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October 13, 2010

Mr. John Kessler  
Siting Project Manager  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

Subject: Rice Solar Energy Project (09-AFC-10)  
Fall 2010 Supplemental Botanical Inventory Report dated 10/12/10

Dear Mr. Kessler:

Attached please find one hardcopy of the Fall 2010 Supplemental Botanical Inventory Report dated 10/12/10 by Sycamore Environmental Consultants.

If you have any questions about this matter, please contact me at (916) 286-0278.

Sincerely,

A handwritten signature in blue ink, appearing to read "Douglas M. Davy", written over a light blue circular stamp.

Douglas M. Davy, Ph.D.  
AFC Project Manager

cc: POS List  
Project File

|                  |             |
|------------------|-------------|
| <b>DOCKET</b>    |             |
| <b>09-AFC-10</b> |             |
| DATE             | OCT 13 2010 |
| RECD.            | OCT 13 2010 |

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Fall 2010 Supplemental  
Botanical Inventory Report  
for the  
Rice Solar Energy Project

Riverside County, CA

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*Prepared by:*

**Sycamore Environmental Consultants, Inc.**

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12 October 2010

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Fall 2010  
Supplemental Botanical Inventory Report  
for the  
Rice Solar Energy Project

Riverside County, CA

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## **I. EXECUTIVE SUMMARY**

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Supplemental botanical surveys were conducted in October 2010 for the Rice Solar Energy Project (RSEP) in Riverside County, CA. The surveys were conducted to address California Energy Commission (CEC) requirements for project approval.

The area surveyed at the main site in October 2010 was smaller than previous RSEP surveys because the October survey included only the proposed disturbance area (i.e., the construction footprint). As a result, the October survey area is referred to herein as the Botanical Study Area (BSA) to distinguish it from previous surveys that were conducted over the entire main site. Previous surveys referenced the Project Study Area or PSA. See Figure 4 for areas included in previous PSA's compared to the October 2010 BSA.

The October BSA includes two areas: 1) the main site, and 2) a  $\pm$  10-mi long transmission line corridor. Botanical surveys in the BSA focused on major washes and approximately 25% of upland areas between washes. The October 2010 botanical surveys were conducted within seven weeks of a 30.5 mm precipitation event that occurred on-site on 17 August 2010.

The BSA provides suitable or marginal habitat for 71 special-status plant species. No federal or state listed plant species were observed during surveys conducted in October 2010. *Cynanchum utahense*, a California Native Plant Society List 4.2 species, was observed at the eastern terminus of the transmission line corridor in the vicinity of the proposed substation/switching station. This species has a California Natural Diversity Database rank of S3.2 (under *Funastrum utahense*). No other special-status plant species were observed in the BSA in October 2010.

## **II. INTRODUCTION**

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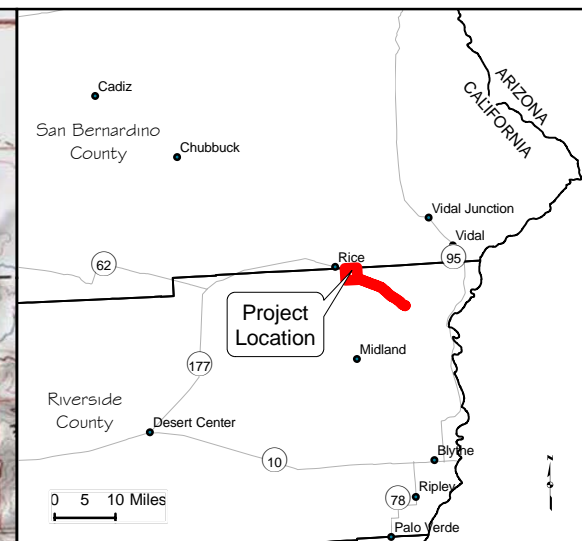
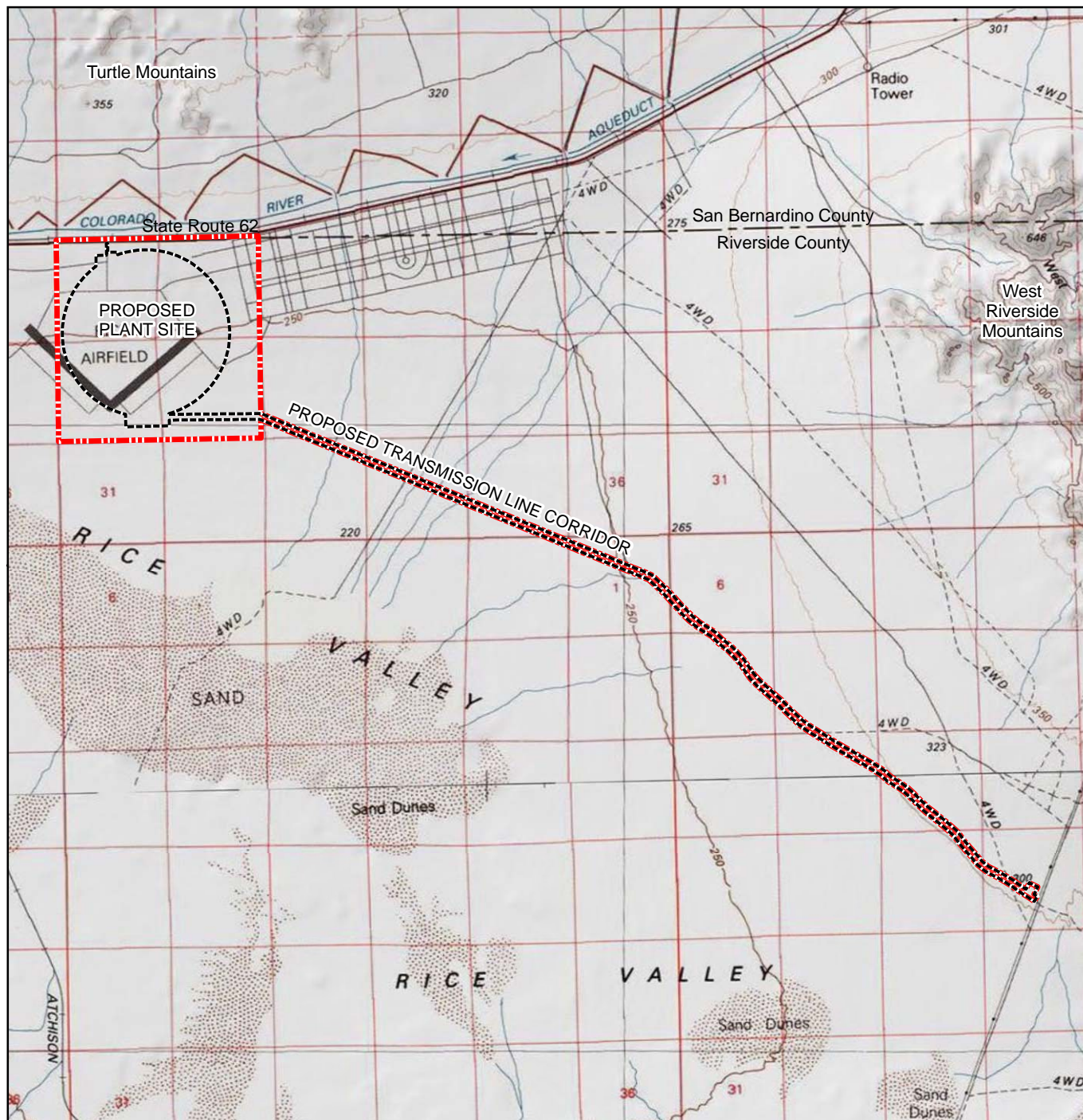
### **A. Purpose of Report**

The purpose of this report is to document the results of botanical surveys conducted in October 2010. This report was prepared under contract to CH2M Hill, Inc., Sacramento, CA. The project contact is Doug Davy, Ph.D.

### **B. Project Location**



The BSA is located in northeastern Riverside County, CA, approximately 30 mi northwest of the City of Blythe, CA and 29 mi west-southwest of Parker, AZ (Figure 1). The BSA occurs on portions of three USGS quads: Rice, Grommet, and Big Maria Mountains Northwest (Table 1). The BSA is in the Southern Mojave (hydrologic unit code 18100100) and Imperial Reservoir (hydrologic unit code 15030104) watersheds. Its centroid is 35.0201° north, -118.1260° west (UTM: Zone 11 S, 702,759 m E, 3,771,557 m W). Figure 2 is a 1 January 1999 aerial photograph of the BSA.

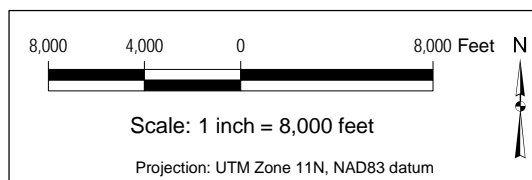
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Rice Solar Energy Project, Fall 2010  
Supplementary Botanical Inventory  
Riverside County, CA  
12 October 2010

Figure 1. Location Map

-  Fall 2010 Botanical Study Area (BSA)  
 Project Study Area (PSA)

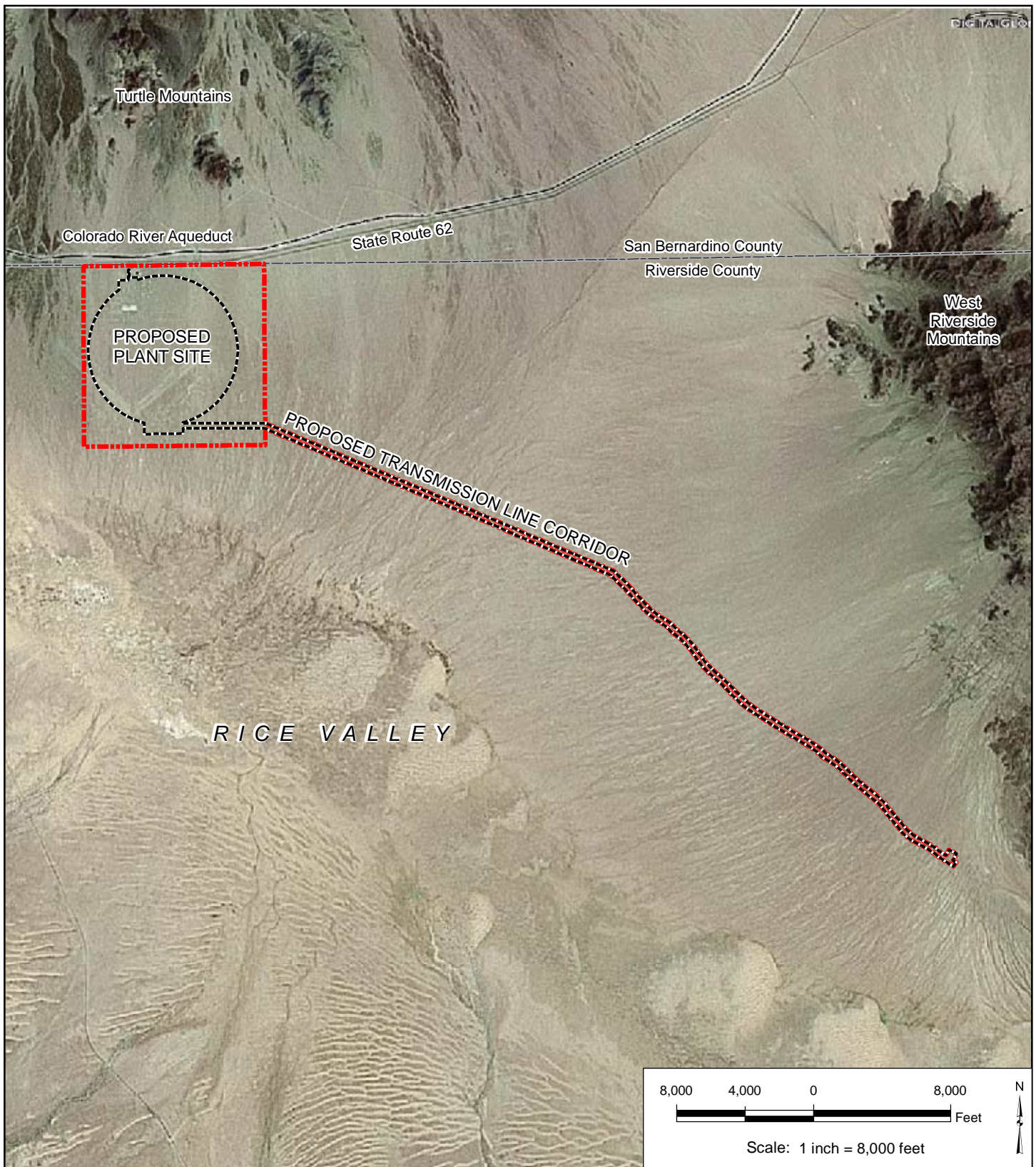


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USGS 30 Minute by 60 Minute  
1:100,000 Topographic Map  
Parker, Arizona and Blythe, California  
© 2007 National Geographic Society  
ESRI ArcGIS Online Data Layer



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Fall 2010 Botanical Study Area (BSA)



Project Study Area (PSA)



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Aerial Photograph:  
 1 January 1999

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Figure 2. Aerial Photograph

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Table 1. Project USGS quads.

| USGS Quad Name                | Portion of BSA located on USGS Quad | Township, Range, and Sections   |
|-------------------------------|-------------------------------------|---|
| Rice                          | Plant Site & T-Line Corridor        | Plant Site: T1S, R21E, Sections 19, 20, 29, and 30<br>T-Line Corridor: T1S, R21E, Sections 28, 33, and 34 |
| Grommet                       | T-Line Corridor                     | T1S, R21E, Section 35; T2S, R21E, Sections 1 and 2;<br>T2S, R22E, Sections 6, 7, 8, and 17                |
| Big Maria Mountains Northwest | T-Line Corridor                     | T2S, R22E, Sections 16, 21, and 22  |

### C. Project Description

The RSEP is a 150-megawatt (MW) concentrating solar thermal power project with a central receiver tower, sun-tracking heliostat field and an integral thermal storage system using liquid salt as the heat transfer and storage medium. When electricity is to be generated, the heated salt will be routed to a steam generation system, which generates steam for use in a high-efficiency reheat steam turbine cycle. The RSEP has elected to use dry cooling technology for the steam turbine cycle using an air-cooled condenser (ACC). The maximum total project water consumption for the RSEP will be approximately 180 acre-feet per year.

The RSEP includes a 10-mi long transmission line that will connect the plant site to the existing Western Area Power Administration's (Western) Parker-Blythe transmission line. The transmission line will be constructed to design standards that allow operation at 230 kV. The transmission line will require construction of 4.6 mi of a new, unpaved access road and will use 5.4 mi of the existing Rice Valley Road (a dirt road). A substation/switching station with a footprint of approximately 300 ft x 400 ft would be constructed where the RSEP transmission line connects to Western's existing 230 kV transmission line.

## III. STUDY METHODS

The botanical surveys for this report follow the guidelines set forth by USFWS (1996), DFG (2009a), California Native Plant Society (CNPS 2001), and the BLM (BLM 1996 and 2009) where applicable. Scientific nomenclature follows Hickman, ed. (1993).

### A. Previous Studies

In March 2009, Sycamore Environmental conducted botanical surveys of the RSEP area; the results are summarized in a separate report (Sycamore Environmental 2009). In February and March 2010, Sycamore Environmental conducted a jurisdictional delineation of the RSEP area (Sycamore Environmental 2010a). In June and July 2010, Sycamore Environmental conducted additional botanical surveys of the RSEP area; the results are summarized in a separate report (Sycamore Environmental 2010b).

## B. Literature Search

Information on the biology, distribution, taxonomy, legal status, and other aspects of the special-status species was obtained from documents on file in the library of Sycamore Environmental. Standard references used for the biology and taxonomy of plants included Abrams (1923-1960); California Department of Fish and Game (2009b); Hickman, ed. (1993); Baldwin et al. (2002); Munz (1959; 1974); and Sawyer et al. (2009). On-line references included California Native Plant Society (2010); CalPhotos (2010); and the Consortium of California Herbaria (CCH 2010).

Lists of DFG special-status species reviewed included *Special Vascular Plants, Bryophytes, and Lichens List* (DFG 2010a) and *State and Federally Listed Endangered, Threatened, and Rare Plants of California* (DFG 2010b).

A search of the California Natural Diversity Database (CNDDDB, 5 September 2010 version; DFG 2010c) was conducted for the Rice, Grommet, Big Maria Mountains Northwest, and the 12 adjacent USGS quads to determine known records of special-status species in or near the BSA. A CNDDDB summary report for the 15 quads is in Appendix B. Table 2 lists the USGS quads evaluated.

Table 2. USGS quads evaluated for the Rice Solar Energy Project BSA.

|                        |             |                                      |                               |
|------------------------|-------------|--------------------------------------|-------------------------------|
| Sablon                 | Horn Spring | Vidal Northwest                      | Vidal Junction                |
| Arica Mountains        | <b>Rice</b> | <b>Grommet</b>                       | Vidal                         |
| Little Maria Mountains | Styx        | <b>Big Maria Mountains Northwest</b> | Big Maria Mountains Northeast |
|                        | Inca        | Big Maria Mountains Southwest        | Big Maria Mountains Southeast |

The proposed plant site is located on private property in a portion of Riverside County administered by the Carlsbad Fish and Wildlife Office (CFWO). San Bernardino County is located north of the BSA in an area administered by the Ventura Fish and Wildlife Office (VFWO). Due to the proximity of the BSA to the VFWO, Sycamore Environmental obtained lists from both the CFWO and VFWO for Riverside and San Bernardino counties that identify federal-listed plant species that potentially occur in or could be affected by projects in Riverside and San Bernardino counties (USFWS 2010a and 2010b). These lists are in Appendix C.

The T-line corridor is located in an area administered by the Palm Springs-South Coast Field Office of the BLM. The area immediately north of the corridor is administered by the Needles Field Office of the BLM. Due to the proximity of lands managed by the Needles Field Office, Sycamore Environmental obtained lists of special-status plant species from the Palm Springs and the Needles BLM field offices. These lists identify special-status plant species that potentially occur in or could be affected by projects in the region (BLM 2010a and 2010b). These lists are in Appendix D.

A search of the California Native Plant Society, Inventory of Rare and Endangered Plants Database (Version 7-10c 8-24-10; CNPS 2010) was conducted for all species having “Sonoran” in their habitat description. The results are in Appendix E.

### C. Survey Dates and Personnel

Surveys were conducted by R. John Little, Ph.D, Chuck Hughes, M.S., and Michael Bower, M.S., from 2 through 5 October 2010. Approximately 90 person-hours were spent in the field conducting the surveys.

### D. Survey Methods

The 2010 jurisdictional delineation for the RSEP PSA (Sycamore Environmental 2010a), assigned each ephemeral channel (i.e., desert wash) into one of 5 size categories (Table 3 below). The October 2010, botanical surveys in the BSA focused on Category 2, 3, 4, and 5 channels (Figure 4), which were considered to be major washes for the purpose of the Fall 2010 botanic surveys. All Category 2, 3, 4, and 5 channels in the main site footprint and in the 300 ft wide T-line corridor in the BSA were surveyed for special-status plant species. (Note: the 300 ft wide BSA for the T-line corridor in October 2010 was the same as the ‘PSA’ of previous surveys.)

Surveys involved botanists walking the length of individual channels in the BSA with a GPS and aerial photos. The October surveys also included surveying approximately 25% of upland areas as botanists walked in and between channels in the BSA. Consistent with BLM guidelines (BLM 2009), survey intensity was greatest in habitats with the highest potential for supporting special-status plant populations (i.e., ephemeral channels; desert washes), a procedure known as “intuitive controlled.”

Table 3. Channel Size Class Categories.

| Category Name | Width Range (ft) |
|---------------|------------------|
| Category 1    | 1 to <5          |
| Category 2    | >5 to <10        |
| Category 3    | >10 to <20       |
| Category 4    | >20 to <35       |
| Category 5    | >35              |

A GPS track log, showing the survey routes of each botanist, was recorded using a Trimble GeoXT, submeter accurate GPS units. A Garmin Etrex Vista HCx unit was also used to record survey routes. The track data files from these GPS units have been sent to CH2M Hill for transmittal to the CEC.

Six plant species were observed in bloom during the October 2010 surveys and all of these were identified on-site (see Section V for additional details). Voucher specimens had been collected of most species in the PSA and BSA during previous surveys (Sycamore Environmental 2009; Sycamore Environmental 2010b). Additional voucher specimens were made in October of some species previously collected and of *Cynanchum utahense*. Appendix A is a cumulative list of plant species observed at the RSEP site beginning in March 2009.

## **E. Mapping**

The 1 January 1999 aerial photo in Figure 2 and the May 2005 aerial photo in Figure 4 were downloaded from GlobeXplorer® 2010. The May 2005 aerial photo was used to map biological communities.

## **F. Problems Encountered and Limitations That May Influence Results**

No problems or limitations were encountered that may influence the results.

## IV. ENVIRONMENTAL SETTING

---

The BSA is located north-northwest of the City of Blythe in northeast Riverside County. Elevation in the BSA ranges from  $\pm$  740 to 1,000 ft above sea level. Topography in the BSA consists of generally flat to gently sloping terrain. Land use surrounding the BSA consists of Highway 62 to the north, and open land to the north, east, south, and west.

### A. Soils

A soil survey of eastern Riverside County has not yet been completed (NRCS 2009). The Digital General Soil Map of U.S. (GSM) shows the general soil association units present in the BSA (NRCS 2006). The GSM data set consists of general soil association units. The GSM was developed by the National Cooperative Soil Survey and supersedes the State Soil Geographic data set published in 1994. The GSM indicates that the majority of the BSA is occupied by the Rositas-Carrizo soil association unit (NRCS 2006). The Rositas-Dune land-Carsitas soil association unit occurs at the extreme eastern tip of the T-line corridor. The 'dune land' modifier in the Rositas-Dune land-Carsitas soil association unit is not a soil series. The term 'dune land' may refer to the fact that the Rositas-Dune land-Carsitas soil association unit commonly occurs in areas with active dunes. (Note: No sand dunes occur in the BSA.) The series descriptions below are from the NRCS official soil series descriptions (NRCS 2010). Figure 3 is a soils map.

Rositas Series: The Rositas series consists of very deep, somewhat excessively drained soils formed in sandy eolian material. Rositas soils occur on dunes and sand sheets with slopes ranging from 0 to 30 percent with hummocky or dune micro relief. Mean annual precipitation is about 4 inches and the mean annual air temperature is about 72° F. Vegetation typically consists of creosote bush, white bursage, desert buckwheat and mesquite. This soil series is classified as a mixed, hyperthermic Typic Torripsamment (NRCS 2010).

Carrizo Series: The Carrizo series consists of very deep, excessively drained soils formed in mixed alluvium. Carrizo soils are on floodplains, alluvial fans, fan piedmonts and bolson floors. Slope ranges from 0 to 15 percent. The mean annual precipitation is about 5 inches and the mean annual air temperature is 73° F. Vegetation typically consists of creosote bush, white bursage, cheese bush and rhatany. This soil series is classified as a sandy-skeletal, mixed, hyperthermic Typic Torriorthents (NRCS 2010).

Carsitas Series: Carsitas soils are excessively drained, rapidly permeable, nearly level to strongly sloping and occur on alluvial fans, moderately steep valley fills and dissected remnants of alluvial fans. Average annual precipitation is less than 5 inches and the average annual temperature is about 72° F. This soil series is classified as a mixed, hyperthermic Typic Torripsamment (NRCS 2010).






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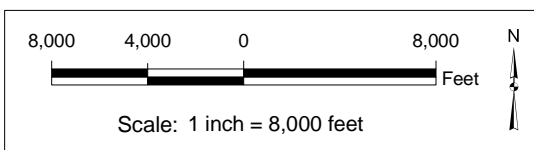


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 12 October 2010

Figure 3. Soils Map

-  Fall 2010 Botanical Study Area (BSA)
-  Project Study Area (PSA)
-  Soil Boundary

| Map Unit | Description                |
|----------|----------------------------|
| s1137:   | Rositas-Carrizo unit       |
| s1136:   | Rositas-Dune land-Carsitas |



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Soils:  
 Digital General Soil Map of U.S. (GSM)  
 National Cooperative Soil Survey (NRCS 2006)

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## **B. Weather and Climate Conditions**

The project proponents constructed a meteorological (Met) station in the project area in 2009. On 17 August 2010, 30.5 mm (1.2 inches) of precipitation was recorded at the Met station in the project area (pers. comm., S. Kaminski). No additional precipitation had been recorded at the Met station through 2 October 2010 (pers. comm., S. Kaminski). The October 2010 botanical surveys were conducted from 2 through 5 October 2010, thus were conducted within seven weeks of the 30.5 mm precipitation event that occurred on 17 August 2010.

## **C. Biological Communities**

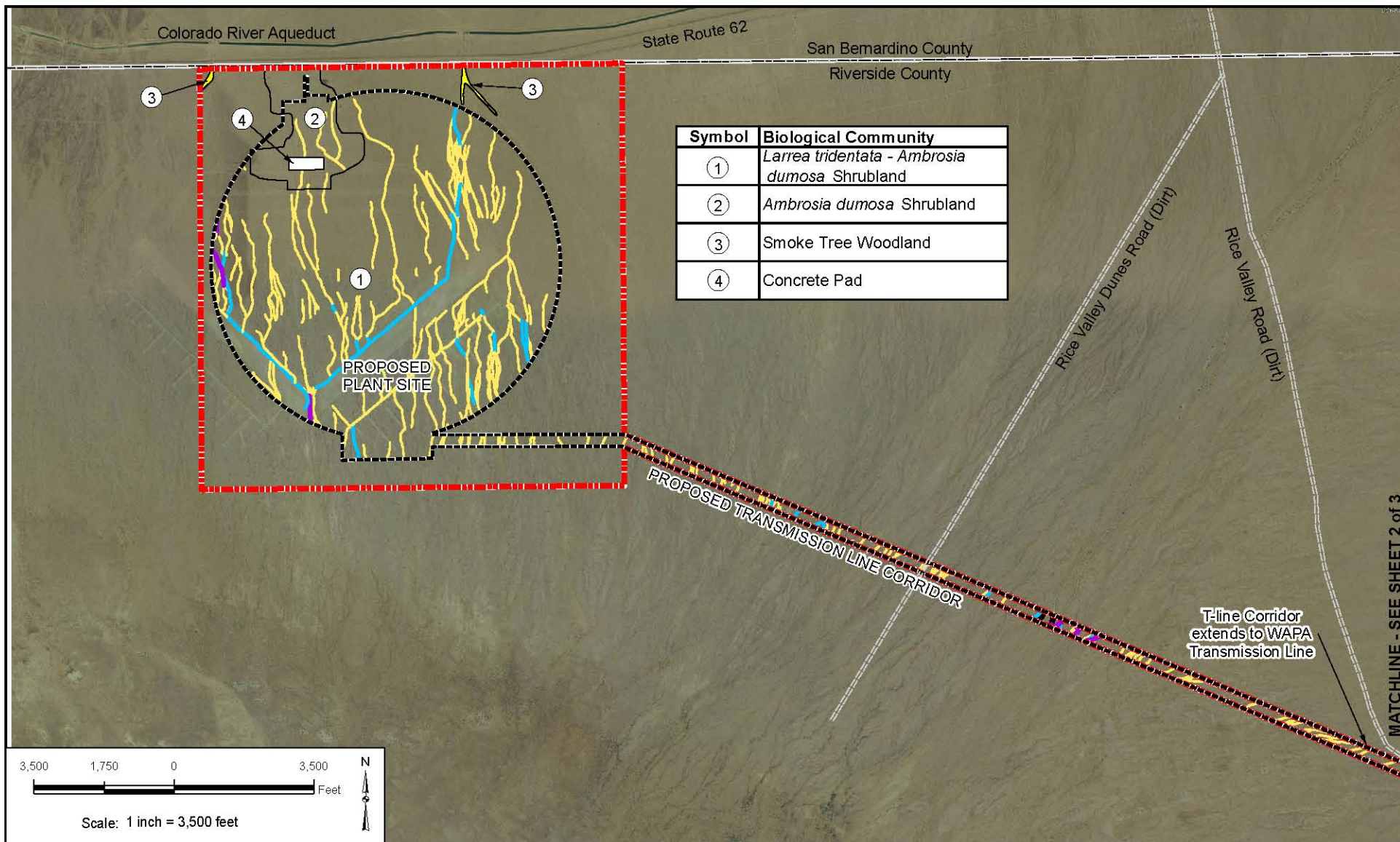
Biological communities in the BSA include *Larrea tridentata* - *Ambrosia dumosa* Shrubland (Creosote bush - white bursage scrub) and *Ambrosia dumosa* Shrubland (White bursage scrub). Biological communities in the RSEP area were described in detail in the *Spring 2010, Supplemental Botanical Inventory Report for the Rice Solar Energy Project* (Sycamore Environmental 2010b). Figure 4 shows the areas surveyed in October 2010 and the biological communities in the BSA. No special-status biological communities occur in the BSA. Photographs of the BSA taken in October 2010 are in Appendix F.

