Cupressaceae	X; Boyd et al. 9586 UCR
<i>Keckiella breviflora</i> (Lindley) Straw var.	Stubflower Penstemon	S	Plantaginaceae	
<i>Keckiella ternata</i> var. <i>septentrionalis</i> (Munz & I.M. Johnston) N. Holmgren	Northern Blue-stemmed Keckiella	S	Plantaginaceae	
<i>Koeleria macrantha</i> (Ledeb.) J.A. Shultes	June Grass	PG	Poaceae	Bitter Creek Ranch
<i>Lactuca serriola</i> L. *	Prickly Wild Lettuce	AH	Asteraceae	X
<i>Laennecia coulteri</i> (A. Gray) G.L. Nesom [ <i>Conyza coulteri</i> ]	Coulter's Horseweed	AH	Asteraceae	
<i>Lagophylla ramosissima</i> Nutt. ssp. <i>ramosissima</i>	Common Hareleaf	AH	Asteraceae	316-10; Sanders 20550 UCR

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<i>Lamarckia aurea</i> (L.) Moench *	Goldentop	AG	Poaceae	
<i>Lasthenia californica</i> Lindley	Common Goldfields	AH	Asteraceae	37-10, 200-10
<i>Lasthenia gracilis</i> (de Candolle) E. Greene	Southern California Goldfields	AH	Asteraceae	Sanders et al. 19806 UCR
<i>Lathyrus vestitus</i> var. <i>laetiflorus</i> (E. Greene) Broich	Pacific Peavine	PV	Fabaceae	Twisselmann 8356 SBBG
<i>Layia glandulosa</i> (Hooker) Hooker & Arnott ssp. <i>glandulosa</i>	White Tidy Tips	AH	Asteraceae	Sanders et al. 20529 SD
<i>Layia heterotricha</i> (DC.) Hook. & Arn.	Pale-yellow Tidy Tips	AH	Asteraceae	Boyd et al. 9569 RSA
<i>Layia pentachaeta</i> A. Gray ssp. <i>pentachaeta</i>	Sierran Tidy Tips	AH	Asteraceae	Boyd et al. 9581 RSA
<i>Layia pentachaeta</i> ssp. <i>albida</i> D.D. Keck	White Sierran Tidy Tips	AH	Asteraceae	Sanders et al. 20529 RSA
<i>Layia</i> sp.	Layia	AH	Asteraceae	
<i>Lemna cf minor</i> L.	Duck Weed	AH	Lemnaceae	Sanders 20560 UCR
<i>Lepidium nitidum</i> Torrey & A. Gray var. <i>nitidum</i>	Common Peppergrass	AH	Brassicaceae	62-10; Sanders et al. 19793 RSA
<i>Lepidospartum squamatum</i> (A. Gray) A. Gray	Scalebroom	S	Asteraceae	X
<i>Leptosiphon bicolor</i> Nuttall	Bicolor Linanthus	AH	Polemoniaceae	325-10, 347-10
<i>Leptosiphon ciliatus</i> (Bentham) Jepson	Whisker Brush	AH	Polemoniaceae	Twisselmann 8312 JEPS
<i>Lessingia glandulifera</i> A. Gray var. <i>glandulifera</i> [ <i>L. lemmontii</i> ]	Lemmon's Lessingia	AH	Asteraceae	C. Davidson 2909 RSA
<i>Linanthus dichotomus</i> Benth.	Evening Snow	AH	Polemoniaceae	Boyd et al. 9570 RSA
<i>Linanthus filipes</i> (Benth.) E. Greene	Thread Linanthus	AH	Polemoniaceae	Bitter Creek Ranch
<i>Linanthus liniflorus</i> (Benth.) E. Greene	Flax-flowered Linanthus	AH	Polemoniaceae	131-10, 137-10
<i>Linanthus parryae</i> (Benth.) E. Greene	Parry's Linanthus	AH	Polemoniaceae	
<i>Linanthus parviflorus</i> (Benth.) E. Greene	Yellow Linanthus	AH	Polemoniaceae	Sanders et al. 20347 UCR
<i>Linanthus pungens</i> (Torr.) J.M. Porter & L.A. Johnson [ <i>Gilia hallii</i> ]	Granite Prickly Phlox	S	Polemoniaceae	
<i>Linanthus pygmaeus</i> (Benth.) E. Greene	Pygmy Linanthus	AH	Polemoniaceae	Sanders et al. 20457 UCR
<i>Linanthus</i> sp.	Linanthus	AH	Polemoniaceae	56-10, 87-10, 195-10
<i>Lithophragma parviflorum</i> (Hook.) T. & G. var. <i>parviflorum</i>	Prairie Star	PH	Saxifragaceae	91-10, 202-10, 219-10; Boyd et al 9533 RSA
<i>Lomatium californicum</i> (Torrey & A. Gray) Mathias & Constance	California Lomatium	AH	Apiaceae	Sanders et al. 20345 RSA
<i>Lomatium macrocarpum</i> (Hooker & Arnott) J. Coulter & Rose	Large-fruited Lomatium	PH	Apiaceae	J.Burtt Davy 2036, 2071 JEPS
<i>Lomatium utriculatum</i> (T. & G.) Coulter & Rose [ <i>Lomatium vaseyi</i> ]	Foothill Lomatium	PH	Apiaceae	43-10, 86-10, 122-10, 181-10
<i>Lonicera subspicata</i> var. <i>denudata</i> Rehder	Southern Honeysuckle	S	Caprifoliaceae	315-10; Twisselmann 11032 SBBG
<i>Lotus humistratus</i> E. Greene	Hill Lotus	AH	Fabaceae	Sanders et al. 19791, Boyd et al. 9546 RSA
<i>Lotus oblongifolius</i> (Bentham) E. Greene var. <i>oblongifolius</i>	Streambank Lotus	PH	Fabaceae	

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<i>Lotus procumbens</i> (E. Greene) E. Greene var. <i>procumbens</i>	Silky Californica Broom	PH	Fabaceae	Bitter Creek Ranch
<i>Lotus purshianus</i> (Benth.) Clements & E.G. Clements var. <i>purshianus</i>	Spanish Clover	AH	Fabaceae	317-10
<i>Lotus scoparius</i> (Nutt.) Ottley var. <i>scoparius</i>	Deerweed	S	Fabaceae	Twisselmann 8348 SBBG
<i>Lotus strigosus</i> (Nutt.) E. Greene	Strigose Lotus	AH	Fabaceae	159-10; Sanders et al. 20455 UCR
<i>Lotus wrangelianus</i> Fischer & C. Meyer	Chile Lotus or Hosackia	AH	Fabaceae	70-10, 75-10, 118-10, 222-10
<i>Ludwigia peploides</i> (Kunth) Raven ssp. <i>peploides</i>	Water Primrose	PH	Onagraceae	
<i>Lupinus albifrons</i> Bentham var. <i>albifrons</i>	Silver Lupine	S	Fabaceae	Sanders et al. 19832 UCR
<i>Lupinus benthamii</i> A. Heller var. <i>benthamii</i>	Spider Lupine	AH	Fabaceae	30-10
<i>Lupinus bicolor</i> Lindley	Sky Lupine	AH	Fabaceae	Sanders et al. 20344 UCR
<i>Lupinus concinnus</i> J. Agardh	Bajada Lupine	AH	Fabaceae	Sanders et al. 20463 UCR
<i>Lupinus excubitus</i> var. <i>hallii</i> (Abrams) C.P. Smith	Hall's Grape Soda Bush Lupine	S	Fabaceae	162-10, 191-10, 226-10
<i>Lupinus microcarpus</i> Sims var. <i>microcarpus</i>	Red-flowered Lupine	AH	Fabaceae	65-10, 96-10, 109-10, 350-10
<i>Lupinus microcarpus</i> var. <i>densiflorus</i> (Bentham) Jepson	Red-flowered Lupine	AH	Fabaceae	Wegg sn 19-Apr-1935 SBBG
<i>Lupinus nanus</i> Benth.	Small Lupine	AH	Fabaceae	88-10, 108-10
<i>Lupinus</i> sp.	Lupine	AH	Fabaceae	X
<i>Lupinus succulentus</i> Douglas	Arroyo Lupine	AH	Fabaceae	38-10, 41-10; Sanders et al. 19785 RSA
<i>Madia elegans</i> ssp. <i>vernalis</i> Keck	Common Madia	AH	Asteraceae	Boyd et al. 9573 RSA
<i>Madia</i> sp.	Madia	AH	Asteraceae	X
<i>Malacothrix coulteri</i> A. Gray	Snake Heads	AH	Asteraceae	156-10
<i>Malacothrix saxatalis</i> var. <i>comutata</i> Ferris	Cliff Desertdandelion	PH	Asteraceae	X
<i>Malva parviflora</i> L. *	Cheeseweed	AH	Malvaceae	66-10; Sanders et al. 20513 UCR
<i>Malvella leprosa</i> (Ortega) Krapov.	Alkali Mallow	PH	Malvaceae	
<i>Marah fabaceus</i> var. <i>agrestis</i> (E. Greene) Stocking	California Man-root	PV	Cucurbitaceae	Sanders et al. 20381 UCR
<i>Marah horridus</i> (Congdon) Dunn	Sierra Man-root	PV	Cucurbitaceae	59-10, 130-10
<i>Marrubium vulgare</i> L. *	White Horehound	PH	Lamiaceae	Sanders et al. 20426 UCR
<i>Medicago polymorpha</i> L.	Common Burclover	AH	Fabaceae	X
<i>Medicago sativa</i> L. *	Alfalfa	PH	Fabaceae	C. Davidson 2937 POM
<i>Melica californica</i> Scribn.	California Melic Grass	PG	Poaceae	Sanders et al. 20440 RSA
<i>Melica imperfecta</i> Trin.	Coast Melic Grass	PG	Poaceae	60-10, 211-10; Boyd et al. 9579 RSA
<i>Melilotus indica</i> (L.) All. *	Yellow Sweetclover	AH	Fabaceae	Sanders & Boyd 20510 UCR

