

August 8, 2017

Mr. Gary Busteed
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Bulk Power Projects Environmental Licensing
Environmental Services Division
Southern California Edison
6040 North Irwindale Ave., Suite A
Irwindale, California 91702

RE: 2017 Rare Plant Memo Report for the Southern California Edison Riverside Transmission Reliability Project (RTRP)

Dear Mr. Busteed,

Southern California Edison (SCE) contracted AECOM to conduct habitat assessments and subsequent focused surveys for a number of special-status species along and adjacent to the Riverside Transmission Reliability Project (RTRP) alignment (Project). The purpose of this letter report is to summarize findings of rare plant surveys conducted during the spring of 2017 for the proposed Project. These surveys are in response to data requests received from the California Public Utilities Commission (CPUC) during their review of SCE's Application for a Certificate of Public Convenience and Necessity. The purpose of these surveys was to identify the presence of rare (special-status) plant species that may occur in the Project area, and if found, map their distribution.

Project Location and Description

The Project is located in the northwest portion of Riverside County, north of Norco and south and east of Mira Loma (Figure 1). The Project is a joint venture with Riverside Public Utilities (RPU) to provide a new 230-kilovolt (kV) transmission line connection to RPU's transmission system and increase the reliability of their grid. The majority of the Project consists of developed areas and lands highly disturbed by historical agricultural use, however portions of the site support remnant fragments of native plant habitat and intact soils. For the purpose of this report the rare plant survey report, survey area is referred to as the Biological Study Area (BSA). The BSA is defined as areas of potential rare plant habitat based on existing vegetation and soils within project construction disturbance features provided by SCE (GDADs) and a 50-foot buffer around these features.

Survey Methodology

Prior to the rare plant surveys, AECOM initiated literature research to prepare a list of potentially occurring species for the geography and conditions of the RTRP and conducted field studies to refine the survey extents to areas of potential habitat for these species. The results of this pre-survey analysis are described in detail in the Habitat Assessment Report prepared for SCE by AECOM, dated August 29, 2017 (AECOM 2017).

Mr. Gary Busteed
Southern California Edison
August 8, 2017
Page 2

Two floristic-level rare plant surveys were performed within the BSA on March 30 and May 22, 2017. These surveys were timed to coincide with the periods of most likely detection and identification of rare species, based on visitation of rare plant reference populations, and were conducted in accordance with survey protocols set forth by *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants* (USFWS 2000); *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFG 2009)¹; and *CNPS Botanical Survey Guidelines* (CNPS 2001).

Surveys were conducted using meandering transects through all areas with suitable habitat. Data was collected using the ArcGIS Collector mobile application and was synced into ArcGIS for analysis. At each rare plant species location recorded, the botanist recorded the phenology of the rare plant species as vegetative, flowering, blooming or senescent and estimated the number of individuals present. Scientific nomenclature of plant species in this rare plants survey report follows the Jepson eFlora (Jepson Flora Project 2017) or, when CRPR listed species are not recognized in Jepson, the CNPS Rare and Endangered Plant Inventory (CNPS 2017). Common names of plant species follow the CNPS Rare and Endangered Plant Inventory (CNPS 2017) for CRPR listed species and Calflora (Calflora 2017) for all other species.

The March 30, 2017 survey was conducted by Jonathan Dunn of AECOM and David Bramlet of Kidd Biological, Inc. The May 22, 2017 survey was conducted by David Bramlet and Nina Kidd of Kidd Biological, Inc. These surveys were conducted during a spring season characterized by above-normal precipitation.

Results

A total of 122 plant taxa (70 native and 52 nonnative) were observed within the BSA (Appendix A). One plant species included in the California Department of Fish and Wildlife California Natural Diversity Database (CNDDDB) *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2017), *Deinandra paniculata* (Paniculate Tarplant), was detected during these surveys. Approximately 150 individuals of this species were recorded across three locations within the BSA (Figure 2).