## **D. The Existing Level of Disturbance**

The proposed plant site is located on an airfield (Rice Airfield) that was abandoned between 1955 and 1958 (Freeman 2009). The abandoned airfield once consisted of two, paved 5,000-ft runways and numerous dispersal pads extending beyond the runways to the south (Freeman 2009). Various dirt roads, concrete pads, and portions of the old runways were observed in 2010 during surveys in the BSA. The proposed 10-mi long T-line corridor traverses relatively undisturbed *Larrea tridentata* - *Ambrosia dumosa* Shrubland.

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 Supplementary Botanical Inventory  
 Riverside County, CA  
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Figure 4. Botanical Resources Map  
 Sheet 1 of 3

- Fall 2010 Botanical Study Area (BSA)
- Project Study Area (PSA)
- Biological Community Boundary

Channel Size Class

- Category 2 (>5 to <10 ft)
- Category 3 (>10 to <20 ft)
- Category 4 (>20 to <35 ft)
- Category 5 (>35 ft)

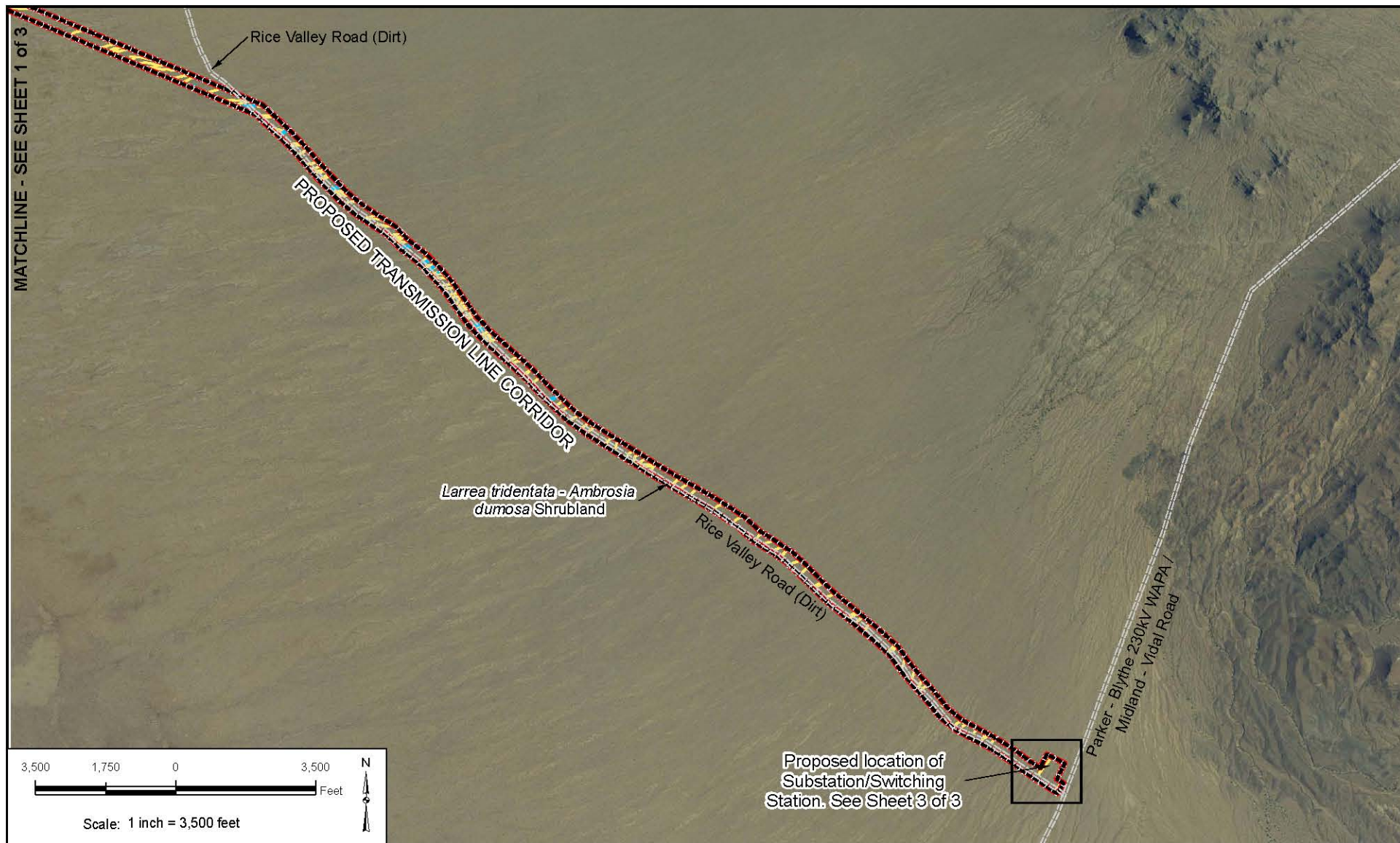


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 Supplementary Botanical Inventory  
 Riverside County, CA  
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Figure 4. Botanical Resources Map  
 Sheet 2 of 3

-  Fall 2010 Botanical Study Area (BSA)
-  Project Study Area (PSA)

Channel Size Class

-  Category 2 (>5 to <10 ft)
-  Category 3 (>10 to <20 ft)
-  Category 4 (>20 to <35 ft)
-  Category 5 (>35 ft)

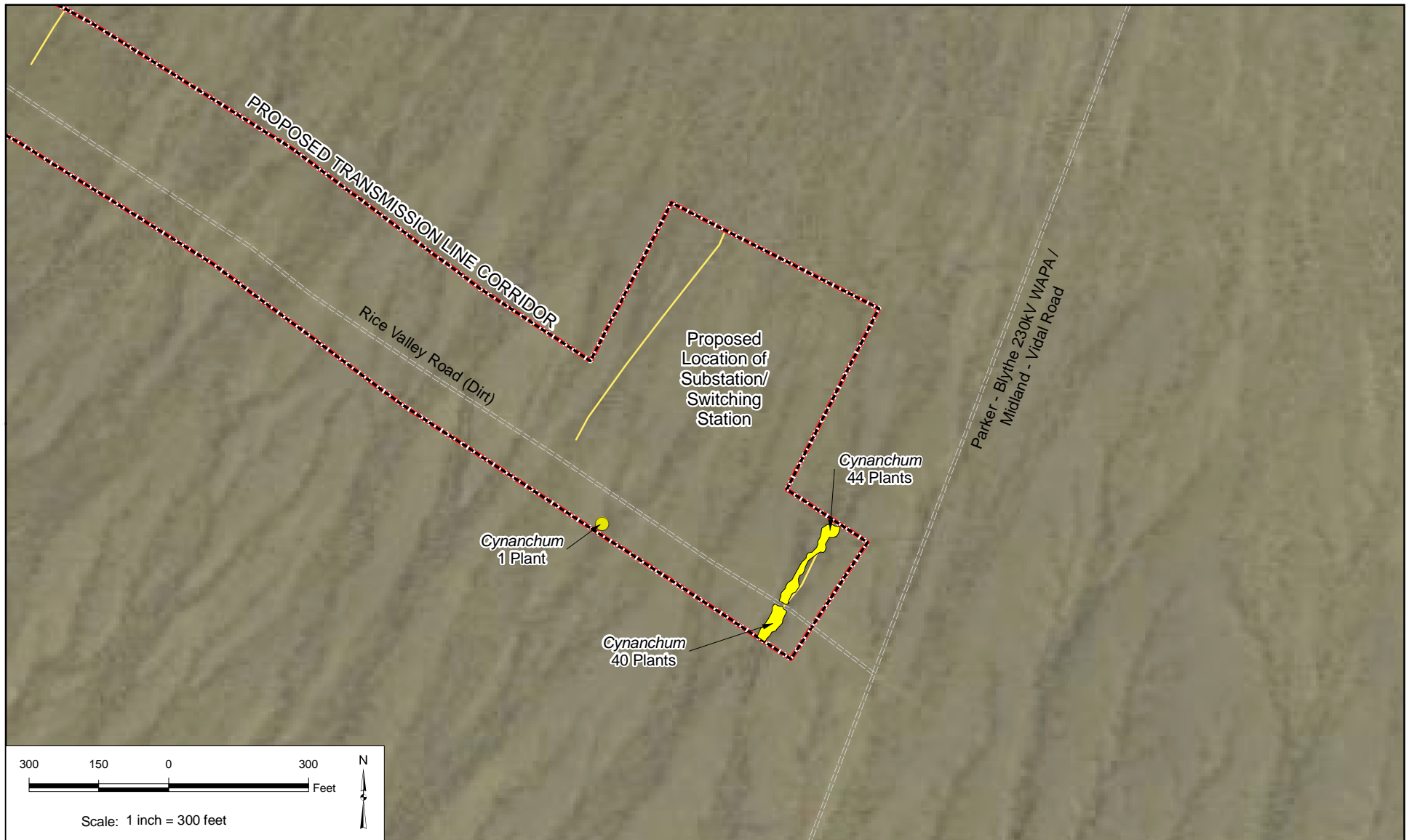


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Figure 4. Botanical Resources Map  
 Substation/Switching Station,  
 Sheet 3 of 3

- *Cynanchum* location
- Fall 2010 Botanical Study Area (BSA)
- Project Study Area (PSA)

Channel Size Class

- Category 2 (>5 to <10 ft)
- Category 3 (>10 to <20 ft)
- Category 4 (>20 to <35 ft)
- Category 5 (>35 ft)



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## V. BOTANICAL RESOURCES IN THE PROJECT STUDY AREA

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A cumulative list of species observed in the project area during botanical surveys in March 2009, and June, July, and October 2010, is in Appendix A. One new species, Utah cynanchum (*Cynanchum utahense*), was observed in October 2010. No other new species were observed during the October 2010 botanical surveys.

Six plant species were observed in bloom during October 2010. These were *Cynanchum utahense* (2 plants), *Ambrosia dumosa*, (1 plant), *Larrea tridentata*, (1 plant), *Ditaxis neomexicana*, (1 plant), *Stephanomeria pauciflora*, (1 plant), and *Chamaesyce polycarpa* var. *hirtella* (several plants).

In the BSA, new vegetative growth was observed on numerous, individual *Ambrosia dumosa* and *Larrea tridentata* shrubs and on four tree species, *Acacia greggii*, *Cercidium floridum* ssp. *floridum*, and *Olneya tesota*. No seedlings or plants of any annual species were observed in the BSA or in areas adjacent to the BSA.

### A. Special-Status Species with Potential to occur in the BSA

File data from USFWS, CNDDDB, BLM, and CNPS were used to determine the special-status plants that could occur in the BSA. A CNDDDB summary report is in Appendix B. USFWS lists of special-status plant species that could occur in or be affected by the project are in Appendix C. Lists of BLM sensitive plant species are in Appendix D. A copy of CNPS database query is in Appendix E. Riverside County does not maintain a list of plant species that are of local concern (pers. comm., County of Riverside).

After the California Energy Commission (CEC) reviewed the Botanical Inventory Report for surveys conducted in 2009, CEC staff provided a list of 15 additional special-status plant species believed to have the potential to occur on the project site. These species do not occur on USFWS or BLM lists, or on the June 2009 CNDDDB summary report for the three project quads or the 12 surrounding USGS quads (Sycamore Environmental 2009). Surveys for these and other species were conducted in June 2010 (Sycamore Environmental 2010b). A discussion of these species, except *Teucrium glandulosum* (for which no habitat occurs on-site), is presented in Section V.C. All of these species are included in the Species Evaluated Table (Appendix G) in this report.

In the September 2010 CEC Staff Assessment, a list of 22 additional special-status species (not previously addressed in Sycamore Environmental 2009 or 2010b) was provided that Staff believed had potential to occur in the project area. These species do not occur on USFWS lists or on the June 2009 or June 2010 CNDDDB summary report for the three project quads or the 12 surrounding USGS quads (Sycamore Environmental 2009; 2010b). Surveys for these and other species were conducted in October 2010. All of these species are included in the Species Evaluated Table (Appendix G) in this report.

Field surveys were conducted by Sycamore Environmental botanists in October 2010 to determine if habitat for special-status plant species, as mentioned in the file data, was present in the BSA. Special-status plant species for which suitable or marginal habitat is present, are listed in Table 4. Special-status species include listed, candidate or proposed species under the federal or state endangered species acts, species listed under the California Native Plant Protection Act, species identified as sensitive by the BLM, and species that are in the California Native Plant Society's, Inventory of Rare and Endangered Plants of California (CNPS 2010).

Table 4. Special-status plants with the potential to occur in the BSA.

| Special-Status Plant Species   | Common Name                  | Federal Status <sup>a</sup> / BLM <sup>b</sup> | State Status <sup>a</sup> / CNPS <sup>b</sup> | Source <sup>c</sup> |
|--|------------------------------|--|---|---------------------|
| <i>Abronia villosa</i> var. <i>aurita</i>  | Chaparral sand-verbena       | --/ --   | --/ 1B.1                                      | 2, 5, 8             |
| <i>Acleisanthes longiflora</i>   | Angel trumpets               | --/ --   | --/ 2.3                                       | 6, 7, 8             |
| <i>Amaranthus watsonii</i>   | Watson's amaranth            | --/ --   | --/ 4.3                                       | 7                   |
| <i>Ambrosia monogyra</i>   | Singlewhorl burrobrush       | --/ --   | --/ 2.2                                       | 7                   |
| <i>Ammoselinum giganteum</i>   | Desert sand parsley          | --/ --   | --/ 2.3                                       | 7, 8                |
| <i>Androstephium breviflorum</i>   | Small-flowered androstephium | --/ --   | --/ 2.2                                       | 2, 6, 8             |
| <i>Astragalus crotalariae</i>  | Salton milk-vetch            | --/ --   | --/ 4.3                                       | 7                   |
| <i>Astragalus insularis</i> var. <i>harwoodii</i>                                      | Harwood's milk-vetch         | --/ --   | --/ 2.2                                       | 2, 5, 8             |
| <i>Astragalus lentiginosus</i> var. <i>borreganus</i>                                  | Borrego milk-vetch           | --/ --   | --/ 4.3                                       | 7, 8                |
| <i>Astragalus lentiginosus</i> var. <i>coachellae</i>                                  | Coachella Valley milk-vetch  | E/ BLM   | --/ 1B.2                                      | 1, 3, 7, 8          |
| <i>Astragalus tricarinatus</i>   | Triple-ribbed milk-vetch     | E/ --  | --/ 1B.2                                      | 1, 3                |
| <i>Ayenia compacta</i>   | California ayenia            | --/ --   | --/ 2.3                                       | 7, 8                |
| <i>Bouteloua trifida</i>   | Three-awned grass            | --/ --   | --/ 2.3                                       | 6, 8                |
| <i>Calliandra eriophylla</i>   | Pink fairy-duster            | --/ --   | --/ 2.3                                       | 6, 7, 8             |
| <i>Camissonia arenaria</i>   | Sand evening-primrose        | --/ --   | --/ 2.2                                       | 7, 8                |
| <i>Castela emoryi</i>  | Emory's crucifixion-thorn    | --/ --   | --/ 2.3                                       | 2, 6, 7, 8          |
| <i>Chamaesyce abramsiana</i>   | Abram's spurge               | --/ --   | --/ 2.2                                       | 7, 8                |
| <i>Chamaesyce arizonica</i>  | Arizona spurge               | --/ --   | --/ 2.3                                       | 7, 8                |
| <i>Chamaesyce platysperma</i>  | Flat-seeded spurge           | --/ BLM  | --/ 1B.2                                      | 7, 8                |
| <i>Colubrina californica</i>   | Las Animas colubrina         | --/ --   | --/ 2.3                                       | 2, 7, 8             |
| <i>Condalia globosa</i> var. <i>pubescens</i>  | Spiny abrojo                 | --/ --   | --/ 4.2                                       | 7, 8                |
| <i>Coryphantha alversonii</i><br>(= <i>Escobaria vivipara</i> var. <i>alversonii</i> ) | Foxtail cactus               | --/ --   | --/ 4.3                                       | 2                   |
| <i>Croton wigginsii</i>  | Wiggins' croton              | --/ --   | R/ 2.2  | 7                   |
| <i>Cryptantha costata</i>  | Ribbed cryptantha            | --/ --   | --/ 4.3                                       | 7, 8                |
| <i>Cryptantha ganderi</i>  | Gander's cryptantha          | --/ --   | --/ 1B.1                                      | 7, 8                |
| <i>Cryptantha holoptera</i>  | Winged cryptantha            | --/ --   | --/ 4.3                                       | 7, 8                |
| <i>Cynanchum utahense</i>  | Utah cynanchum               | --/ --   | --/ 4.2                                       | 5, 7, 8             |
| <i>Cuscuta californica</i> var. <i>apiculata</i>                                       | Pointed dodder               | --/ --   | --/ 3   | 7                   |
| <i>Delphinium parishii</i> ssp. <i>subglobosum</i>                                     | Colorado Desert larkspur     | --/ --   | --/ 4.3                                       | 7                   |
| <i>Delphinium scaposum</i>   | Bare-stem larkspur           | --/ --   | --/ 2.3                                       | 7                   |
| <i>Ditaxis claryana</i>  | Glandular ditaxis            | --/ --   | --/ 2.2                                       | 6, 7, 8             |
| <i>Ditaxis serrata</i> var. <i>californica</i>   | California ditaxis           | --/ --   | --/ 3.2                                       | 6, 7, 8             |
| <i>Eriastrum harwoodii</i>   | Harwood's eriastrum          | --/ --   | --/ 1B.2                                      | 2, 8                |
| <i>Galium angustifolium</i> ssp. <i>gracillimum</i>                                    | Slender bedstraw             | --/ --   | --/ 4.2                                       | 7                   |

Table 4. continued

|   |  |         |          |         |
|---|--|---------|----------|---------|
| <i>Horsfordia alata</i>                                 | Pink velvet mallow                           | --/ --  | --/ 4.3  | 7, 8    |
| <i>Horsfordia newberryi</i>                             | Newberry's velvet mallow                     | --/ --  | --/ 4.3  | 7       |
| <i>Ipomopsis effusa</i>                                 | Baja California ipomopsis                    | --/ --  | --/ 2.1  | 7       |
| <i>Ipomopsis tenuifolia</i>                             | Slender-leaved ipomopsis                     | --/ --  | --/ 2.3  | 7       |
| <i>Koeberlinia spinosa</i> ssp.<br><i>tenuispina</i>    | Slender-spined all thorn                     | --/ --  | --/ 2.2  | 7       |
| <i>Lepidium flavum</i> var. <i>felipense</i>            | Borrego Valley pepper-grass                  | --/ --  | --/ 1B.2 | 7       |
| <i>Linanthus maculatus</i>                              | Little San Bernardino<br>Mountains linanthus | --/ BLM | --/ 1B.2 | 3, 7, 8 |
| <i>Lotus haydonii</i>                                   | Pygmy lotus                                  | --/ --  | --/ 1B.3 | 7       |
| <i>Lycium parishii</i>                                  | Parish's desert-thorn                        | --/ --  | --/ 2.3  | 7       |
| <i>Lyrocarpa coulteri</i> var. <i>palmeri</i>           | Palmer's lyrepod                             | --/ --  | --/ 4.3  | 7       |
| <i>Malperia tenuis</i>                                  | Brown turbans                                | --/ --  | --/ 2.3  | 7       |
| <i>Mammillaria grahamii</i> var.<br><i>grahamii</i>     | Graham's fishhook cactus                     | --/ --  | --/ 2.2  | 7       |
| <i>Matelea parvifolia</i>                               | Spearleaf                                    | --/ --  | --/ 2.3  | 7, 8    |
| <i>Mentzelia hirsutissima</i>                           | Hairy stickleaf                              | --/ --  | --/ 2.3  | 7       |
| <i>Mentzelia puberula</i>                               | Argus blazing star                           | --/ --  | --/ 2.2  | 6, 7, 8 |
| <i>Mirabilis tenuiloba</i>                              | Slender-lobed four o'clock                   | --/ --  | --/ 4.3  | 7       |
| <i>Nemacaulis denudata</i> var.<br><i>gracilis</i>      | Slender woolly-heads                         | --/ --  | --/ 2.2  | 7, 8    |
| <i>Opuntia</i> (= <i>Grusonia</i> ) <i>parishii</i>     | Parish's club-cholla (mat<br>cholla)         | --/ --  | --/ 2.2  | 7       |
| <i>Opuntia wigginsii</i>                                | Wiggins' cholla                              | --/ --  | --/ 3.3  | 7, 8    |
| <i>Opuntia wolfii</i>                                   | Wolf's cholla                                | --/ --  | --/ 4.3  | 7       |
| <i>Penstemon clevelandii</i> var.<br><i>conatus</i>     | San Jacinto beardtongue                      | --/ --  | --/ 4.3  | 7       |
| <i>Penstemon thurberi</i>                               | Thurber's beardtongue                        | --/ --  | --/ 4.2  | 7       |
| <i>Pholistoma auritum</i> var.<br><i>arizonicum</i>     | Arizona pholistoma                           | --/ --  | --/ 2.3  | 6       |
| <i>Physalis lobata</i>                                  | Lobed ground cherry                          | --/ --  | --/ 2.3  | 6       |
| <i>Pilostyles thurberi</i>                              | Thurber's pilostyles                         | --/ --  | --/ 4.3  | 7       |
| <i>Proboscidea althaeifolia</i>                         | Desert unicorn plant                         | --/ --  | --/ 4.3  | 7, 8    |
| <i>Psorothamnus fremontii</i> var.<br><i>attenuatus</i> | Narrow-leaved psorothamnus                   | --/ --  | --/ 2.3  | 6       |
| <i>Salvia greatae</i>                                   | Orocopia sage                                | --/ BLM | --/ 1B.3 | 7, 8    |
| <i>Senna covesii</i>                                    | Coves' cassia                                | --/ --  | --/ 2.2  | 6, 7, 8 |
| <i>Spermolepis echinata</i>                             | Bristly scaleseed                            | --/ --  | --/ 2.3  | 7       |
| <i>Stemodia durantifolia</i>                            | Purple stemodia                              | --/ --  | --/ 2.1  | 7       |
| <i>Tetracoccus hallii</i>                               | Hall's tetracoccus                           | --/ --  | --/ 4.3  | 7       |
| <i>Teucrium cubense</i> ssp.<br><i>depressum</i>        | Dwarf germander                              | --/ --  | --/ 2.2  | 6, 7, 8 |
| <i>Wislizenia refracta</i> ssp. <i>palmeri</i>          | Palmer's jackass clover                      | --/ --  | --/ 2.2  | 7, 8    |
| <i>Wislizenia refracta</i> ssp. <i>refracta</i>         | Jackass clover                               | --/ --  | --/ 2.2  | 6, 7, 8 |
| <i>Xylorhiza cognata</i>                                | Mecca-aster                                  | --/ --  | --/ 1B.2 | 7       |
| <i>Xylorhiza orcuttii</i>                               | Orcutt's woody-aster                         | --/ --  | --/ 1B.2 | 7       |

Table 4. continued

<sup>a</sup> **Listing Status** Federal status determined from USFWS letter (USFWS 2010a and b). State status determined from DFG (2010a, b, and c). Codes used in table are:

E = Endangered; T = Threatened; P = Proposed; C = Candidate; R = California Rare; \* = Possibly extinct.

<sup>b</sup> **Other Codes** CNPS (2010); BLM status determined from BLM (2010a and b). Codes used in table are as follows:

**CNPS List** (plants only): **1A** = Presumed Extinct in CA; **1B** = Rare or Endangered (R/E) in CA and elsewhere; **2** = R/E in CA and more common elsewhere; **3** = Need more information; **4** = Plants of limited distribution.

**CNPS List Decimal Extensions:** **.1** = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); **.2** = Fairly endangered in CA (20-80% of occurrences threatened); **.3** = Not very endangered in CA (< 20% of occurrences threatened or no current threats known).

**BLM:** BLM Sensitive plant species

<sup>c</sup> **Sources** **1** = From USFWS letter (USFWS 2010a and b). **2** = From CNDDDB. **3** = BLM List for Palm Springs District (BLM 2010a). **4** = BLM List for Needles District (BLM 2010b). **5** = Observed or included by Sycamore Environmental. **6** = CEC Data Request #72 for RSEP Application for Certification. **7** = CNPS Inventory of Rare and Endangered Plants (CNPS 2010). **8** = CEC Staff Assessment (Sept 2010).

## B. Special-Status Plant Species not in the Botanical Study Area

Special-status plant species for which suitable habitat is not present, or whose distributional limits preclude the possibility of their occurrence in the BSA, are not discussed in Section V.C of this report. An evaluation of these species is in Appendix G.

## C. Evaluation of Special-Status Plants

### Chaparral sand-verbena (*Abronia villosa* var. *aurita*)

**HABITAT AND BIOLOGY:** An annual herb found in chaparral, coastal scrub, and desert dunes from 25 to 5,250 ft. Blooms January through September (CNPS 2010).

**RANGE:** In CA, known from Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. This species is also known to occur in Arizona and Baja California (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, or Big Maria Mountains Northwest quads. The closest CNDDDB record for this species is from 1910, located approximately 8.5 mi east of the BSA on the Vidal quad. The location of this record is mapped as “best guess” by CNDDDB.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Chaparral sand-verbena was not observed during botanical surveys conducted in October 2010. Additional information on this taxon is discussed in previous reports.

### Angel trumpets (*Acleisanthes longiflora*)

**HABITAT AND BIOLOGY:** A perennial herb found on carbonate soils in Sonoran desert scrub (CNPS 2010), and in dry places, generally on limestone from 30 to 8,200 ft (Baldwin et al. 2002). The blooming period for angel trumpets is reported as occurring in May (CNPS 2010). However, Poole (2003) reported that blooming occurs from February through November.

**RANGE:** In CA, angel trumpets is known only from one occurrence in the Maria Mountains in Riverside County at about 300 ft (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1970, from a wash near Hwy 95 near the Palo Verde Diversion Dam, approximately 18.5 mi southeast of the BSA on the Blythe Northeast quad.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA.

**DISCUSSION:** Angel trumpets was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Watson's amaranth (*Amaranthus watsonii*)**

**HABITAT AND BIOLOGY:** An annual herb found in Mojavean and Sonoran desert scrub from 66 to 5,580 ft. Blooms April through September (CNPS 2010).

**RANGE:** In CA, known from Imperial, Los Angeles, and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Watson's amaranth was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Singlewhorl burrobrush (*Ambrosia monogyra*)**

**HABITAT AND BIOLOGY:** A perennial herb found in chaparral and Sonoran desert scrub from 32 to 1,640 ft. Blooms August through November (CNPS 2010).

**RANGE:** In CA, known only from Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1919, approximately 102 mi west of the BSA on the Palm Springs quad.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Singlewhorl burrobrush was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Ambrosia dumosa* was observed in the BSA in March 2009, and June and October 2010.

**Desert sand parsley (*Ammoselinum giganteum*)**

**HABITAT AND BIOLOGY:** An annual herb found in Sonoran desert scrub at approximately 1,300 ft. Blooms March through April (CNPS 2010).

**RANGE:** In CA, known only from Riverside County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1922, approximately 52 mi southwest of the BSA on the Hayfield quad. The record states that this species was abundant in heavy soils in a dry basin, growing under shrubs.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Desert sand parsley was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Small-flowered androstephium (*Androstephium breviflorum*)**

**HABITAT AND BIOLOGY:** A bulbiferous herb found in desert dunes and Mojavean desert scrub bajadas from 700 to 2,100 ft. Blooms March through April (CNPS 2010).



**RANGE:** In CA, known from Riverside and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** There are two CNDDDB records for this species on the Rice, Grommet, or Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2010, approximately 6.7 mi southwest of the BSA on the Arica Mountains quad. Two plants were observed growing out of limestone cracks with *Larrea tridentata*, *Ambrosia dumosa*, *Pleuraphis rigida*, *Hesperocallis undulata*, *Chaenactis* sp., *Lotus strigosus*, *Schismus barbatus*, *Palafoxia arida*, *Malacothrix glabrata*, and *Cryptantha micrantha*.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Small-flowered androstephium was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Salton milk-vetch (*Astragalus crotalariae*)**

**HABITAT AND BIOLOGY:** A perennial herb found in Sonoran desert scrub from -200 to 820 ft. Blooms January through April (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Salton milk-vetch was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Astragalus insularis* var. *harwoodii* and *A. didymocarpus* var. *didymocarpus* have been observed in the RSEP study area.

### **Harwood's milk-vetch (*Astragalus insularis* var. *harwoodii*)**

**HABITAT AND BIOLOGY:** An annual herb found in desert dunes and sandy or gravelly Mojavean desert scrub from 0 to 2,300 ft. Blooms January through May (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Diego counties (CNPS 2010). This species is also known to occur in Arizona and Mexico (CNPS 2010).

**KNOWN RECORDS:** The closest CNDDDB record is from 1920, approximately 0.8 mi west of the BSA on the Rice quad.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Harwood's milk-vetch was not observed in the BSA during the October 2010 botanical surveys. In March 2009, *Astragalus insularis* var. *harwoodii* was observed at 5 locations in the T-line alignment corridor in March 2009 (Sycamore Environmental 2009). This taxon has a CNDDDB rank of S2.2? (The question mark is part of the rank given by CNDDDB.)

