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CH2MHILL

July 21, 2010

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

Subject: Rice Solar Energy Project (09-AFC-10)
Response to CEC Staff Data Request #72 – Spring 2010 Supplemental Botanical Inventory Report dated July 20, 2010

Dear Mr. Kessler:

Attached please find one hardcopy of Rice Solar Energy, LLC's response to the CEC Staff Data Request #72 – Spring 2010 Supplemental Botanical Inventory Report dated July 20, 2010.

If you have any questions about this matter, please contact me at (916) 286-0278 or Sarah Madams at (916) 286-0249.

Sincerely,

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

cc: POS List
Project File

Spring 2010, Supplemental Botanical Inventory Report

for the

Rice Solar Energy Project

Riverside County, CA

20 July 2010

SYCAMORE

ENVIRONMENTAL CONSULTANTS, INC.

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Spring 2010, Supplemental Botanical Inventory Report
for the
Rice Solar Energy Project

Riverside County, CA

Prepared by:

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20 July 2010

Spring 2010, Supplemental Botanical Inventory Report for the Rice Solar Energy Project

Riverside County, CA

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APPENDICES

I. EXECUTIVE SUMMARY

Supplementary botanical surveys were conducted for the Rice Solar Energy Project in Riverside County, CA, in June and July 2010. The 2,897.97 ac project study area (PSA) consists of two areas, the proposed plant site (2,559.52 ac) and a ± 10 mi long transmission line corridor (T-line; ± 338.45ac). The PSA provides suitable habitat for 21 special-status plant species. No federal or state listed plants were observed in the PSA during surveys conducted in June and July 2010. No other special-status plant species were observed in the PSA during the 2010 botanical surveys.

Smoke Tree Woodland occurs in the PSA (5.17 ac) and has a state rarity ranking of S3. The California Natural Diversity Data Base (CNDDB) considers biological communities with state rarity rankings of S1-S3 to be of "high inventory priority" (DFG 2009b). A community with an S3 ranking is considered "rare and threatened" throughout its range by Sawyer et al. (2009). No other special-status communities occur in the PSA. No special-status species were observed in the PSA in 2010.

II. INTRODUCTION

A. Purpose of Report

The purpose of this report is to document the results of late spring botanical surveys conducted to identify special-status plants that occur in the PSA. This report was prepared under contract to CH2M Hill, Inc., Sacramento, CA. The project contact is Doug Davy, Ph.D.

B. Project Location

The 2,897.97 ac PSA 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 PSA occurs on portions of three USGS quads, Rice, Grommet, and Big Maria Mountains Northwest (Table 1). The PSA consists of two areas, the proposed plant site (2,559.52 ac) and a T-line corridor (338.45 ac). The plant site is located on privately owned property and the T-line corridor occurs on land managed by the Palm Springs-South Coast Field Office of the Bureau of Land Management (BLM). The PSA 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 PSA.

Table 1. Project USGS quads.