Discussion

No listed or sensitive rare plant species were observed within the BSA, except for *D. paniculata* discussed in detail below. Local reference populations were also viewed to assess species' phenologies at the time of the surveys; all were observed to be flowering and identifiable at reference populations at the time of site surveys.

Presence/absence surveys have to answer two questions: 1) Is the species able to be detected and 2) is the species present. In answering the first question:

¹ This document replaced the CDFG document *Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened and Endangered Plants and Natural Communities*.

Mr. Gary Busted
Southern California Edison
August 8, 2017
Page 3

- A) The plants were observed at reference populations, meaning they should have also been observed onsite.
- B) Two separate surveys were scheduled during optimal viewing and identification periods for rare species with potential to occur—to account for differences in bloom cycle between the site and reference populations.
- C) The surveys were conducted during historically favorable annual conditions (i.e., above average rainfall totals for the 2016-2017 rainy season).
- D) The qualification of the surveyor and methods were addressed by using qualified botanists and approved CDFW survey protocol.
- E) When considered together, all four points above indicate there is no issues with being able to detect rare plants on site and that the lack of observation is more supportive of absence onsite rather than an inability to detect the species

Therefore it was concluded that the lack of observations on the project site compared to observations at reference populations cannot be attributed to 1) poor annual conditions leading to minimal flowers in high quality habitat but little or no growth in marginal or lower quality habitats, 2) slight differences in bloom cycle between the site and reference populations, or 3) the observer simply missing finding a plant because it would be expected that it would have been detected in one of the two surveys. Therefore, all the listed and sensitive plants surveyed were not detected and are not expected to occur except for *D. paniculata*.

Deinandra paniculata is an annual plant in the Asteraceae that ranges from the central coast of California to northern Baja California, with the core of its population occurring in western Riverside County (Jepson Flora Project, 2017). This species is classified by the California Native Plant Society as “California Rare Plant Rank 4.2: Plants of Limited Distribution – Moderately threatened in California” (CRPR 4.2). Although considered rare by CNPS, it is not a sensitive species under the California Environmental Quality Act (CEQA) within the BSA because:

- 1) *Deinandra paniculata* is not federally listed pursuant to the federal Endangered Species Act (ESA) nor listed within Section 670.2 or 670.5, Title 14, of the California Code of Regulations (§15380 of CEQA).
- 2) *Deinandra paniculata* is not on California Native Plant Society (CNPS) List 1B or 2B. CDFW rare plant survey protocol provides criteria for determining whether a species should be considered “rare.” Rare plants are defined by CDFW protocol those that are considered by the CNPS to be “rare, threatened or endangered in California” (Lists 1B and 2B).

Mr. Gary Busted
Southern California Edison
August 8, 2017
Page 4

- 3) *Deinandra paniculata* is not a locally significant species. CDFW protocol accounts for species on Lists 3 and 4 and considered them rare when it is rare or uncommon in a local context such as within a county or region (CEQA §15125 (c)). The project is within the core range of *D. paniculata* and found on soils typical for the species, meaning the location and substrate cannot be used to call this species a locally significant species.
- 4) *Deinandra paniculata* is not listed as rare in local or regional plans, policies or ordinances. CDFW protocol also considers a species rare when it is so designated in local or regional plans, policies, or ordinances (CEQA Guidelines, Appendix G). It is not considered as rare or uncommon in a local context as it not one of the 146 special-status species covered under the Western Riverside County Multiple Species Conservation Plan.
- 5) *Deinandra paniculata* commonly occurs in western Riverside County. CNPS also notes that considering List 4 during CEQA is particularly appropriate when the location is a type locality, at the edge/periphery of the range, in an area where it is uncommon or has sustained heavy loss in the area, or a unique morphology or unusual substrate. It does not warrant consideration on the basis of local significance, as it occurs commonly in western Riverside County, within the core of its range, on typical soils and is not a type locality or sustaining heavy population loss in the area.