### **Borrego milk-vetch (*Astragalus lentiginosus* var. *borreganus*)**

**HABITAT AND BIOLOGY:** An annual herb (sometimes perennial) found in Mojavean and Sonoran desert scrub from 98 to 885 ft. Blooms February through May (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Borrego milk-vetch was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site

(Sycamore Environmental 2009 and 2010b). *Astragalus insularis* var. *harwoodii* and *A. didymocarpus* var. *didymocarpus* have been observed in the RSEP study area.

**Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*)**

**HABITAT AND BIOLOGY:** An annual or perennial herb found on sandy substrates in desert dune and Sonoran desert scrub communities from 100 to 2,200 ft. Blooms February through May (CNPS 2010).

**RANGE:** In CA, known from Riverside County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1927, approximately 74 mi southwest of the BSA on the Mecca quad.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Coachella Valley milk-vetch was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Astragalus insularis* var. *harwoodii* and *A. didymocarpus* var. *didymocarpus* are the only species of *Astragalus* that have been observed in the RSEP study area.

**Triple-ribbed milk-vetch (*Astragalus tricarlinatus*)**

**HABITAT AND BIOLOGY:** A perennial herb found in Joshua tree woodland and Sonoran desert scrub on sandy or gravelly substrate from 1,500 to 3,900 ft. Blooms February through May (CNPS 2010).

**RANGE:** In CA, known from fewer than twenty occurrences in Riverside and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, or Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is located approximately 60 mi southwest of the BSA on the Orocopia Canyon quad.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Triple-ribbed milk-vetch was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**California ayenia (*Ayenia compacta*)**

**HABITAT AND BIOLOGY:** A perennial herb found in Mojavean and Sonoran desert scrub from 500 to 3,590 ft. Blooms March through April (CNPS 2010).

**RANGE:** In CA, known from Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1976, approximately 45 mi southwest of the BSA on the Desert Center quad. Several plants were observed in a rocky canyon.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** California ayenia was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Three-awned grass (*Bouteloua trifida*)**

**HABITAT AND BIOLOGY:** A perennial herb found on carbonate and rocky substrates in Mojavean desert scrub from 2,300 to 6,600 ft. Blooms May through September (CNPS 2010).

**RANGE:** In CA, known from Inyo and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2003, approximately 22.2 mi northeast of the BSA on the Whipple Mountains Southwest quad. Plants were observed in a wide wash in dark volcanic hills in the Whipple Mountains.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA.

**DISCUSSION:** Three-awned grass was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Pink fairy-duster (*Calliandra eriophylla*)**

**HABITAT AND BIOLOGY:** A deciduous shrub found in sandy or rocky Sonoran desert scrub from 400 to 4,950 ft. Blooms January through March (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1964, approximately 30.9 mi southwest of the BSA on the East of Aztec Mines quad. This record is based on plants collected along I-10, south of Ford Dry Lake and west of Blythe.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Pink fairy-duster was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Sand evening-primrose (*Camissonia arenaria*)**

**HABITAT AND BIOLOGY:** An annual or perennial herb found in sandy or rocky Sonoran desert scrub from 230 to 3,000 ft. Blooms November through May (CNPS 2010).

**RANGE:** In CA, known from Imperial and Riverside counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from the 1970's, approximately 45 mi southwest of the BSA on the Chuckwalla Spring quad.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Sand evening-primrose was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Emory's crucifixion thorn (*Castela emoryi*)**

**HABITAT AND BIOLOGY:** A deciduous shrub found on gravelly substrates in Mojavean desert scrub, playas, and Sonoran desert scrub from 300 to 2,200 ft. Blooms June through July and uncommonly as early as April (CNPS 2010).

**RANGE:** In CA, known from Imperial, Inyo, Riverside, and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** There is one CNDDDB record for this species on the Rice quad. This CNDDDB record is from 2009, approximately 2.2 mi south of the BSA on the Rice quad. Twelve plants were observed on alkali flats with drifting sand, growing with *Larrea tridentata*, *Acacia greggii*, *Tamarix aphylla*, and *Brassica tournefortii*.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Emory's crucifixion thorn was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Abram's spurge (*Chamaesyce abramsiana*)**

**HABITAT AND BIOLOGY:** An annual herb found in sandy Mojavean and Sonoran desert scrub from -16 to 3,000 ft. Blooms September through November (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2000, approximately 32 mi southwest of the BSA on the Hopkins Well quad. A 'substantial' number of plants were observed in shallow depressions with *Larrea tridentata*, *Ambrosia dumosa*, *Encelia farinosa*, *Datura discolor*, and *Hilaria rigida*.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Abram's spurge was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Chamaesyce polycarpa* var. *hirtella* was observed in the BSA in March 2009, and June and October 2010.

### **Arizona spurge (*Chamaesyce arizonica*)**

**HABITAT AND BIOLOGY:** A perennial herb found in sandy Sonoran desert scrub from 165 to 985 ft. Blooms March through April (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from approximately 90 mi west of the BSA on the Cathedral City quad. No further information is provided on the CNDDDB record.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Arizona spurge was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Chamaesyce polycarpa* var. *hirtella* was observed in the BSA in March 2009, and June and October 2010.

### **Flat-seeded spurge (*Chamaesyce platysperma*)**

**HABITAT AND BIOLOGY:** An annual herb found in desert dunes and Sonoran desert scrub from 213 to 335 ft. Blooms February through September (CNPS 2010).

**RANGE:** In CA, known from four herbarium collections (from Riverside, San Bernardino, and San Diego counties) and a 1987 collection from Imperial County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1926, approximately 91 mi west of the BSA on the Cathedral City quad.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Flat-seeded spurge was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Chamaesyce polycarpa* var. *hirtella* was observed in the BSA in March 2009, and June and October 2010.

### **Las Animas colubrina (*Colubrina californica*)**

**HABITAT AND BIOLOGY:** A deciduous shrub found in Mojavean desert scrub and Sonoran desert scrub from 30 to 3,300 ft. Blooms April through June (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are one CNDDDB record for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1991, approximately 13 mi southwest of the BSA on the Arlington Mine and Little Maria Mountains quads. Plant(s) observed on alluvial fan with desert pavement, growing with *Larrea tridentata*, *Encelia farinosa*, and *Ambrosia dumosa*.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Las Animas colubrina was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Spiny abrojo (*Condalia globosa* var. *pubescens*)**

**HABITAT AND BIOLOGY:** A deciduous shrub found in Sonoran desert scrub from 460 to 3,280 ft. Blooms March through May (CNPS 2010).

**RANGE:** In CA, known from Imperial and Riverside counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Spiny abrojo was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Foxtail cactus (*Coryphantha alversonii*)**

**HABITAT AND BIOLOGY:** A stem succulent found on sandy or rocky substrates (usually granitic) in Mojavean desert scrub and Sonoran desert scrub from 200 to 5,100 ft. Blooms April through June (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** The closest CNDDDB record is from 1989, approximately 3.8 mi southeast of the BSA on the Big Maria Mountains Northwest quad.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Foxtail cactus was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Wiggins' croton (*Croton wigginsii*)**

**HABITAT AND BIOLOGY:** A perennial shrub found in desert dunes and Sonoran desert scrub from 165 to 330 ft. Blooms March through May (CNPS 2010).

**RANGE:** In CA, known from only two occurrences in Imperial County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1986, approximately 69 mi southwest of the BSA on the Tortuga quad. Plant(s) observed growing in creosote bush scrub on sand flats with *Larrea tridentata*, *Ambrosia dumosa*, and *Ephedra*.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Wiggins' croton was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Ribbed cryptantha (*Cryptantha costata*)**

**HABITAT AND BIOLOGY:** An annual herb found in desert dunes and sandy Mojavean and Sonoran desert scrub from -195 to 1,640 ft. Blooms February through May (CNPS 2010).

**RANGE:** In CA, known from Imperial, Inyo, Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Ribbed cryptantha was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Cryptantha angustifolia*, *C. barbigera*, *C. maritima*, and *C. nevadensis* were observed in the BSA (Sycamore Environmental 2010b; 2009).

**Gander's cryptantha (*Cryptantha ganderi*)**

**HABITAT AND BIOLOGY:** An annual herb found in desert dunes and sandy Sonoran desert scrub from 525 to 1,312 ft. Blooms February through May (CNPS 2010).

**RANGE:** In CA, known from approximately five occurrences in Imperial and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1995, approximately 100 mi southwest of the BSA on the Clark Lake quad. Plant(s) observed on sandy soil in creosote bust scrub.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Gander's cryptantha was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Cryptantha angustifolia*, *C. barbigera*, *C. maritima*, and *C. nevadensis* were observed in the BSA (Sycamore Environmental 2010b; 2009).

**Winged cryptantha (*Cryptantha holoptera*)**

**HABITAT AND BIOLOGY:** An annual herb found in Mojavean and Sonoran desert scrub from 328 to 5,545 ft. Blooms March through April (CNPS 2010).

**RANGE:** In CA, known from Imperial, Inyo, Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Winged cryptantha was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Cryptantha angustifolia*, *C. barbiger*, *C. maritima*, and *C. nevadensis* were observed in the BSA (Sycamore Environmental 2010b; 2009).

**Utah cynanchum (*Cynanchum utahense*)**

**HABITAT AND BIOLOGY:** A perennial herb found on sandy or gravelly substrates in Mojavean desert scrub and Sonoran desert scrub from 500 to 4,700 ft. Blooms April through June (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Approximately 85 Utah cynanchum plants were observed during the October 2010 botanical surveys at the eastern terminus of the transmission line corridor in the vicinity of the proposed substation/switching station (Figure 4, Sheet 3 of 3; Appendix F, photos 23-24). Two individuals each bore a few live flowers. A voucher specimen was collected from a plant at this location. A copy of the CNDDDB form is in Appendix H. This species has a CNDDDB rank of S3.2 (under *Funastrum utahense*).

**Pointed dodder (*Cuscuta californica* var. *apiculata*)**

**HABITAT AND BIOLOGY:** An annual parasitic vine found in sandy Mojavean and Sonoran desert scrub from 0 to 1,640 ft. Blooms February through August (CNPS 2010).

**RANGE:** In CA, known from Riverside and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Pointed dodder was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Cuscuta denticulata* was observed in the BSA in June 2010 (Sycamore Environmental 2010b).

**Colorado Desert larkspur (*Delphinium parishii* ssp. *subglobosum*)**

**HABITAT AND BIOLOGY:** A perennial herb found in chaparral, cismontane woodland, pinyon and juniper woodland, and Sonoran desert scrub from 1,970 to 5,900 ft. Blooms March through June (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010.

**DISCUSSION:** Colorado Desert larkspur was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Bare-stem larkspur (*Delphinium scaposum*)**

**HABITAT AND BIOLOGY:** A perennial herb found in rocky Sonoran desert scrub from 885 to 3,460 ft. Blooms March through April (CNPS 2010).

**RANGE:** In CA, known from three occurrences in the Whipple Mountains in San Bernardino County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2004, approximately 27 mi northeast of the BSA on the Whipple Mountains Southwest quad.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Bare-stem larkspur was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Glandular ditaxis (*Ditaxis claryana*)**

**HABITAT AND BIOLOGY:** A perennial herb found on sandy substrates in Mojavean desert scrub and Sonoran desert scrub from 0 to 1,550 ft. Blooms October through March (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1980, approximately 29.3 mi northeast of the BSA on the Cross Roads quad. This record is based on plants collected from a gravel bar in a dry wash lined with *Olneya* and *Cercidium*, northeast of Earp, near Empire Landing Campground.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Glandular ditaxis was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Ditaxis neomexicana* was observed in the BSA in June and October 2010.

**California ditaxis (*Ditaxis serrata* var. *californica*)**

**HABITAT AND BIOLOGY:** A perennial herb found in Sonoran desert scrub from 100 to 3,300 ft. Blooms March through December (CNPS 2010).

**RANGE:** In CA, known from Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1997, approximately 39 mi southwest of the BSA on the Victory Pass quad. This record is based on plants observed growing in a dry sandy wash in creosote bush scrub with *Olneya*, *Fouquieria*, and *Krameria* along Eagle Mountain Road in the Eagle Mountains.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.



**DISCUSSION:** California ditaxis was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Ditaxis neomexicana* was observed in the BSA in June 2010 and October 2010.

**Harwood's eriastrum (*Eriastrum harwoodii*)**

**HABITAT AND BIOLOGY:** An annual herb found in desert dune communities from 600 to 3,100 ft. Blooms March through June (CNPS 2010).

**RANGE:** In CA, known from fewer than 20 occurrences in Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The closest CNDDDB record is from 2010, approximately 1.8 mi southwest of the BSA on the Rice quad. In March 2010, Sycamore Environmental botanists observed Harwood's eriastrum on sandy dune habitat at the same general location as the 2010 CNDDDB record described above.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA.

**DISCUSSION:** Harwood's eriastrum was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Slender bedstraw (*Galium angustifolium* ssp. *gracillimum*)**

**HABITAT AND BIOLOGY:** A perennial herb found in Joshua tree woodland and granitic rocky Sonoran desert scrub from 430 to 5,090 ft. Blooms in April through June (CNPS 2010).

**RANGE:** In CA, known from Riverside and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA.

**DISCUSSION:** Slender bedstraw was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Pink velvet mallow (*Horsfordia alata*)**

**HABITAT AND BIOLOGY:** A perennial shrub found in rocky Sonoran desert scrub from 330 to 1,640 ft. Blooms February through December (CNPS 2010).

**RANGE:** In CA, known from Imperial and Riverside counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Pink velvet mallow was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Newberry's velvet mallow (*Horsfordia newberryi*)**

**HABITAT AND BIOLOGY:** A perennial shrub found in rocky Sonoran desert scrub from 10 to 2,625 ft. Blooms February through December (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Newberry's velvet mallow was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Baja California ipomopsis (*Ipomopsis effusa*)**

**HABITAT AND BIOLOGY:** An annual herb found in chaparral, and sandy Sonoran desert scrub from 0 to 328 ft. Blooms April through June (CNPS 2010).

**RANGE:** In CA, known from Pinto Wash, along the Mexican border in Imperial County (CNPS 2010). Considered a waif (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1987, approximately 109 mi southwest of the BSA on the Yuha Basin quad. Two plants observed in Sonoran creosote bush scrub on open sandy fan where Pinto Wash terminates. Though native to California, this single U.S. population may be a waif and therefore may not be viable in the long-term. Not seen since 1987 despite site visits in 1992, 1995, 1996, and 2004.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Baja California ipomopsis was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Slender-leaved ipomopsis (*Ipomopsis tenuifolia*)**

**HABITAT AND BIOLOGY:** A perennial herb found in chaparral, pinyon and juniper woodland, and gravelly or rocky Sonoran desert scrub from 328 to 3,940 ft. Blooms March through May (CNPS 2010).

**RANGE:** In CA, known from Imperial and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1927, approximately 119 mi southwest of the BSA on the In-ko-pah Gorge quad.

**HABITAT PRESENT IN THE BSA:** Marginal for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Slender-leaved ipomopsis was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Slender-spined all thorn (*Koeberlinia spinosa* ssp. *tenuispina*)**

**HABITAT AND BIOLOGY:** A deciduous shrub found in riparian woodland and Sonoran desert scrub from 490 to 1,675 ft. Blooms May through July (CNPS 2010).

**RANGE:** In CA, known from fewer than 10 occurrences in Imperial County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1980, approximately 53 mi southwest of the BSA on the Pegleg Well quad.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Slender-spined all thorn was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Borrego Valley pepper-grass (*Lepidium flavum* var. *felipense*)**

**HABITAT AND BIOLOGY:** An annual herb found in pinyon and juniper woodland and Sonoran desert scrub from 1,490 to 2,755 ft. Blooms March through May (CNPS 2010).

**RANGE:** In CA, known from fewer than 10 occurrences in San Diego County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1906, approximately 106 mi southwest of the BSA on the Borrego Palm Canyon quad.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010.

**DISCUSSION:** Borrego Valley pepper-grass was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Lepidium lasiocarpum* var. *lasiocarpum* was observed in the BSA in March 2009 and June 2010.

**Little San Bernardino Mountains linanthus (*Linanthus maculatus*)**

**HABITAT AND BIOLOGY:** An annual herb found on sandy substrates in desert dune, Joshua tree woodland, Mojavean desert scrub, and Sonoran desert scrub communities from 600 to 6,900 ft. Blooms March through May (CNPS 2010).

**RANGE:** In CA, known from Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2001, approximately 66.4 mi west of the BSA on the Fried Liver Wash quad.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Little San Bernardino Mountains linanthus was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Pygmy lotus (*Lotus haydonii*)**

**HABITAT AND BIOLOGY:** A perennial herb found in pinyon and juniper woodland and Sonoran desert scrub from 1,700 to 3,940 ft. Blooms January through June (CNPS 2010).

**RANGE:** In CA, known from Imperial and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010.

**DISCUSSION:** Pygmy lotus was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Lotus strigosus* was observed in the BSA in March 2009 and June 2010.

**Parish's desert-thorn (*Lycium parishii*)**

**HABITAT AND BIOLOGY:** A perennial shrub found in coastal scrub and Sonoran desert scrub from 1,000 to 3,280 ft. Blooms March through April (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1986, approximately 111 mi southwest of the BSA on the Carrizo Mountain quad. The CNDDDB record states that this species was uncommon at the edge of a wash in creosote bush scrub.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Parish's desert-thorn was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Palmer's lyrepod (*Lyrocarpa coulteri* var. *palmeri*)**

**HABITAT AND BIOLOGY:** A perennial herb found in gravelly or rocky Sonoran desert scrub from 395 to 2,610 ft. Blooms December through April (CNPS 2010).

**RANGE:** In CA, known from Imperial and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Palmer's lyrepod was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Brown turbans (*Malperia tenuis*)**

**HABITAT AND BIOLOGY:** An annual herb found in sandy Sonoran desert scrub from 50 to 1,100 ft. Blooms March through April (CNPS 2010).

**RANGE:** In CA, known from Imperial and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1926, approximately 96 mi southwest of the BSA on the Carrizo Mountain Northeast quad.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Brown turbans was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Graham's fishhook cactus (*Mammillaria grahamii* var. *grahamii*)**

**HABITAT AND BIOLOGY:** A stem succulent found in gravelly or rocky Sonoran desert scrub from 985 to 2,950 ft. Blooms April through September (CNPS 2010).

**RANGE:** In CA, known from San Bernardino County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2001, approximately 20 mi northeast of the BSA on the Whipple Mountains Southwest quad.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Graham's fishhook cactus was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Mammillaria tetrancistra* was observed in the BSA in March 2009 and June 2010.

### **Spearleaf (*Matelea parvifolia*)**

**HABITAT AND BIOLOGY:** A perennial herb found in Mojavean and Sonoran desert scrub from 1,445 to 3,595 ft. Blooms March through May (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2003, approximately 30 mi northeast of the BSA on the Whipple Wash quad. One plant was observed in a steep rocky area growing with *Ephedra*.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010.

**DISCUSSION:** Spearleaf was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Hairy stickleaf (*Mentzelia hirsutissima*)**

**HABITAT AND BIOLOGY:** A perennial herb found in Mojavean and Sonoran desert scrub from 0 to 2,300 ft. Blooms March through May (CNPS 2010).

**RANGE:** In CA, known from Imperial and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1961, approximately 102 mi southwest of the BSA on the Mount Signal quad.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Hairy stickleaf was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Mentzelia albicaulis* and *M. obscura* were observed in the BSA (Sycamore Environmental 2010b; 2009).

### **Argus blazing star (*Mentzelia puberula*)**

**HABITAT AND BIOLOGY:** A perennial herb found on sandy or rocky substrates in Mojavean desert scrub and Sonoran desert scrub from 300 to 4,200 ft (CNPS 2010). Habitat is also described as sandy crevices in cliffs or rocky slopes (Brokaw et al. 2009). Blooms March through May (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1936, approximately 29.2 mi southwest of the BSA on the East of Victory Pass quad. This record is based on plants collected from sandy soil in open ground at the south end of the Coxcomb Mountains.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA.

**DISCUSSION:** Argus blazing star was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Mentzelia albicaulis* and *M. obscura* were observed in the BSA (Sycamore Environmental 2010b; 2009).

### **Slender-lobed four o'clock (*Mirabilis tenuiloba*)**

**HABITAT AND BIOLOGY:** A perennial herb found in Sonoran desert scrub from 985 to 3,595 ft. Blooms March through May (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Slender-lobed four o'clock was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Slender woolly-heads (*Nemacaulis denudata* var. *gracilis*)**

**HABITAT AND BIOLOGY:** An annual herb found in coastal dunes, desert dunes, Sonoran desert scrub from -165 to 1,310 ft. Blooms April through May and occasionally March (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, and Big Maria Mountains Northwest quads. The closest CNDDDB record is from 2010, approximately 7 mi west of the BSA on the Arica Mountains quad. Eighteen plants were observed growing on sandy slopes.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Slender woolly-heads was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Parish's club-cholla (mat cholla) (*Opuntia parishii*)**

**HABITAT AND BIOLOGY:** A stem succulent found in Joshua tree woodland, Mojavean desert scrub, and Sonoran desert scrub from 985 to 5,000 ft. Blooms May through June and occasional in July (CNPS 2010).

**RANGE:** In CA, known from Riverside, and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is approximately 45 mi southwest of the BSA on the Buzzard Spring quad. The CNDDDB record provides no further information.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Parish's club-cholla was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Opuntia basilaris* var. *basilaris*, *O. bigelovii*, *O. echinocarpa*, and *O. ramosissima* were observed in the BSA (Sycamore Environmental 2010b; 2009).

**Wiggins' cholla (*Opuntia wigginsii*)**

**HABITAT AND BIOLOGY:** A stem succulent found in sandy Sonoran desert scrub from 100 to 2,900 ft. Blooms March (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** See discussion

**HABITAT PRESENT IN THE BSA:** No; see discussion.

**DISCUSSION:** In the first edition of The Jepson Manual, Wiggin's cholla was treated as a synonym of *Opuntia ramosissima* Engelm. The text states, "[Wiggin's cholla] is probably *O. ramosissima* x *O. echinocarpa*." In the online edition of the second edition of The Jepson Manual, Wiggin's cholla (*Opuntia wigginsii*) is synonymized under *Cylindropuntia echinocarpa* (Engelm. & J. M. Bigelow) F. M. Knuth. *Cylindropuntia echinocarpa* was formerly treated as *Opuntia echinocarpa*, a species common in CA deserts. Sycamore Environmental (2009) reported *Opuntia echinocarpa* from the main project site and the T-line.

Wiggin's cholla has not been treated as a distinct species in CA since at least 1993. Wiggin's cholla is treated in the second edition of The Jepson Manual by taxonomists that specialize in cactus taxonomy as a synonym of *Cylindropuntia echinocarpa*. Thus, all currently available data suggests this taxon is not rare and should not be treated as such.

**Wolf's cholla (*Opuntia wolfii*)**

**HABITAT AND BIOLOGY:** A stem succulent found in Sonoran desert scrub from 328 to 3,935 ft. Blooms March through May (CNPS 2010).

**RANGE:** In CA, known from Imperial and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Wolf's cholla was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Opuntia basilaris* var. *basilaris*, *O. bigelovii*, *O. echinocarpa*, and *O. ramosissima* were observed in the BSA (Sycamore Environmental 2010b; 2009).

**San Jacinto beardtongue (*Penstemon clelandii* var. *conatus*)**

**HABITAT AND BIOLOGY:** A perennial herb found in chaparral, pinyon and juniper woodland, and rocky Sonoran desert scrub from 1,312 to 4,920 ft. Blooms March through May (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010.

**DISCUSSION:** San Jacinto beardtongue was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Thurber's beardtongue (*Penstemon thurberi*)**

**HABITAT AND BIOLOGY:** A perennial herb found in chaparral, Joshua tree woodland, pinyon and juniper woodland, and Sonoran desert scrub from 1,640 to 4,000 ft. Blooms May through July (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, San Bernardino and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010.

**DISCUSSION:** Thurber's beardtongue was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Arizona pholistoma (*Pholistoma auritum* var. *arizonicum*)**

**HABITAT AND BIOLOGY:** An annual herb found in Mojavean desert scrub from 900 to 2,750 ft. Blooms in March (CNPS 2010).

**RANGE:** In CA, known only from the Whipple Mountains in San Bernardino County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2004, approximately 26 mi northeast of the BSA on the Whipple Mountains Southwest quad. This record is based on plants observed in a small clay seep area in a gravelly wash with rock outcrops.

**HABITAT PRESENT IN THE BSA:** Marginal Habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Arizona pholistoma was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).



### **Lobed ground cherry (*Physalis lobata*)**

**HABITAT AND BIOLOGY:** A perennial herb found in playas and on decomposed granitic substrates in Mojavean desert scrub from 1,600 to 2,650 ft. Blooms September through January, and uncommonly in May (CNPS 2010). Also reported as flowering sporadically all year with rains, with peak flowering September through January and peak fruiting October through March (Jones et al. 1979).

**RANGE:** In CA, known only from San Bernardino County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1975, approximately 40.2 mi west of the BSA on the Clarks Pass quad. This record is based on a plants collected from decomposed granite in a sink area just east of Clarks Pass.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA.

**DISCUSSION:** Arizona pholistoma was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Thurber's pilostyles (*Pilostyles thurberi*)**

**HABITAT AND BIOLOGY:** A parasitic perennial herb found growing inside the stems of *Psoralea*, especially *P. emoryi* in Sonoran desert scrub from 0 to 1,200 ft. Blooms January (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1967, approximately 87 mi southwest of the BSA on the Kane Spring Northwest quad.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Thurber's pilostyles was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). The blooming period for this species is January according to CNPS (2010). However, there are records of this species in CA herbaria for collections made in March, April, May, June, October, November, and December (CCH 2010). For example, a collection was made in Imperial County in March (UCR217783) with the notation "flowering on *Psoralea emoryi*" indicating that the plant was in bloom when it was collected. Therefore, the March 2009 and June and July 2010 botanical surveys were conducted during the evident and identifiable period for this species.

### **Desert unicorn plant (*Proboscidea althaeifolia*)**

**HABITAT AND BIOLOGY:** A perennial herb found in sandy Sonoran desert scrub from 495 to 3,280 ft. Blooms May through August (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Desert unicorn plant was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Narrow-leaved psorothamnus (*Psorothamnus fremontii* var. *attenuatus*)**

**HABITAT AND BIOLOGY:** A perennial shrub found on granitic and volcanic substrates in Sonoran desert scrub from 1,100 to 3,000 ft. Blooms in April (CNPS 2010). (As noted in the Discussion below, this species was in bloom in the Whipple Mountains in June 2010. Thus, the blooming time listed in CNPS 2010 is inaccurate.)

**RANGE:** In CA, known only from the Whipple Mountains in San Bernardino County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2003, approximately 20.7 mi northeast of the BSA on the Savahia Peak quad. This record states that plants were observed growing on light-colored volcanic rock forming gravelly rolling hills and washes.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Narrow-leaved psorothamnus was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b). *Psorothamnus spinosus* occurs in the larger RSEP study area, but not in the BSA.

**Orocapia sage (*Salvia greatae*)**

**HABITAT AND BIOLOGY:** An evergreen shrub found in Mojavean and Sonoran desert scrub from -130 to 2,700 ft. Blooms March through April (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1983, approximately 40 mi southwest of the BSA on the Corn Spring quad. In 1983 a total of 200 plants were observed, no plants observed during surveys in 1986. The CNDDDB record provides no further information.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Orocapia sage was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Coves' cassia (*Senna covesii*)**

**HABITAT AND BIOLOGY:** A perennial herb found in sandy Sonoran desert scrub from 1,000 to 3,550 ft. Blooms March through June (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2005, approximately 15.6 mi north of the BSA on the Mopah Peaks quad. This record states that plant(s) were observed on an open, rocky slope with *Larrea tridentata* and *Ambrosia dumosa*.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Coves' cassia was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Bristly scaleseed (*Spermolepis echinata*)**

**HABITAT AND BIOLOGY:** An annual herb found in sandy or rocky Sonoran desert scrub from 196 to 4,920 ft. Blooms March through April (CNPS 2010).

**RANGE:** In CA, known from the Borrego Valley in San Diego County (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1932, approximately 107 mi southwest of the BSA on the Tubb Canyon quad.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Bristly scaleseed was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Purple stemodia (*Stemodia durantifolia*)**

**HABITAT AND BIOLOGY:** A perennial herb found in mesic, sandy Sonoran desert scrub from 590 to 985 ft. Blooms January through December (CNPS 2010).

**RANGE:** In CA, known from Riverside and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1912, approximately 90 mi west of the BSA on the La Quinta quad.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA.

**DISCUSSION:** Purple stemodia was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Hall's tetracoccus (*Tetracoccus hallii*)**

**HABITAT AND BIOLOGY:** A deciduous shrub found in Mojavean and Sonoran desert scrub from 100 to 3,940 ft. Blooms January through May (CNPS 2010).