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

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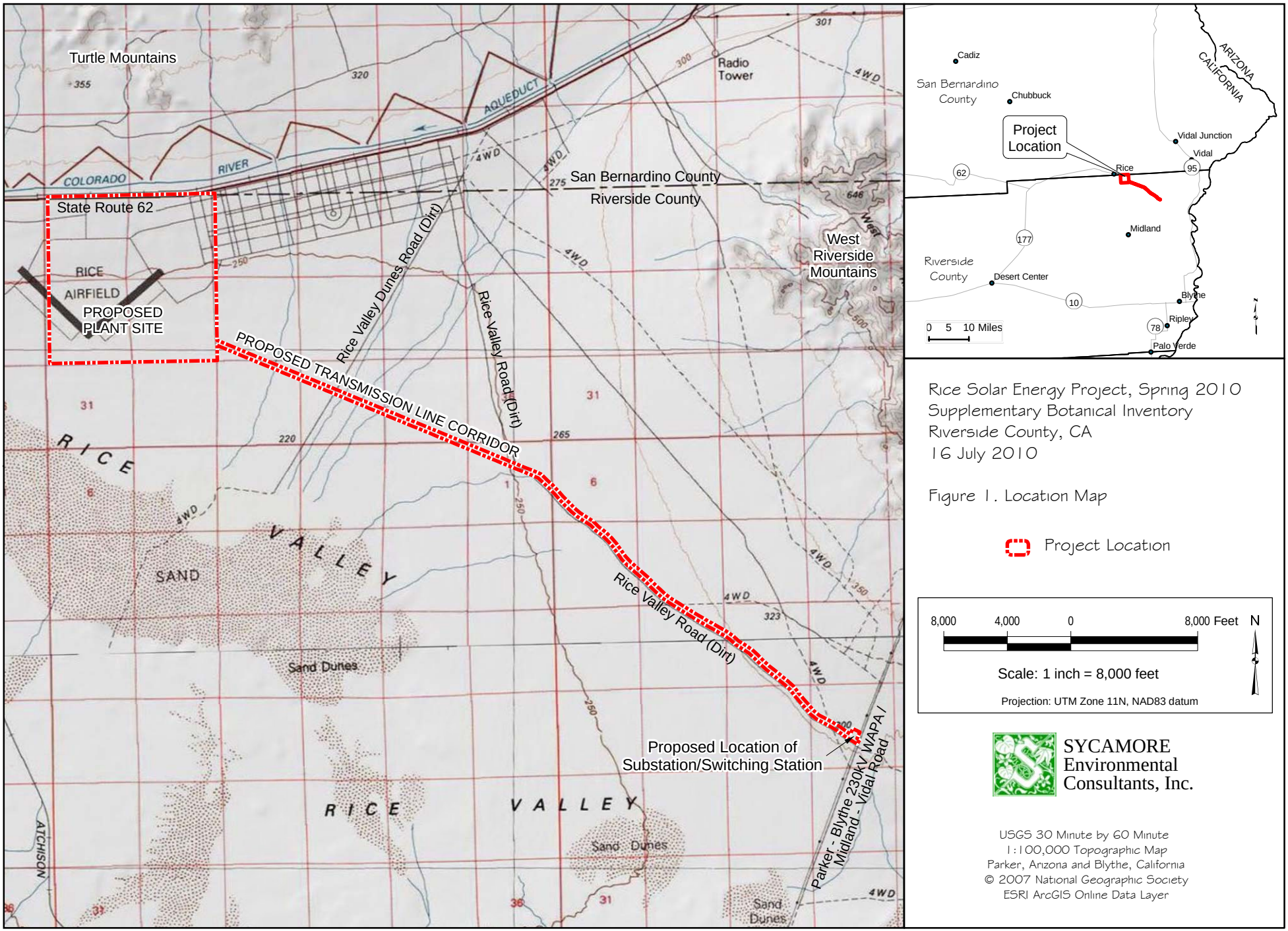

Rice Solar Energy Project, Spring 2010
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Figure 1. Location Map

Project Location

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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