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<i>Melilotus officinalis</i> (L.) Lam. *	Yellow Sweetclover	AH	Fabaceae	
<i>Mentzelia affinis</i> E. Greene	Yellow Blazing Star	AH	Loasaceae	42-10, 46-10, 57-10, 123-10, 214-10
<i>Mentzelia dispersa</i> S. Watson	Nada Blazing Star	AH	Loasaceae	
<i>Mentzelia gracilenta</i> Torrey & A. Gray	Slender Blazing Star	AH	Loasaceae	Sanders et al. 20380 UCR
<i>Mentzelia laevicaulis</i> (Hooker) Torrey & A. Gray	Giant Blazing Star	AH	Loasaceae	Gallup 91 SDSU
<i>Mentzelia pectinata</i> Kellogg	San Joaquin Blazing Star	AH	Loasaceae	58-10, 160-10
<i>Mentzelia</i> sp.	Mentzelia	AH	Loasaceae	X
<i>Mentzelia veatchiana</i> Kellogg	Blazing Star	AH	Loasaceae	Boyd et al. 9578 RSA
<i>Micropus californicus</i> Fischer & C. Meyer var. <i>californicus</i>	Slender Cottonweed	AH	Asteraceae	Sanders 20549 UCR
<i>Microseris elegans</i> A. Gray	Elegant Silverpuffs	AH	Asteraceae	Sanders et al. 19801 UCR
<i>Microsteris gracilis</i> (Hook.) Greene ssp. <i>gracilis</i>	Slender Phlox	AH	Asteraceae	Sanders et al. 19813 RSA
<i>Mimulus cardinalis</i> Benth.	Scarlet Monkeyflower	AH	Phrymaceae	C. Davidson 2930 RSA
<i>Mimulus cf androsaceus</i> E. Greene	Androsace Monkeyflower	AH	Phrymaceae	
<i>Mimulus constrictus</i> (A.L. Grant) Pennell	Narrow-throated Monkeyflower	AH	Phrymaceae	Twisselmann 8325 SBBG
<i>Mimulus fremontii</i> (Benth.) A. Gray	Fremont's Monkeyflower	AH	Phrymaceae	
<i>Mimulus guttatus</i> DC.	Common Stream Monkeyflower	PH	Phrymaceae	81-10; Sanders & Boyd 20493 UCR
<b><i>Mimulus pictus</i> (Greene) A. Gray</b>	<b>Calico Monkeyflower</b>	AH	Phrymaceae	
<i>Minuartia douglasii</i> (Torrey & A. Gray) Mattf.	Douglas' Sandwort	AH	Caryophyllaceae	Bitter Creek Ranch
<i>Mirabilis multiflora</i> var. <i>pubescens</i> S. Watson	Wagon Wheels	PH	Nyctaginaceae	148-10, 184-10; Short & Johnson S160 UC
<i>Monardella exilis</i> (A. Gray) E. Greene	Mojave Wildmint	AH	Lamiaceae	Boyd et al. 9584 RSA
<i>Monardella lanceolata</i> A. Gray	Mustang Mint	AH	Lamiaceae	Sanders et al. 20336 RSA
<i>Monolopia lanceolata</i> Nutt.	Common Monolopia	AH	Asteraceae	45-10, 50-10, 101-10, 135-10
<i>Monolopia major</i> DC.	Cupped Monolopia	AH	Asteraceae	223-10
<i>Monolopia stricta</i> Crum	Crum's Monolopia	AH	Asteraceae	A. Lewis 631 UC
<i>Muhlenbergia asperifolia</i> (Nees & Meyen ex Trin.) Parodi	Scratchgrass	PG	Poaceae	Twisselmann 2342 RSA
<i>Muhlenbergia rigens</i> (Benth.) A. Hitchc.	Deer Grass	PG	Poaceae	Anonymous 90 SDSU
<i>Muilla maritima</i> (Torrey) S. Watson	Common Muilla	PG	Alliaceae	Bitter Creek Ranch
<i>Myosurus minimus</i> L.	Mousetails	AH	Ranunculaceae	Sanders et al. 20393 UCR
<i>Nasturtium officinale</i> R. Br. *	Watercress	PH	Brassicaceae	X; Sanders et al. 20558 UCR
<i>Navarretia setiloba</i> Cov.	<b>Paiute Mountain Pincushion</b>	AH	Polemoniaceae	209-10, 337-10, 340-10, 346-10, 349-10

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<i>Nemophila menziesii</i> Hook. & Arn. var. <i>menziesii</i>	Baby Blue-eyes	AH	Boraginaceae	201-10, 205-10, 217-10
<i>Nemophila parviflora</i> Douglas ex Bentham var. <i>quercifolia</i>	Smallflower Nemophila	AH	Boraginaceae	Sanders et al. 20408 RSA
<i>Nemophila pendulculata</i> Benth.	Meadow Nemophila	AH	Boraginaceae	
<i>Nemophila pulchella</i> var. <i>fremontii</i> (Elmer) Constance	Fremont Baby Blue-eyes	AH	Boraginaceae	J.Burtt Davy 2070 UC
<i>Nicotiana glauca</i> Grahm *	Tree Tobacco	T	Solanaceae	
<i>Nicotiana quadrivalvis</i> Pursh	Indian Tobacco	AH	Solanaceae	Bitter Creek Ranch
<i>Oenothera elata</i> ssp. <i>hookeri</i> (T. & G.) W. Dietr. & W.L. Wagner	Hooker's Evening Primrose	PH	Onagraceae	X
<b><i>Opuntia basilaris</i> var. <i>treleasei</i> (J. Coulter) Tourney</b>	<b>Bakerfield Cactus</b>	S	Cactaceae	181-10
<i>Orobanche fasciculata</i> Nutt.	Fascicled Broom-rape	PH	Orobanchaceae	Boyd et al. 9552 RSA
<i>Osmorrhiza brachypoda</i> Torrey	Sweet Cicely	PH	Apiaceae	333-10, 353-10
<i>Packera breweri</i> (Burtt Davy) W. A. Weber & Á. Löve	Brewer Butterweed	S	Asteraceae	334-10; Twisselmann 4470 JEPS
<i>Paspalum distichum</i> L. (?)	Knotgrass	PG	Poaceae	
<i>Pectocarya linearis</i> ssp. <i>ferocula</i> (I.M. Johnston) Thorne	Slender Pectocarya	AH	Boraginaceae	151-10
<i>Pectocarya penicillata</i> (Hook. & Arn.) A. DC.	Winged Pectocarya	AH	Boraginaceae	Sanders et al. 20478 UCR
<i>Pectocarya</i> sp.	Pectocarya	AH	Boraginaceae	68-10
<i>Pellaea andromedifolia</i> (Haulfuss) Fee var. <i>andromedifolia</i>	Coffee Fern	PF	Pteridaceae	Sanders et al. 20348 UCR
<i>Pellaea mucronata</i> (D. Eaton) D. Eaton	Birdsfoot Trefoil	PF	Pteridaceae	J.Burtt Davy 2077 UC
<i>Penstemon centranthifolius</i> (Benth.) Benth.	Scarlet Bugler	PH	Plantaginaceae	Twisselmann 8316 JEPS
<i>Penstemon grinnellii</i> Eastw. var. <i>scrophularioides</i>	Grinnell's Beardtongue	PH	Plantaginaceae	J.Burtt Davy 2002 UC
<i>Penstemon heterophyllus</i> Lindley var. <i>heterophyllus</i>	Penstemon	PH	Plantaginaceae	Twisselmann 8357 SBBG
<i>Penstemon laetus</i> A. Gray var.	Mountain Blue Penstemon	PH	Plantaginaceae	Twisselmann 8357 RSA
<i>Penstemon</i> sp.	Penstemon	PH	Plantaginaceae	X
<i>Penstemon speciosus</i> Lindley	Royal Penstemon	PH	Plantaginaceae	324-10
<i>Pentagramma triangularis</i> (Kaulf.) G. Yatskievych, M.D. Windham, & E. Wollenweber var. <i>triangularis</i>	Goldenback Fern	PF	Pteridaceae	210-10
<i>Perideridia gairdneri</i> (Hook. & Arn.) Mathias ssp. <i>gairdneri</i>	Gairdner's Yampah	PH	Apiaceae	330-10
<i>Perideridia</i> sp.	Yampah	PH	Apiaceae	Sanders 20542 UCR
<i>Phacelia affinis</i> A. Gray	Purple-bell Scorpionweed	AH	Boraginaceae	Boyd et al. 9559 RSA
<i>Phacelia cicutaria</i> Greene var. <i>cicutaria</i>	Caterpillar Phacelia	AH	Boraginaceae	Sanders et al. 20424 UCR
<i>Phacelia cicutaria</i> var. <i>hispida</i> (A. Gray) J.T. Howell	Hispid Caterpillar Phacelia	AH	Boraginaceae	X