**RANGE:** In CA, known from Imperial, Riverside, and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** The CNDDDB has no records for this species.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Hall's tetracoccus was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Dwarf germander (*Teucrium cubense* ssp. *depressum*)**

**HABITAT AND BIOLOGY:** An annual herb found in desert dunes, playa margins, and Sonoran desert scrub from 150 to 1,350 ft. Blooms March through May, and uncommonly into September or November (CNPS 2010).

**RANGE:** In CA, known from Imperial and Riverside counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1912, approximately 20.6 mi southeast of the BSA on the Blythe quad. This record states that plants were collected from flats in Palo Verde Valley, probably near Blythe.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Dwarf germander was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Palmer's Jackass clover (*Wislizenia refracta* ssp. *palmeri*)**

**HABITAT AND BIOLOGY:** A deciduous shrub found in chenopod scrub, Sonoran thorn woodland, and Sonoran desert scrub from 0 to 985 ft. Blooms January through December (CNPS 2010).

**RANGE:** In CA, known from Riverside, San Bernardino and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1991, 30 mi southwest of the BSA on the Sidewinder Well quad.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Palmer's Jackass clover was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Jackass clover (*Wislizenia refracta* ssp. *refracta*)**

**HABITAT AND BIOLOGY:** An annual herb found in desert dunes, Mojavean desert scrub, playas, and Sonoran desert scrub from 1,950 to 2,650 ft. Blooms April through November (CNPS 2010).

**RANGE:** In CA, known from Riverside and San Bernardino counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2008, 70 mi west of the BSA on the Twentynine Palms quad. This record states that plants were growing in a silty alkaline depression with *Suaeda nigra*, *Atriplex polycarpa*, *Prosopis* sp., and *Washingtonia filifera*.

**HABITAT PRESENT IN THE BSA:** Habitat for this species occurs in the BSA.

**DISCUSSION:** Jackass clover was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

### **Mecca-aster (*Xylorhiza cognata*)**

**HABITAT AND BIOLOGY:** A perennial herb found in Sonoran desert scrub from 65 to 1,312 ft. Blooms January through June (CNPS 2010).

**RANGE:** In CA, known from the Indio Hills and Mecca Hills Imperial and Riverside counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 1936, 69 mi southwest of the BSA on the Mortmar quad.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.

**DISCUSSION:** Mecca-aster was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

**Orcutt's woody-aster (*Xylorhiza orcuttii*)**

**HABITAT AND BIOLOGY:** A perennial herb found in Sonoran desert scrub from 0 to 1,200 ft. Blooms March through April (CNPS 2010).

**RANGE:** In CA, known from Imperial and San Diego counties (CNPS 2010).

**KNOWN RECORDS:** There are no CNDDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDDB record is from 2009, 85 mi southwest of the BSA on the Seventeen Palms quad.

**HABITAT PRESENT IN THE BSA:** Marginal habitat for this species occurs in the BSA. The BSA is outside the geographic range of this species (CNPS 2010).

**DISCUSSION:** Orcutt's woody-aster was not observed during botanical surveys conducted in October 2010 or during any botanical surveys previously conducted by Sycamore Environmental at the RSEP site (Sycamore Environmental 2009 and 2010b).

## **D. Evaluation of Special-Status Natural Communities**

No special-status communities occur in the BSA. The BSA does not include any Smoke Tree Woodland habitat previously documented in the PSA by Sycamore Environmental (2010b). The Smoke Tree Woodland is located outside the BSA to the northeast and northwest (Figure 4).

## **E. Summary of Findings**

The BSA provides suitable or marginal habitat for 71 special-status plant species. No federal or state listed plant species or BLM sensitive plant species were observed in the BSA during botanical surveys conducted in October 2010. *Cynanchum utahense*, a California Native Plant Society List 4.2 species and CNDDDB rank S3.2 species (under *Funastrum utahense*), was identified and mapped near the proposed substation at the eastern terminus of the T-line corridor. This was the only special-status plant species observed during the October 2010 surveys.

## VI. LITERATURE CITED AND PERSONAL COMMUNICATIONS

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## B. Personal Communications

- County of Riverside, Environmental Programs Department. 3 June 2009. Phone conversation regarding whether Riverside County maintains a list of plant species of local concern.
- Mr. Scott Kaminski, Sr. Project Engineer, Solar Reserve. 31 August 2010. Email correspondence regarding precipitation data.



## VII. PREPARERS

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**R. John Little, Ph.D.,** Botany, Claremont Graduate School, Claremont, CA. Over 25 years experience managing and conducting environmental projects involving impact assessment and preparation of numerous NEPA/CEQA compliance documents, Biological Assessments, and Caltrans Natural Environmental Studies. Experience includes conducting special-status plant and wildlife species surveys, jurisdictional wetland delineations, general biological surveys, permitting and biological report preparation. Dr. Little is a trained wetland delineator, an ISA Certified Arborist (WE-1057A), and holds a California Department of Fish and Game Scientific Collecting Permit (#801180-01), and DFG Rare, Threatened and Endangered Plant Voucher Collecting Permit (#2081(a)-10-19-V).

Responsibilities: Project Manager, senior technical lead, botanical survey fieldwork, plant identification, and report preparation.

**Adam C. Forbes, M.S.,** Range Science (emphasis on plant systematics), New Mexico State University, Las Cruces, NM. Over 10 years experience conducting biological studies for the public and private sector. As a botanist/ biologist with Sycamore Environmental, Mr. Forbes conducts plant and wildlife surveys, prepares and edits reports, serves as assistant project manager, and conducts informal consultations with regulatory agency personnel. Responsibilities also include assisting with proposal preparation and marketing activities. Provides technical support for wetland delineations, biological resource evaluations, mitigation plans, and other documents used in the CEQA/NEPA process. He holds a California Department of Fish and Game Rare, Threatened and Endangered Plant Voucher Collecting Permit (#10021), and a DFG Scientific Collecting Permit (#802085-01).

Responsibilities: Botanical report preparation.

**Chuck Hughes, M.S.,** Plant Biology, Michigan State University, East Lansing, MI. Prepares biological/botanical resource evaluations, jurisdictional delineations, arborist reports, impact analyses, and mitigation and restoration plans. Serves as assistant project manager. He is an ISA Certified Arborist (WE-6885A) and is listed on a Fish and Wildlife Service recovery permit for vernal pool crustaceans (TE799564-3). He holds a California Department of Fish and Game Rare, Threatened and Endangered Plant Voucher Collecting Permit (#08053), and a DFG Scientific Collecting Permit (#801246-05).

Responsibilities: Botanical survey fieldwork and plant identification.

**Michael Bower, M.S.,** Ecology, University of California, Davis, CA. Conducts plant and wildlife surveys, provides technical support for wetland delineations, biological resource evaluations, mitigation plans, and other documents used in the CEQA/NEPA process, queries the California Natural Diversity Database (CNDDDB/ RareFind), and researches special-status species for projects. Leads public plant identification workshops. He holds a California Department of Fish and Game Rare, Threatened and Endangered Plant Voucher Collecting Permit (#2081(a)-09-14-V).

Responsibilities: Botanical survey fieldwork.

**Aramis Respall,** Over fifteen years experience in drafting and design for public and private projects using Autodesk land development and ESRI ArcGIS geospatial programs. Primary experience evolved from conventional surveying and civil engineering practices to advanced GPS and GIS based technology. Past project experience include CAD/GIS support for road and highway designs, facilities management, highway and airport master planning, noise studies, power transmission line alignments, and various private development projects such as subdivision layouts and golf courses. Prepares figures for biological and permitting documents such as project location maps, aerial photographs, biological resource maps, CNDDDB proximity maps, waters and wetland delineation, proposed project impacts, tree location maps and other supporting graphics. Provides geospatial analysis and support for projects involving geodesy, hydrology, watershed studies, project impact analysis, CNDDDB species, critical habitat and mitigation.

Responsibilities: Figure preparation and spatial analysis.

**Cynthia Little,** Principal, Sycamore Environmental.

Responsibilities: Senior editor, quality control.

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## APPENDIX A.

### Cumulative List of Plant Species Observed 2009-2010

#### Rice Solar Energy Project Riverside County, CA

| FAMILY                 | SCIENTIFIC NAME   | COMMON NAME              | N/I <sup>a</sup> | October 2010<br>Species observed<br>in bloom |
|------------------------|---|--------------------------|------------------|--|
| <b>DICOTS</b>          |   |                          |                  |  |
| <b>Asclepiadaceae</b>  | <i>Asclepias subulata</i>                                 | Rush milkweed            | N                |  |
|                        | <i>Cynanchum utahense</i>                                 | Utah cynanchum           | N                | ✓  |
|                        | <i>Sarcostemma hirtellum</i>                              | Trailing townula         | N                |  |
| <b>Asteraceae</b>      | <i>Ambrosia dumosa</i>                                    | Burro-weed               | N                | ✓  |
|                        | <i>Bebbia juncea</i> var. <i>aspera</i>                   | Sweetbush                | N                |  |
|                        | <i>Calycoseris wrightii</i>                               |                          | N                |  |
|                        | <i>Chaenactis carphoclinia</i> var. <i>carphoclinia</i>   | Pebble pincushion        | N                |  |
|                        | <i>Chaenactis fremontii</i>                               | Desert pincushion        | N                |  |
|                        | <i>Chaenactis stevioides</i>                              | Desert pincushion        | N                |  |
|                        | <i>Chaenactis xantiana</i>                                | Pincushion               | N                |  |
|                        | <i>Encelia farinosa</i>                                   | Brittlebush              | N                |  |
|                        | <i>Geraea canescens</i>                                   | Desert-sunflower         | N                |  |
|                        | <i>Hymenoclea salsola</i> var. <i>salsola</i>             | Burrobrush               | N                |  |
|                        | <i>Malacothrix glabrata</i>                               | Desert dandelion         | N                |  |
|                        | <i>Monoptilon bellioides</i>                              | Desert star              | N                |  |
|                        | <i>Palafoxia arida</i> var. <i>arida</i>                  |                          | N                |  |
|                        | <i>Porophyllum gracile</i>                                | Odora                    | N                |  |
|                        | <i>Rafinesquia neomexicana</i>                            | California chicory       | N                |  |
|                        | <i>Stephanomeria exigua</i> ssp. <i>exigua</i>            |                          | N                |  |
|                        | <i>Stephanomeria pauciflora</i>                           | Wire-lettuce             | N                | ✓  |
| <b>Boraginaceae</b>    | <i>Amsinckia menziesii</i> var. <i>intermedia</i>         | Rancher's fireweed       | N                |  |
|                        | <i>Amsinckia tessellata</i>                               | Devil's lettuce          | N                |  |
|                        | <i>Cryptantha angustifolia</i>                            |                          | N                |  |
|                        | <i>Cryptantha barbigera</i>                               |                          | N                |  |
|                        | <i>Cryptantha maritima</i>                                |                          | N                |  |
|                        | <i>Cryptantha nevadensis</i>                              |                          | N                |  |
|                        | <i>Pectocarya heterocarpa</i>                             |                          | N                |  |
|                        | <i>Pectocarya platycarpa</i>                              |                          | N                |  |
|                        | <i>Pectocarya recurvata</i>                               |                          | N                |  |
| <b>Brassicaceae</b>    | <i>Brassica tournefortii</i>                              | Mustard                  | I                |  |
|                        | <i>Dithyrea californica</i>                               | Spectacle-pod            | N                |  |
|                        | <i>Lepidium lasiocarpum</i> var. <i>lasiocarpum</i>       | Peppergrass              | N                |  |
| <b>Cactaceae</b>       | <i>Mammillaria tetrancistra</i>                           | Fish-hook cactus         | N                |  |
|                        | <i>Echinocactus polycephalus</i> var. <i>polycephalus</i> | Clustered barrel cactus  | N                |  |
|                        | <i>Ferocactus cylindraceus</i> var. <i>cylindraceus</i>   | California barrel cactus | N                |  |
|                        | <i>Opuntia basilaris</i> var. <i>basilaris</i>            | Beavertail cactus        | N                |  |
|                        | <i>Opuntia bigelovii</i>                                  | Teddy-bear cholla        | N                |  |
|                        | <i>Opuntia echinocarpa</i>                                | Silver cholla            | N                |  |
|                        | <i>Opuntia ramosissima</i>                                | Pencil cactus            | N                |  |
| <b>Campanulaceae</b>   | <i>Nemacladus glanduliferus</i> var. <i>orientalis</i>    |                          | N                |  |
| <b>Caryophyllaceae</b> | <i>Achyrionychia cooperi</i>                              | Onyx flower              | N                |  |
| <b>Chenopodiaceae</b>  | <i>Chenopodium murale</i>                                 | Pigweed                  | I                |  |

|                        |   |                          |   |   |
|------------------------|---|--------------------------|---|---|
| <b>Cuscutaceae</b>     | <i>Cuscuta denticulata</i>                            | Dodder                   | N |   |
| <b>Euphorbiaceae</b>   | <i>Chamaesyce polycarpa</i> var. <i>hirtella</i>      | Small seeded spurge      | N | ✓ |
|                        | <i>Ditaxis neomexicana</i>                            |                          | N | ✓ |
| <b>Fabaceae</b>        | <i>Acacia greggii</i>                                 | Catclaw                  | N |   |
|                        | <i>Astragalus didymocarpus</i> var. <i>dispermus</i>  | Two-seeded milkvetch     | N |   |
|                        | <i>Astragalus insularis</i> var. <i>harwoodii</i>     | Harwood's milkvetch      | N |   |
|                        | <i>Cercidium floridum</i> ssp. <i>floridum</i>        | Blue palo verde          | N |   |
|                        | <i>Dalea mollissima</i>                               |                          | N |   |
|                        | <i>Lotus strigosus</i>                                |                          | N |   |
|                        | <i>Lupinus arizonicus</i>                             | Arizona lupine           | N |   |
|                        | <i>Olneya tesota</i>                                  | Ironwood                 | N |   |
|                        | <i>Psoralea argophylla</i>                            | Smoke tree               | N |   |
| <b>Geraniaceae</b>     | <i>Erodium cicutarium</i>                             | Filaree                  | I |   |
|                        | <i>Erodium texanum</i>                                | Filaree                  | N |   |
| <b>Hydrophyllaceae</b> | <i>Phacelia crenulata</i> var. <i>minutiflora</i>     |                          | N |   |
|                        | <i>Phacelia distans</i>                               |                          | N |   |
|                        | <i>Phacelia rotundifolia</i>                          |                          | N |   |
| <b>Krameriaceae</b>    | <i>Krameria grayi</i>                                 | White rhatany            | N |   |
| <b>Loasaceae</b>       | <i>Mentzelia albicaulis</i>                           | Blazing star             | N |   |
|                        | <i>Mentzelia obscura</i>                              | Blazing star             | N |   |
| <b>Malvaceae</b>       | <i>Eremalche rotundifolia</i>                         | Desert fivespot          | N |   |
| <b>Nyctaginaceae</b>   | <i>Abronia villosa</i> var. <i>villosa</i>            | Chaparral sand verbena   | N |   |
| <b>Onagraceae</b>      | <i>Camissonia boothii</i> ssp. <i>condensata</i>      | Booth's evening primrose | N |   |
|                        | <i>Camissonia brevipes</i> ssp. <i>brevipes</i>       | Sun cup                  | N |   |
| <b>Orobanchaceae</b>   | <i>Orobanche cooperi</i>                              | Broom-rape               | N |   |
| <b>Papaveraceae</b>    | <i>Eschscholzia minutiflora</i>                       |                          | N |   |
| <b>Plantaginaceae</b>  | <i>Plantago ovata</i>                                 | Plantain                 | N |   |
| <b>Polemoniaceae</b>   | <i>Gilia filiformis</i>                               |                          | N |   |
|                        | <i>Gilia latifolia</i>                                |                          | N |   |
|                        | <i>Langloisia setosissima</i> ssp. <i>setosissima</i> |                          | N |   |
|                        | <i>Loeseliastrum mathewsii</i>                        | Desert calico            | N |   |
|                        | <i>Loeseliastrum schottii</i>                         |                          | N |   |
| <b>Polygonaceae</b>    | <i>Chorizanthe brevicornu</i> var. <i>brevicornu</i>  | Brittle spineflower      | N |   |
|                        | <i>Chorizanthe rigida</i>                             | Spiny-herb               | N |   |
|                        | <i>Eriogonum inflatum</i> var. <i>inflatum</i>        | Desert trumpet           | N |   |
|                        | <i>Eriogonum reniforme</i>                            | Wild buckwheat           | N |   |
|                        | <i>Eriogonum thomasi</i>                              |                          | N |   |
|                        | <i>Eriogonum trichopes</i>                            |                          | N |   |
| <b>Resedaceae</b>      | <i>Oligomeris linifolia</i>                           |                          | N |   |
| <b>Zygophyllaceae</b>  | <i>Larrea tridentata</i>                              | Creosote bush            | N | ✓ |
| <b>MONOCOTS</b>        |   |                          |   |   |
| <b>Liliaceae</b>       | <i>Hesperocallis undulata</i>                         | Desert lily              | N |   |
| <b>Poaceae</b>         | <i>Pleuraphis rigida</i>                              | Galleta grass            | N |   |
|                        | <i>Schismus arabicus</i>                              | Mediterranean grass      | I |   |
|                        | <i>Schismus barbatus</i>                              | Mediterranean grass      | I |   |

<sup>a</sup> N = Native; I= Introduced.

## **APPENDIX B.**

CNDDDB Summary Report  
(Rice, Grommet, Big Maria Mountains Northwest and 12 surrounding quads)

Rice Solar Energy Project  
Riverside County, CA

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| Scientific Name                                     | Common Name                                  | Element Code | Federal Status | State Status | Global Rank | State Rank | CNPS | CDFG |
|---|--|--------------|----------------|--------------|-------------|------------|------|------|
| 1 <i>Abronia villosa</i> var. <i>aurita</i>         | chaparral sand-verbena                       | PDNYC010P1   |                |              | G5T3T4      | S2         | 1B.1 |      |
| 2 <i>Androstephium breviflorum</i>                  | small-flowered androstephium                 | PMLIL06010   |                |              | G5          | S1.2       | 2.2  |      |
| 3 <i>Antrozous pallidus</i>                         | pallid bat                                   | AMACC10010   |                |              | G5          | S3         |      | SC   |
| 4 <i>Astragalus insularis</i> var. <i>harwoodii</i> | Harwood's milk-vetch                         | PDFAB0F491   |                |              | G5T3        | S2.2?      | 2.2  |      |
| 5 <i>Castela emoryi</i>                             | Emory's crucifixion-thorn                    | PDSIM03030   |                |              | G3          | S3         | 2.3  |      |
| 6 <i>Coastal and Valley Freshwater Marsh</i>        | Coastal and Valley Freshwater Marsh          | CTT52410CA   |                |              | G3          | S2.1       |      |      |
| 7 <i>Coccyzus americanus occidentalis</i>           | western yellow-billed cuckoo                 | ABNRB02022   | Candidate      | Endangered   | G5T3Q       | S1         |      |      |
| 8 <i>Colaptes chrysoides</i>                        | gilded flicker                               | ABNYF10040   |                | Endangered   | G5          | S1         |      |      |
| 9 <i>Colubrina californica</i>                      | Las Animas colubrina                         | PDRHA05030   |                |              | G4          | S2S3.3     | 2.3  |      |
| 10 <i>Corynorhinus townsendii</i>                   | Townsend's big-eared bat                     | AMACC08010   |                |              | G4          | S2S3       |      | SC   |
| 11 <i>Coryphantha alversonii</i>                    | Alverson's foxtail cactus                    | PDCAC0X060   |                |              | G3          | S3.2       | 4.3  |      |
| 12 <i>Eremarionta immaculata</i>                    | white desert snail                           | IMGASB9040   |                |              | G1          | S1         |      |      |
| 13 <i>Eriastrum harwoodii</i>                       | Harwood's eriastrum                          | PDPLM030B1   |                |              | G2          | S2         | 1B.2 |      |
| 14 <i>Falco mexicanus</i>                           | prairie falcon                               | ABNKD06090   |                |              | G5          | S3         |      |      |
| 15 <i>Gopherus agassizii</i>                        | desert tortoise                              | ARAAF01010   | Threatened     | Threatened   | G4          | S2         |      |      |
| 16 <i>Icteria virens</i>                            | yellow-breasted chat                         | ABPBX24010   |                |              | G5          | S3         |      | SC   |
| 17 <i>Macrotus californicus</i>                     | California leaf-nosed bat                    | AMACB01010   |                |              | G4          | S2S3       |      | SC   |
| 18 <i>Melanerpes uropygialis</i>                    | Gila woodpecker                              | ABNYF04150   |                | Endangered   | G5          | S1S2       |      |      |
| 19 <i>Mesquite Bosque</i>                           | Mesquite Bosque                              | CTT61820CA   |                |              | G3          | S2.1       |      |      |
| 20 <i>Micrathene whitneyi</i>                       | elf owl                                      | ABNSB09010   |                | Endangered   | G5          | S1         |      |      |
| 21 <i>Myiarchus tyrannulus</i>                      | brown-crested flycatcher                     | ABPAE43080   |                |              | G5          | S2S3       |      |      |
| 22 <i>Myotis velifer</i>                            | cave myotis                                  | AMACC01050   |                |              | G5          | S1         |      | SC   |
| 23 <i>Nemacaulis denudata</i> var. <i>gracilis</i>  | slender cottonheads                          | PDPGN0G012   |                |              | G3G4T3?     | S2         | 2.2  |      |
| 24 <i>Oliarces clara</i>                            | cheeseweed owlfly (cheeseweed moth lacewing) | IINEU04010   |                |              | G1G3        | S1S3       |      |      |
| 25 <i>Ovis canadensis nelsoni</i>                   | Nelson's bighorn sheep                       | AMALE04013   |                |              | G4T4        | S3         |      |      |
| 26 <i>Piranga rubra</i>                             | summer tanager                               | ABPBX45030   |                |              | G5          | S2         |      | SC   |
| 27 <i>Pyrocephalus rubinus</i>                      | vermillion flycatcher                        | ABPAE36010   |                |              | G5          | S2S3       |      | SC   |
| 28 <i>Rallus longirostris yumanensis</i>            | Yuma clapper rail                            | ABNME0501A   | Endangered     | Threatened   | G5T3        | S1         |      |      |
| 29 <i>Sonoran Cottonwood Willow Riparian Forest</i> | Sonoran Cottonwood Willow Riparian Forest    | CTT61810CA   |                |              | G2          | S1.1       |      |      |
| 30 <i>Taxidea taxus</i>                             | American badger                              | AMAJF04010   |                |              | G5          | S4         |      | SC   |
| 31 <i>Toxostoma bendirei</i>                        | Bendire's thrasher                           | ABPBK06050   |                |              | G4G5        | S3         |      | SC   |
| 32 <i>Toxostoma crissale</i>                        | Crissal thrasher                             | ABPBK06090   |                |              | G5          | S3         |      | SC   |
| 33 <i>Toxostoma lecontei</i>                        | Le Conte's thrasher                          | ABPBK06100   |                |              | G3          | S3         |      | SC   |
| 34 <i>Uma scoparia</i>                              | Mojave fringe-toed lizard                    | ARACF15030   |                |              | G3G4        | S3S4       |      | SC   |



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## **APPENDIX C.**

### USFWS Species Lists

#### Rice Solar Energy Project Riverside County, CA

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Includes list from the VFWO and CFWO.

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# Ventura Fish and Wildlife Office

## Pacific Southwest Region

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### *Federally Listed Threatened & Endangered Species Which May Occur In San Bernardino County, CA*

#### **Amphibian**

|             |                   |   |
|-------------|-------------------|---|
| Arroyo Toad | Bufo californicus | E |
|-------------|-------------------|---|

#### **Bird**

|                                |                                |   |
|--------------------------------|--------------------------------|---|
| Least Bell's Vireo             | Vireo bellii pusillus          | E |
| Southwestern Willow Flycatcher | Empidonax trillii extimus      | E |
| Yellow-Billed Cuckoo           | Coccyzus americanus            | C |
| Yuma Clapper Rail              | Rallus longirostris yumanensis | E |

#### **Fish**

|                  |                         |   |
|------------------|-------------------------|---|
| Bonytail Chub    | Gila elegans            | E |
| Mohave Tui Chub  | Gila bicolor mohavensis | E |
| Razorback Sucker | Xyrauchen texanus       | E |

#### **Plant**

|                          |                                    |   |
|--------------------------|------------------------------------|---|
| Cushenbury Buckwheat     | Eriogonum ovalifolium var. vineum  | E |
| Cushenberry Milk-vetch   | Astragalus albens                  | E |
| Cushenbury Oxytheca      | Oxytheca parishii var. goodmaniana | E |
| Lane Mountain Milk-Vetch | Astragalus jaegerianus             | E |
| Parish's Daisy           | Erigeron parishii                  | T |

#### **Reptile**

|                 |                    |   |
|-----------------|--------------------|---|
| Desert Tortoise | Gopherus agassizii | T |
|-----------------|--------------------|---|

E - Endangered

T - Threatened

CH - Critical habitat

PE - Taxa proposed for listing as endangered

PT - Taxa proposed for listing as threatened

PCH - Critical habitat which has been proposed

**DISCLAIMER NOTICE - The information provided on this page should not be considered an OFFICIAL species list. If you have a proposed project and are in need of an official species list, please mail a detailed request to:**

Ventura Fish and Wildlife Office  
2493 Portola Road, Suite B  
Ventura, CA, 93003.