08099RiceSpring2010BotInv_Fig1LocationMap.mxd

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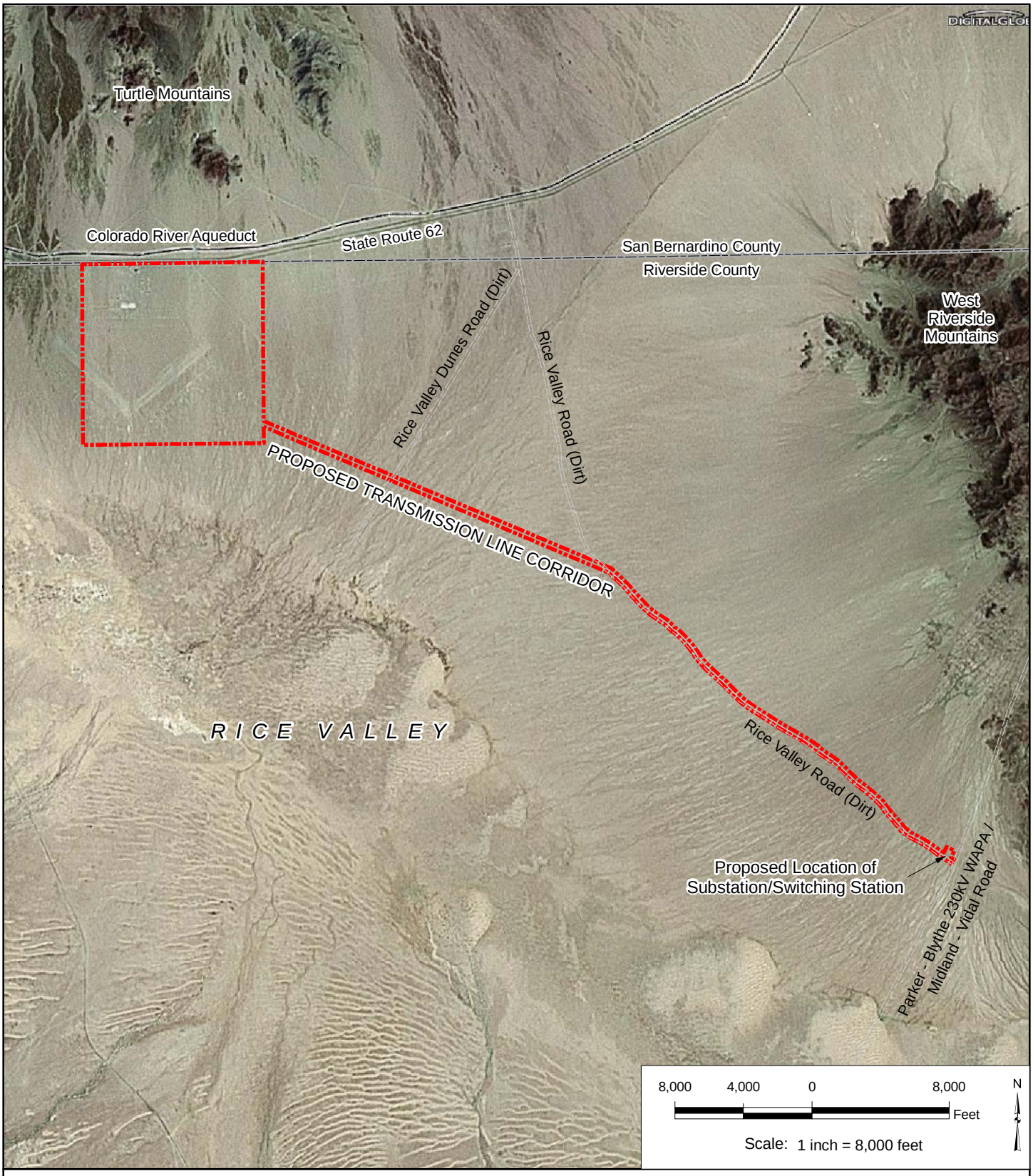

Rice Solar Energy Project, Spring 2010
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Project Location

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Figure 2. Aerial Photograph

Aerial Photograph:
1 January 1999

08099RiceSpring2010BotInv_Fig2AerialPhoto.mxd

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C. Project Description

The Rice Solar Energy Project (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 kilovolts (kV). The transmission line will require construction of 4.6 mi of new, unpaved access road and will use of 5.4 mi of existing dirt roads. A substation with a footprint approximately 300 ft by 400 ft is planned to be constructed where the transmission line connects to Western's existing 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 PSA, the results of which are summarized in a separate report (Sycamore Environmental 2009). In February and March 2010, Sycamore Environmental conducted a jurisdictional delineation of the PSA (Sycamore Environmental 2010). During the delineation field work, additional data regarding biological communities occurring in the PSA were collected and used to complete the CNPS Rapid Assessment Protocol data sheets (see Section IV.C).

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 (CNDDB, 1 May 2010 version; DFG 2010c) was conducted for the Rice, Grommet, and Big Maria Mountains Northwest quads and the 12 adjacent USGS

quads to determine known records of special-status species in or near the PSA. A CNDDB 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 PSA.

Sablon	Horn Springs	Vidal Northwest	Vidal Junction
Arica Mountains	**Rice**	**Grommet**	Vidal
Little Maria Mountains	Styx	**Big Maria Mountains Northwest**	Big Maria Mountains Northeast
	Inca	Big Maria Mountains Southwest	Big Maria Mountains Southeast

The proposed plant site portion of the PSA is located on privately owned property and is located in a portion Riverside County that is administered by the Carlsbad Fish and Wildlife Office (CFWO). San Bernardino County is located immediately north of the PSA and is in an area administered by the Ventura Fish and Wildlife Office (VFWO). Because the PSA is immediately adjacent to the area of responsibility of 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 PSA is administered by the Needles Field Office of the BLM. Because the PSA is immediately adjacent to the area administered by the Needles Field Office, Sycamore Environmental obtained lists from both the Palm Springs and Needles field offices that 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.