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<i>Phacelia ciliata</i> Bentham var. <i>ciliata</i>	Ciliate Phacelia	PH	Boraginaceae	Boyd et al. 9571 UCR
<i>Phacelia congdonii</i> Greene	Congdon Phacelia	AH	Boraginaceae	
<i>Phacelia davidsonii</i> A. Gray	Davidson's Phacelia	AH	Boraginaceae	Boyd et al. 9540 RSA
<i>Phacelia distans</i> Benth.	Wild Heliotrope	AH	Boraginaceae	Sanders et al. 20475 RSA
<i>Phacelia douglasii</i> (Bentham) Torrey var. <i>douglasii</i>	Douglas' Phacelia	AH	Boraginaceae	Sanders et al. 19788 UCR
<i>Phacelia egena</i> (Brand) J. Howell	Rock Phacelia	PH	Boraginaceae	Heckard 545 UC
<i>Phacelia fremontii</i> Torrey	Fremont's Phacelia	PH	Boraginaceae	Boyd et al. 9542 RSA
<i>Phacelia imbricata</i> ssp. <i>imbricata</i> E. Greene	Rock Phacelia	PH	Boraginaceae	339-10; Sanders et al. 20420 RSA
<i>Phacelia ramosissima</i> (Torrey) Cronq.	Branching Phacelia	PH	Boraginaceae	
<i>Phacelia tanacetifolia</i> Benth.	Tansy Phacelia	AH	Boraginaceae	Sanders et al. 2434 RSA
<i>Phalaris aquatica</i> L. *	Harding Grass	PG	Poaceae	
<i>Phlox gracilis</i> E. Greene	Slender Phlox	AH	Polemoniaceae	207-10, 218-10, 319-10
<i>Pholistoma membranaceum</i> (Benth.) Constance	White Fiesta Flower	AH	Boraginaceae	77-10, 85-10; Sanders et al. 19778 RSA
<i>Pholistoma</i> sp.	Fiesta Flower	AH	Boraginaceae	X
<i>Phoradendron bolleanum</i> (Seem.) Eichler	Fir Mistletoe	PH	Viscaceae	Bitter Creek Ranch
<i>Phoradendron densum</i> Trel.	Dense Mistletoe	PH	Viscaceae	
<i>Phoradendron macrophyllum</i> (Engelm.) Cockerell	Bigleaf Mistletoe	PH	Viscaceae	Sanders et al. 20447 RSA
<i>Phoradendron villosum</i> (Nutt.) Nutt.	Woolly Mistletoe	PH	Viscaceae	X; Boyd et al. 9532 UCR
<i>Pinus jeffreyi</i> Greville & Balfour	Jeffery Pine	T	Pinaceae	J. Burtt Davy 2686 UC
<i>Pinus monophylla</i> Torrey & Fremont	Singleleaf Pinyon Pine	T	Pinaceae	J. Burtt Davy 2684 UC
<i>Pinus ponderosa</i> C. Lawson var. <i>ponderosa</i>	Pacific Ponderosa Pine	T	Pinaceae	J. Burtt Davy 2684 SBBG
<i>Plagiobothrys arizonicus</i> (A. Gray) A. Gray	Arizona Popcornflower	AH	Boraginaceae	33-10, 225-10, 227-10
<i>Plagiobothrys canescens</i> Benth.	Valley or Bracted Popcornflower	AH	Boraginaceae	86-10, 89-10, 117-10, 320-10
<i>Plagiobothrys nothofulvus</i> (A. Gray) A. Gray	Rusty Popcornflower	AH	Boraginaceae	32-10, 110-10, 188-10, 198-10
<i>Plagiobothrys tenellus</i> (Nutt.) A. Gray	Slender Popcorn Flower	AH	Boraginaceae	Bitter Creek Ranch
<i>Plantago cf elongata</i> Pursh.	Long-leaved Plantain	AH	Plantaginaceae	
<i>Plantago erecta</i> E. Morris	California Plantain	AH	Plantaginaceae	44-10, 69-10 126-10, 157-10, 158-10
<i>Plantago ovata</i> Forsskal	Woolly Plantain	AH	Plantaginaceae	
<i>Platystemon californicus</i> Benth. var. <i>californicus</i>	Cream Cups	AH	Papaveraceae	102-10; Sanders et al. 20532 RSA
<i>Plectritis ciliosa</i> ssp. <i>insignis</i> (Suksd.) D. Morey	Petite Long-spurred Plectritis	AH	Valerianaceae	206-10; Sanders et al. 20468 UCR

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<i>Poa annua</i> L.	Annual Bluegrass	AG	Poaceae	X
<i>Poa bulbosa</i> L. *	Bulbous Annual Bluegrass	AG	Poaceae	Sanders et al. 20428 UCR
<i>Poa secunda</i> J.S. Presl ssp. <i>secunda</i>	One-sided Bluegrass	PG	Poaceae	49-10, 55-10, 336-10
<i>Polygonum argyrocoleon</i> Kunze *	Persian Knotweed	AH	Polygonaceae	Sanders et al. 20508 UCR
<i>Polypogon interruptus</i> Kunth *	Beard Grass	AG	Poaceae	Sanders et al. 20511 UCR
<i>Polypogon monspeliensis</i> L. *	Rabbitsfoot Grass	AG	Poaceae	X; Sanders et al. 20506 UCR
<i>Populus fremontii</i> S. Watson ssp. <i>fremontii</i>	Fremont Cottonwood	T	Salicaceae	X; Sanders et al. 20448 RSA
<i>Prosopis glandulosa</i> var. <i>torreyana</i> (L. Benson) M.C. Johnston	Honey Mesquite	S	Fagaceae	
<i>Prunus</i> sp.	Prunus	S	Rosaceae	X
<i>Prunus subcordata</i> Benth.	Klamath Plum	T / S	Rosaceae	
<i>Prunus virginiana</i> L. var. <i>demissa</i>	Western Chokecherry	T / S	Rosaceae	C. Davidson 2941 RSA
<i>Pseudognaphalium canescens</i> (de Candolle) Anderberg	Wright's Rabbit-tobacco	AH	Asteraceae	
<i>Pseudognaphalium luteoalbum</i> (L.) Hilliard & B.L. Burtt *	Cudweed Everlasting	AH	Asteraceae	
<i>Pseudognaphalium stramineum</i> (Kunth) Anderberg	Cotton-batting Plant	AH	Asteraceae	
<i>Pseudotsuga macrocarpa</i> (Vasey) Mayr	Bigcone Spruce or False-hemlock	T	Pinaceae	C.B. Wolf 2438 RSA
<i>Pterostegia drymarioides</i> Fischer & C. Meyer	Fairy Mist	AH	Polygonaceae	X; Sanders et al. 19802 RSA
<i>Quercus berberidifolia</i> Liebm.	California Scrub Oak	S	Fagaceae	C.B. Wolf 2440 RSA
<i>Quercus chryssolepis</i> Liebm.	Canyon Live or Goldencup Oak	T	Fagaceae	X; J.M. Tucker 1882 UCD
<i>Quercus douglasii</i> Hooker & Arnott	Blue Oak	T	Fagaceae	X; J.M. Tucker 1608 UCD
<i>Quercus john-tuckeri</i> K. Nixon & C.H. Muller	John Tucker Oak	S	Fagaceae	J.M. Tucker 188111 UCD
<i>Quercus lobata</i> Nee	Valley Oak	T	Fagaceae	X
<i>Quercus wislizenii</i> A. de Candolle ssp. <i>wislizenii</i>	Interior Live Oak	T	Fagaceae	
<i>Quercus wislizenii</i> ssp. <i>frutescens</i> (Engelm.) E. Murray	Shrubby Interior Live Oak	S	Fagaceae	
<i>Quercus Xalvordiana</i> Eastwood	Alvord Oak	S	Fagaceae	J.M. Tucker 18812 UCD
<i>Rafinesquia californica</i> Nutt.	California Chickory	AH	Asteraceae	Sanders et al. 20476 UCR
<i>Ranunculus canus</i> Benth. var. ?	Great Valley buttercup	PH	Ranunculaceae	Sanders et al. 20402 UCR
<i>Ranunculus cymbalaria</i> var. <i>saximontanus</i> Fern.	Mountain Desert Buttercup	PH	Ranunculaceae	J. Burtt Davy 2052 UC
<i>Ranunculus hebecarpus</i> Hooker & Arnott	Hebe-fruited Buttercup	AH	Ranunculaceae	Sanders et al. 20466 UCR
<i>Raphanus sativus</i> L. *	Wild Radish	AH	Brassicaceae	
<i>Rhamnus californica</i> Eschsch.	California Coffeeberry	S	Rhamnaceae	X

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Scientific Name	Common Name	Habit	Family	Voucher
<i>Rhamnus ilicifolia</i> Kellogg	Hollyleaf Redberry, Buckthorn	S	Rhamnaceae	
<i>Rhamnus tomentella</i> Benth. ssp. <i>tomentella</i>	Hoary Coffeeberry	S	Rhamnaceae	J. Burtt Davy 2030 UC
<i>Ribes quercetorum</i> E. Greene	Oak Gooseberry	S	Grossulariaceae	234-10; Boyd et al. 9548 RSA
<i>Ribes roezlii</i> Regel var. <i>roezlii</i>	Sierra Gooseberry	S	Grossulariaceae	J. Burtt Davy 2064 UC
<i>Ribes</i> sp.	Gooseberry	S	Grossulariaceae	X
<i>Rigiopappus leptocladus</i> A. Gray	Rigiopappus, Wire Weed	AH	Asteraceae	Sanders et al. 20470 RSA
<i>Rosa californica</i> Cham. & Schldl.	California Wild Rose	S	Rosaceae	
<i>Rosa xharisonii</i> Rivers +	Harison Yellow Rose	S	Rosaceae	P
<i>Rostaria cristata</i> (L.) Tzvelev *	Mediterranean Hairgrass	AG	Poaceae	185-10
<i>Rumex cf. salicifolius</i> J.A. Weinm. var. <i>salicifolius</i>	Willow-leaved Dock	PH	Polygonaceae	P
<i>Rumex crispus</i> L. *	Curly Dock	PH	Polygonaceae	Sanders et al. 20496 UCR
<i>Salix exigua</i> Nuttall var. <i>exigua</i>	Narrowleaf Willow	S	Salicaceae	Bitter Creek Ranch
<i>Salix gooddingii</i> C. Ball	Black Willow	T	Salicaceae	Bracelin 576 SBBG
<i>Salix laevigata</i> Bebb.	Red Willow	T	Salicaceae	Bitter Creek Ranch
<i>Salix lasiolepis</i> Benth. var. <i>lasiolepis</i>	Arroyo Willow	S	Salicaceae	Sanders et al. 19837 RSA
<i>Salsola tragus</i> L. *	Russian Thistle	AH	Chenopodiaceae	X
<i>Salvia carduacea</i> Benth.	Thistle Sage	PH	Lamiaceae	Bitter Creek Ranch
<i>Salvia columbariae</i> Benth.	Chia	AH	Lamiaceae	X; Boyd et al. 9558 RSA
<i>Sambucus mexicana</i> C. Presl	Blue Elderberry	S	Caprifoliaceae	X; Ewan 7791 UC
<i>Sanicula arguta</i> J. Coulter & Rose	Southern California Sanicle	PH	Apiaceae	
<i>Sanicula bipinnata</i> Hook. & Arn.	Poison Sanicle	PH	Apiaceae	Sanders et al. 20539 UCR
<i>Sanicula bipinnatifida</i> Hook.	Purple Sanicle	PH	Apiaceae	Sanders et al. 20540 UCR
<i>Sanicula crassicaulis</i> Poepp. ex DC. var. <i>crassicaulis</i>	Pacific Sanicle	PH	Apiaceae	Sanders et al. 20350 UCR
<i>Sanicula graveolens</i> DC.	Sierra Sanicle	PH	Apiaceae	Sanders et al. 20400 UCR
<i>Saxifraga californica</i> E. Greene	California Saxifrage	PH	Saxifragaceae	203-10, 220-10; Sanders et al. 20434 RSA
<i>Schismus arabicus</i> Nees *	Arabian Grass	AG	Poaceae	X; Boyd et al. 9560 RSA
<i>Schismus barbatus</i> (L.) Thell. *	Abu Mashi	AG	Poaceae	X; Sanders et al. 20516 UCR
<i>Schismus</i> sp. *	Schismus	AG	Poaceae	X
<i>Schoenoplectus americanus</i> (Pers.) Volkart ex Schinz & R. Keller	American Rush	PG	Cyperaceae	Sanders et al. 20520 SD
<i>Scirpus cf. pungens</i> Vahl	Common Threesquare	PG	Cyperaceae	78-10