Last updated: May 6, 2010

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| Scientific Name  | Common Name                           | Taxon Abbrev. | Lead Office | Fed. Status | CH    | R.P. | 5yr Rev  | LA | O | SB | Riv | SD | Imp | Listing Fed Reg | Date Listed |
|--|---------------------------------------|---------------|-------------|-------------|-------|------|----------|----|---|----|-----|----|-----|-----------------|-------------|
| <b>PLANTS</b>  |                                       |               |             |             |       |      |          |    |   |    |     |    |     |                 |             |
| <i>Acanthoscyphus (Oxytheca) parishii</i> var. <i>goodmaniana</i> [1]                                      | Cushenbury oxytheca                   | ACPAGO        | CFWO        | E           | f-02  | D2   | 2009     |    |   | X  |     |    |     | 59:43652        | 24-Aug-94   |
| <i>Acanthomintha ilicifolia</i>  | San Diego thornmint                   | ACIL          | CFWO        | T           | f-08  |      | 2009     |    |   |    |     |    | X   | 63:54937        | 13-Oct-98   |
| <i>Acmispon (Lotus) dendroideus</i> var. <i>traskiae</i>   | San Clemente Island lotus             | LODETR        | CFWO        | E           |       | F 84 | 2007     | X  |   |    |     |    |     | 42:40682        | 11-Aug-77   |
| <i>Allium munzii</i>   | Munz's onion                          | ALMU          | CFWO        | E           | f-05  |      | 2009     |    |   |    | X   |    |     | 63:54975        | 13-Oct-98   |
| <i>Ambrosia pumila</i>   | San Diego ambrosia                    | AMPU          | CFWO        | E           | p-09  |      | in prep. |    |   |    | X   | X  |     | 67:44372        | 2-Jul-02    |
| <i>Arctostaphylos glandulosa</i> subsp. <i>crassifolia</i>   | Del Mar manzanita                     | ARGLCR        | CFWO        | E           |       |      | in prep. |    |   |    |     |    | X   | 61:52370        | 7-Oct-96    |
| <i>Arenaria paludicola</i>   | marsh sandwort                        | ARPA          | VFWO        | E           |       | F 98 | 2008     | X  |   | X  |     |    |     | 58:41378        | 3-Aug-93    |
| <i>Arenaria ursina</i>   | Bear Valley sandwort                  | ARUR          | CFWO        | T           | f-07  |      | 2008     |    |   | X  |     |    |     | 63:49006        | 14-Sep-98   |
| <i>Astragalus albens</i>   | Cushenbury milk-vetch                 | ASAL          | CFWO        | E           | f-02  | D2   | 2009     |    |   |    | X   |    |     | 59:43652        | 24-Aug-94   |
| <i>Astragalus brauntonii</i>   | Braunton's milk-vetch                 | ASBR          | VFWO        | E           | f-06  | F 99 | 2009     | X  | X |    | X   |    |     | 62:4172         | 29-Jan-97   |
| <i>Astragalus lentiginosus</i> var. <i>coachellae</i>  | Coachella Valley milk-vetch           | ASLECO        | CFWO        | E           | f-05  |      | 2009     |    |   |    | X   |    |     | 63:53596        | 6-Oct-98    |
| <i>Astragalus magdalenae</i> var. <i>peirsonii</i>   | Peirson's milk-vetch                  | ASMAPE        | CFWO        | T           | f-08  |      | 2008     |    |   |    |     |    | X   | 63:53596        | 6-Oct-98    |
| <i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>   | Ventura marsh milk-vetch              | ASPYLA        | VFWO        | E           | f-04  |      | in prep. | X  | X |    |     |    |     | 66:27901        | 21-May-01   |
| <i>Astragalus tener</i> var. <i>titi</i>   | coastal dunes milk-vetch              | ASTETI        | VFWO        | E           |       | D    | 2009     | X  |   |    |     | X  |     | 63:43100        | 12-Aug-98   |
| <i>Astragalus tricarlinatus</i>  | triple-ribbed milk-vetch              | ASTR          | CFWO        | E           |       |      | 2009     |    |   | X  | X   |    |     | 63:53596        | 6-Oct-98    |
| <i>Atriplex coronata</i> var. <i>notatior</i>  | San Jacinto Valley crownscale         | ATCONO        | CFWO        | E           | f-05  |      | 2008     |    |   |    | X   |    |     | 63:54975        | 13-Oct-98   |
| <i>Baccharis vanessae</i>  | Encinitas baccharis                   | BAVA          | CFWO        | T           |       |      | in prep. |    |   |    |     | X  |     | 61:52370        | 7-Oct-96    |
| <i>Berberis nevini</i>   | Nevin's barberry                      | BENE          | CFWO        | E           | f-08  |      | 2009     | X  |   | X  | X   | X  |     | 63:54956        | 13-Oct-98   |
| <i>Brodiaea filifolia</i>  | thread-leaved brodiaea                | BRFI          | CFWO        | T           | pr-09 |      | 2009     | X  | X | X  | X   | X  |     | 63:54975        | 13-Oct-98   |
| <i>Castilleja cinerea</i>  | ash-gray Indian paintbrush            | CACI          | CFWO        | T           | f-07  |      | 2008     |    |   | X  |     |    |     | 63:49006        | 14-Sep-98   |
| <i>Castilleja grisea</i>   | San Clemente Island Indian paintbrush | CAGR          | CFWO        | E           |       | F 84 | 2007     | X  |   |    |     |    |     | 42:40682        | 11-Aug-77   |
| <i>Ceanothus ophiocylus</i>  | Vail Lake ceanothus                   | CEOP          | CFWO        | T           | f-07  |      | 2008     |    |   |    | X   |    |     | 63:54956        | 13-Oct-98   |
| <i>Cercocarpus traskiae</i>  | Catalina Island mountain-mahogany     | CETR          | CFWO        | E           |       |      | 2007     | X  |   |    |     |    |     | 62:42692        | 8-Aug-97    |
| <i>Chloropyron maritimum (Cordylanthus maritimus)</i> var. <i>maritimum</i> (subsp. <i>maritimus</i> ) [1] | salt marsh bird's beak                | CHMAMA        | CFWO        | E           |       | F 85 | 2009     | X  | X |    |     | X  |     | 43:44809        | 28-Sep-78   |
| <i>Chorizanthe orcuttiana</i>  | Orcutt's spineflower                  | CHOR          | CFWO        | E           |       |      | 2008     |    |   |    |     | X  |     | 61:52370        | 7-Oct-96    |
| <i>Chorizanthe parryi</i> var. <i>fernandina</i>   | San Fernando Valley spineflower       | CHPAFE        | VFWO        | C           |       |      |          | X  | X | X  |     |    |     | 64:57533        | 25-Oct-99   |
| <i>Deinandra (Hemizonia) conjugens</i> [1]   | Otay tarplant                         | DECO          | CFWO        | T           | f-02  | F 04 | 2009     |    |   |    |     | X  |     | 63:54937        | 13-Oct-98   |

|   |                                     |        |      |   |       |      |          |   |   |   |          |           |
|---|-------------------------------------|--------|------|---|-------|------|----------|---|---|---|----------|-----------|
| <i>Delphinium variegatum</i> subsp. <i>kinkiense</i>              | San Clemente Island larkspur        | DEVAKI | CFWO | E |       | F 84 | 2008     | X |   |   | 42:40682 | 11-Aug-77 |
| <i>Dodecahema (Centrostegia) leptoceras</i> [1]                   | slender-horned spineflower          | DOLE   | CFWO | E |       |      | in prep. | X | X | X | 52:36265 | 28-Sep-87 |
| <i>Dudleya cymosa</i> subsp. <i>ovatifolia</i>                    | Santa Monica Mountains              | DUCYOV | VFWO | T |       | F 99 | in prep. | X | X |   | 62:4172  | 29-Jan-97 |
| <i>Dudleya stolonifera</i>  | Laguna Beach live-forever           | DUST   | CFWO | T |       |      | in prep. |   | X |   | 63:54937 | 13-Oct-98 |
| <i>Eriastrum densifolium</i> subsp. <i>sanctorum</i>              | Santa Ana River woolly-star         | ERDESA | CFWO | E |       |      | in prep. |   | X | X | 52:36265 | 28-Sep-87 |
| <i>Erigeron parishii</i>  | Parish's daisy                      | ERPA   | CFWO | T | f-02  | D2   | 2009     |   |   | X | 59:43652 | 24-Aug-94 |
|   | southern mountain wild              |        |      |   |       |      |          |   |   |   |          |           |
| <i>Eriogonum kennedyi</i> var. <i>austromontanum</i>              | buckwheat                           | ERKEAU | CFWO | T | f-07  |      | 2008     |   |   | X | 63:49006 | 14-Sep-98 |
| <i>Eriogonum ovalifolium</i> var. <i>vineum</i>                   | Cushenbury buckwheat                | EROVVI | CFWO | E | f-02  | D2   | 2009     |   |   | X | 59:43652 | 24-Aug-94 |
| <i>Eryngium aristulatum</i> var. <i>parishii</i>                  | San Diego button celery             | ERARPA | CFWO | E |       | F 98 | in prep. |   |   | X | 58:41384 | 3-Aug-93  |
| <i>Fremontodendron mexicanum</i>                                  | Mexican flannelbush                 | FRME   | CFWO | E | f-07  |      | 2009     |   |   |   | 63:54956 | 13-Oct-98 |
| <i>Hazardia orcuttii</i>  | Orcutt's hazardia                   | HOAR   | CFWO | C |       |      |          |   |   |   | 69:24876 | 4-May-04  |
| <i>Helianthemum greenei</i>                                       | Island rush-rose                    | HEGR   | VFWO | T |       | F 00 | in prep. | X |   |   | 62:40954 | 31-Jul-97 |
| <i>Lithophragma maximum</i>                                       | San Clemente Island woodland        | LIMA   | CFWO | E |       | F 84 | 2007     | X |   |   | 62:42692 | 8-Aug-97  |
| <i>Malacothamnus clementinus</i>                                  | San Clemente Island bush            | MACL   | CFWO | E |       | F 84 | 2007     | X |   |   | 42:40682 | 11-Aug-77 |
| <i>Monardella linoides</i> subsp. <i>viminea</i>                  | willow monardella                   | MOLIVI | CFWO | E | f-06  |      | 2008     |   |   | X | 63:54937 | 13-Oct-98 |
| <i>Navarretia fossalis</i>  | spreading navarretia                | NAFO   | CFWO | T | f-05  | F 98 | 2009     | X |   | X | 63:54975 | 13-Oct-98 |
| <i>Orcuttia californica</i>                                       | California Orcutt grass             | ORCA   | CFWO | E |       | F 98 | in prep. | X |   | X | 58:41384 | 3-Aug-93  |
| <i>Pentachaeta lyonii</i>   | Lyon's pentachaeta                  | PELY   | VFWO | E |       | F 99 | 2008     | X |   |   | 62:4172  | 29-Jan-97 |
| <i>Phacelia stellaris</i>   | Brand's phacelia                    | PHST   | CFWO | C |       |      |          |   | X | X | 69:24876 | 4-May-04  |
| <i>Physaria (Lesquerella) kingii</i> subsp. <i>bernardina</i> [1] | San Bernardino Mountains bladderpod | PHKIBE | CFWO | E | f-02  | D2   | 2009     |   |   | X | 59:43652 | 24-Aug-94 |
| <i>Poa atropurpurea</i>   | San Bernardino bluegrass            | POAT   | CFWO | E | f-08  |      | 2008     |   | X | X | 63:49006 | 14-Sep-98 |
| <i>Pogogyne abramsii</i>  | San Diego mesa mint                 | POAB   | CFWO | E |       | F 98 | in prep. |   |   | X | 43:44809 | 28-Sep-78 |
| <i>Pogogyne nudiuscula</i>  | Otay mesa mint                      | PONU   | CFWO | E |       | F 98 | in prep. |   |   | X | 58:41384 | 3-Aug-93  |
| <i>Rorippa gambellii</i>  | Gambel's watercress                 | ROGA   | VFWO | E |       | F 98 | in prep. | X | X | X | 58:41378 | 3-Aug-93  |
| <i>Sibara filifolia</i>   | Santa Cruz Island rock-cress        | SIFI   | CFWO | E |       |      | 2006     | X |   |   | 62:42692 | 8-Aug-97  |
| <i>Sidalcea pedata</i>  | pedate checker-mallow               | SIPE   | CFWO | E |       | F 98 | in prep. |   |   | X | 49:34497 | 31-Aug-84 |
| <i>Taraxacum californicum</i>                                     | California taraxacum                | TACA   | CFWO | E | f-08  |      | 2008     |   |   | X | 63:49006 | 14-Sep-98 |
| <i>Thelypodium stenopetalum</i>                                   | slender-petaled mustard             | THST   | CFWO | E |       | F 98 | in prep. |   |   | X | 49:34497 | 31-Aug-84 |
| <i>Trichostema austromontanum</i> subsp. <i>compactum</i>         | Hidden Lake bluecurls               | TRAUCO | CFWO | T | np-07 |      | 2006     |   |   | X | 63:49006 | 14-Sep-98 |
| <i>Verbesina dissita</i>  | big-leaved crown beard              | VEDI   | CFWO | T |       |      | in prep. |   | X |   | 61:52370 | 7-Oct-96  |
| INVERTEBRATES   |                                     |        |      |   |       |      |          |   |   |   |          |           |
| <i>Branchinecta lynchi</i>  | vernal pool fairy shrimp            | VPFS   | SAC  | T | f-03  |      | 2007     |   |   | X | 59:48153 | 19-Sep-94 |

|   |                               |      |      |    |       |      |      |   |   |   |   |          |           |
|---|-------------------------------|------|------|----|-------|------|------|---|---|---|---|----------|-----------|
| <i>Branchinecta sandiegonensis</i>            | San Diego fairy shrimp        | SDFS | CFWO | E  | fr-07 | F 98 | 2008 |   | X |   | X | 62:4925  | 3-Feb-97  |
| <i>Dinacoma caseyi</i>                        | Casey's June beetle           | CJB  | CFWO | pE | p-09  |      |      |   |   |   | X | 74:32857 | 9-Jul-09  |
| <i>Euphilotes battoideis allyni</i>           | El Segundo blue butterfly     | ESB  | CFWO | E  |       | F 98 | 2008 | X |   |   |   | 41:22041 | 1-Jun-76  |
| <i>Euphydryas editha quino</i>                | Quino checkerspot butterfly   | QCB  | CFWO | E  | fr-09 | F 03 | 2009 |   | X | X | X | 62:2313  | 16-Jan-97 |
| <i>Glaucopsyche lygdamus palosverdesensis</i> | Palos Verdes blue butterfly   | PVB  | CFWO | E  | f-80  | F 84 | 2008 | X |   |   |   | 45:44939 | 2-Jul-80  |
| <i>Pyrgus ruralis lagunae</i>                 | Laguna Mountains skipper      | LMS  | CFWO | E  | f-06  |      | 2007 |   |   |   | X | 62:2313  | 16-Jan-97 |
| <i>Rhaphiomidas terminatus abdominalis</i>    | Delhi Sands flower-loving fly | DSF  | CFWO | E  |       | F 97 | 2008 |   | X | X |   | 58:49887 | 23-Sep-93 |
| <i>Streptocephalus woottoni</i>               | Riverside fairy shrimp        | RFS  | CFWO | E  | f-05  | F 98 | 2008 | X | X |   | X | 58:41391 | 3-Aug-93  |

**FISH**

|   |                                 |     |      |   |       |      |         |   |   |   |   |          |           |
|---|---------------------------------|-----|------|---|-------|------|---------|---|---|---|---|----------|-----------|
| <i>Catostomus santaanae</i>               | Santa Ana sucker                | SAS | CFWO | T | pr-09 |      | in prep | X | X | X | X | 65:19686 | 12-Apr-00 |
| <i>Cyprinodon macularius</i>              | desert pupfish                  |     | R02  | E | f-86  | F 93 |         |   |   | X | X | 51:10850 | 31-Mar-86 |
| <i>Eucyclogobius newberryi</i>            | tidewater goby                  | TWG | VFWO | E | fr-08 | D 04 | 2007    |   | X |   | X | 59:5494  | 4-Feb-94  |
| <i>Gasterosteus aculeatus williamsoni</i> | unarmored threespine            |     | VFWO | E | p-80  | F 85 | 2009    | X |   | X | X | 35:16047 | 13-Oct-70 |
| <i>Gila bicolor mohavensis</i>            | Mohave tui chub                 |     | VFWO | E |       | F 84 | 2009    |   |   | X |   | 35:16047 | 13-Oct-70 |
| <i>Gila elegans</i>                       | bonytail chub                   |     | R06  | E | f-94  | F 90 |         |   | X | X | X | 45:27713 | 23-Apr-80 |
| <i>Oncorhynchus mykiss</i>                | southern steelhead (So Cal DPS) |     | R09  | E |       |      |         | X | X |   | X | 71:833   | 5-Jan-06  |
| <i>Ptychocheilus lucius</i>               | Colorado squawfish              |     | R06  | E | f-94  | F 91 |         |   | X | X | X | 50:30194 | 24-Jul-85 |
| <i>Xyrauchen texanus</i>                  | razorback sucker                |     | R06  | E | f-94  |      |         |   | X | X | X | 56:54967 | 23-Oct-91 |

**AMPHIBIANS**

|   |                                  |      |      |   |       |      |      |   |   |   |   |          |           |
|---|----------------------------------|------|------|---|-------|------|------|---|---|---|---|----------|-----------|
| <i>Anaxyrus californicus</i> ( <i>B. microscaphus</i> c.) |                                  |      |      |   |       |      |      |   |   |   |   |          |           |
| [1]   | arroyo toad (a. southwestern t.) | ARTO | VFWO | E | pr-09 | F 99 | 2009 | X | X | X | X | 59:64866 | 16-Dec-94 |
| <i>Batrachoseps aridus</i>                                | desert slender salamander        | DSS  | CFWO | E |       | F 82 | 2009 |   |   |   | X | 38:14678 | 4-Jun-73  |
| <i>Rana draytoni</i>                                      | California red-legged frog       | CRLF | SAC  | T | pr-08 | F 02 |      | X | X | X | X | 61:25832 | 23-May-96 |
| <i>Rana muscosa</i> (So Cal DPS)                          | mountain yellow-legged frog      | MYLF | CFWO | E | f-06  |      |      | X |   | X | X | 67:44382 | 2-Jul-02  |

**REPTILES**

|                            |                              |       |      |    |      |      |          |   |   |   |   |          |           |
|----------------------------|------------------------------|-------|------|----|------|------|----------|---|---|---|---|----------|-----------|
| <i>Gopherus agassizii</i>  | desert tortoise              | DETO  |      | T  | f-94 | F 94 |          |   | X | X | X | 55:12191 | 2-Apr-90  |
| <i>Phrynosoma mcallii</i>  | flat-tailed horned lizard    | FTHL  | CFWO | pT |      |      |          |   |   | X | X | 58:62624 | 29-Nov-93 |
| <i>Uma inornata</i>        | Coachella Valley fringe-toed | CVFTL | CFWO | T  | f-80 | F 85 | in prep. |   |   | X |   | 45:63812 | 25-Sep-80 |
| <i>Xantusia riversiana</i> | island night lizard          | INL   | CFWO | T  |      | F 84 | 2006     | X |   |   |   | 42:40685 | 11-Aug-77 |

**BIRDS**

|                                   |                           |      |      |   |  |      |      |   |  |  |  |          |           |
|-----------------------------------|---------------------------|------|------|---|--|------|------|---|--|--|--|----------|-----------|
| <i>Amphispiza belli clementae</i> | San Clemente sage sparrow | SCSS | CFWO | T |  | F 84 | 2009 | X |  |  |  | 42:40685 | 11-Aug-77 |
|-----------------------------------|---------------------------|------|------|---|--|------|------|---|--|--|--|----------|-----------|

|  |                                |      |      |     |             |      |          |   |   |   |          |           |
|--|--------------------------------|------|------|-----|-------------|------|----------|---|---|---|----------|-----------|
| <i>Brachyramphus marmoratus</i>              | marbled murrelet               | MAMU | POR  | T   | pr-08       | F 97 |          | X |   | X | 57:45337 | 1-Oct-92  |
| <i>Charadrius alexandrinus nivosus</i>       | western snowy plover           | WSP  | SAC  | T   | fr-05       | D 01 | 2006     | X | X | X | 58:12874 | 5-Mar-93  |
| <i>Coccyzus americanus</i>                   | yellow-billed cuckoo           | YBCU | SAC  | C   |             |      |          | X | X | X | 66:38611 | 25-Jul-01 |
| <i>Empidonax traillii eximius</i>            | southwestern willow flycatcher | SWFL | R02  | E   | fr-05       | D    |          | X | X | X | 60:10715 | 27-Feb-95 |
| <i>Gymnogyps californianus</i>               | California condor              | CACO | VFO  | E   |             | F 96 |          | X | X | X | 61:54057 | 16-Oct-96 |
| <i>Haliaeetus leucocephalus</i>              | bald eagle                     | BAEA | R03  | PDM |             | F 86 |          | X | X | X | 60:36010 | 12-Jul-95 |
| <i>Lanius ludovicianus mearnsi</i>           | San Clemente loggerhead shrike | SCLS | CFWO | E   |             | F 84 | 2009     | X |   |   | 42:40685 | 11-Aug-77 |
| <i>Pelecanus occidentalis</i>                | brown pelican                  | BRPE | VFWO | PDM | pde-<br>--- | F 83 | 2007     | X | X | X | 50:4945  | 4-Feb-85  |
| <i>Phoebastria albatrus</i>                  | short-tailed albatross         | STAL | JFO  | E   |             |      |          | X | X | X | 65:46643 | 31-Jul-00 |
| <i>Polioptila californica californica</i>    | coastal California gnatcatcher | CAGN | CFWO | T   | fr-07       |      | in prep. | X | X | X | 58:16757 | 30-Mar-93 |
| <i>Rallus longirostris levipes</i>           | light-footed clapper rail      | LFCL | CFWO | E   |             | F 85 | 2009     | X | X | X | 35:16047 | 13-Oct-70 |
| <i>Rallus longirostris yumanensis</i>        | Yuma clapper rail              | YUCR | R02  | E   |             |      |          |   | X | X | 32:4001  | 11-Mar-67 |
| <i>Sterna (Sterna) antillarum browni</i> [1] | California least tern          | CLT  | CFWO | E   |             | F 85 | 2006     | X | X | X | 35:8495  | 2-Jun-70  |
| <i>Vireo bellii pusillus</i>                 | least Bell's vireo             | LBV  | CFWO | E   | fr-94       | D 98 | 2006     | X | X | X | 51:16482 | 2-May-86  |

**MAMMALS**

|   |                              |      |      |      |       |      |          |   |   |   |          |           |
|---|------------------------------|------|------|------|-------|------|----------|---|---|---|----------|-----------|
| <i>Dipodomys merriami parvus</i>          | San Bernardino kangaroo rat  | SBKR | CFWO | E    | fr-08 |      | 2009     | X | X | X | 63:51005 | 24-Sep-98 |
| <i>Dipodomys stephensi</i>                | Stephens' kangaroo rat       | SKR  | CFWO | E    |       | D 97 | in prep. | X | X | X | 53:38469 | 30-Sep-88 |
| <i>Enhydra lutris nereis</i>              | southern sea otter           | SSO  | VFO  | T/X* |       | D 00 |          | X | X | X | 52:29780 | 11-Aug-87 |
| <i>Ovis canadensis nelsoni</i>            | Peninsular bighorn sheep     | PBS  | CFWO | E    | fr-09 | F 00 | in prep. |   | X | X | 63:13134 | 18-Mar-98 |
| <i>Perognathus longimembris pacificus</i> | Pacific pocket mouse         | PPM  | CFWO | E    |       | F 98 | in prep. | X | X | X | 59:49752 | 29-Sep-94 |
| <i>Spermophilus tereticaudus chlorus</i>  | Palm Springs ground squirrel |      | CFWO | C    |       |      |          |   |   | X | 64:57534 | 25-Oct-99 |
| <i>Urocyon littoralis catalinae</i>       | Santa Catalina Island fox    | CAIF | CFWO | E    | D-05  |      |          | X |   |   | 69:10335 | 5-Mar-04  |

**Status:** E = Federally endangered; T = Federally threatened; C = Federal candidate for listing; P = proposed; PDM=subject to post delisting

**XN:** Experimental population; \* southern sea

**CH** = Critical Habitat: p = Proposed; f = Designated; np=Not Prudent; pr = Proposed Revised; fr = Final Revised; W\* = proposal

**RP** = Recovery Plan: F= Final, D= Draft

**County Reported:** LA = Los Angeles; O = Orange; SB = San Bernardino; Riv = Riverside; SD = San Diego; Imp =

**Note:** Santa Catalina Isl. and San Clemente

[1] Name under which the species was listed is in parentheses. This form should be cited at least in the beginning of a document, otherwise use the current name

March 1, 2010



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## **APPENDIX D.**

### **BLM Sensitive Species Lists**

#### **Rice Solar Energy Project Riverside County, CA**

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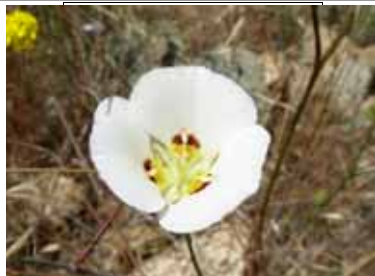






Lists are included from the BLM Palm Springs and Needles field offices.

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U.S. DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**  
California

**Special Status Plants of the Palm Springs Field Office**

This plant guide identifies the special status plants that are known to occur on public lands administered by the Bureau of Land Management, but they may only be suspected on land administered by the Alturas Field Office. To view a photograph and more information on an individual plant, click on the plant's common name below. To see a complete list of all plants, regardless of if it is known or suspected, [click here](#).

|   |  |  |
|---|--|--|
|  <p><b><u>Coachella Valley Milk-Vetch</u></b></p> <p><i>Astragalus lentiginosus</i> var. <i>coachellae</i></p> |  <p><b><u>Deane's Milk-Vetch</u></b></p> <p><i>Astragalus deanei</i></p>      |  <p><b><u>Dunn's Mariposa Lily</u></b></p> <p><i>Calochortus dunnii</i></p>                           |
|  <p><b><u>Encinitas Baccharis</u></b></p> <p><i>Baccharis vanessae</i></p>                                   |  <p><b><u>Gander's Pitcher-Sage</u></b></p> <p><i>Lepechinia ganderi</i></p> |  <p><b><u>Jacumba Milk-Vetch</u></b></p> <p><i>Astragalus douglasii</i> var. <i>perstrictus</i></p> |
|  <p><b><u>Lakeside Ceanothus</u></b></p>   |  <p><b><u>Little San Bernardino Mountains</u></b></p>                       |  <p><b><u>Many-Stemmed Dudleya</u></b></p>  |

|  |   |   |
|--|---|---|
| <i>Ceanothus cyaneus</i>   | <b><u>Linanthus</u></b><br><i>Linanthus maculatus</i>                                     | <i>Dudleya multicaulis</i>  |
|                           |          |    |
| <b><u>Mexican Flannelbush</u></b><br><i>Fremontodendron mexicanum</i>                                      | <b><u>Mountain Springs Bush Lupine</u></b><br><i>Lupinus excubitus</i> var. <i>medius</i> | <b><u>Munz Cholla</u></b><br><i>Opuntia munzii</i>                                    |
|                          |         |   |
| <b><u>Nevin's Barberry</u></b><br><i>Berberis nevinii</i>  | <b><u>Orcutt's Brodiaea</u></b><br><i>Brodiaea orcuttii</i>                               | <b><u>Otay Manzanita</u></b><br><i>Arctostaphylos otayensis</i>                       |
|                         |        |  |
| <b><u>Otay Tarplant</u></b><br><i>Deinandra conjugens</i> Also listed under ( <i>Hemizonia conjugens</i> ) | <b><u>Parish's Daisy</u></b><br><i>Erigeron parishii</i>                                  | <b><u>Parry's Tetracoccus</u></b><br><i>Tetracoccus dioicus</i>                       |
|  |   |   |



**Robison's  
Monardella**

*Monardella robisonii*



**Santa Ana River  
Woollystar**

*Eriastrum densifolium* ssp.  
*sanctorum*



**San Diego Milk-  
Vetch**

*Astragalus oocarpus*



**San Diego  
Thornmint**

*Acanthomintha ilicifolia*



**San Jacinto Valley  
Crownscale**

*Atriplex coronata* var. *notatior*



**Slender-Horned  
Spineflower**

*Dodecahema leptoceras*



**Tecate Cypress**

*Cupressus forbesii*



**Tecate Tarplant**

*Deinandra floribunda*



**Triple-Ribbed Milk-  
Vetch**

*Astragalus tricarinatus*



**Variegated**

## **Dudleya**

*Dudleya variegata*

Special status plants are those plants whose survival is of concern due to 1) their limited distribution, 2) low number of individuals and/or populations, and 3) potential threats to habitat. The Bureau of Land Management (BLM) uses the term "special status plants" to include: 1) Federal endangered, threatened, proposed and candidate species; 2) California State endangered, threatened, and rare species; and 3) BLM Sensitive plants. Sensitive plants are those species that do not occur on Federal or state lists, but which are designated by the BLM State Director for special management consideration.

It is BLM policy to manage for the conservation of special status plants and their associated habitats and to ensure that actions authorized, funded, or carried out do not contribute to the need to list any species as threatened or endangered.









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U.S. DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**  
California

**Special Status Plants of the Needles Field Office**

This plant guide identifies the special status plants that are known to occur on public lands administered by the Bureau of Land Management, but they may only be suspected on land administered by the Needles Field Office. To view a photograph and more information on an individual plant, click on the plant's common name below. To see a complete list of all plants, regardless of if it is known or suspected, [click here](#).

|  |   |  |
|--|---|--|
|  <p><b><u>Howe's Hedgehog Cactus</u></b></p> <p><i>Echinocereus engelmannii</i> var. <i>howei</i></p> |  <p><b><u>Jaeger's Ivesia</u></b></p> <p><i>Ivesia jaegeri</i></p>                                 |  <p><b><u>Kingston Bedstraw</u></b></p> <p><i>Galium hilendiae</i> ssp. <i>kingstonense</i></p>     |
|  <p><b><u>Kingston Mountains Ivesia</u></b></p> <p><i>Ivesia patellifera</i></p>                     |  <p><b><u>Pungent Glossopetalon</u></b></p> <p><i>Glossopetalon pungens</i></p>                   |  <p><b><u>Rusby's Desert-Mallow</u></b></p> <p><i>Sphaeralcea rusbyi</i> var. <i>eremicola</i></p> |
|  <p><b><u>Stephen's Beardtongue</u></b></p> <p><i>Penstemon stephensii</i></p>                      |  <p><b><u>Thorne's Buckwheat</u></b></p> <p><i>Eriogonum ericifolium</i> var. <i>thornei</i></p> |  |

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Land Management (BLM) uses the term "special status plants" to include: 1) Federal endangered, threatened, proposed and candidate species; 2) California State endangered, threatened, and rare species; and 3) BLM Sensitive plants. Sensitive plants are those species that do not occur on Federal or state lists, but which are designated by the BLM State Director for special management consideration.

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## APPENDIX E.