C. Survey Dates and Personnel

The first survey event was conducted by R. John Little, Ph.D, Charles Hughes, M.S., and Michael Bower, M.S. from 11 to 16 June 2010. A ± 2.0 mi segment of the eastern half of the T-line corridor was surveyed by R. John Little, Ph.D, Michael Bower, M.S., and Jessica Easley on 15 July 2010. A total of approximately 114 person-hours were spent in the field during the two survey events.

D. Survey Methods

During the 2010 botanical surveys of the 2,560 ac proposed plant site, all transects were oriented east-west. (During the 2009 spring survey, most transects were oriented north-south.) The 2010 surveys were conducted by three botanists who walked parallel transects throughout the proposed plant site. The botanists also walked parallel transects within the ± 10 mi long T-line line corridor to search for special-status plants. Spacing between transects was approximately 200 ft on the proposed plant site portion of the PSA and approximately 75 ft along the transmission line corridor. Survey coverage for the entire PSA was 100%.

The location of PSA boundaries for the proposed plant site were determined using GIS boundary data provided by CH2M Hill that had been uploaded onto a Trimble GeoXT GPS unit. The T-line corridor boundaries were determined using GIS boundary data provided by CH2M Hill that had been uploaded onto a Trimble GeoXT GPS unit.

All plant species observed were either identified on-site or were collected and identified later. Voucher specimens were collected of most species observed in the PSA during the spring 2009 surveys (Sycamore Environmental 2009). During the June 2010 surveys, additional voucher specimens were collected of some species previously collected as well as some of the species not observed in 2009 (see Section V). Appendix A lists the plant species observed.

On 15 June 2010, Sycamore botanists visited the Whipple Mountains approximately 25 air miles northeast of the PSA to search for special-status plant species known to occur there.

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 PSA is located north-northwest of the City of Blythe in northeast Riverside County. Elevation in the PSA ranges from approximately 740 to 1,000 ft above sea level. Topography in the PSA consists of generally flat to gently sloping terrain. Land use surrounding the PSA 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 PSA (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 PSA 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 were observed in the PSA during surveys conducted by Sycamore Environmental in 2009 and 2010.) The series descriptions below are from the NRCS official soil series descriptions (NRCS 2010). Figure 3 is a soils map.

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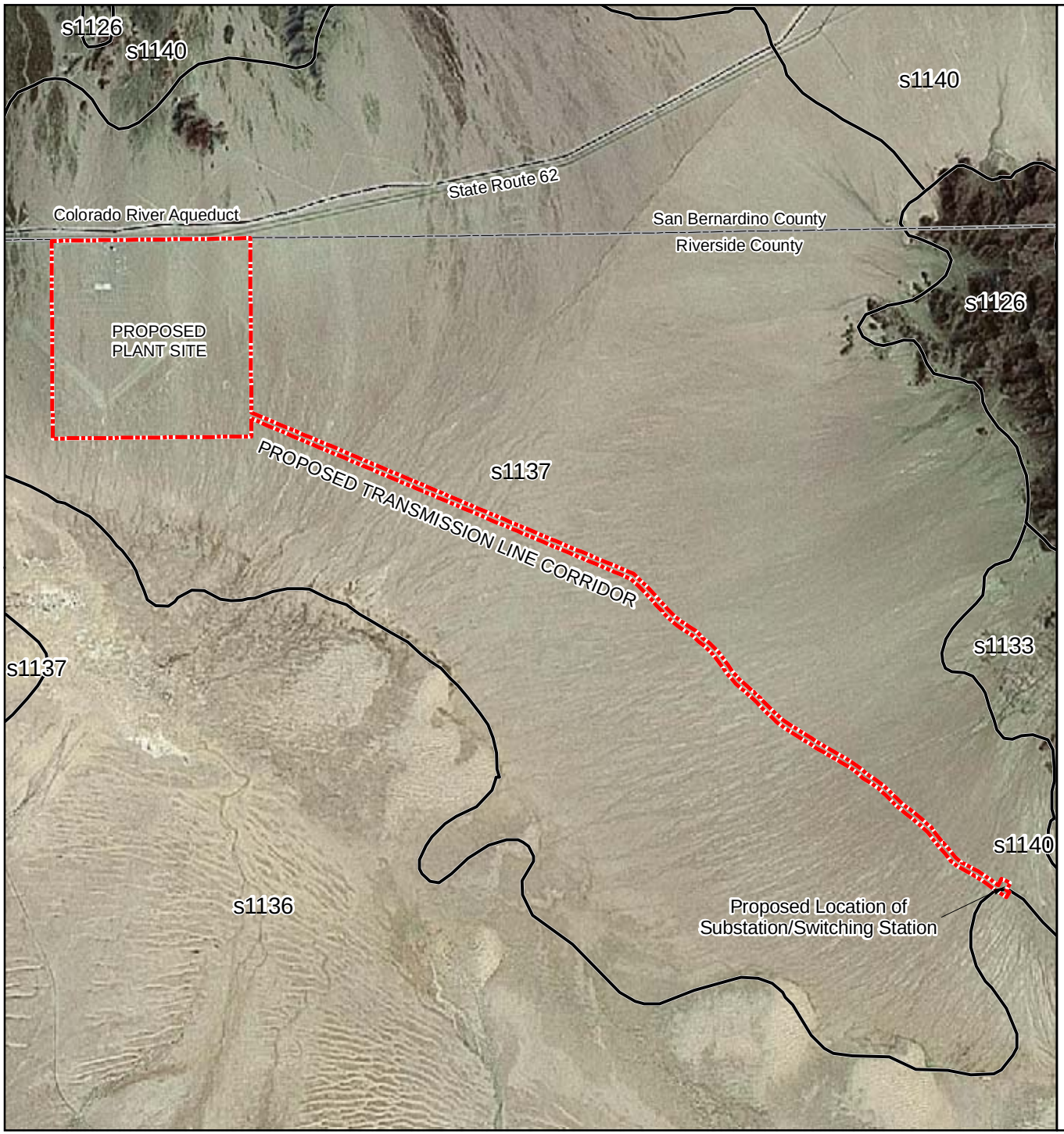