Impacts to individuals of *Deinandra paniculata* are therefore not considered a “substantial adverse effect” to Biological Resources pursuant to Appendix G of the CEQA Guidelines. As a result, there are no species-specific botanical concerns with the BSA.

If you have any questions or comments regarding this letter report, please contact me at (619) 610-7654.

Sincerely,



Erin Riley
Senior Biologist/Project Manager
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Attachments:

Figure 1 – Project Location

Figure 2 – Special Status Plant Species Detected within Biological Study Area

Appendix A – List of Plant Species Observed within the BSA

Mr. Gary Busted
Southern California Edison
August 8, 2017
Page 5

Literature Cited

- AECOM. 2017. Riverside Transmission Reliability Project – Habitat Assessment Results. Letter report to Paul Yamazaki, Southern California Edison. August 29, 2016.
- Baldwin B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken. 2012. *The Jepson Manual Vascular Plants of California*.
- California Department of Fish and Game (CDFG). 2009. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>. Accessed: 2017.
- California Department of Fish and Wildlife (CDFW). July 2017. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication.
- Calflora: Information on California plants for education, research and conservation. [web application]. 2016. Berkeley, California: The Calflora Database [a non-profit organization]. Available: <http://www.calflora.org/> Accessed: 2017.
- California Native Plant Society (CNPS). 2001. CNPS Botanical Survey Guidelines. Available at http://www.cnps.org/cnps/rareplants/pdf/cnps_survey_guidelines.pdf. Accessed: 2017.
- California Native Plant Society (CNPS). 2017. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA. Available at <http://www.cnps.org/inventory>.
- Jepson Flora Project (JFP) (eds.) 2017. Jepson eFlora, <http://ucjeps.berkeley.edu/eflora/> Accessed: 2017.
- U.S. Fish and Wildlife Service (USFWS). 2000 U.S. Fish and Wildlife Service (USFWS). 2000. Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed Proposed and Candidate Plants. Available at <https://www.fws.gov/ventura/docs/species/protocols/botanicalinventories.pdf>. Accessed 2017.

FIGURES



LEGEND
— Project Features

Source: NAIP 2014; Essex 2010; SCE 2016; Esri 2009.