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Scientific Name	Common Name	Habit	Family	Voucher
<i>Scrophularia californica</i> Cham. & Schldl. ssp. <i>californica</i>	California Figwort	PH	Scrophulariaceae	233-10; Boyd et al. 9544 RSA
<i>Sedum spathulifolium</i> Hook.	Pacific Stonecrop	PH	Crassulaceae	Short & Johnson S162 UC
<i>Selaginella bigelovii</i> L. Underw.	Bigelow Spike-moss	PF	Selaginellaceae	
<i>Senecio flaccidus</i> var. <i>douglasii</i> (DC.) B.L. Turner & T.M. Barkley	Shrubby Ragwort or Butterweed	S	Asteraceae	Twisselmann 12766 RSA
<i>Senecio vulgaris</i> L. *	Common Groundsel	AH	Asteraceae	X
<i>Sidagelia malvaeflora</i> (DC.) Benth	Checker Mallow	S	Malvaceae	
<i>Silene antirrhina</i> L.	Sleepy Catchfly	AH	Caryophyllaceae	
<i>Silene californica</i> Durand	California Indian Pink	PH	Caryophyllaceae	357-10
<i>Sisymbrium altissimum</i> L. *	Tumbling Mustard	AH	Brassicaceae	X
<i>Sisymbrium irio</i> L. *	London Rocket	AH	Brassicaceae	187-10; Sanders et al. 20499 UCR
<i>Sisymbrium orientale</i> L. *	Eastern Mustard	AH	Brassicaceae	72-10; Sanders et al. 20425 RSA
<i>Sisymbrium</i> sp. *	Sisymbrium	AH	Brassicaceae	X
<i>Sisyrinchium bellum</i> S. Watson	Blue-eyed Grass	PG	Iridaceae	
<i>Solanum douglasii</i> Dunal	Douglas Nightshade	PH	Solanaceae	
<i>Solanum elaeagnifolium</i> Cav. *	White Horse-Nettle	PH	Solanaceae	
<i>Solanum umbelliferum</i> Eschsch.	Douglas Nightshade	PH	Solanaceae	Bitter Creek Ranch
<i>Solanum xanti</i> A. Gray var. <i>xanti</i>	Chaparral Nightshade	S	Solanaceae	204-10
<i>Solidago confinis</i> A. Gray	Southern Goldenrod	PH	Asteraceae	
<i>Sonchus asper</i> (L.) Hill ssp. <i>asper</i> *	Prickly Sow Thistle	AH	Asteraceae	X; Sanders et al. 20498 UCR
<i>Sonchus oleraceus</i> L.*	Common Sow Thistle	AH	Asteraceae	X
<i>Stachys albens</i> A. Gray	Woolly Hedge Nettle	PH	Lamiaceae	X
<i>Stanleya pinnata</i> (Pursh) Britton var. <i>pinnata</i>	Prince's Plume	S	Brassicaceae	142-10; Sanders et al. 20418 RSA
<i>Stellaria media</i> (L.) Vill. *	Common Chickweed	AH	Caryophyllaceae	124-10
<i>Stellaria nitens</i> Nutt.	Shining Chickweed	AH	Caryophyllaceae	X; Sanders et al. 19807 RSA
<i>Stellaria pallida</i> (Dumont.) Piré *	Pale Starwort	AH	Caryophyllaceae	Sanders et al. 20361 UCR
<i>Stephanomeria pauciflora</i> (Nuttall) Nelson var. (?)	Wire Lettuce, Desert Straw	PH	Asteraceae	
<i>Stephanomeria</i> sp.	Stephanomeria	PH	Asteraceae	93-10
<i>Stephanomeria virgata</i> Bentham ssp. <i>virgata</i>	Tall Stephanomeria	AH	Asteraceae	
<i>Stipa cernua</i> Stebbins & Löve [ <i>Nassella cernua</i> ]	Foothill Needlegrass	PG	Poaceae	Boyd et al. 9585 RSA
<i>Stipa pulchra</i> A. Hitchc. [ <i>Nassella pulchra</i> (A. Hitchc.) Barkworth]	Purple Needlegrass	PG	Poaceae	Boyd et al. 9577 UCR



Scientific Name	Common Name	Habit	Family	Voucher
<i>Stipa</i> sp.	Needlegrass	PG	Poaceae	X
<i>Stipa speciosa</i> Trin. & Rupr. [ <i>Achnatherum speciosum</i> ]	Desert Needlegrass	PG	Poaceae	Sanders 20547 UCR
<i>Stylocline micropoides</i> A. Gray	Desert Neststraw	AH	Asteraceae	
<i>Stylemecon heterophylla</i> (Benth.) G.C. Taylor	Wind Poppy	AH	Papaveraceae	183-10; Sanders et al. 20413 UCR
<i>Symporicarpos mollis</i> Nutt.	Snowberry	PV	Caprifoliaceae	
<i>Tamarix ramosissima</i> Ledeb. *	Tamarisk	T/ S	Tamaricaceae	X
<i>Taraxacum officianale</i> L. *	Common Dandelion	AH	Asteraceae	
<i>Tauschia hartwegii</i> (A. Gray) J.F. Macbr.	Hartweg's Tauschia	PH	Apiaceae	Sanders et al. 20386 UCR
<i>Tauschia</i> sp.	Tauschia	PH	Apiaceae	P
<i>Thelypodium</i> sp.	Thelypodium	AH	Brassicaceae	134-10
<i>Thysanocarpus curvipes</i> Hook.	Common Fringe Pod	AH	Brassicaceae	192-10; Sanders et al. 20439 UCR
<i>Thysanocarpus laciniatus</i> Torrey & A. Gray	Narrow-leaved Fringe Pod	AH	Brassicaceae	X
<i>Toxicodendron diversilobum</i> (Torrey & A. Gray)	Western Poison Oak	PV	Anacardiaceae	
<i>Tragopogon dubius</i> Scop. *	Goat's Beard	AH	Asteraceae	344-10
<i>Tribulus terrestris</i> L. *	Puncture Vine, Caltrop	AH	Zygophyllaceae	
<i>Trichostema lanceolatum</i> Benth.	Vinegar Weed	AH	Lamiaceae	X
<i>Trichostema</i> sp.	Trichostema	AH	Lamiaceae	X
<i>Trifolium albopurpureum</i> T. & G. var. <i>albopurpureum</i>	Indian Clover	AH	Fabaceae	113-10; Sanders et al. 20374 UCR
<i>Trifolium barbigerum</i> ssp. <i>barbigerum</i> Torrey	Bearded Clover	AH	Fabaceae	189-10
<i>Trifolium ciliolatum</i> Benth.	Tree Clover, Foothill Clover	AH	Fabaceae	Boyd et al. 9591 RSA
<i>Trifolium cyanthiferum</i> Lindley	Bowl Clover	AH	Fabaceae	Sanders et al. 20438 UCR
<i>Trifolium gracilentum</i> T. & G. var. <i>gracilentum</i>	Pin-point Clover	AH	Fabaceae	97-10, 112-10, 194-10
<i>Trifolium microcephalum</i> Pursh	Tiny-head Clover	AH	Fabaceae	Sanders et al. 20372 UCR
<i>Trifolium</i> sp.	Clover	AH	Fabaceae	97-10, 100-10
<i>Trifolium willdenovii</i> Sprengel	Tomcat Clover	AH	Fabaceae	95-10, 111-10; Sanders et al. 20341 UCR
<i>Triteleia ixioides</i> ssp. <i>scabra</i>	Foothill Triteleia	PG	Themidaceae	199-10, 208-10; Boyd et al. 9561 UCR
<i>Triteleia laxa</i> Benth.	Ithuriel Spear	PG	Themidaceae	
<i>Tropidocarpum gracile</i> Hook.	Slender Tropidocarpum	AH	Brassicaceae	X; Sanders et al. 19799 UCR
<i>Typha domingensis</i> Persoon	Narrowleaf Cattail	PG	Typhaceae	X
<i>Ulmus minor</i> Mill. *	English Elm	T	Ulmaceae	352-10