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Figure 3. Soils Map

Project Location
Soil Boundary

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

8,000 4,000 0 8,000 Feet

N

Scale: 1 inch = 8,000 feet

SYCAMORE
Environmental
Consultants, Inc.

Aerial Photograph:
1 January 1999

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

08099RiceSpring2010BotInv_Fig3SoilsMap.mxd

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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 72º 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 73º 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 72º F. This soil series is classified as a mixed, hyperthermic Typic Torripsamment (NRCS 2010).

B. Weather and Climate Conditions

Fieldwork for the botanical surveys was conducted on 11-16 June and 15 July 2010. The historic (1908-present) average precipitation for the Blythe gauge from September through May 2010 is 2.62 inches (CDWR 2010). From September 2009 through May 2010 the Blythe gauge received approximately 4.58 inches of rain (CDWR 2010), or approximately 175% of the average accumulated precipitation. Thus, hydrologic conditions were above normal during the botanical surveys.

C. Biological Communities

Biological communities are defined by species composition and relative abundance. Biological communities described below correlate where applicable with *A Manual of California Vegetation*, 2nd edition (Sawyer et al. 2009). Five CNPS Rapid Assessment Protocol data sheets (CNPS 1, 2, 4, 5, and 6) were completed for the biological communities in the PSA during fieldwork conducted in February and March 2010 and are in Appendix E. (CNPS Rapid Assessment Protocol data sheet number 3 was located outside that PSA and is not included in this report.) The CNPS data sheets were completed to document community types present in the PSA. Biological communities are mapped in Figure 4 and their acreages are in Table 3. Photographs of the PSA are in Appendix F.