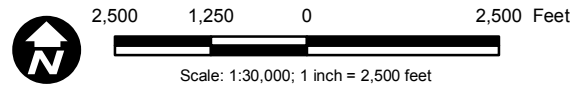
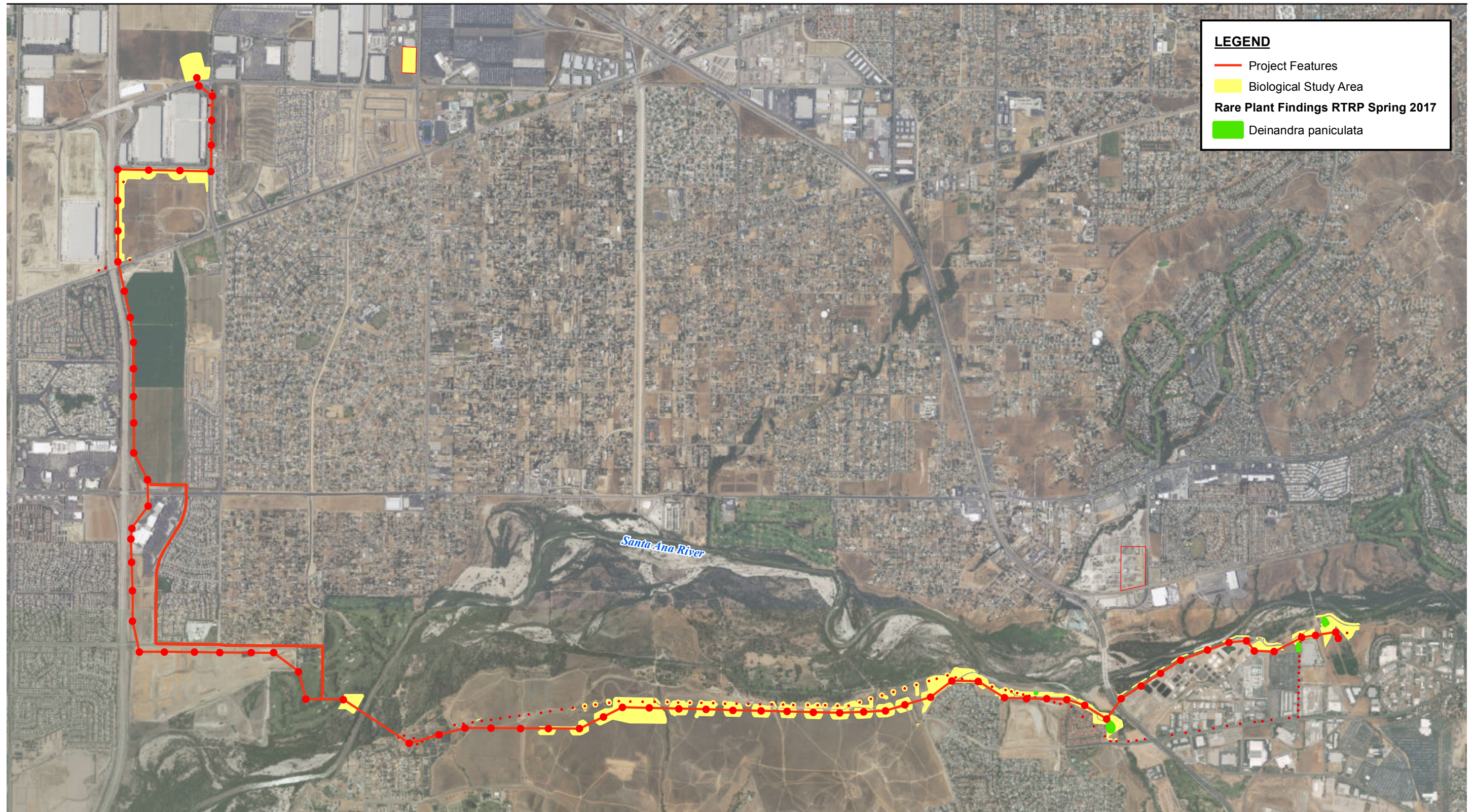


Figure 1
Project Location



LEGEND

- Project Features
- Biological Study Area

Rare Plant Findings RTRP Spring 2017

- *Deinandra paniculata*

Source: NAIP 2014; Essex 2010; SCE 2016; Esri 2009.

2,500 1,250 0 2,500 Feet

Scale: 1:30,000; 1 inch = 2,500 feet

Figure 2
Rare Plant Findings 2017

APPENDIX A

**PLANT SPECIES OBSERVED
ON THE
RIVERSIDE TRANSMISSION RELIABILITY PROJECT**

Spring 2017

LEGEND

- * Non-native species
- † Special status plant species
- [] W Riverside County Checklist equivalents

Note: Taxonomy of scientific and common names generally follows the Jepson manual (Baldwin et al. 2012), with some recent name changes following the checklist of vascular plants of western Riverside County (Roberts et al. 2004). Common names follow Roberts et al. 2004.