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Scientific Name	Common Name	Habit	Family	Voucher
<i>Uropappus lindleyi</i> (DC.) Nuttall	Silverpuffs	AH	Asteraceae	64-10; Sanders et al. 20449 UCR
<i>Urtica dioica</i> ssp. <i>holosericea</i> (Nuttall) Thorne	Stinging Nettle	PH	Urticaceae	X
<i>Veronica anagallis-aquatica</i> L. *	Water or Common Speedwell	PH	Plantaginaceae	
<i>Vicia americana</i> Willd. ssp. <i>americana</i>	American Vetch	AV	Fabaceae	Sanders et al. 20407 RSA
<i>Vicia ludoviciana</i> Nutt. var. <i>ludoviciana</i>	Slender Vetch	AV	Fabaceae	Sanders et al. 20416 UCR
<i>Vitis girdiana</i> Munson	Desert Wild Grape	PV	Vitaceae	
<i>Vulpia bromoides</i> (L.) S.F. Gray *	European Foxtail Fescue	AG	Poaceae	X
<i>Vulpia microstachys</i> (Nuttall) Bentham var. ?	Six Weeks Fescue	AH	Poaceae	X
<i>Vulpia microstachys</i> var. <i>ciliata</i> (Beal) Lonard & Gould	Hairy Six Weeks Fescue	AG	Poaceae	Bitter Creek Ranch
<i>Vulpia microstachys</i> var. <i>confusa</i> (Piper) Lonard & Gould	Confusing Six Weeks Fescue	AG	Poaceae	X; J. Burtt Davy 2055 UC
<i>Vulpia microstachys</i> var. <i>pacifica</i> (Beal) Lonard & Gould	Naked Six Weeks Fescue	AG	Poaceae	X
<i>Vulpia microstachys</i> var. <i>pauciflora</i> (Beal) Lonard & Gould	Naked Six Weeks Fescue	AG	Poaceae	39-10, 115-10
<i>Vulpia myuros</i> (L.) C.C. Gmelin forma <i>myuros</i> *	Rattail Fescue	AG	Poaceae	119-10; Sanders & Boyd 20505 UCR
<i>Vulpia myuros</i> forma <i>megalura</i> (Nuttall) Stace & R. Cotton *	Rattail Fescue	AG	Poaceae	Helmkamp & Helmkamp 1379 UCR
<i>Xanthium spinosum</i> L. *	Spiny Cocklebur	AH	Asteraceae	Sanders et al. 20555 UCR
<i>Xanthium strumarium</i> L.	Cocklebur	AH	Asteraceae	Bitter Creek Ranch
<i>Yabea microcarpa</i> [ <i>Caucalis microcarpa</i> ] (Hook. & Arn.) Koso-Polj.	Yabea	AH	Apiaceae	Sanders et al. 20467 UCR
<i>Zannichellia palustris</i> L.	Horned-pondweed	PH	Zannichelliaceae	Sanders et al. 20519 RSA
<i>Zauschneria californica</i> (E. Greene) Raven	California Fuschia	AH	Onagraceae	X
<i>Zigadenus brevibracteatus</i> (M.E. Jones) H.M. Hall	Desert Death Camas	PG	Menianthaceae	Bitter Creek Ranch

Notes: Scientific nomenclature follows Flora of North America Committee (1993-2009 - *Flora of North America*) or Hickman (1993 - *The Jepson Manual: Higher Plants of California*).

Common names follow Abrams and Ferris (1960), Neihaus and Ripper (1976), and DeGarmo (1980).

**Bold** typeface indicates special-status species.

An "\*" indicates non-native species that have become naturalized or persist without cultivation.

An "+" indicates non-native species that where cultivated and/or persist without active cultivation after planting.

Voucher notes: An "X" = observed but not collected. A sir name with a # represents a voucher collection at a public herbarium followed by the herbarium initial. P = photograph.

A hyphenated number (e.g. 39-10, 115-10) represents a collection of David Magney et al. (including Callen Huff and David Brown), which are deposited at the UCSB herbarium.

"Bitter Creek Ranch" indicates that it has been collected from the USFWS Bitter Creek Ranch west of the Wind Wolves Preserve and likely occurs onsite as well.



Scientific Name	Common Name	Habit	Family	Voucher
Habit definitions:				
AF = annual fern or fern ally.	PG = perennial grass or graminoid.			
AG = annual grass or graminoid.	PH = perennial herb.			
AH = annual herb.	PV = perennial vine.			
BH = biennial herb.	S = shrub.			
PF = perennial fern or fern ally.	T = tree.			

## SPECIAL-STATUS PLANT SPECIES

Special-status plant species are plants that are considered rare by the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and/or the California Native Plant Society (CNPS). CNPS has developed lists of rare plants native to California that are rare statewide and included in its *Inventory of Rare and Endangered Plants of California* (CNPS 2001) and the electronic (online) version (CNPS 2010), and locally rare plants for selected areas of the state (Lake 2004, Magney 2009, Wilken 2007). To date, CNPS has not developed a list of locally rare plants for any part of Kern or Los Angeles Counties except for a preliminary list for the Liebre Mountains of northwestern Los Angeles County (Magney 2005).

CNPS has five statewide rare plant lists: 1A, 1B, 2, 3, and 4, plus a list of taxa will be considered for inclusion onto one of these lists when staff time and information becomes available (CNPS 2008). This list is referred to as the Postponed Taxa List (PT).

Table 3, Special-status Plant Species Observed on the Wind Wolves Preserve, lists the species and ranking of six rare plant species found during the field surveys. Four (4) special-status plant species were directly observed on the Wind Wolves Preserve on the DMEC rare plant survey, plus two (2) additional taxa found that may qualify as special-status species. A form of *Calochortus* provisionally identified as *Calochortus weedii* var. *vestus* with a unique red color variation that may represent an undescribed variety or species (Fiedler, personal communication) was found on the preserve. A form of *Erysimum* provisionally identified as *Erysimum moniliforme* was found on the preserve. This geographically isolated form of *Erysimum* may qualify for CNPS List 4 status.

**Table 3. Special-status Plant Species Observed on the Wind Wolves Preserve**

Status	Scientific Name	Common Name
Unknown pending description	<i>Calochortus weedii</i> var. <i>vestus</i> variant that may represent a new taxon	Variant of Weed's Mariposa Lily
Possibly CNPS 4	<i>Erysimum moniliforme</i>	Western Wallflower
CNPS 4	<i>Delphinium gypsophilum</i> ssp. <i>gypsophilum</i>	Gypsum Loving Larkspur
CNPS 1B	<i>Navarretia setiloba</i>	Paiute Mountain Pincushion Plant
CNPS 1B	<i>Opuntia basilaris</i> var. <i>treleasii</i>	Bakersfield Cactus
CNPS 4	<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	Gairdner Yampah

DMEC botanists found these rare plants at a total of 33 locations, some quite close together, such as for *Opuntia basilaris* var. *treleasii* where the bounds of the population were delineated with waypoints.

## Rare Plant Accounts

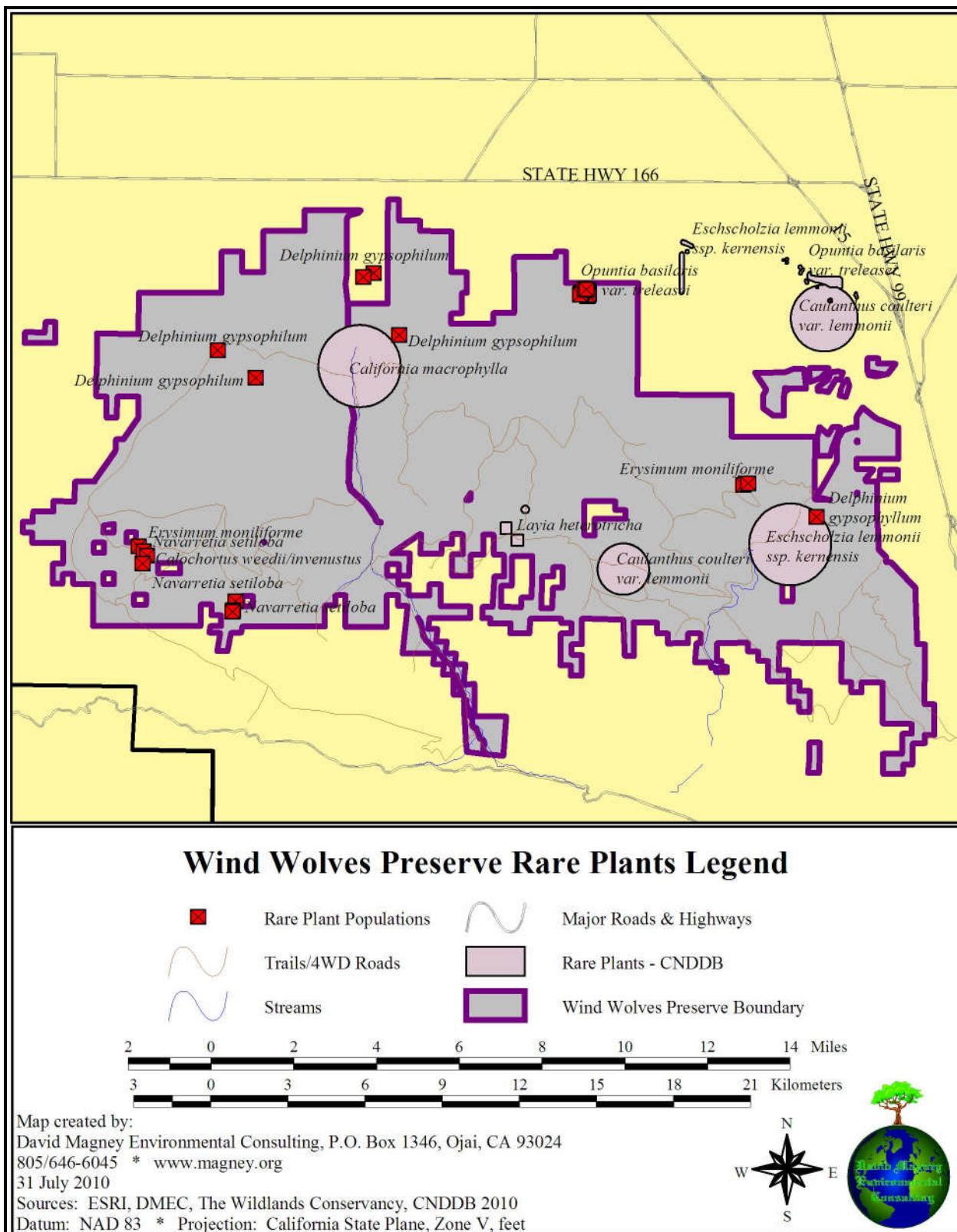
This subsection includes brief discussions of each rare plant species found during the survey and relevant information about is included. The locations for each occurrence for each taxon are included in Table 4, Locations of Special-status Plant Species Observed on the Wind Wolves Preserve.