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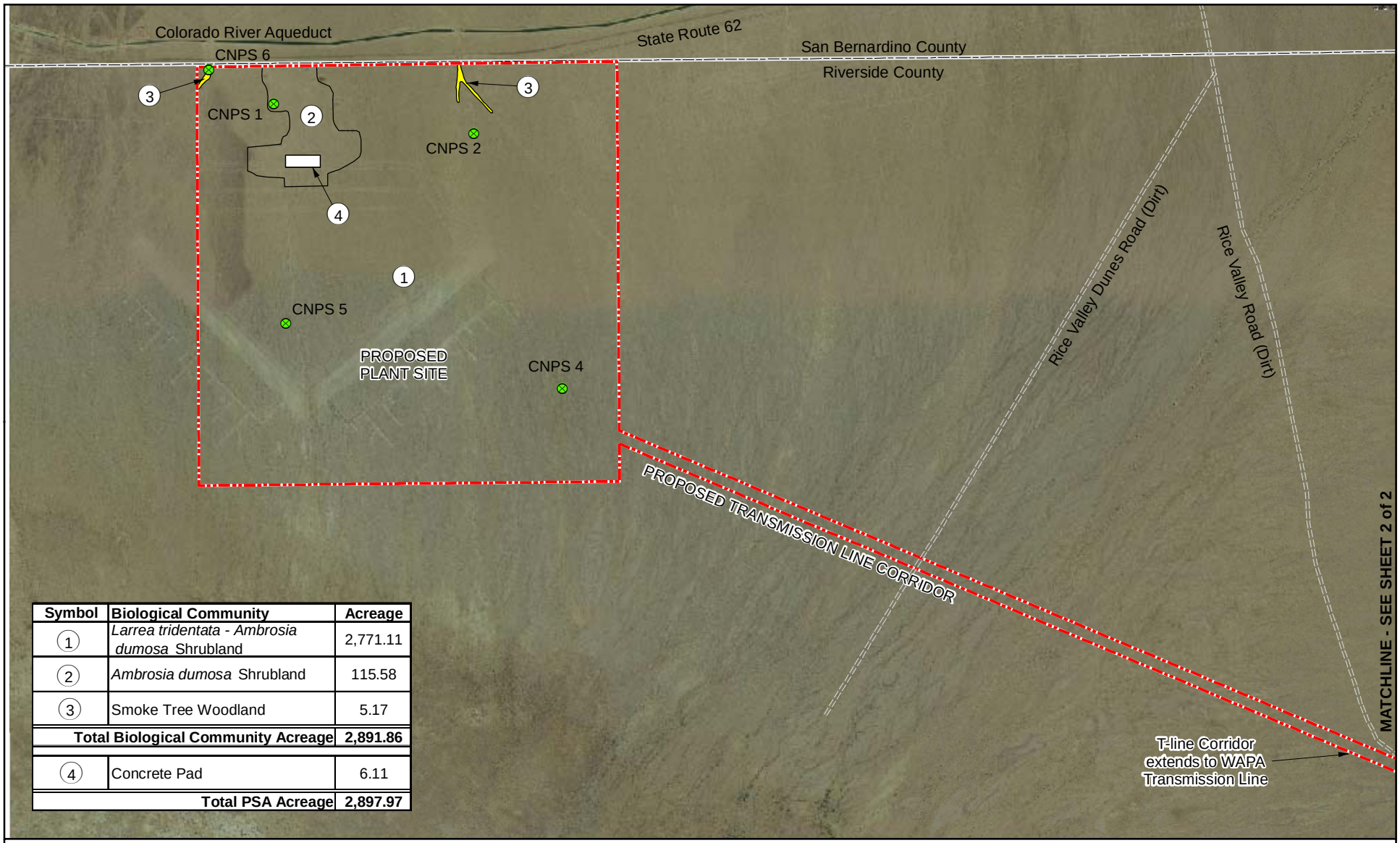

Symbol	Biological Community	Acreage
1	*Larrea tridentata - Ambrosia dumosa* Shrubland	2,771.11
2	*Ambrosia dumosa* Shrubland	115.58
3	Smoke Tree Woodland	5.17
	Total Biological Community Acreage	**2,891.86**
4	Concrete Pad	6.11
	Total PSA Acreage	**2,897.97**

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Figure 4. Botanical Resources Map
Sheet 1 of 2

Project Study Area (PSA)
Concrete Pad
CNPS Biological Community Rapid Assessment Point (CNPS)

Note: CNPS 3 is located outside the PSA and is not shown on this map

3,500 1,750 0 3,500 Feet

Scale: 1 inch = 3,500 feet

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SYCAMORE Environmental Consultants, Inc.