### Copy of CNPS Inventory of Rare and Endangered Plants, Database Query

#### Rice Solar Energy Project Riverside County, CA

| Family          | Species  |                             | CNPS Status |
|-----------------|--|-----------------------------|-------------|
|                 | Scientific Name                                      | Common Name                 |             |
| Acanthaceae     | <i>Carlowrightia arizonica</i>                       | Arizona carlowrightia       | List 2.2    |
| Amaranthaceae   | <i>Amaranthus watsonii</i>                           | Watson's amaranth           | List 4.3    |
| Apiaceae        | <i>Ammoselinum giganteum</i>                         | desert sand-parsley         | List 2.3    |
|                 | <i>Spermolepis echinata</i>                          | bristly scaleseed           | List 2.3    |
| Apodanthaceae   | <i>Pilostyles thurberi</i>                           | Thurber's pilostyles        | List 4.3    |
| Asclepiadaceae  | <i>Cynanchum utahense</i>                            | Utah cynanchum              | List 4.2    |
|                 | <i>Matelea parvifolia</i>                            | spearleaf                   | List 2.3    |
| Asteraceae      | <i>Ambrosia monogyra</i>                             | singlewhorl burrobrush      | List 2.2    |
|                 | <i>Chaenactis carphoclinia</i> var. <i>peirsonii</i> | Peirson's pincushion        | List 1B.3   |
|                 | <i>Erigeron oxyphyllus</i>                           | wand-like fleabane daisy    | List 2.3    |
|                 | <i>Hymenoxys odorata</i>                             | bitter hymenoxys            | List 2      |
|                 | <i>Malperia tenuis</i>                               | brown turbans               | List 2.3    |
|                 | <i>Stylocline sonorensis</i>                         | mesquite neststraw          | List 1A     |
|                 | <i>Xylorhiza cognata</i>                             | Mecca-aster                 | List 1B.2   |
|                 | <i>Xylorhiza orcuttii</i>                            | Orcutt's woody-aster        | List 1B.2   |
| Boraginaceae    | <i>Cryptantha costata</i>                            | ribbed cryptantha           | List 4.3    |
|                 | <i>Cryptantha ganderi</i>                            | Gander's cryptantha         | List 1B.1   |
|                 | <i>Cryptantha holoptera</i>                          | winged cryptantha           | List 4.3    |
| Brassicaceae    | <i>Lepidium flavum</i> var. <i>felipense</i>         | Borrego Valley pepper-grass | List 1B.2   |
|                 | <i>Lyrocarpa coulteri</i> var. <i>palmeri</i>        | Palmer's lyrepod            | List 4.3    |
| Burseraceae     | <i>Bursera microphylla</i>                           | little-leaf elephant tree   | List 2.3    |
| Cactaceae       | <i>Carnegiea gigantea</i>                            | saguaro                     | List 2.2    |
|                 | <i>Coryphantha alversonii</i>                        | foxtail cactus              | List 4.3    |
|                 | <i>Cylindropuntia xfosbergii</i>                     | pink cholla                 | List 3      |
|                 | <i>Grusonia</i> (= <i>Opuntia</i> ) <i>parishii</i>  | Parish's club-cholla        | List 2.2    |
|                 | <i>Mammillaria grahamii</i> var. <i>grahamii</i>     | Graham's fishhook cactus    | List 2.2    |
|                 | <i>Opuntia munzii</i>                                | Munz's cholla               | List 1B.3   |
|                 | <i>Opuntia wigginsii</i>                             | Wiggins' cholla             | List 3.3    |
|                 | <i>Opuntia wolfii</i>                                | Wolf's cholla               | List 4.3    |
| Capparaceae     | <i>Wislizenia refracta</i> ssp. <i>refracta</i>      | jackass-clover              | List 2.2    |
| Caryophyllaceae | <i>Loeflingia squarrosa</i> var. <i>artemisiarum</i> | sagebrush loeflingia        | List 2.2    |
| Cleomaceae      | <i>Wislizenia refracta</i> ssp. <i>palmeri</i>       | Palmer's jackass clover     | List 2.2    |
| Convolvulaceae  | <i>Cuscuta californica</i> var. <i>apiculata</i>     | pointed dodder              | List 3      |
| Crassulaceae    | <i>Dudleya alainae</i>                               | Banner dudleya              | List 3.2    |
| Euphorbiaceae   | <i>Chamaesyce abramsiana</i>                         | Abrams' spurge              | List 2.2    |
|                 | <i>Chamaesyce arizonica</i>                          | Arizona spurge              | List 2.3    |

|                 |   |                                       |           |
|-----------------|---|---------------------------------------|-----------|
|                 | <i>Chamaesyce platysperma</i>                         | flat-seeded spurge                    | List 1B.2 |
|                 | <i>Croton wigginsii</i>                               | Wiggins' croton                       | List 2.2  |
|                 | <i>Ditaxis claryana</i>                               | glandular ditaxis                     | List 2.2  |
|                 | <i>Ditaxis serrata</i> var. <i>californica</i>        | California ditaxis                    | List 3.2  |
|                 | <i>Tetracoccus hallii</i>                             | Hall's tetracoccus                    | List 4.3  |
| Fabaceae        | <i>Astragalus crotalariae</i>                         | Salton milk-vetch                     | List 4.3  |
|                 | <i>Astragalus lentiginosus</i> var. <i>borreganus</i> | Borrego milk-vetch                    | List 4.3  |
|                 | <i>Astragalus lentiginosus</i> var. <i>coachellae</i> | Coachella Valley milk-vetch           | List 1B.2 |
|                 | <i>Astragalus nutans</i>                              | Providence Mountains milk-vetch       | List 4.3  |
|                 | <i>Astragalus tricarinatus</i>                        | triple-ribbed milk-vetch              | List 1B.2 |
|                 | <i>Calliandra eriophylla</i>                          | pink fairy-duster                     | List 2.3  |
|                 | <i>Lotus haydonii</i>                                 | pygmy lotus                           | List 1B.3 |
|                 | <i>Lupinus excubitus</i> var. <i>medius</i>           | Mountain Springs bush lupine          | List 1B.3 |
|                 | <i>Marina orcuttii</i> var. <i>orcuttii</i>           | California marina                     | List 1B.3 |
|                 | <i>Phaseolus filiformis</i>                           | slender-stem bean                     | List 2.1  |
|                 | <i>Psoralea fremontii</i> var. <i>attenuatus</i>      | narrow-leaved psoralea                | List 2.3  |
|                 | <i>Senna covesii</i>                                  | Coves' cassia                         | List 2.2  |
| Koeberliniaceae | <i>Koeberlinia spinosa</i> ssp. <i>tenuispina</i>     | slender-spined all thorn              | List 2.2  |
| Lamiaceae       | <i>Salvia eremostachya</i>                            | desert sage                           | List 4.3  |
|                 | <i>Salvia greatae</i>                                 | Orocopia sage                         | List 1B.3 |
|                 | <i>Teucrium cubense</i> ssp. <i>depressum</i>         | dwarf germander                       | List 2.2  |
|                 | <i>Teucrium glandulosum</i>                           | desert germander                      | List 2.3  |
| Loasaceae       | <i>Eucnide rupestris</i>                              | annual rock-nettle                    | List 2.2  |
|                 | <i>Mentzelia hirsutissima</i>                         | hairy stickleaf                       | List 2.3  |
|                 | <i>Mentzelia puberula</i>                             | Darlington's blazing star             | List 2.2  |
| Malvaceae       | <i>Herissantia crispa</i>                             | curly herissantia                     | List 2.3  |
|                 | <i>Horsfordia alata</i>                               | pink velvet-mallow                    | List 4.3  |
|                 | <i>Horsfordia newberryi</i>                           | Newberry's velvet-mallow              | List 4.3  |
| Martyniaceae    | <i>Proboscidea althaeifolia</i>                       | desert unicorn-plant                  | List 4.3  |
| Nyctaginaceae   | <i>Acleisanthes longiflora</i>                        | angel trumpets                        | List 2.3  |
|                 | <i>Mirabilis tenuiloba</i>                            | slender-lobed four o'clock            | List 4.3  |
| Onagraceae      | <i>Camissonia arenaria</i>                            | sand evening-primrose                 | List 2.2  |
|                 | <i>Oenothera caespitosa</i> ssp. <i>crinita</i>       | caespitose evening-primrose           | List 4.2  |
| Poaceae         | <i>Digitaria californica</i>                          | Arizona cottontop                     | List 2.3  |
| Polemoniaceae   | <i>Ipomopsis effusa</i>                               | Baja California ipomopsis             | List 2.1  |
|                 | <i>Ipomopsis tenuifolia</i>                           | slender-leaved ipomopsis              | List 2.3  |
|                 | <i>Leptosiphon floribundus</i> ssp. <i>hallii</i>     | Santa Rosa Mountains leptosiphon      | List 1B.3 |
|                 | <i>Linanthus maculatus</i>                            | Little San Bernardino Mtns. linanthus | List 1B.2 |
| Polygonaceae    | <i>Nemacaulis denudata</i> var. <i>gracilis</i>       | slender cottonheads                   | List 2.2  |
| Ranunculaceae   | <i>Delphinium parishii</i> ssp. <i>subglobosum</i>    | Colorado Desert larkspur              | List 4.3  |
|                 | <i>Delphinium scaposum</i>                            | bare-stem larkspur                    | List 2.3  |
| Rhamnaceae      | <i>Colubrina californica</i>                          | Las Animas colubrina                  | List 2.3  |
|                 | <i>Condalia globosa</i> var. <i>pubescens</i>         | spiny abrojo                          | List 4.2  |
| Rubiaceae       | <i>Galium angustifolium</i> ssp. <i>borregoense</i>   | Borrego bedstraw                      | List 1B.3 |
|                 | <i>Galium angustifolium</i> ssp. <i>gracillimum</i>   | slender bedstraw                      | List 4.2  |

|                  |   |                           |          |
|------------------|---|---------------------------|----------|
| Scrophulariaceae | <i>Antirrhinum cyathiferum</i>                    | Deep Canyon snapdragon    | List 2.3 |
|                  | <i>Penstemon clevelandii</i> var. <i>connatus</i> | San Jacinto beardtongue   | List 4.3 |
|                  | <i>Penstemon thurberi</i>                         | Thurber's beardtongue     | List 4.2 |
|                  | <i>Stemodia durantifolia</i>                      | purple stemodia           | List 2.1 |
| Selaginellaceae  | <i>Selaginella eremophila</i>                     | desert spike-moss         | List 2.2 |
| Simaroubaceae    | <i>Castela emoryi</i>                             | Emory's crucifixion-thorn | List 2.3 |
| Solanaceae       | <i>Lycium parishii</i>                            | Parish's desert-thorn     | List 2.3 |
| Sterculiaceae    | <i>Ayenia compacta</i>                            | California ayenia         | List 2.3 |

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## **APPENDIX F.**

### Photographs

Rice Solar Energy Project  
Riverside County, CA

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Photo 1. View northwest of channel in north-central portion of main site. The remnants of a man-made berm at left of photo. 5 October 2010.



Photo 2. View north of channel bordered by *Ambrosia dumosa* in northeast portion of main site. Turtle Mtns. in background. 5 October 2010.



Photo 3. View east at creosote bush - white bursage scrub in eastern portion of main site. 4 October 2010.



Photo 4. View northeast at a Category 2 channel in white bursage scrub in southeast portion of main site. 3 October 2010.



Photo 5. View west along former airstrip in southeast portion of main site. 3 October 2010.



Photo 6. View west at creosote bush - white bursage scrub in southern portion of main site. Creosote bush in foreground; burro-weed in background. 5 October 2010.





Photo 7. View north of a wash in southern portion of main site. 5 October 2010.



Photo 8. View northeast at creosote bush - white bursage scrub in southwest portion of main site. 5 October 2010.



Photo 9. View south of a large wash in creosote bush - white bursage scrub in southwest portion of main site. 5 October 2010.



Photo 10. View north of a large wash in creosote bush - white bursage scrub in southwest portion of main site. 5 October 2010.



Photo 11. View north of a wash in creosote bush - white bursage scrub in western portion of main site. 5 October 2010.



Photo 12. View south of a wash in creosote bush - white bursage scrub in western portion of main site. 5 October 2010.



Photo 13. View south at a Category 2 wash in western portion of T-line corridor. 2 October 2010.



Photo 14. View north at a Category 2 wash along western portion of the T-line corridor. Turtle Mtns. in background. 2 October 2010.



Photo 15. View north at creosote bush - white bursage scrub in central portion of T-line corridor. Turtle Mtns. in background. 4 October 2010.



Photo 16. View southeast toward proposed substation site from central portion of T-line corridor. 4 October 2010.



Photo 17. View south showing network of small channels in creosote bush - white bursage scrub, in central portion of T-line corridor. 4 October 2010.



Photo 18. *Ditaxis neomexicana* in bloom in central portion of T-line corridor. 2 October 2010.





Photo 19. View southwest at a Category 2 wash in the eastern portion of the T-line corridor. 4 October 2010.



Photo 20. View of typical vegetation in T-line corridor. Green shrub in foreground is creosote bush; other shrubs are burro-weed. 4 October 2010.



Photo 21. View east at area of proposed substation from eastern terminus of T-line corridor. A small, silver cholla (*Opuntia echinocarpa*) in foreground. 4 October 2010.



Photo 22. View southwest at proposed substation site. 5 October 2010.



Photo 23. View northeast at proposed substation site. Utah cynanchum (*Cynanchum utahense*) occurs in shrubs along channel at left of photo. 5 October 2010.



Photo 24. Utah cynanchum in flower in vicinity of proposed substation. 5 October 2010.

## APPENDIX G.

### Species Evaluated Table

#### Rice Solar Energy Project Riverside County, CA

| Scientific Name/<br>Common Name   | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA  |
|---|--------------------------------|------------------------------|---------------------|---|---|
| <i>Abronia villosa</i> var. <i>aurita</i><br>chaparral sand-verbena   | --/ --                         | --/ 1B.1                     | 2, 5, 8             | Annual herb found in chaparral, coastal scrub, and desert dunes from 25 to 5,250 ft. Blooms January through September (CNPS 2010).  | Yes. See text.  |
| <i>Acanthomintha ilicifolia</i><br>San Diego thorn-mint   | T/ BLM Sensitive               | E/ 1B.2                      | 3                   | Annual herb found on clay substrates in chaparral, coastal scrub, Valley and foothill grassland, and vernal pools from 0 to 3,200 ft. Known from San Diego County and Baja California. Blooms April through June (CNPS 2010). Also known to occur in clay depressions on mesas and slopes and in coastal sage scrub, chaparral, and vernal pool communities (BLM 2010a).              | No. Suitable habitat does not occur in the BSA.   |
| <i>Acanthoscyphus</i><br>(= <i>Oxytheca</i> ) <i>parishii</i> var.<br><i>goodmaniana</i><br>Cushenbury oxytheca | E/ --                          | --/ 1B.1                     | 1                   | Annual herb found in pinyon and juniper woodland on sandy, carbonate substrate from 4,000 to 7,800 ft. Known from only 15 occurrences in San Bernardino County. Blooms May to October (CNPS 2010).  | No. Suitable habitat does not occur in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010. |
| <i>Acleisanthes longiflora</i><br>Angel trumpets  | --/ --                         | --/ 2.3                      | 6, 7, 8             | Perennial herb found on carbonate soils in Sonoran desert scrub. In CA, known only from one occurrence in the Maria Mountains in Riverside Co. at about 300 ft. Blooms in May (CNPS 2010). Also reported from dry places, generally on limestone from 30-8,200 ft (Baldwin et al. 2002). Reported in Flora of North America (Poole 2003), as blooming from February through November. | Yes. See text.  |
| <i>Allium munzii</i><br>Munz's onion  | E/ --                          | T/ 1B.1                      | 1                   | Bulbiferous herb found on mesic, clay substrates in chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, and Valley and foothill grassland from 900 to 3,600 ft. Known from Riverside County. Blooms March through May (CNPS 2010).  | No. Suitable habitat does not occur in the BSA.   |
| <i>Amaranthus watsonii</i><br>Watson's amaranth   | --/ --                         | --/ 4.3                      | 7                   | Annual herb found in Mojavean and Sonoran desert scrub from 66 to 5,580 ft. Known from Imperial, Los Angeles, and San Bernardino counties. Blooms April through September (CNPS 2010).  | Yes. See text   |

| Special-Status Species<br>Common Name                                   | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur<br>in the BSA   |
|---|--------------------------------|------------------------------|---------------------|--|--|
| <i>Ambrosia monogyra</i><br>Singlewhorl burrobrush                      | --/ --                         | --/ 2.2                      | 7                   | Perennial shrub found in chaparral and Sonoran desert scrub from 32 to 1,640 ft. Known from Riverside, San Bernardino, and San Diego counties. Blooms August through November (CNPS 2010).   | Yes. See text  |
| <i>Ambrosia pumila</i><br>San Diego ambrosia                            | E/ --                          | --/ 1B.1                     | 1                   | Rhizomatous herb found on disturbed, sometimes alkaline substrates in chaparral, coastal scrub, Valley and foothill grassland, and vernal pools from 0 to 1,400 ft. Known from Riverside and San Diego counties and from Baja California. Blooms April through October (CNPS 2010).  | No. Suitable habitat does not occur in the BSA.  |
| <i>Ammoselinum giganteum</i><br>Desert sand parsley                     | --/ --                         | --/ 2.3                      | 7, 8                | Annual herb found in Sonoran desert scrub from approximately 1,300 ft. Known from Riverside County. Blooms March through April (CNPS 2010).  | Yes. See text  |
| <i>Androstephium<br/>breviflorum</i><br>Small-flowered<br>androstephium | --/ --                         | --/ 2.2                      | 2, 6, 8             | Bulbiferous herb found in desert dunes and Mojavean desert scrub bajadas from 700 to 2,100 ft. In CA, known from Riverside and San Bernardino cos. Blooms March through April (CNPS 2010).   | Yes. See text.   |
| <i>Antirrhinum cyathiferum</i><br>Deep Canyon snapdragon                | --/ --                         | --/ 2.3                      | 7                   | Annual herb found in Mojavean and Sonoran desert scrub from 0 to 4,260 ft. In CA, known from Deep Canyon in Riverside County. Blooms February through April (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010. |
| <i>Arctostaphylos otayensis</i><br>Otay manzanita                       | --/BLM Sensitive               | --/ 1B.2                     | 3                   | Evergreen shrub found on meta-volcanic substrate in chaparral and cismontane woodland from 900 to 5,600 ft. Known from San Diego County. Blooms January through April (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010. |
| <i>Arenaria paludicola</i><br>Marsh sandwort                            | E/ --                          | E/ 1B.1                      | 1                   | Stoloniferous herb found in marshes and swamps in sandy openings from 10 to 560 ft. Known from only two natural occurrences in Black Lake Canyon and at Oso Flaco Lake in Los Angeles and San Luis Obispo counties. Uncertain or extirpated records also occur in San Bernardino, Santa Cruz, and San Francisco counties as well as Washington state. Blooms May through August (CNPS 2010). | No. Suitable habitat does not occur in the BSA.  |

| Special-Status Species<br>Common Name  | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA   |
|--|--------------------------------|------------------------------|---------------------|---|--|
| <i>Arenaria ursina</i><br>Bear Valley sandwort                               | T/ --                          | --/ 1B.1                     | 1                   | Perennial herb found in meadows and seeps, pebble (pavement) plain, and on mesic, rocky substrate in pinyon and juniper woodland communities from 5,900 to 9,500 ft. Known only from the vicinity of Big Bear and Baldwin lakes in the San Bernardino Mtns, San Bernardino County. Blooms May through August (CNPS 2010). | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010. |
| <i>Astragalus albens</i><br>Cushenbury milk-vetch                            | E/ --                          | --/ 1B.1                     | 1                   | Perennial herb found in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland usually on carbonate substrate (rarely granitic) from 3,600 to 6,600 ft. Known from fewer than 20 occurrences in San Bernardino County. Blooms March through June (CNPS 2010).                                       | No. The BSA is outside the elevation range of this species as cited in CNPS 2010.  |
| <i>Astragalus brauntonii</i><br>Braunton's milk-vetch                        | E/ --                          | --/ 1B.1                     | 1                   | Perennial herb found in recently burned or disturbed areas (generally on sandstone with carbonate layers) in chaparral, coastal scrub, and Valley and foothill grassland communities from 20 to 2,100 ft. Known from Los Angeles, Orange, Riverside, and Ventura counties. Blooms January through August (CNPS 2010).     | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010. |
| <i>Astragalus crotalariae</i><br>Salton milk-vetch                           | --/ --                         | --/ 4.3                      | 7                   | Perennial herb found in Sonoran desert scrub from -200 to 820 ft. Known from Imperial, Riverside, and San Diego counties. Blooms January through April (CNPS 2010).   | Yes. See text.   |
| <i>Astragalus deanei</i><br>Deane's milk-vetch                               | --/BLM Sensitive               | --/ 1B.1                     | 3                   | Perennial herb found in chaparral, cismontane woodland, coastal scrub, and riparian forest from 200 to 2,200 ft. Known from fewer than 15 occurrences in San Diego County. Blooms February through May (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010. |
| <i>Astragalus douglasii</i> var.<br><i>perstrictus</i><br>Jacumba milk-vetch | --/ BLM Sensitive              | --/ 1B.2                     | 3                   | Perennial herb found on rocky substrates in chaparral, cismontane woodland, pinyon and juniper woodland, riparian scrub, and Valley and foothill grassland from 2,900 to 4,500 ft. Known from San Diego County and Baja California. Blooms April through June (CNPS 2010).  | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010. |
| <i>Astragalus insularis</i> var.<br><i>harwoodii</i><br>Harwood's milk-vetch | --/ --                         | --/ 2.2                      | 2, 5, 8             | An annual herb found in desert dunes and sandy or gravelly Mojavean desert scrub from 0 to 2,300 ft. Blooms January through May. In CA, known from Imperial, Riverside, and San Diego counties. Also known from Arizona and Mexico (CNPS 2010).   | Yes. See text.   |

| Special-Status Species<br>Common Name   | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA   |
|---|--------------------------------|------------------------------|---------------------|---|--|
| <i>Astragalus jaegerianus</i><br>Lane Mountain milk-vetch                               | E/ --                          | --/ 1B.1                     | 1                   | Perennial herb found in Joshua tree woodland and Mojavean desert scrub on granitic sandy or gravelly substrate from 2,900 to 3,900 ft. Known from fewer than 10 occurrences in San Bernardino County totaling about 1,000 individual plants in 2001. Blooms April through June (CNPS 2010).   | No. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010.                               |
| <i>Astragalus lentiginosus</i><br>var. <i>borreganus</i><br>Borrego milk-vetch          | --/ --                         | --/ 4.3                      | 7, 8                | An annual herb found in Mojavean and Sonoran desert scrub from 98 to 885 ft. In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties (CNPS 2010). Blooms February through May.  | Yes. See text.   |
| <i>Astragalus lentiginosus</i><br>var. <i>coachellae</i><br>Coachella Valley milk-vetch | E/ BLM Sensitive               | --/ 1B.2                     | 1, 3, 7, 8          | Annual or perennial herb found on sandy substrates in desert dune and Sonoran desert scrub communities from 100 to 2,200 ft. Known from Riverside County. Blooms February through May (CNPS 2010).  | Yes. See text.   |
| <i>Astragalus nutans</i><br>Providence Mountains milk-vetch                             | --/ --                         | --/ 4.3                      | 7                   | Annual herb found in Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland, and Sonoran desert scrub from 1,475 to 6,400 ft. Known from Imperial, Inyo, Riverside, San Bernardino, and San Diego counties. Blooms March through June (occasionally in October) (CNPS 2010).  | No. Suitable habitat does not occur in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010.  |
| <i>Astragalus oocarpus</i><br>San Diego milk-vetch                                      | --/BLM Sensitive               | --/ 1B.2                     | 3                   | Perennial herb found in openings in chaparral and in cismontane woodland from 1,000 to 5,000 ft. Known from San Diego County (CNPS 2010). Also known to occur on dry brush slopes and in openings in chaparral and oak woodland (BLM 2010a). Blooms May through August (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010. |
| <i>Astragalus tricarinatus</i><br>Triple-ribbed milk-vetch                              | E/ BLM Sensitive               | --/ 1B.2                     | 1, 3, 7, 8          | Perennial herb found in Joshua tree woodland and Sonoran desert scrub on sandy or gravelly substrate from 1,500 to 3,900 ft. Known from fewer than 20 occurrences in San Bernardino and Riverside counties. Blooms February through May (CNPS 2010). Also known from desert dunes, creosote scrub, exposed rocky slopes, and canyon walls from 1,440-2660 ft (BLM 2010a). | Yes. See text.   |
| <i>Atriplex coronata</i> var. <i>notatior</i><br>San Jacinto Valley crownscale          | E/ BLM Sensitive               | --/ 1B.1                     | 1, 3                | Annual herb found on alkaline substrates in playa, Valley and foothill grassland, and vernal pool communities from 400 to 1,700 ft. Known from Kern and Riverside counties. Blooms April through August (CNPS 2010).  | No. Suitable habitat does not occur in the BSA.  |
| <i>Ayenia compacta</i><br>California ayenia   | --/ --                         | --/ 2.3                      | 7, 8                | Perennial herb found in Mojavean and Sonoran desert scrub from 500 to 3,590 ft. In CA, known from Riverside, San Bernardino, and San Diego counties. Blooms March through April (CNPS 2010).  | Yes. See text.   |

| Special-Status Species<br>Common Name                   | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur<br>in the BSA   |
|---|--------------------------------|------------------------------|---------------------|--|--|
| <i>Baccharis vanessae</i><br>Encinitas baccharis        | T/ BLM Sensitive               | R/ 1B.1                      | 3                   | Deciduous shrub found on sandstone substrates in maritime chaparral and cismontane woodland from 100 to 2,400 ft. Known from San Diego County. Blooms August through November (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010. |
| <i>Berberis nevinii</i><br>Nevin's barberry             | E/ BLM Sensitive               | E/ 1B.1                      | 1,3                 | Evergreen shrub found in chaparral, cismontane woodland, coastal scrub, and riparian scrub on sandy or gravelly substrate from 900 to 2,700 ft. Known from Los Angeles, Riverside, San Bernardino, and San Diego counties. Blooms March through June (CNPS 2010).  | No. Suitable habitat does not occur in the BSA.  |
| <i>Bouteloua trifida</i><br>Three-awned grass           | --/ --                         | --/ 2.3                      | 6, 8                | Perennial herb found in carbonate, rocky Mojavean desert scrub from 2,300 to 6,600 ft. In CA, known from Inyo and San Bernardino counties. Blooms May through September (CNPS 2010).   | Marginal. See text.  |
| <i>Brodiaea filifolia</i><br>Thread-leaved brodiaea     | T/ --                          | E/ 1B.1                      | 1                   | Bulbiferous herb found in chaparral, cismontane woodland, coastal scrub, playas, Valley and foothill grassland, vernal pools often on clay substrates, from 100 to 4,000 ft. Known from Los Angeles, Orange, Riverside, San Bernardino, San Diego, and San Luis Obispo counties. Blooms March through June (CNPS 2010).                          | No. Suitable habitat does not occur in the BSA.  |
| <i>Brodiaea orcuttii</i><br>Orcutt's brodiaea           | --/BLM Sensitive               | --/ 1B.1                     | 3                   | Bulbiferous herb found on mesic, clay substrates (sometimes on serpentinite) in closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, Valley and foothill grassland, and vernal pools from 0 to 5,600 ft. Known from Riverside and San Diego counties and from Baja California. Blooms May through July (CNPS 2010). | No. Suitable habitat does not occur in the BSA.  |
| <i>Bursera microphylla</i><br>Little-leaf elephant tree | --/ --                         | --/ 2.3                      | 7                   | Deciduous tree found in rocky Sonoran desert scrub from 650 to 2,300 ft. In CA, known from fewer than 20 occurrences in Imperial, Riverside, and San Diego counties. Blooms June through July (CNPS 2010).   | No. The BSA is outside the geographic range of this species.   |
| <i>Calliandra eriophylla</i><br>Pink fairy-duster       | --/ --                         | --/ 2.3                      | 6, 7, 8             | Deciduous shrub found in sandy or rocky Sonoran desert scrub from 400 to 4,950 ft. In CA, known from Imperial, Riverside, and San Diego counties. Blooms January through March (CNPS 2010).  | Yes, see text.   |
| <i>Calochortus dunnii</i><br>Dunn's mariposa lily       | --/ BLM Sensitive              | R/ 1B.2                      | 3                   | Bulbiferous herb found on gabbroic, meta-volcanic, or rocky substrates in closed-cone coniferous forest, chaparral, and Valley and foothill grassland from 1,200 to 6,100 ft. Known from San Diego County and Baja California. Blooms April through June (CNPS 2010).  | No. Suitable habitat does not occur in the BSA.  |