**Table 4. Locations of Special-status Plant Species Observed on the Wind Wolves Preserve**

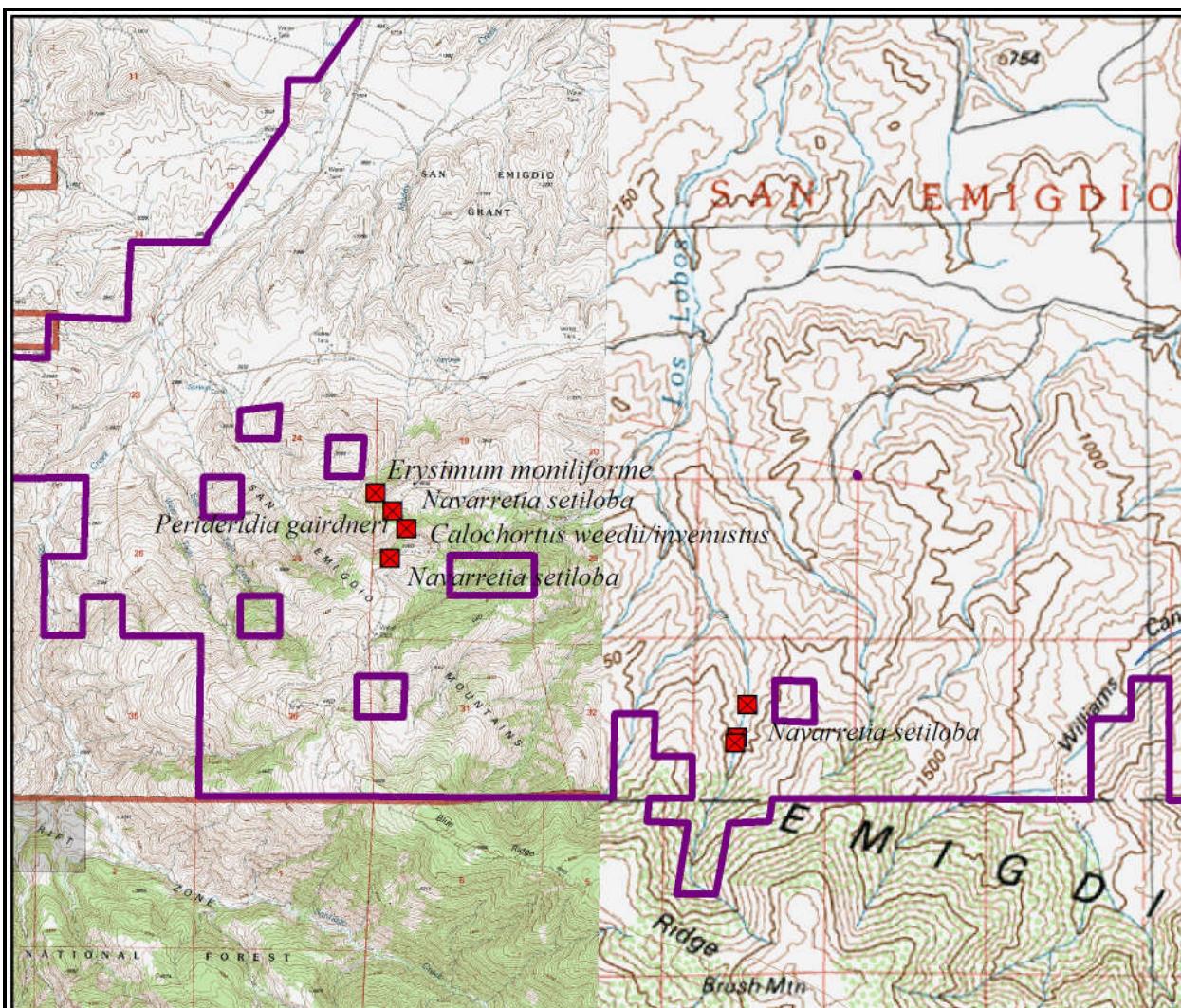
Taxon	Waypoint (Date)	Latitude	Longitude	Elevation
<i>Calochortus cf weedii</i> var. <i>vestus</i>	WP007 (6/24/10)	34.92550°N	119.27283°W	3,973 ft
<i>Delphinium gypsophilum</i> ssp. <i>gypsophilum</i>	WP006 (3/24/10)	34.94177°N	118.98793°W	2,147 ft
	WP008 (3/25/10)	35.02557°N	119.17773°W	939 ft
	WP011 (3/25/10)	34.98515°N	119.22731°W	1,512 ft
	WP002CH (3/25/10)	35.02554°N	119.17768°W	932 ft
	WP004CH (3/25/10)	35.02420°N	119.18223°W	969 ft
	WP009CH (3/25/10)	34.98833°N	119.22756°W	1,441 ft
	WP042CH (4/6/10)	35.00404°N	119.16667°W	1,117 ft
	WP058CH (4/8/10)	34.99785°N	119.24384°W	1,115 ft
<i>Erysimum moniliforme</i>	WP038 (3/30/10)	34.95325°N	119.01832°W	3,028 ft
	WP039 (3/30/10)	34.95270°N	119.01929°W	3,130 ft
	WP042 (3/30/10)	34.95776°N	119.03307°W	3,029 ft
	WP043 (3/30/10)	34.97472°N	119.02316°W	2,335 ft
	WP020DB (3/30/10)	34.95332°N	118.99849°W	1,820 ft
	WP019CH (3/30/10)	34.95326°N	119.01717°W	2,951 ft
	WP004 (6/24/10)	34.92876°N	119.27631°W	3,485 ft
	WP006 (6/24/10)	34.92708°N	119.27439°W	3,833 ft
	WP007 (6/24/10)	34.92550°N	119.27283°W	3,973 ft
<i>Navarretia setiloba</i>	WP007 (6/24/10)	34.92550°N	119.27283°W	3,973 ft
	WP008 (6/24/10)	34.92276°N	119.27460°W	4,312 ft
	WP010 (6/24/10)	34.90984°N	119.23483°W	3,815 ft
	WP011 (6/24/10)	34.90683°N	119.23589°W	3,944 ft
	WP012 (6/24/10)	34.90633°N	119.23605°W	4,003 ft
<i>Opuntia basilaris</i> var. <i>treleasei</i>	WP050 (3/31/10)	35.01928°N	119.08599°W	708 ft
	WP051 (3/31/10)	35.01905°N	119.08730°W	716 ft
	WP052 (3/31/10)	35.01974°N	119.08733°W	716 ft
	WP053 (3/31/10)	35.01962°N	119.06795°W	716 ft
	WP026DB (3/31/10)	35.02133°N	119.08704°W	734 ft
	WP027DB (3/31/10)	35.02059°N	119.08679°W	665 ft
	WP028DB (3/31/10)	35.02014°N	119.08729°W	693 ft
	WP027CH (3/31/10)	35.0183481°N	119.0865413°W	699 ft
	WP028CH (3/31/10)	35.0186142°N	119.0861312°W	705 ft
<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>	WP007 (6/24/10)	34.92550°N	119.27283°W	3,973 ft

The locations of each occurrence are shown on Figure 3, Map of Special-status Plant Species on Wind Wolves Preserve, with more detailed maps showing greater detail with a topographic map base, Figures 3a through 3d, respectively, from west to east.

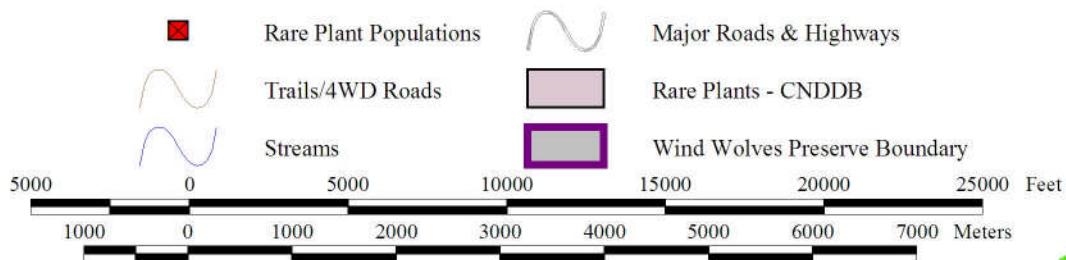
Figure 3. Map of Special-status Plant Species on Wind Wolves Preserve