MAGNOLIOPHYTA - FLOWERING PLANTS

MAGNOLIIDS - MAGNOLIID CLADE

ADOXACEAE

ELDERBERRY FAMILY

Sambucus nigra

Mexican elderberry

AMARANTHACEAE

AMARANTH FAMILY

**Amaranthus albus*

Tumbling pigweed

**Amaranthus blitoides*

Prostrate pigweed

ANACARDIACEAE

SUMAC FAMILY

**Schinus molle*

Peruvian pepper

Toxicodendron diversilobum

Poison oak

APIACEAE

CARROT FAMILY

**Conium maculatum*

Poison hemlock

ASTERACEAE

SUNFLOWER FAMILY

Ambrosia acanthicarpa

Annual bur weed

Ambrosia psilostachya

Western ragweed

Artemisia californica

California sagebrush

Artemisia douglasiana

Mugwort

Artemisia dracuncululus

Tarragon

Baccharis salicifolia

Mulefat

**Centaurea melitensis*

Tocalote

**Cirsium vulgare*

Bull thistle

**Cnicus benedictus*

Blessed thistle

Conyza canadensis

Common horsetail

Corethrogyne filaginifolia

Common sand aster

**Cotula australis*

Australian brass buttons

Deinandra fasciculata

Fascicled tarweed

† *Deinandra paniculata*

Paniculate tarplant

Encelia farinosa

Brittlebush

Ericameria palmeri var. *pachylepis*

Grassland goldenbush

Helianthus annuus

Annual sunflower

Heterotheca grandiflora

Telegraph weed

<i>*Hypochaeris glabra</i>	Smooth cat's ear
<i>Isocoma menziesii</i>	Coastal goldenbush
<i>*Lactuca serriola</i>	Prickly lettuce
<i>Logfia californica</i>	California filago
<i>*Logfia gallica</i>	Narrow-leaved filago
<i>*Oncosiphon piluliferum</i>	Stink net
<i>*Pilularia hispanica</i>	Spanish sunflower
<i>Pseudognaphalium californicum</i>	California everlasting
<i>*Senecio vulgaris</i>	Common groundsel
<i>*Sonchus asper</i>	Prickly sow thistle
<i>*Sonchus oleraceus</i>	Common sow thistle
<i>*Verbesina encelioides</i>	Earless crownbeard
<i>Xanthium strumarium</i>	Cocklebur

BORAGINACEAE
FORGET-ME-NOT FAMILY

<i>Amsinckia intermedia</i>	Common fiddleneck
<i>Heliotropium curassavicum</i>	Alkali heliotrope
<i>Pectocarya linearis</i>	Slender pectocarya
<i>Pectocarya penicillata</i>	Winged pectocarya
<i>Phacelia distans</i>	Common phacelia
<i>Phacelia cicutaria</i>	Caterpillar phacelia
<i>Phacelia minor</i>	Canterbury bells
<i>Phacelia ramosissima</i>	Branching phacelia
<i>Plagiobothrys canescens</i>	Valley popcorn flower

BRASSICACEAE
MUSTARD FAMILY

<i>*Brassica nigara</i>	Black mustard
<i>*Brassica tournefortii</i>	Sahara mustard
<i>*Capsella bursa-pastoris</i>	Shepherd's purse
<i>*Coronopus didymocarpus</i>	Swine cress
<i>*Hirschfeldia incana</i>	Summer mustard
<i>Lepidium nitidum</i>	Shiny peppergrass
<i>*Raphanus sativa</i>	Wild radish
<i>*Sisymbrium irio</i>	London rocket

CACTACEAE
CACTUS FAMILY

<i>Cylindropuntia californica</i> var. <i>parkeri</i>	Valley cholla
<i>*Opuntia ficus-indica</i>	Mission cactus
<i>Opuntia Xvaseyi</i>	Vasey's prickly pear

CARYOPHYLLACEAE

PINK FAMILY

**Spergularia bocconeii*

Boccone's sand spurry

CHENOPODIACEAE

GOOSEFOOT FAMILY

Atriplex canescens

Four-wing saltbush

Atriplex lentiformis

Quail bush

**Atriplex suberecta*

Serrate-leaved saltbush

**Bassia hyssopifolia*

Five-hook bassia

Chenopodium berlandieri

Pitseed goosefoot

**Salsola tragus*

Russian thistle

CONVOLVULACEAE

MORNING GLORY FAMILY

Calystegia macrostegia

Finger-leaved morning glory

Cressa truxillensis

Alkali weed

CRASSULACEAE

STONECROP FAMILY

Crassula connata

Sand pigmy stonecrop

Dudleya lanceolata

Lance-leaved dudleya

CUCURBITACEAE

GOURD FAMILY

Cucurbita foetidissima

Coyote melon

EUPHORBIACEAE

SPURGE FAMILY

Croton setiger

Dove weed

**Ricinus communis*

Castor bean

FABACEAE

PEA FAMILY

Acmispon brachycarpus

Hill lotus

[*Lotus humistratus*]