| Special-Status Species<br>Common Name                   | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA   |
|---|--------------------------------|------------------------------|---------------------|---|--|
| <i>Camissonia arenaria</i><br>Sand evening-primrose     | --/ --                         | --/ 2.2                      | 7, 8                | Annual/ perennial herb found in sandy or rocky Sonoran desert scrub from 230 to 3,000 ft. In CA, known from Imperial and Riverside counties. Blooms November through May (CNPS 2010).   | Yes, see text.   |
| <i>Carlowrightia arizonica</i><br>Arizona carlowrightia | --/ --                         | --/ 2.2                      | 7                   | Deciduous shrub found in Sonoran desert scrub from 770 to 1,410 ft. In CA, known from one population at Anza Borrego State Park and on adjacent private land in San Diego County. Blooms June through July, and uncommonly as early as April (CNPS 2010).   | No. The BSA is outside the geographic range of this species as cited in CNPS 2010.   |
| <i>Carnegiea gigantea</i><br>Saguaro                    | --/ --                         | --/ 2.2                      | 7                   | Stem succulent found in rocky Sonoran desert scrub from 165 to 4,920 ft. In CA, known from Imperial and San Bernardino counties. Blooms May through June (CNPS 2010).   | No. The BSA is outside the geographic range of this species as cited in CNPS 2010.   |
| <i>Castela emoryi</i><br>Emory's crucifixion-thorn      | --/ --                         | --/ 2.3                      | 2, 6, 7, 8          | Deciduous shrub found on gravelly substrates in Mojavean desert scrub, playas, and Sonoran desert scrub from 300 to 2,200 ft. In CA, known from Imperial, Inyo, Riverside, and San Bernardino counties. Blooms June through July, and uncommonly as early as April (CNPS 2010).                                   | Yes, see text.   |
| <i>Castilleja cinerea</i><br>Ash-gray Indian paintbrush | T/ --                          | --/ 1B.2                     | 1                   | Hemiparasitic perennial herb found in Mojavean desert scrub, meadows and seeps, pebble (pavement) plain, pinyon and juniper woodland, and on clay substrate in openings in upper montane coniferous forest from 5,900 to 9,300 ft. Known only from San Bernardino County. Blooms June through August (CNPS 2010). | No. The BSA is outside the elevation range of this species as cited in CNPS 2010.  |
| <i>Ceanothus cyaneus</i><br>Lakeside ceanothus          | --/BLM Sensitive               | --/ 1B.2                     | 3                   | Evergreen shrub found in closed-cone coniferous forest and chaparral from 700 to 2,500 ft. Known from San Diego County and Baja California. Uncertain records exist in Riverside County. Blooms April through June (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010. |
| <i>Ceanothus ophiochilus</i><br>Vail Lake ceanothus     | T/ --                          | E/ 1B.1                      | 1                   | Evergreen shrub found on gabbroic or pyroxenite-rich outcrops in chaparral from 1,900 to 3,500 ft. Known from only three occurrences near Vail Lake in Riverside County. Blooms February through March (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010. |
| <i>Chamaesyce abramsiana</i><br>Abram's spurge          | --/ --                         | --/ 2.2                      | 7, 8                | Annual herb found in sandy Mojavean and Sonoran desert scrub from -16 to 3,000 ft. Known from Imperial, Riverside, San Bernardino, and San Diego counties. Blooms September through November (CNPS 2010).   | Yes. See text.   |

| Special-Status Species<br>Common Name   | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur<br>in the BSA  |
|---|--------------------------------|------------------------------|---------------------|--|---|
| <i>Chamaesyce arizonica</i><br>Arizona spurge   | --/ --                         | --/ 2.3                      | 7, 8                | Perennial herb found in sandy Sonoran desert scrub from 165 to 985 ft. Known from Imperial, Riverside, and San Diego counties. Blooms March through April (CNPS 2010).   | Yes. See text.  |
| <i>Chamaesyce platysperma</i><br>Flat-seeded spurge   | --/ BLM Sensitive              | --/ 1B.2                     | 7, 8                | Annual herb found in desert dunes and Sonoran desert scrub from 213 to 335 ft. In CA, known from four herbarium collections (from Riverside, San Bernardino, and San Diego counties) and a 1987 collection from Imperial County. Blooms February through September (CNPS 2010).  | Yes. See text.  |
| <i>Chaenactis carphoclinia</i><br>var. <i>peirsonii</i><br>Peirson's pincushion                             | --/ --                         | --/ 1B.3                     | 7, 8                | Annual herb found in desert dunes and Sonoran desert scrub from 10 to 1,640 ft. In CA, known only from a few collections in the eastern Santa Rosa Mountains in San Diego and Imperial counties. Blooms March through April (CNPS 2010).   | No. The BSA is well outside the geographic range of this species as cited in CNPS 2010. |
| <i>Chorizanthe parryi</i> var.<br><i>fernandina</i><br>San Fernando Valley<br>spineflower                   | C/ --                          | E/ 1B.1                      | 1                   | Annual herb found on sandy substrate in coastal scrub and in various substrates in Valley and foothill grassland from 500 to 4,000 ft. Rediscovered in 1999 and now known from only three occurrences in Los Angeles and Ventura counties. Extirpated or uncertain records exist for Orange County. Blooms April through July (CNPS 2010). | No. Suitable habitat does not occur in the BSA.   |
| <i>Colubrina californica</i><br>Las Animas colubrina  | --/ --                         | --/ 2.3                      | 2, 7, 8             | Deciduous shrub found in Mojavean desert scrub and Sonoran desert scrub from 30 to 3,300 ft. Known from Imperial, Riverside, and San Diego counties. Blooms April through June (CNPS 2010).  | Yes. See text.  |
| <i>Condalia globosa</i> var.<br><i>pubescens</i><br>Spiny abrojo  | --/ --                         | --/ 4.2                      | 7, 8                | Deciduous shrub found in Sonoran desert scrub from 460 to 3,280 ft. Known from Imperial and Riverside counties. Blooms March through May (CNPS 2010).  | Yes. See text.  |
| <i>Coryphantha alversonii</i><br>(= <i>Escobaria vivipara</i> var.<br><i>alversonii</i> )<br>Foxtail cactus | --/ --                         | --/ 4.3                      | 2, 5, 7, 8          | Stem succulent found on sandy or rocky substrates (usually granitic) in Mojavean desert scrub, and Sonoran desert scrub from 200 to 5,100 ft. Known from Imperial, Riverside, and San Bernardino counties. Blooms April through June (CNPS 2010).  | Yes. See text.  |
| <i>Croton wigginsii</i><br>Wiggins' croton  | --/ --                         | R/ 2.2                       | 7                   | Perennial shrub found in desert dunes and Sonoran desert scrub from 165 to 330 ft. In CA, known from only two occurrences in Imperial County. Blooms March through May (CNPS 2010).  | Marginal. See text.   |
| <i>Cryptantha costata</i><br>Ribbed cryptantha  | --/ --                         | --/ 4.3                      | 7,8                 | Annual herb found in desert dunes and sandy Mojavean and Sonoran desert scrub from -195 to 1,640 ft. In CA, known from Imperial, Inyo, Riverside, San Bernardino, and San Diego counties. Blooms February through May (CNPS 2010).   | Yes. See text.  |

| Special-Status Species<br>Common Name                                 | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA  |
|---|--------------------------------|------------------------------|---------------------|---|---|
| <i>Cryptantha ganderi</i><br>Gander's cryptantha                      | --/ --                         | --/ 1B.1                     | 7, 8                | Annual herb found in desert dunes and sandy Sonoran desert scrub from 525 to 1,312 ft. In CA, known from approximately five occurrences in Imperial and San Diego counties. Blooms February through May (CNPS 2010).  | Marginal. See text.   |
| <i>Cryptantha holoptera</i><br>Winged cryptantha                      | --/ --                         | --/ 4.3                      | 7, 8                | Annual herb found in Mojavean and Sonoran desert scrub from 328 to 5,545 ft. In CA, known from Imperial, Inyo, Riverside, San Bernardino, and San Diego counties. Blooms March through April (CNPS 2010).   | Yes. See text.  |
| <i>Cynanchum utahense</i><br>Utah cynanchum                           | --/ --                         | --/ 4.2                      | 5, 7, 8             | Perennial herb found on sandy or gravelly substrates in Mojavean desert scrub and Sonoran desert scrub from 500 to 4,700 ft. Known from Imperial, Riverside, San Bernardino, and San Diego counties. Blooms April through June (CNPS 2010).                               | Yes. See text.  |
| <i>Cuscuta californica</i> var.<br><i>apiculata</i><br>Pointed dodder | --/ --                         | --/ 3                        | 7                   | Annual parasitic vine found in sandy Mojavean and Sonoran desert scrub from 0 to 1,640 ft. In CA, known from Riverside and San Bernardino counties. Blooms February through August (CNPS 2010).   | Yes. See text.  |
| <i>Cupressus</i> (=Callitropsis)<br><i>forbesii</i><br>Tecate cypress | --/BLM Sensitive               | --/ 1B.1                     | 3                   | Evergreen shrub found on clay, gabbroic, or meta-volcanic substrates in closed-cone coniferous forest and chaparral from 800 to 5,000 ft. Known from Orange, Riverside, and San Diego counties and from Baja California (CNPS 2010). Typically on dry slopes (BLM 2010a). | No. Suitable habitat does not occur in the BSA.   |
| <i>Cylindropuntia xfosbergii</i><br>Pink cholla                       | --/ --                         | --/ 3                        | 7                   | Stem succulent found in Sonoran desert scrub from 280 to 2,790 ft. In, CA, known from San Diego County. Blooms March through May (CNPS 2010).   | No. The BSA is well outside the geographic range of this species as cited in CNPS 2010. |
| <i>Deinandra</i> (=Hemizonia)<br><i>conjugens</i><br>Otay tarplant    | E/ BLM Sensitive               | E/ 1B.1                      | 3                   | Annual herb found on clay substrates in coastal scrub and Valley and foothill grassland from 0 to 1,000 ft. Known from San Diego County and Baja California. Blooms May through June (CNPS 2010).   | No. Suitable habitat does not occur in the BSA.   |
| <i>Deinandra</i> (=Hemizonia)<br><i>floribunda</i><br>Tecate tarplant | --/BLM Sensitive               | --/ 1B.2                     | 3                   | Annual herb found in chaparral and coastal scrub from 200 to 4,100 ft. Known from San Diego County and Baja California (CNPS 2010). Typically found on dry slopes and in valleys (BLM 2010a). Blooms August through October (CNPS 2010).                                  | No. Suitable habitat does not occur in the BSA.   |

| Special-Status Species<br>Common Name   | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur<br>in the BSA  |
|---|--------------------------------|------------------------------|---------------------|--|---|
| <i>Delphinium parishii</i> ssp.<br><i>subglobosum</i><br>Colorado Desert larkspur                   | --/ --                         | --/ 4.3                      | 7                   | Perennial herb found in chaparral, cismontane woodland, pinyon and juniper woodland, and Sonoran desert scrub from 1,970 to 5,900 ft. In CA, known from Imperial, Riverside, and San Bernardino counties. Blooms March through June (CNPS 2010).           | Marginal. See text.   |
| <i>Delphinium scaposum</i><br>Bare-stem larkspur  | --/ --                         | --/ 2.3                      | 7                   | Perennial herb found in rocky Sonoran desert scrub from 885 to 3,460 ft. In CA, known from three occurrences in the Whipple Mountains in San Bernardino County. Blooms March through April (CNPS 2010).  | Marginal. See text.   |
| <i>Digitaria californica</i><br>Arizona cottontop   | --/ --                         | --/ 2.3                      | 7                   | Perennial herb found in desert riparian areas in rocky Mojavean and Sonoran desert scrub from 950 to 4,900 ft. In CA, known from two occurrences in San Bernardino and San Diego counties. Blooms July through November (CNPS 2010).                       | No. Suitable habitat does not occur in the BSA.   |
| <i>Ditaxis claryana</i><br>Glandular ditaxis  | --/ --                         | --/ 2.2                      | 6, 7, 8             | Perennial herb found on sandy substrates in Mojavean desert scrub and Sonoran desert scrub from 0 to 1,550 ft. In CA, known from Imperial, Riverside, and San Bernardino counties. Blooms October through March (CNPS 2010).                               | Yes. See text.  |
| <i>Ditaxis serrata</i> var.<br><i>californica</i><br>California ditaxis                             | --/ --                         | --/ 3.2                      | 6, 7, 8             | Perennial herb found in Sonoran desert scrub from 100 to 3,300 ft. In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties. Blooms March through December (CNPS 2010).   | Yes. See text.  |
| <i>Dodecahema</i><br>(= <i>Centrostegia</i> )<br><i>leptoceras</i><br>Slender-horned<br>spineflower | E/ BLM Sensitive               | E/ 1B.1                      | 1, 3                | Annual herb found on sandy substrates in chaparral, cismontane woodland, and on alluvial fans in coastal scrub from 600 to 2,400 ft. Known from Los Angeles, Riverside, and San Bernardino counties. Blooms April through June (CNPS 2010).                | No. Suitable habitat does not occur in the BSA.   |
| <i>Dudleya alainae</i><br>Banner dudleya  | --/ --                         | --/ 3.2                      | 7                   | Perennial herb found in chaparral, lower montane coniferous forest, and rocky Sonoran desert scrub from 2,430 to 3,940 ft. Known from San Diego County. Blooms May through July (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010. |
| <i>Dudleya multicaulis</i><br>Many-stemmed dudleya  | --/BLM Sensitive               | --/ 1B.2                     | 3                   | Perennial herb found in chaparral, coastal scrub, and Valley and foothill grassland often on clay substrates from 0 to 2,600 ft. Known from Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties. Blooms April through July (CNPS 2010). | No. Suitable habitat does not occur in the BSA.   |

| Special-Status Species<br>Common Name   | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur<br>in the BSA  |
|---|--------------------------------|------------------------------|---------------------|--|---|
| <i>Dudleya variegata</i><br>Variegated dudleya                                    | --/BLM Sensitive               | --/ 1B.2                     | 3                   | Perennial herb found on clay substrates in chaparral, cismontane woodland, coastal scrub, Valley and foothill grassland, and vernal pool communities from 0 to 2,000 ft. Known from San Diego County and Baja California. Typically found on dry hillsides, stony places, and mesas (BLM 2010a). Blooms April through June (CNPS 2010).  | No. Suitable habitat does not occur in the BSA.   |
| <i>Echinocereus engelmannii</i><br>var. <i>howei</i><br>Howe's hedgehog cactus    | --/BLM Sensitive               | --/ 1B.1                     | 4                   | Stem succulent found in Mojavean desert scrub from 1,400 to 2,600 ft. Known from San Bernardino County. Blooms April through May (CNPS 2010).  | No. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010.                              |
| <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i><br>Santa Ana River woolly-star | E/ BLM Sensitive               | E/ 1B.1                      | 1, 3                | Perennial herb found on sandy or gravelly substrate in chaparral and on alluvial fans in coastal scrub from 500 to 2,000 ft. Known from Riverside and San Bernardino counties. Uncertain or extirpated occurrences occur in Orange County (CNPS 2010). Also known to occur in gravelly river beds, coastal sage scrub, and chaparral (BLM 2010a). Blooms May through September (CNPS 2010).  | No. Suitable habitat does not occur in the BSA.   |
| <i>Eriastrum harwoodii</i><br>Harwood's eriastrum                                 | --/ --                         | --/ 1B.2                     | 2, 8                | Annual herb found in desert dune communities from 600 to 3,100 ft. Known from fewer than 20 occurrences in Riverside, San Bernardino, and San Diego counties. Blooms March through June (CNPS 2010).   | Yes. See text.  |
| <i>Erigeron oxyphyllus</i><br>Wand-like fleabane daisy                            | --/ --                         | --/ 2.3                      | 7                   | Perennial herb found on dry rocky slopes and washes in Sonoran desert scrub from 2,145 to 2,600 ft. In CA, known only from the Whipple Mountains in San Bernardino County. Blooms May (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010. |
| <i>Erigeron parishii</i><br>Parish's daisy  | T/ BLM Sensitive               | --/ 1B.1                     | 1, 3                | Perennial herb usually found on carbonate substrate (sometimes granitic) in Mojavean desert scrub and pinyon and juniper woodland from 2,600 to 6,600 ft. Known from Riverside and San Bernardino counties (CNPS 2010). Also known to occur in upper montane coniferous forest. Occurs around the northern base of the San Bernardino Mountains near Cushenbury Canyon; in the Little San Bernardino Mountains; and in the hills around Yucca Valley (BLM 2010a). Blooms May through August (CNPS 2010). | No. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010.                              |

| Special-Status Species<br>Common Name  | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur<br>in the BSA  |
|--|--------------------------------|------------------------------|---------------------|--|---|
| <i>Eriogonum ericifolium</i><br>var. <i>thornei</i><br>Thorne's buckwheat                      | --/ BLM Sensitive              | E/ 1B.2                      | 4                   | Shrub found on gravelly substrates in pinyon and juniper woodland from 5,900 to 6,100 ft. Known only from two occurrences in the New York Mountains, San Bernardino County (CNPS 2010). Found on copper-rich gravel substrates in pinyon and juniper woodland (BLM 2010b). Blooms July through August (CNPS 2010). | No. Suitable habitat does not occur in the BSA.   |
| <i>Eriogonum kennedyi</i> var.<br><i>austromontanum</i><br>Southern mountain wild<br>buckwheat | T/ --                          | --/ 1B.2                     | 1                   | Perennial herb found on gravelly substrate in lower montane coniferous forest and in pebble (pavement) plains from 5,800 to 9,500 ft. Known from San Bernardino and Ventura counties. Blooms June through September (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is well outside the elevation range of the species (CNPS 2010).       |
| <i>Eriogonum ovalifolium</i><br>var. <i>vineum</i><br>Cushenbury buckwheat                     | E/ --                          | --/ 1B.1                     | 1                   | Perennial herb found on carbonate substrates in Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland from 4,500 to 8,100 ft. Known from San Bernardino County. Blooms May through August (CNPS 2010).  | No. The BSA is well outside the elevation range of this species as cited in CNPS 2010.  |
| <i>Eryngium aristulatum</i> var.<br><i>parishii</i><br>San Diego button celery                 | E/ --                          | E/ 1B.1                      | 1                   | Annual to perennial herb found on mesic substrates in coastal scrub, Valley and foothill grassland, and vernal pool communities from 0 to 2,100 ft. Known from Riverside and San Diego counties and from Baja California. Blooms April through June (CNPS 2010).   | No. Suitable habitat does not occur in the BSA.   |
| <i>Eucnide rupestris</i><br>Annual rock-nettle   | --/ --                         | --/ 2.2                      | 7                   | Annual herb found in Sonoran desert scrub from 1,640 to 1,970 ft. In CA, known from Imperial and San Diego counties. Blooms December through April (CNPS 2010).  | No. Suitable habitat does not occur in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010. |
| <i>Fremontodendron</i><br><i>mexicanum</i><br>Mexican flannelbush                              | E/ BLM Sensitive               | R/ 1B.1                      | 3                   | Evergreen shrub found on gabbroic, meta-volcanic, or serpentinite substrates in closed-cone coniferous forest, chaparral, and cismontane woodland from 0 to 2,400 ft. Known from San Diego County and Baja California. Blooms March through June (CNPS 2010).  | No. Suitable habitat does not occur in the BSA.   |
| <i>Galium angustifolium</i><br>ssp. <i>borregoense</i><br>Borrego bedstraw                     | --/--                          | R/ 1B.3                      | 7                   | Perennial herb found rocky Sonoran desert scrub from 1,150 to 4,100 ft. In CA, known from fewer than 10 occurrences in San Diego County. Blooms in March (CNPS 2010).  | No. The BSA is well outside the geographic range of this species as cited in CNPS 2010.                                       |
| <i>Galium angustifolium</i><br>ssp. <i>gracillimum</i><br>Slender bedstraw                     | --/--                          | --/ 4.2                      | 7                   | Perennial herb found in Joshua tree woodland and granitic rocky Sonoran desert scrub from 430 to 5,090 ft. In CA, known from Riverside and San Bernardino counties. Blooms in April through June (CNPS 2010).  | Marginal. See text.   |

| Special-Status Species<br>Common Name                                    | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA  |
|--|--------------------------------|------------------------------|---------------------|---|---|
| <i>Galium hilendiae</i> ssp.<br><i>kingstonense</i><br>Kingston bedstraw | --/BLM Sensitive               | --/ 1B.3                     | 4                   | Perennial herb found on rocky substrates in lower montane coniferous forest, and pinyon and juniper woodland from 3,900 to 6,900 ft. Known in CA from fewer than five occurrences in the Kingston Mountains, San Bernardino County. Also known from Nevada. Blooms in June (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic and elevation range of the species as cited in CNPS 2010. |
| <i>Glossopetalon pungens</i><br>Pungent glossopetalon                    | --/BLM Sensitive               | --/ 1B.2                     | 4                   | Deciduous shrub found on carbonate substrates in chaparral and pinyon and juniper woodland from 5,400 to 6,600 ft. Known in CA from only one occurrence in Forsellesia Cyn. in the Clark Mountains, San Bernardino County; also known from Nevada (CNPS 2010). Typical habitat also includes limestone cliffs (BLM 2010b). Blooms May through June (CNPS 2010). | No. Suitable habitat does not occur in the BSA. The BSA is well outside the elevation range of this species as cited in CNPS 2010.          |
| <i>Herissantia crispa</i><br>Curly herissantia                           | --/--                          | --/ 2.3                      | 7                   | Annual/ perennial herb found in Sonoran desert scrub from 2,295 to 2,375 ft. In CA, known from two occurrences at Mountain Springs Grade and Vallecito Wash in San Diego County. Blooms August through September and uncommonly in April (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010.               |
| <i>Horsfordia alata</i><br>Pink velvet mallow                            | --/--                          | --/ 4.3                      | 7, 8                | Perennial shrub found in rocky Sonoran desert scrub from 330 to 1,640 ft. In CA, known from Imperial and Riverside counties. Blooms February through December (CNPS 2010).  | Yes. See text.  |
| <i>Horsfordia newberryi</i><br>Newberry's velvet mallow                  | --/--                          | --/ 4.3                      | 7                   | Perennial shrub found in rocky Sonoran desert scrub from 10 to 2,625 ft. In CA, known from Imperial, Riverside and San Diego counties. Blooms February through December (CNPS 2010).  | Yes. See text.  |
| <i>Hymenoxys odorata</i><br>Bitter hymenoxys                             | --/ --                         | --/ 2                        | 2, 7, 8             | Annual herb found in riparian scrub and sandy Sonoran desert scrub from 150 to 500 ft. Known from fewer than 10 occurrences in California. Blooms February through November (CNPS 2010).  | Yes. See text.  |
| <i>Imperata brevifolia</i><br>California satintail                       | --/ --                         | --/ 2.1                      | 2, 8                | A rhizomatous herb found in mesic sites, alkali seeps, and riparian areas within chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps, and riparian scrub from 0 to 1,640 ft. Blooms September through May (CNPS 2010).   | No. Suitable habitat does not occur in the BSA.   |

| Special-Status Species<br>Common Name  | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA  |
|--|--------------------------------|------------------------------|---------------------|---|---|
| <i>Ipomopsis effusa</i><br>Baja California ipomopsis                             | --/ --                         | --/ 2.1                      | 7                   | Annual herb found in chaparral, and sandy Sonoran desert scrub from 0 to 328 ft. In CA, known from Pinto Wash, along the Mexican border in Imperial County. Considered a waif. Blooms April through June (CNPS 2010).   | Marginal. See text.   |
| <i>Ipomopsis tenuifolia</i><br>Slender-leaved ipomopsis                          | --/ --                         | --/ 2.3                      | 7                   | Perennial herb found in chaparral, pinyon and juniper woodland, and gravelly or rocky Sonoran desert scrub from 328 to 3,940 ft. In CA, known from Imperial and San Diego counties. Blooms March through May (CNPS 2010).   | Marginal. See text.   |
| <i>Ivesia jaegeri</i><br>Jaeger's ivesia   | --/BLM Sensitive               | --/ 1B.3                     | 4                   | Perennial herb found on carbonate and rocky substrates in pinyon and juniper woodland and upper montane coniferous forest from 6,000 to 11,900 ft. Known in CA from only two occurrences near Clark Mountain, San Bernardino County; also known from Nevada (CNPS 2010). Typical habitat also includes limestone crevices and vertical rocks (BLM 2010b). Blooms June through July (CNPS 2010). | No. Suitable habitat does not occur in the BSA. The BSA is well outside the elevation range of this species as cited in CNPS 2010.  |
| <i>Ivesia patellifera</i><br>Kingston Mountains ivesia                           | --/BLM Sensitive               | --/ 1B.3                     | 4                   | Perennial herb found on rocky and granitic substrates in pinyon and juniper woodland from 4,500 to 6,900 ft. Known from San Bernardino County. Blooms June through October (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is well outside the elevation range of this species as cited in CNPS 2010.  |
| <i>Koeberlinia spinosa</i> ssp.<br><i>tenuispina</i><br>Slender-spined all thorn | --/ --                         | --/ 2.2                      | 7                   | Deciduous shrub found in riparian woodland and Sonoran desert scrub from 490 to 1,675 ft. In CA, known from fewer than 10 occurrences in Imperial County. Blooms May through July (CNPS 2010).  | Marginal. See text.   |
| <i>Lepechinia ganderi</i><br>Gander's pitcher-sage                               | --/ BLM Sensitive              | --/ 1B.3                     | 3                   | Shrub found on gabbroic or meta-volcanic substrates in closed-cone coniferous forest, chaparral, coastal scrub, and Valley and foothill grassland from 1,000 to 3,300 ft. Known in CA from fewer than 20 occurrences in San Diego County. Also known from Baja California. Blooms June through July (CNPS 2010).  | No. Suitable habitat does not occur in the BSA. The BSA is well outside the geographic range of this species as cited in CNPS 2010. |
| <i>Lepidium flavum</i> var.<br><i>felipense</i><br>Borrego Valley pepper-grass   | --/ --                         | --/ 1B.2                     | 7                   | Annual herb found in pinyon and juniper woodland and Sonoran desert scrub from 1,490 to 2,755 ft. In CA, known from fewer than 10 occurrences in San Diego County. Blooms March through May (CNPS 2010).  | Marginal. See text.   |



| Special-Status Species<br>Common Name   | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur<br>in the BSA  |
|---|--------------------------------|------------------------------|---------------------|--|---|
| <i>Leptosiphon floribundus</i><br>ssp. <i>hallii</i><br>Santa Rosa Mountains<br>leptosiphon | --/ --                         | --/ 1B.3                     | 7                   | Perennial herb found in pinyon and juniper woodland and Sonoran desert scrub from 3,280 to 6,560 ft. In CA, known from the Santa Rosa Mountains in Riverside and San Diego counties. Blooms May through July (CNPS 2010).  | No. The BSA is well outside the geographic and elevation range of this species as cited in CNPS 2010. |
| <i>Linanthus maculatus</i><br>Little San Bernardino<br>Mountains linanthus                  | --/ BLM Sensitive              | --/ 1B.2                     | 3, 7, 8             | Annual herb found on sandy substrates in desert dune, Joshua tree woodland, Mojavean desert scrub, and Sonoran desert scrub communities from 600 to 6,900 ft. Known from Riverside, San Bernardino, and San Diego counties. Blooms March through May (CNPS 2010).              | Yes. See text.  |
| <i>Loeflingia squarrosa</i> var.<br><i>artemisiarum</i><br>Sagebrush loeflingia             | --/ --                         | --/ 2.2                      | 7                   | Annual herb found on sandy substrates in desert dunes, Great Basin scrub, and Sonoran desert scrub from 2,200 to 5,300 ft. Known from Inyo, Kern, Lassen, Los Angeles, and San Bernardino counties and from Nevada, Oregon, and Wyoming. Blooms April through May (CNPS 2010). | No. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010.      |
| <i>Lotus haydonii</i><br>Pygmy lotus  | --/ --                         | --/ 1B.3                     | 7                   | Perennial herb found in pinyon and juniper woodland and Sonoran desert scrub from 1,700 to 3,940 ft. In CA, known from Imperial and San Diego counties. Blooms January through June (CNPS 2010).   | Marginal. See text.   |
| <i>Lupinus excubitus</i> var.<br><i>medius</i><br>Mountain Springs bush<br>lupine           | --/ BLM Sensitive              | --/ 1B.3                     | 3, 7                | Shrub found in pinyon and juniper woodland and Sonoran desert scrub from 1,300 to 4,500 ft. Known from Imperial and San Diego counties and from Baja California. Blooms March through May (CNPS 2010).   | No. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010.      |
| <i>Lycium parishii</i><br>Parish's desert-thorn   | --/ --                         | --/ 2.3                      | 7                   | Perennial shrub found in coastal scrub and Sonoran desert scrub from 1,000 to 3,280 ft. In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties. Blooms March through April (CNPS 2010).   | Yes. See text.  |
| <i>Lyrocarpa coulteri</i> var.<br><i>palmeri</i><br>Palmer's lyreped                        | --/ --                         | --/ 4.3                      | 7                   | Perennial herb found in gravelly or rocky Sonoran desert scrub from 395 to 2,610 ft. In CA, known from Imperial and San Diego counties. Blooms December through April (CNPS 2010).   | Marginal. See text.   |
| <i>Malperia tenuis</i><br>Brown turbans   | --/ --                         | --/ 2.3                      | 7                   | Annual herb found in sandy Sonoran desert scrub from 50 to 1,100 ft. In CA, known from Imperial and San Diego counties. Blooms March through April (CNPS 2010).  | Marginal. See text.   |
| <i>Mammillaria grahamii</i><br>var. <i>grahamii</i><br>Graham's fishhook cactus             | --/ --                         | --/ 2.2                      | 7                   | Stem succulent found in gravelly or rocky Sonoran desert scrub from 985 to 2,950 ft. In CA, known from San Bernardino County. Blooms April through September (CNPS 2010).  | Marginal. See text.   |