**Figure 3a. Map of Special-status Plant Species on Wind Wolves Preserve, Southwest**



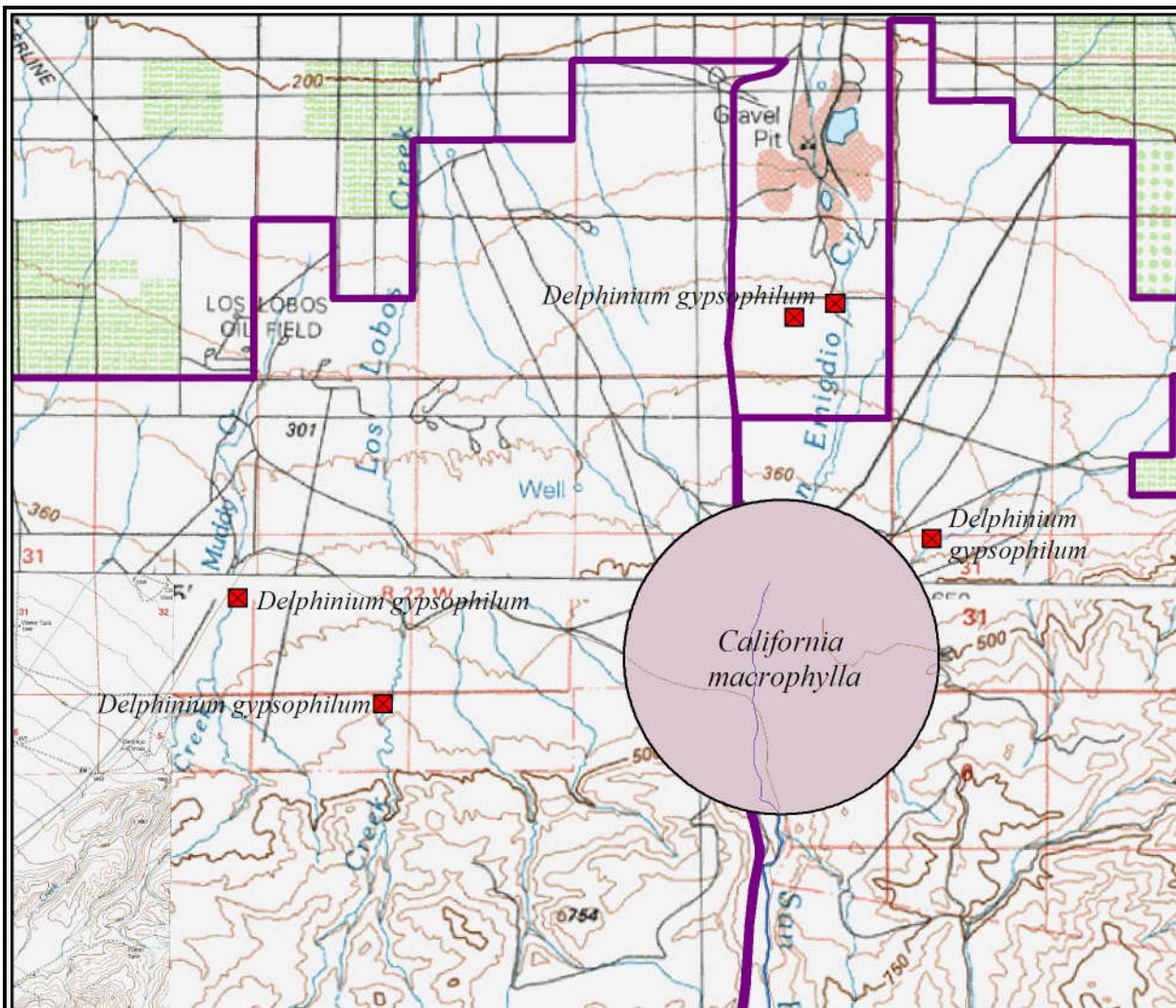
### Wind Wolves Preserve Rare Plants Legend



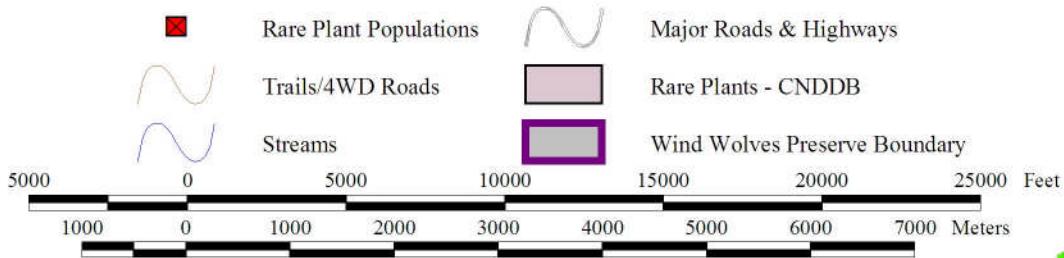
Map created 31 July 2010 by:  
David Magney Environmental Consulting, P.O. Box 1346, Ojai, CA 93024  
805/646-6045 \* [www.magney.org](http://www.magney.org)  
Sources: ESRI, DMEC, The Wildlands Conservancy, CNDB 2010  
Datum: NAD 83 \* Projection: California State Plane, Zone V, feet  
Base Map: USGS Topographic Maps



**Figure 3b. Map of Special-status Plant Species on Wind Wolves Preserve, Northwest**



### Wind Wolves Preserve Rare Plants Legend



Map created 31 July 2010 by:  
David Magney Environmental Consulting, P.O. Box 1346, Ojai, CA 93024  
805/646-6045 \* [www.magney.org](http://www.magney.org)  
Sources: ESRI, DMEC, The Wildlands Conservancy, CNDBB 2010  
Datum: NAD 83 \* Projection: California State Plane, Zone V, feet  
Base Map: USGS Topographic Maps



Figure 3c. Map of Special-status Plant Species on Wind Wolves Preserve, Northeast

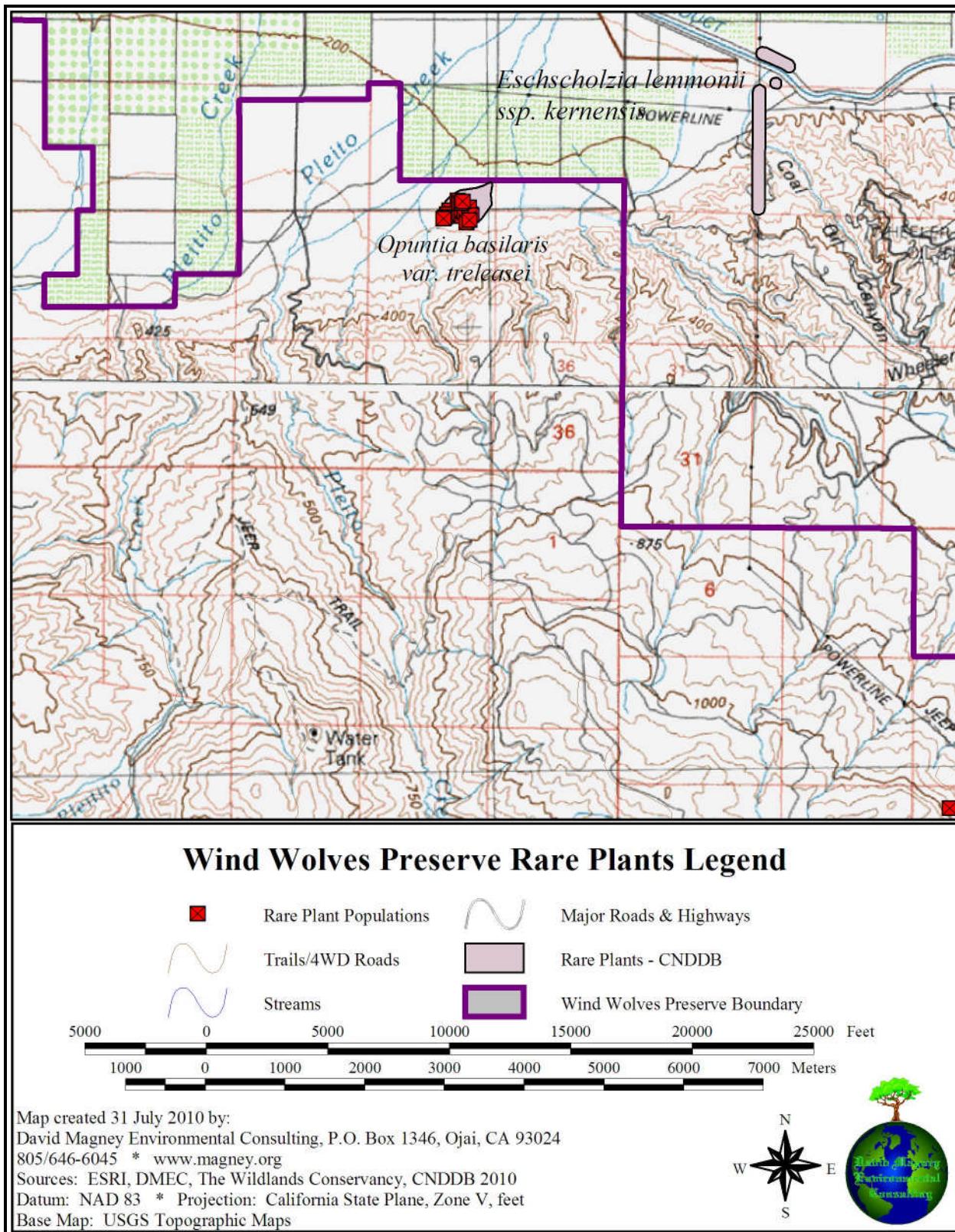
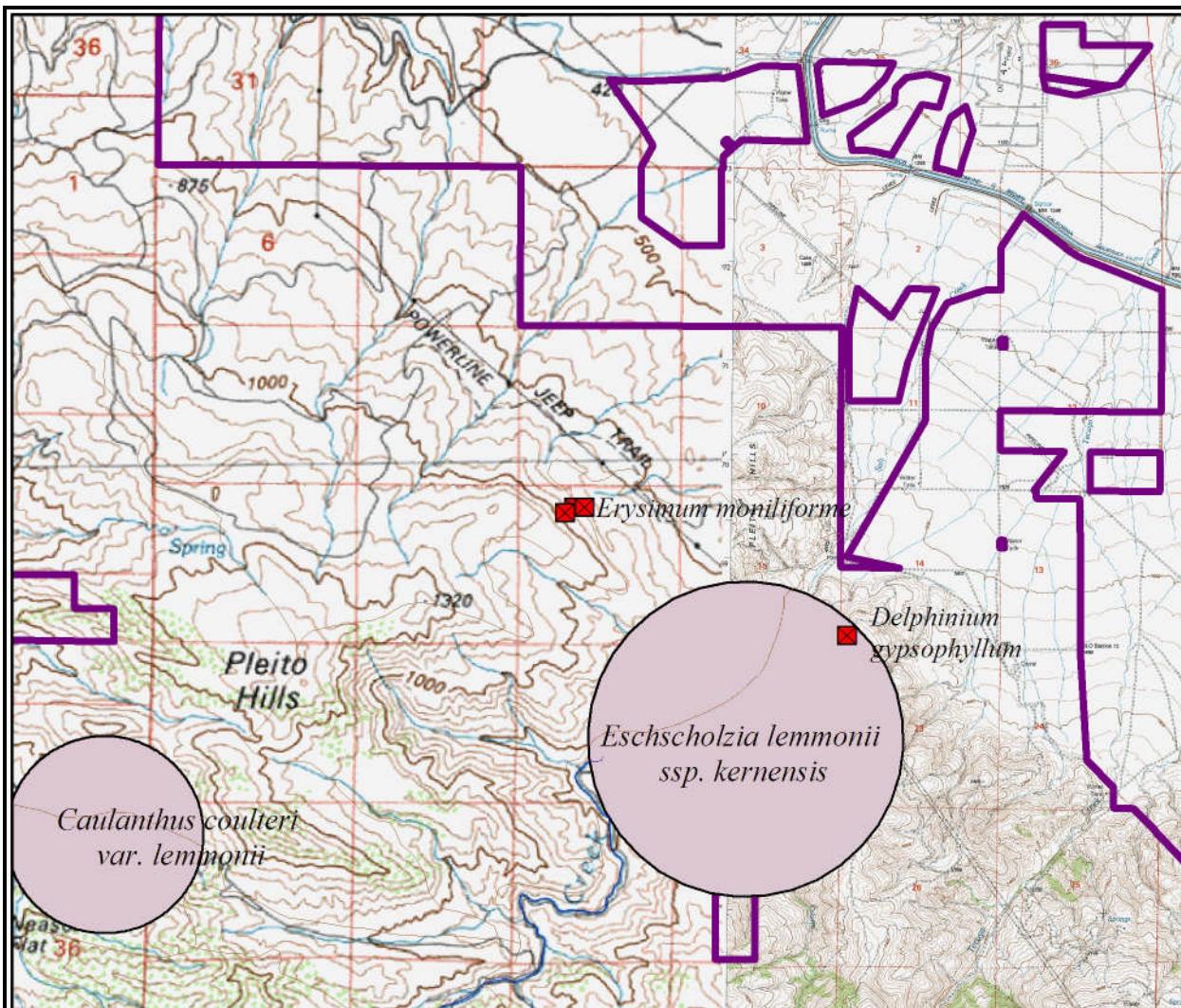
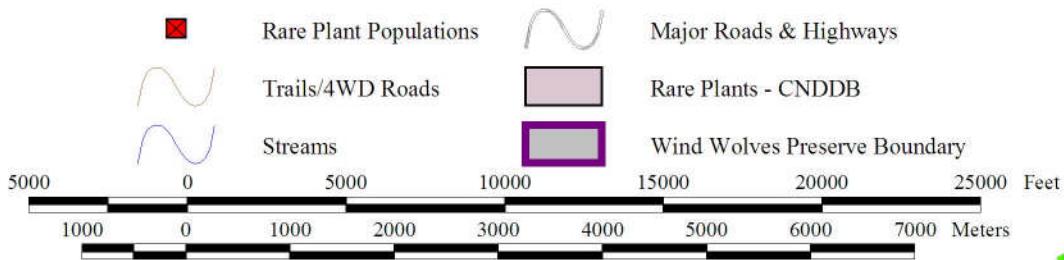