Acmispon glaber

Deerweed

[*Lotus scoparius*]

Acmispon micranthus

Grab lotus

[*Lotus hamatus*]

Acmispon strigosus

Strigose lotus

[*Lotus strigosus*]

Lupinus bicolor

Miniature lupine

Lupinus succulentus

Arroyo lupine

**Medicago polymorpha*
**Melilotus indicus*

Bur clover
Yellow sweet clover

GERANIACEAE

GERANIUM FAMILY

**Erodium cicutarium*
**Erodium moschatum*

Red-stemmed filaree
White-stemmed filaree

JUGLANDACEAE

WALNUT FAMILY

†*Juglans californica*

Southern California black
walnut

LAMIACEAE

MINT FAMILY

**Marrubium vulgare*
Tricostema lanceolatum

Horehound
Vinegar weed

MALVACEAE

MALLOW FAMILY

**Malva parviflora*

Cheeseweed

MYRTACEAE

MYRTLE FAMILY

**Eucalyptus camaldulensis*

River red gum

OLEACEAE

OLIVE FAMILY

**Fraxinus udehi*

Shamel ash

ONAGRACEAE

EVENING PRIMROSE FAMILY

Camissonia californica
Camissoniopsis micrantha

California false mustard
Small primrose

PLATANACEAE

SYCAMORE FAMILY

**Platanus racemosa*

Western sycamore

POLEMONIACEAE

PHLOX FAMILY

Gilia angelensis

Los Angeles gilia

POLYGONACEAE

BUCKWHEAT FAMILY

Eriogonum fasciculatum ssp. *foliolosum*

Interior flat-topped buckwheat

Eriogonum fasciculatum ssp. *polifolium*

Rosemary California
buckwheat

**Rumex pulcher*

Fiddle dock

PORTULACACEAE

PURSLANE FAMILY

Calandrinia ciliata

Red maids

ROSACEAE

ROSE FAMILY

Rubus ursinus

California blackberry

RUBIACEAE

MADDER FAMILY

Galium angustifolium

Narrow-leaved bedstraw

SALICACEAE

WILLOW FAMILY

Populus fremontii

Fremont cottonwood

Salix gooddingii

Black willow

Salix laevigata

Red willow

Salix lasiolepis

Arroyo willow

Salix exigua

Sandbar willow

SCROPHULARIACEAE

FIGWORT FAMILY

**Veronica anagallis-aquatica*

Great water speedwell

SOLANACEAE

NIGHTSHADE FAMILY

Datura wrightii

Jimson weed

**Nicotiana glauca*

Tree tobacco

TAMARICACEAE

TAMARISK FAMILY

**Tamarix ramosissima*

Mediterranean tamarisk

URTICACEAE

NETTLE FAMILY

Urtica dioica ssp. *holosericea*

Hoary nettle

**Urtica urens*

Dwarf nettle

VITACEAE

GRAPE FAMILY

Vitus girdiana

Desert wild grape

ZYGOPHYLLACEAE

CALTROP FAMILY

**Tribulus terrestris*

Puncture vine

CYPERACEAE

SEDGE FAMILY

Schoenoplectus americanus

Oleny's three square

Schoenoplectus californicus

California bulrush

POACEAE

GRASS FAMILY

**Arundo donax*

Giant reed

**Avena barbata*

Slender wild oat

**Avena fatua*

Wild oat

**Bromus diandrus*

Ripgut brome

**Bromus madritensis ssp. rubens*

Red brome

**Bromus tectorum*

Cheat grass

**Hordeum murinum ssp. leporinum*

Foxtail barley

Melica imperfecta

Small-flowered melic grass

**Schismus barbatus*

Mediterranean schismus