| Special-Status Species<br>Common Name                                      | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA   |
|--|--------------------------------|------------------------------|---------------------|---|--|
| <i>Marina orcuttii</i> var.<br><i>orcuttii</i><br>California marina        | --/ --                         | --/ 1B.3                     | 7                   | Perennial herb found in chaparral, pinyon and juniper woodland, and rocky Sonoran desert scrub from 3,445 to 3,800 ft. In CA, known from two occurrences at Deep Canyon in the Santa Rosa Mountains in Riverside County. Blooms May through October (CNPS 2010).  | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010. |
| <i>Matelea parvifolia</i><br>Spearleaf                                     | --/ --                         | --/ 2.3                      | 7, 8                | Perennial herb found in Mojavean and Sonoran desert scrub from 1,445 to 3,595 ft. In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties. Blooms March through May (CNPS 2010).  | Marginal. See text.  |
| <i>Mentzelia hirsutissima</i><br>Hairy stickleaf                           | --/ --                         | --/ 2.3                      | 7                   | Perennial herb found in Mojavean and Sonoran desert scrub from 0 to 2,300 ft. In CA, known from Imperial and San Diego counties. Blooms March through May (CNPS 2010).  | Marginal. See text.  |
| <i>Mentzelia puberula</i><br>Argus blazing star                            | --/ --                         | --/ 2.2                      | 6, 7, 8             | Perennial herb found on sandy or rocky substrates in Mojavean desert scrub and Sonoran desert scrub from 300 to 4,200 ft. In CA, known from Imperial, Riverside, and San Bernardino counties. Habitat also reported as sandy crevices in cliffs or rocky slopes (Brokaw et al. 2009). Blooms March through May (CNPS 2010). | Yes. See text.   |
| <i>Mirabilis tenuiloba</i><br>Slender-lobed four o'clock                   | --/ --                         | --/ 4.3                      | 7                   | Perennial herb found in Sonoran desert scrub from 985 to 3,595 ft. In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties. Blooms March through May (CNPS 2010).   | Yes. See text.   |
| <i>Monardella robinsonii</i><br>Robinson's monardella                      | --/ BLM Sensitive              | --/ 1B.3                     | 3                   | A rhizomatous herb found in pinyon juniper woodland from 2,000 to 4,920 ft. Known from Riverside and San Bernardino counties. Blooms April through September and uncommonly in April and October (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010.                |
| <i>Navarretia fossalis</i><br>Spreading navarretia                         | T/ --                          | --/ 1B.1                     | 1                   | Annual herb found in chenopod scrub, playa, vernal pool, and assorted freshwater marsh and swamp communities from 0 to 4,300 ft. Known from Los Angeles, Riverside, San Diego, and San Luis Obispo counties and from Baja California. Blooms April through June (CNPS 2010).  | No. Suitable habitat does not occur in the BSA.  |
| <i>Nemacaulis denudata</i> var.<br><i>gracilis</i><br>Slender woolly-heads | --/ --                         | --/ 2.2                      | 2, 7, 8             | Annual herb found in coastal dunes, desert dunes, Sonoran desert scrub from -165 to 1,310 ft. In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties. Blooms April through May and occasionally March (CNPS 2010).   | Yes. See text.   |

| Special-Status Species<br>Common Name  | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA   |
|--|--------------------------------|------------------------------|---------------------|---|--|
| <i>Oenothera caespitosa</i> ssp.<br><i>crinita</i><br>Caespitose evening-<br>primrose          | --/ --                         | --/ 4.2                      | 7                   | Rhizomatous herb found in pinyon and juniper woodland, subalpine coniferous forest, and Sonoran desert scrub from 3,770 to 11,050 ft. In CA, known from Inyo and San Bernardino counties. Blooms June through September (CNPS 2010).                | No. Suitable habitat does not occur in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010.                |
| <i>Opuntia munzii</i><br>Munz cholla   | --/ BLM Sensitive              | --/ 1B.3                     | 3, 7                | Stem succulent found on sandy or gravelly substrate in Sonoran desert scrub from 400 to 2,000 ft. Known from only two occurrences in the Chocolate Mountains, Imperial and Riverside counties. Blooms in May (CNPS 2010).                           | No. The BSA is outside the geographic range of this species as cited in CNPS 2010.   |
| <i>Opuntia</i> (= <i>Grusonia</i> )<br><i>parishii</i><br>Parish's club-cholla (mat<br>cholla) | --/ --                         | --/ 2.2                      | 7                   | Stem succulent found in Joshua tree woodland, Mojavean desert scrub, and Sonoran desert scrub from 985 to 5,000 ft. In CA, known from Imperial, Riverside, and San Bernardino counties. Blooms May through June and occasional in July (CNPS 2010). | Yes. See text.   |
| <i>Opuntia wigginsii</i><br>Wiggins' cholla  | --/ --                         | --/ 3.3                      | 7, 8                | Stem succulent found in sandy Sonoran desert scrub from 100 to 2,900 ft. In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties. Blooms March (CNPS 2010).   | No. See text.  |
| <i>Opuntia wolfii</i><br>Wolf's cholla   | --/ --                         | --/ 4.3                      | 7                   | Stem succulent found in Sonoran desert scrub from 328 to 3,935 ft. In CA, known from Imperial and San Diego counties. Blooms March through May (CNPS 2010).   | Marginal. See text.  |
| <i>Orcuttia californica</i><br>California Orcutt grass   | E/ --                          | E/ 1B.1                      | 1                   | Annual herb found in vernal pools from 0 to 2,200 ft. Known from fewer than 20 occurrences in Los Angeles, Riverside, San Diego, and Ventura counties. Also known from Baja California. Blooms April through August (CNPS 2010).                    | No. Suitable habitat does not occur in the BSA.  |
| <i>Penstemon<br/>albomarginatus</i><br>White-margined<br>beardtongue                           | --/ --                         | --/ 1B.1                     | 7, 8                | Perennial herb found in stabilized desert dunes, Mojavean desert scrub from 2,100 to 3,495 ft. In CA, known from fewer than 20 occurrences San Bernardino County. Blooms March through May (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010. |
| <i>Penstemon clevelandii</i><br>var. <i>conatus</i><br>San Jacinto beardtongue                 | --/ --                         | --/ 4.3                      | 7                   | Perennial herb found in chaparral, pinyon and juniper woodland, and rocky Sonoran desert scrub from 1,312 to 4,920 ft. In CA, known from Imperial, Riverside, and San Diego counties. Blooms March through May (CNPS 2010).                         | Marginal. See text.  |

| Special-Status Species<br>Common Name  | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA   |
|--|--------------------------------|------------------------------|---------------------|---|--|
| <i>Penstemon stephensii</i><br>Stephens' beardtongue   | --/ BLM Sensitive              | --/ 1B.3                     | 4                   | Perennial herb found in Mojavean desert scrub and pinyon and juniper woodland usually on carbonate and rocky substrates from 3,800 to 6,100 ft. Known from Inyo and San Bernardino counties. Typical habitat also includes rocky slopes and sagebrush scrub (BLM 2010b). Blooms April through June (CNPS 2010).   | No. The BSA is outside the elevation range of this species as cited in CNPS 2010.  |
| <i>Penstemon thurberi</i><br>Thurber's beardtongue   | --/ --                         | --/ 4.2                      | 7                   | Perennial herb found in chaparral, Joshua tree woodland, pinyon and juniper woodland, and Sonoran desert scrub from 1,640 to 4,000 ft. In CA, known from Imperial, Riverside, San Bernardino and San Diego counties. Blooms May through July (CNPS 2010).   | Marginal. See text.  |
| <i>Phacelia stellaris</i><br>Brand's phacelia  | C/ --                          | --/ 1B.1                     | 1                   | Annual herb found in coastal dune and coastal scrub communities from 0 to 1,300 ft. Known from approximately 10 occurrences in San Diego County. Also known from Baja California. Extirpated or uncertain records also exist for Los Angeles County. Blooms March through June (CNPS 2010).   | No. Suitable habitat does not occur in the BSA.  |
| <i>Phaseolus filiformis</i><br>Slender-stem bean   | --/ --                         | --/ 2.1                      | 7                   | Perennial herb found in gravelly washes bordered by creosote bush-dominated rocky slopes in Sonoran desert scrub at 410 ft. In CA, known from one occurrence in the Coachella Valley in Riverside County. Blooms April (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.               |
| <i>Pholistoma auritum</i> var.<br><i>arizonicum</i><br>Arizona pholistoma  | --/ --                         | --/ 2.3                      | 6, 8                | Annual herb found in Mojavean desert scrub from 900 to 2,750 ft. In CA, known only from the Whipple Mountains in San Bernardino Co. Blooms March (CNPS 2010).   | Marginal. See text.  |
| <i>Physalis lobata</i><br>Lobed ground cherry  | --/ --                         | --/ 2.3                      | 6, 8                | Perennial herb found in playas and on decomposed granitic substrates in Mojavean desert scrub from 1,600 to 2,650 ft. In CA, known only from San Bernardino Co. Also reported as flowering sporadically all year with rains, with peak flowering September through January and peak fruiting October through March (Jones et al. 1979). Blooms September through January (sometimes in May; CNPS 2010). | Yes. See text.   |
| <i>Physaria</i> (=Lesquerella)<br><i>kingii</i> ssp. <i>bernardina</i><br>San Bernardino Mountains<br>bladderpod | E/ --                          | --/ 1B.1                     | 1                   | Perennial herb usually found on carbonate substrate in lower montane coniferous forest, pinyon and juniper woodland, and subalpine coniferous forest from 4,900 to 8,500 ft. Known from approximately five occurrences in the Big Bear Valley area in San Bernardino County. Blooms May through June (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010. |

| Special-Status Species<br>Common Name  | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA   |
|--|--------------------------------|------------------------------|---------------------|---|--|
| <i>Pilostyles thurberi</i><br>Thurber's pilostyles                                       | --/ --                         | --/ 4.3                      | 7                   | Parasitic perennial herb found growing inside the stems of <i>Psorothamnus</i> , especially <i>P. emoryi</i> in Sonoran desert scrub from 0 to 1,200 ft. In CA, known from Imperial, Riverside counties. Blooms January (CNPS 2010).  | Yes. See text.   |
| <i>Poa atropurpurea</i><br>San Bernardino bluegrass                                      | E/ --                          | --/ 1B.2                     | 1                   | Rhizomatous herb found on mesic substrates in meadow and seep communities from 4,400 to 8,000 ft. Known from approximately 20 occurrences in the San Bernardino Mountains, San Bernardino County and the Laguna Mountains, San Diego County. Blooms May (sometimes as early as April) through July (sometimes through August; CNPS 2010). | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010. |
| <i>Proboscidea althaeifolia</i><br>Desert unicorn plant                                  | --/ --                         | --/ 4.3                      | 7, 8                | Perennial herb found in sandy Sonoran desert scrub from 495 to 3,280 ft. In CA, known from Imperial, Riverside, and San Diego counties. Blooms May through August (CNPS 2010).  | Yes. See text.   |
| <i>Psorothamnus fremontii</i><br>var. <i>attenuatus</i><br>Narrow-leaved<br>psorothamnus | --/ --                         | --/ 2.3                      | 6, 7, 8             | Perennial shrub found on granitic and volcanic substrates in Sonoran desert scrub from 1,100 to 3,000 ft. In CA known only from the Whipple Mountains in San Bernardino Co. Blooms in April (CNPS 2010); observed by Sycamore Environmental botanists in bloom and fruit in June 2010 in the Whipple Mountains.                           | Yes. See text.   |
| <i>Rorippa</i> (=Nasturtium)<br><i>gambellii</i><br>Gambel's watercress                  | E/ --                          | E/ 1B.1                      | 1                   | Rhizomatous herb found in freshwater and brackish marshes and swamps from 0 to 1,100 ft. Known from Los Angeles, Orange, Santa Barbara, San Diego, and San Luis Obispo counties. Uncertain or extirpated records exist for San Bernardino County. Blooms April through October (CNPS 2010).   | No. Suitable habitat does not occur in the BSA.  |
| <i>Salvia eremostachya</i><br>desert sage  | --/ --                         | --/ 4.3                      | 7                   | Evergreen shrub found in rocky or gravelly Sonoran desert scrub from 2,295 to 4,595 ft. In CA, known from Riverside and San Diego counties. Blooms March through May (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the elevation range of this species as cited in CNPS 2010.                |
| <i>Salvia greatae</i><br>Orocopia sage   | --/ BLM Sensitive              | --/ 1B.3                     | 7, 8                | Evergreen shrub found in Mojavean and Sonoran desert scrub from -130 to 2,700 ft. In CA, known from Imperial, Riverside and San Diego counties. Blooms March through April (CNPS 2010).   | Yes. See text.   |
| <i>Selaginella eremophila</i><br>Desert spike-moss                                       | --/ --                         | --/ 2.2                      | 7                   | Rhizomatous herb found in gravelly or rocky Sonoran desert scrub from 655 to 2,950 ft. In CA, known from 20 occurrences in Riverside and San Diego counties. Blooms June and occasionally in May and July (CNPS 2010).  | No. Suitable habitat does not occur in the BSA.  |

|  |                   |          |         |  |  |
|--|-------------------|----------|---------|--|--|
| <i>Senna covesii</i><br>Coves' cassia                                    | --/ --            | --/ 2.2  | 6, 7, 8 | Perennial herb found in sandy Sonoran desert scrub from 1,000 to 3,550 ft. In CA, known from Imperial, Riverside, San Bernardino, and San Diego counties. Blooms March through June (CNPS 2010).   | Yes. See text.   |
| <i>Sidalcea pedata</i><br>Pedate checker-mallow                          | E/ --             | E/ 1B.1  | 1       | Perennial herb found on mesic substrates in meadow and seep communities and in pebble (pavement) plain communities from 5,200 to 8,200 ft. Known from approximately 20 occurrences in San Bernardino County. Blooms May through August (CNPS 2010).                        | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010. |
| <i>Spermolepis echinata</i><br>Bristly scaleseed                         | --/ --            | --/ 2.3  | 7       | Annual herb found in sandy or rocky Sonoran desert scrub from 196 to 4,920 ft. In CA, known from the Borrego Valley in San Diego County. Blooms March through April (CNPS 2010).   | Marginal. See text.  |
| <i>Sphaeralcea rusbyi</i> var. <i>eremicola</i><br>Rusby's desert-mallow | --/ BLM Sensitive | --/ 1B.2 | 4       | Perennial herb found in Joshua tree woodland and Mojavean desert scrub from 3,100 to 5,000 ft. Known from approximately 20 occurrences in Death Valley National Park in Inyo County and near Clark Mountain, San Bernardino County. Blooms March through June (CNPS 2010). | No. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010.   |
| <i>Stemodia durantifolia</i><br>Purple stemodia                          | --/ --            | --/ 2.1  | 7       | Perennial herb found in Sonoran desert scrub often mesic, sandy areas from 590 to 985 ft. In CA, known from Riverside and San Diego counties. Blooms January through December (CNPS 2010).   | Marginal. See text.  |
| <i>Stylocline sonorensis</i><br>Mesquite nest straw                      | --/ --            | --/ 1A   | 7, 8    | Annual herb found in sandy Sonoran desert scrub at 1,325 ft. In CA, known from a single collection (1930) at Hayfields Dry Lake in Riverside County. Blooms April (CNPS 2010). Presumed extinct in California.   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.               |
| <i>Taraxacum californicum</i><br>California dandelion                    | E/ --             | --/ 1B.1 | 1       | Perennial herb found on mesic substrates in meadow and seep communities from 5,300 to 9,200 ft. Known only from the San Bernardino Mountains, San Bernardino County. Blooms May through August (CNPS 2010).  | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010. |
| <i>Tetracoccus dioicus</i><br>Parry's tetracoccus                        | --/ BLM Sensitive | --/ 1B.2 | 3       | Deciduous shrub found in chaparral and coastal scrub communities from 500 to 3,300 ft. Known from Orange, Riverside, and San Diego counties and from Baja California. Typical habitat includes dry stony slopes (BLM 2010a). Blooms April through May (CNPS 2010).         | No. Suitable habitat does not occur in the BSA.  |
| <i>Tetracoccus hallii</i><br>Hall's tetracoccus                          | --/ --            | --/ 4.3  | 7       | Deciduous shrub found in Mojavean and Sonoran desert scrub from 100 to 3,940 ft. In CA, known from Imperial, Riverside, and San Bernardino counties. Blooms January through May (CNPS 2010).   | Yes. See text.   |

| Special-Status Species<br>Common Name   | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements  | Potential to Occur<br>in the BSA   |
|---|--------------------------------|------------------------------|---------------------|---|--|
| <i>Teucrium cubense</i> ssp.<br><i>depressum</i><br>Dwarf germander                           | --/ --                         | --/ 2.2                      | 6, 7, 8             | Annual herb found in desert dunes, playa margins, and Sonoran desert scrub from 150 to 1,350 ft. In CA, known from Imperial and Riverside cos. Blooms March through May, and uncommonly into September or November (CNPS 2010).   | Yes. See text.   |
| <i>Teucrium glandulosum</i><br>Desert germander   | --/ --                         | --/ 2.3                      | 6, 7, 8             | Perennial stoloniferous herb found on rocky substrate in Sonoran desert scrub from 1,300 to 2,600 ft. In CA, known only from the Whipple Mountains in San Bernardino Co. Habitat has also been described as rocky slopes and canyons (Baldwin et al. 2002). Blooms April through May (CNPS 2010). | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic range of this species as cited in CNPS 2010.               |
| <i>Thelypodium</i><br><i>stenopetalum</i> Slender-<br>petaled mustard                         | E/ --                          | E/ 1B.1                      | 1                   | Perennial herb found on alkaline, mesic substrates in meadow and seep communities from 5,200 to 8,300 ft. Known from approximately 10 occurrences in San Bernardino County. Blooms May through September (CNPS 2010).   | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010. |
| <i>Trichostema</i><br><i>austromontanum</i> ssp.<br><i>compactum</i><br>Hidden Lake bluecurls | T/ --                          | --/ 1B.1                     | 1                   | Annual herb found on seasonally submerged lake margins in upper montane coniferous forest from 7,800 to 8,600 ft. Known only from one occurrence at Hidden Lake in the San Jacinto Mountains, Riverside County. Blooms July through September (CNPS 2010).  | No. Suitable habitat does not occur in the BSA. The BSA is outside the geographic and elevation range of this species as cited in CNPS 2010. |
| <i>Wislizenia refracta</i> ssp.<br><i>palmeri</i><br>Palmer's jackass clover                  | --/ --                         | --/ 2.2                      | 7, 8                | Deciduous shrub found in chenopod scrub, Sonoran thorn woodland, and Sonoran desert scrub from 0 to 985 ft. In CA, known from Riverside, San Bernardino and San Diego counties. Blooms January through December (CNPS 2010).  | Yes. See text.   |
| <i>Wislizenia refracta</i> ssp.<br><i>refracta</i><br>Jackass clover                          | --/ --                         | --/ 2.2                      | 6, 7, 8             | Annual herb found in desert dunes, Mojavean desert scrub, playas, and Sonoran desert scrub from 1,950 to 2,650 ft. In CA, known from Riverside and San Bernardino counties. Blooms April through November (CNPS 2010).  | Marginal. See text.  |
| <i>Xylorhiza cognata</i><br>Mecca-aster   | --/ --                         | --/ 1B.2                     | 7                   | Perennial herb found in Sonoran desert scrub from 65 to 1,312 ft. In CA, known from the Indio Hills and Mecca Hills Imperial and Riverside counties. Blooms January through June (CNPS 2010).   | Marginal. See text.  |
| <i>Xylorhiza orcuttii</i><br>Orcutt's woody-aster   | --/ --                         | --/ 1B.2                     | 7                   | Perennial herb found in Sonoran desert scrub from 0 to 1,200 ft. In CA, known from Imperial and San Diego counties. Blooms March through April (CNPS 2010).   | Marginal. See text.  |

|   | Federal Status <sup>a, b</sup> | State Status <sup>a, b</sup> | Source <sup>c</sup> | Habitat Requirements   | Potential to Occur in the BSA   |
|---|--------------------------------|------------------------------|---------------------|--|---|
| <b>Natural Communities</b>  |                                |                              |                     |  |   |
| Coastal and Valley Freshwater Marsh   | --/ --                         | --/ --                       | 2                   | A permanently flooded freshwater marsh dominated by emergent perennial monocots 4-5m tall. Often lacks a significant current that allows deep, peaty soils to accumulate. Characteristic species include <i>Carex</i> sp., <i>Eleocharis</i> sp., <i>Scirpus</i> sp., <i>Typha</i> sp., and <i>Verbena bonariensis</i> . Most extensive in the upper portion of the Sacramento-San Joaquin River Delta. Commonly occurs in the Sacramento and San Joaquin valleys in river oxbows and other flood plain areas (Holland 1986).  | This community type does not occur in the BSA (or PSA).                   |
| Mesquite Bosque   | --/ --                         | --/ --                       | 2                   | An open to somewhat dense, drought-deciduous streamside thorn forest community. Park-like interiors maintained by regular flooding or fire. Understories historically open and dominated by annual and perennial grasses. Restricted to the lower Colorado River. Not widespread in CA and almost completely destroyed by agricultural development, flood control, and tamarisk invasion. More widespread in Arizona and northwestern mainland Mexico. Characteristic species include: <i>Amaranthus palmeri</i> , <i>Ambrosia dumosa</i> , <i>Atriplex canescens</i> , <i>Atriplex lentiformis</i> , <i>Atriplex polycarpa</i> , <i>Celtis reticulata</i> , <i>Cercidium floridum</i> , <i>Coldenia palmeri</i> , <i>Cucurbita</i> spp., <i>Larrea tridentata</i> , <i>Lycium</i> spp., <i>Prosopis glandulosa</i> , <i>Prosopis pubescens</i> , <i>Prosopis velutina</i> , <i>Sambucus mexicana</i> , <i>Sarcostemma</i> spp., and <i>Suaeda torreyana</i> (Holland 1986). | This community type does not occur in the BSA (or PSA).                   |
| Smoke Tree Woodland; <i>Psoralea argophylla</i> Woodland Alliance in Sawyer et al. (2009) | --/ --                         | --/ --                       | 5                   | A desert wash community dominated or co-dominated by <i>Psoralea argophylla</i> from 0 to 3,281 ft. Characteristic species include <i>Chilopsis linearis</i> , <i>Olneya tesota</i> , <i>Parkinsonia florida</i> , <i>Acacia greggii</i> , <i>Ambrosia salsola</i> , <i>Baccharis emoryi</i> , <i>Bebbia juncea</i> , <i>Chrysothamnus emoryi</i> , <i>Larrea tridentata</i> , and <i>Stephanomeria pauciflora</i> . Trees are less than 8 m tall and both the tree and shrub layers are open to intermittent. The herbaceous layer is sparse to seasonally abundant with annuals. Found commonly on Arroyos, in intermittently flooded channels and washes. This Alliance has a state rarity rank of S3 and is considered of high inventory priority to CNDDDB (DFG 2009b).   | This community type does not occur in the BSA, but does occur in the PSA. |



|  |        |        |   |   |   |
|--|--------|--------|---|---|---|
| Sonoran Cottonwood<br>Willow Riparian Forest | --/ -- | --/ -- | 2 | A broadleaved, winter-deciduous streamside forests reaching 60 feet tall. Dominated by <i>Populus fremontii</i> with dense understories of <i>Salix</i> spp. Formerly widespread along the lower Colorado River but has been mostly eliminated by flood control, agriculture, or Tamarisk invasion. Characteristic species include: <i>Arundo donax</i> , <i>Aster spinosus</i> , <i>Atriplex lentiformis</i> , <i>Baccharis glutinosa</i> , <i>Baccharis sarothroides</i> , <i>Phragmites australis</i> , <i>Pluchea sericea</i> , <i>Populus fremontii</i> , <i>Salix exigua</i> , <i>Salix gooddingii</i> , <i>Sesbania macrocarpa</i> , <i>Tamarix</i> spp. (Holland 1986). | This community type does not occur in the BSA (or PSA). |
|--|--------|--------|---|---|---|

<sup>a</sup> **Listing Status** Federal status determined from USFWS letter (USFWS 2010a and b). State status determined from DFG (2010a, b, and c). Codes used in table are:

E = Endangered; T = Threatened; P = Proposed; C = Candidate; R = California Rare; \* = Possibly extinct.

<sup>b</sup> **Other Codes** CNPS (2010); BLM status determined from BLM (2010a and b). Codes used in table are as follows:

**CNPS List** (plants only): **1A** = Presumed Extinct in CA; **1B** = Rare or Endangered (R/E) in CA and elsewhere; **2** = R/E in CA and more common elsewhere; **3** = Need more information; **4** = Plants of limited distribution.

**CNPS List Decimal Extensions:** **.1** = Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat); **.2** = Fairly endangered in CA (20-80% of occurrences threatened); **.3** = Not very endangered in CA (< 20% of occurrences threatened or no current threats known).

**BLM Sensitive:** BLM Sensitive plant species.

<sup>c</sup> **Sources** **1** = From USFWS letter (USFWS 2010a and b). **2** = From CNDDDB. **3** = BLM List for Palm Springs District (BLM 2010a). **4** = BLM List for Needles District (BLM 2010b). **5** = Observed or included by Sycamore Environmental. **6** = CEC Data Request #72 for RSEP Application for Certification. **7** = CNPS Inventory of Rare and Endangered Plants (CNPS 2010). **8** = CEC Staff Assessment (Sept 2010).

## **APPENDIX H.**

CNDDDB form for *Cynanchum utahense*

Rice Solar Energy Project  
Riverside County, CA

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For Office Use Only

Source Code \_\_\_\_\_ Quad Code \_\_\_\_\_  
Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mm/dd/yyyy): 10/04/2010

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Funastrum (=Cynanchum) utahense*

Common Name: Utah cynanchum

Species Found? ☒ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals 85 Subsequent Visit? ☐ yes ☒ no

Is this an existing NDDDB occurrence? ☒ no ☐ unk.  
Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_  
Number \_\_\_\_\_ Museum / Herbarium \_\_\_\_\_

Reporter: John Little, Ph.D., Chuck Hughes, Mike Bower

Address: Sycamore Environmental Consultants, Inc.  
6355 Riverside Blvd., Suite C, Sacramento, CA 95831

E-mail Address: john.little@sycamoreenv.com

Phone: (916) 427-0703

Plant Information

Phenology: 8% vegetative 2% flowering 90% fruiting

Animal Information

# adults # juveniles # larvae # egg masses # unknown  
☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

See attached map.

County: Riverside Landowner / Mgr.: BLM

Quad Name: Big Maria Mountains Northwest Elevation: 980 ft.

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: H ☐ M ☐ S ☐ Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: H ☐ M ☐ S ☐ GPS Make & Model \_\_\_\_\_

DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☐ Horizontal Accuracy \_\_\_\_\_ meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ OR Geographic (Latitude & Longitude) ☐

Coordinates:

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Plants are almost entirely rooted under and climbing up Ambrosia dumosa shrubs. All plants are along small, sandy ephemeral wash. Surrounding plant community is Larrea tridentata - Ambrosia dumosa shrubland.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☒ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use: Electric transmission line nearby. Occurrence is outside but near the corner of a designated wilderness area.

Visible disturbances: The single-lane, dirt Rice Valley Road bisects the wash containing the occurrence. Very little traffic on road.

Threats: New electric transmission line and substation planned nearby, but avoidance of occurrence likely possible.

Comments:

Determination: (check one or more, and fill in blanks)

- ☒ Keyed (cite reference): Hickman, ed., 1993  
☐ Compared with specimen housed at: \_\_\_\_\_  
☒ Compared with photo / drawing in: Calphotos  
☐ By another person (name): \_\_\_\_\_  
☒ Other: Compared with reference population elsewhere in Rice Valley.

Photographs: (check one or more)

Slide Print Digital  
Plant / animal ☐ ☐ ☒  
Habitat ☐ ☐ ☒  
Diagnostic feature ☐ ☐ ☒

May we obtain duplicates at our expense? yes ☒ no ☐

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BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT  
COMMISSION OF THE STATE OF CALIFORNIA  
1516 NINTH STREET, SACRAMENTO, CA 95814  
1-800-822-6228 – [WWW.ENERGY.CA.GOV](http://WWW.ENERGY.CA.GOV)

**APPLICATION FOR CERTIFICATION  
FOR THE *RICE SOLAR ENERGY POWER  
PLANT PROJECT***

**Docket No. 09-AFC-10**

***PROOF OF SERVICE***  
**(Revised 8/5/2010)**

**APPLICANT**

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## DECLARATION OF SERVICE

I, Mary Finn, declare that on October 13, 2010, I served and filed copies of the attached Rice Solar Energy Project (09-AFC-10) Fall 2010 Supplemental Botanical Inventory Report dated 10/12/10. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:

[\[http://www.energy.ca.gov/sitingcases/ricesolar\]](http://www.energy.ca.gov/sitingcases/ricesolar).

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

**(Check all that Apply)**

### FOR SERVICE TO ALL OTHER PARTIES:

x \_\_\_\_\_ sent electronically to all email addresses on the Proof of Service list;

\_\_\_\_\_ by personal delivery:

\_\_\_\_\_ by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "email preferred."

**AND**

### FOR FILING WITH THE ENERGY COMMISSION:

x \_\_\_\_\_ sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (preferred method);

**OR**

\_\_\_\_\_ depositing in the mail an original and 12 paper copies, as follows:

### **CALIFORNIA ENERGY COMMISSION**

Attn: Docket No. 09-AFC-10

1516 Ninth Street, MS-4

Sacramento, CA 95814-5512

[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.



Mary Finn