Figure 3d. Map of Special-status Plant Species on Wind Wolves Preserve, East



### Wind Wolves Preserve Rare Plants Legend



Map created 31 July 2010 by:  
David Magney Environmental Consulting, P.O. Box 1346, Ojai, CA 93024  
805/646-6045 \* [www.magney.org](http://www.magney.org)  
Sources: ESRI, DMEC, The Wildlands Conservancy, CNDB 2010  
Datum: NAD 83 \* Projection: California State Plane, Zone V, feet  
Base Map: USGS Topographic Maps



### *Calochortus weedii/invenustus*

A uniquely colored form of *Calochortus* that keys out as *Calochortus weedii* var. *vestus* but better fits the description for *Calochortus invenustus* was found at the Wind Wolves Preserve by DMEC. Fiedler (personal communication<sup>2</sup>) suggests that this population might represent an undescribed taxon, in which case this population is potentially uncommon or rare and may qualify for CNPS List status. The location where DMEC found the unique *Calochortus* population at the Wind Wolves Preserve is shown in Figure 3a, with the exact geographic coordinates listed in Table 4. This red form of *Calochortus* has been found on Mount Piños in northern Ventura County, located only a few miles south of the Preserve.



### *Delphinium gypsophilum* ssp. *gypsophilum*

*Delphinium gypsophilum* ssp. *gypsophilum* (Gypsum Loving Larkspur) is an endemic California plant. This taxon is on CNPS List 4. This plant was found along several ephemeral drainages west of Santiago Canyon Creek. The locations where DMEC found *Delphinium gypsophilum* ssp. *gypsophilum* at the Wind Wolves Preserve is shown in Figures 3b and 3d and the exact coordinates are listed in Table 4.



<sup>2</sup> Peggy Fiedler, PhD., Liliaceae taxonomic expert, University of California Natural Reserve System director, personal communication (email), 12 July 2010, regarding identification of red form *Calochortus*.

### *Erysimum moniliforme*

*Erysimum moniliforme* is an endemic form of the Western Wallflower (*E. capitatum*) that may be uncommon or rare and qualify for CNPS List status. This plant was found on steep north-facing slopes in the Los Lobos Creek watershed above 1,800 feet. The locations where DMEC found *Erysimum moniliforme* at the Wind Wolves Preserve is shown in Figures 3a and 3d and the exact coordinates are listed in Table 4. The taxonomy of the *E. capitatum* complex is not well understood at this time and some taxonomists have lumped *E. moniliforme* under *E. capitatum*, which DMEC and other knowledgeable California botanists disagree with, and retain the local variant as a valid species.



### *Navarretia setiloba*

*Navarretia setiloba* (Paiute Mountain Pincushion Plant) is an endemic California plant. This taxon is on CNPS List 1B and is only known to occur in Los Angeles, Kern, and Tulare Counties. This plant was found in upper Los Lobos Creek Canyon and on steep north-facing slopes in the upper northwest portion of the Los Lobos Creek watershed. The location where DMEC found *Navarretia setiloba* at the Wind Wolves Preserve is shown in Figure 3a and the exact coordinates are listed in Table 4.



### *Opuntia basilaris* var. *treleasii*

*Opuntia basilaris* var. *treleasii* (Bakersfield Cactus) is an endemic California plant. This taxon is on CNPS List 1B and is a State-listed Rare plant. The range of the Bakersfield Cactus is restricted to a few scattered locations in Kern County. One of the largest known populations exists at the Wind Wolves Preserve, east of the Pleto Creek drainage complex in the NE ¼ of the NE ¼ of Section 26 T11 N. R21 W. San Bernadino Base Meridian. The location of the Wind Wolves population of *Opuntia basilaris* var. *treleasii* found by DMEC is shown on Figure 3c and the exact coordinates of the population are listed in Table 4.



### *Perideridia gairdneri* ssp. *gairdneri*

*Perideridia gairdneri* ssp. *gairdneri* (Gairdner Yampah) is an endemic California plant. This taxon is on CNPS List 4. This plant was found on a steep north-facing slope in the upper northwest reaches of the Los Lobos Creek watershed. The location where DMEC found *Perideridia gairdneri* ssp. *gairdneri* at the Wind Wolves Preserve is shown in Figure 3a and the exact coordinates are listed in Table 4.



## SECTION 4. ACKNOWLEDGEMENTS

This report was written by David Magney and David Brown. Mr. Magney created all graphics for this report. Mr. Magney, Mr. Brown, and Ms. Huff, with help from David Clendenen, conducted the botanical resources survey and photographed the property in March, April, and June 2010. All photographs by David Magney.

Dan York and David Clendenen at The Wildlands Conservancy and Brian Cyper at the CSUS provided logistical and project coordination assistance throughout this project.

## SECTION 5. REFERENCES CITED

- California Department of Fish and Game. 2009. California Natural Diversity Database search of RareFind3. (Updated 30 November 2009.) The Resource Agency, State of California, Sacramento, California.
- California Native Plant Society. 2001. *Inventory of Rare and Endangered Plants of California*. Sixth edition. (Special Publication No. 1.) Rare Plant Scientific Advisory Committee, David Tibor, Convening Editor, Sacramento, California. September.
- California Native Plant Society (CNPS). 2008. CNPS Postponed Taxa. (1 January 2008.) Rare Plant Scientific Advisory Committee, Sacramento, California.
- California Native Plant Society (CNPS). 2010. *Inventory of Rare and Endangered Plants of California*. Seventh (Online) edition. (v7-10a 1-19-10.) Sacramento, California.
- Flora of North America Editorial Committee. 1993+. *Flora of North America*. Oxford University Press. New York, New York. Volumes 1 through 27 (incomplete).
- Hickman, J. ed. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley, California.
- Lake, D. 2004. *Rare, Unusual, and Significant Plants of Alameda and Contra Costa Counties*. Seventh Edition, March 2004. California Native Plant Society, East Bay Chapter, Berkeley, California.
- Magney, D.L. Manuscript. *A Flora of Ventura County, California*. David Magney Environmental Consulting, Ojai, California.
- Magney, D.L. 2005. Rare Plants of the Liebre Mountains, Los Angeles County: Preliminary List. 14 December 2005. California Native Plant Society, Channel Islands Chapter, Ojai, California. Published at [http://cnpisci.org/html/PlantInfo/Libre\\_Rare.htm](http://cnpisci.org/html/PlantInfo/Libre_Rare.htm)
- Magney, D.L. 2009. Checklist of Ventura County Rare Plants. 19 October 2009, Fifteenth edition. California Native Plant Society, Channel Islands Chapter, Ojai, California. Published on [www.cnpisci.org](http://www.cnpisci.org).
- Munz, P.A. 1974. *A Flora of Southern California*. University of California Press, Berkeley, California.
- Munz, P.A., and D.D. Keck. 1973. *A California Flora and Supplement*. University of California Press, Berkeley, California.
- Twissleman, E.C. 1995. *A Flora of Kern County, California*. California Native Plant Society, Sacramento, California.
- Wilken, D. 2007. Rare Plants of Santa Barbara County. (version 1.8, 6 August 2007.) Central Coast Center for Plant Conservation, Santa Barbara Botanic Garden, Santa Barbara, California. California Native Plant Society, Channel Islands Chapter, Ojai, California. (Published on [www.cnpisci.org](http://www.cnpisci.org).)