Aerial Photo:
29 May 2005

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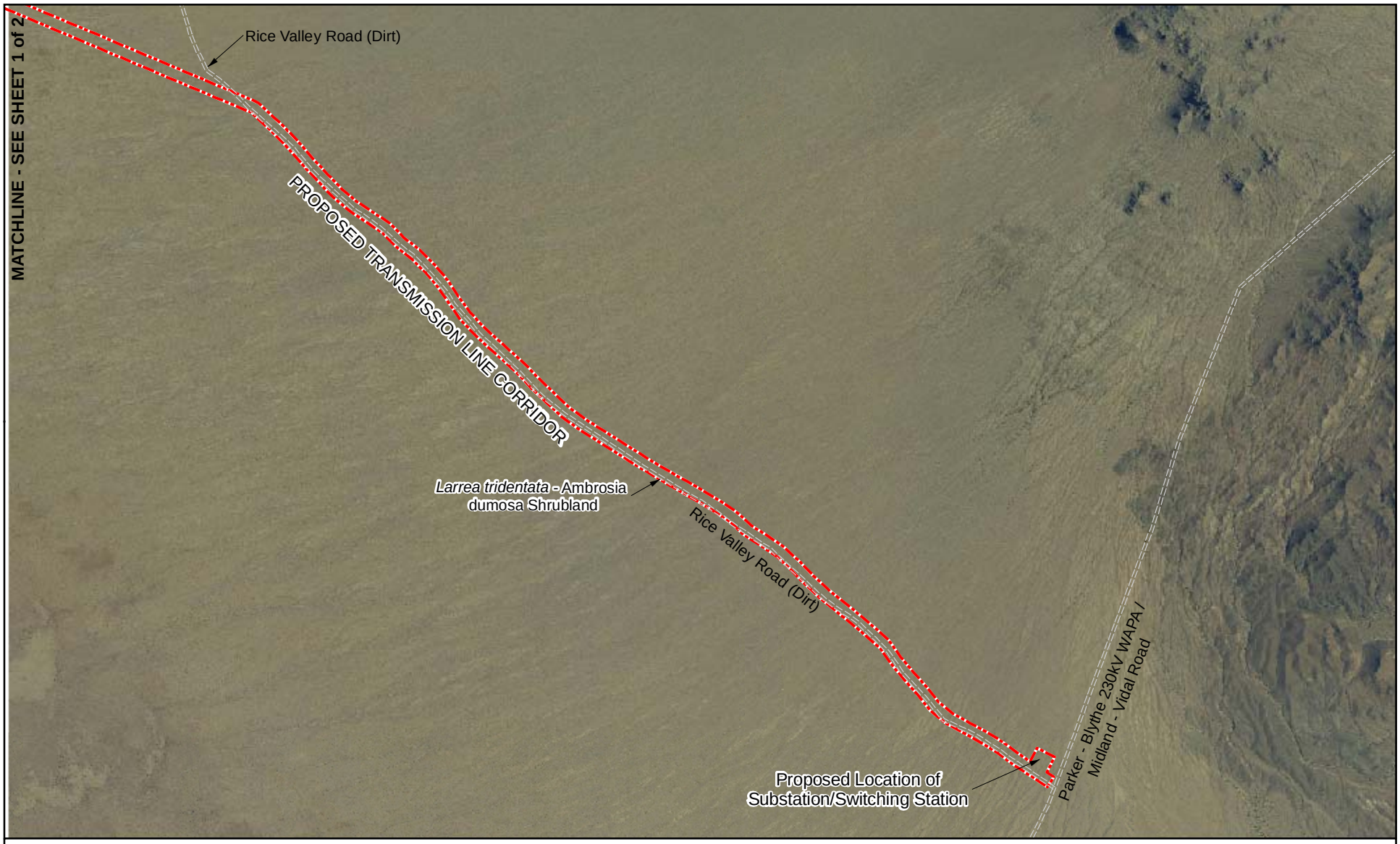

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Project Study Area (PSA)

3,500 1,750 0 3,500 Feet

N

Scale: 1 inch = 3,500 feet

SYCAMORE Environmental Consultants, Inc.

Aerial Photo:
29 May 2005

Figure 4. Botanical Resources Map
Sheet 2 of 2

08099RiceSpring2010BotInv_Fig4BotResMap_Sheet2of2.mxd

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Table 3. Biological communities and other features in proposed plant site and T-line corridor.

Biological Community [1]	Common Name [2]	Global & State Rarity Rank [3]	Acreage [4]
Larrea tridentata - Ambrosia dumosa Shrubland	Creosote bush - white bursage scrub	G5 S5	2,771.11
Ambrosia dumosa Shrubland	White bursage scrub	G5 S4	115.58
Psorothamnus spinosus Woodland	Smoke tree woodland	G4 S3.3	5.17
Other Features			
Concrete Pad	--	--	6.11
		Total:	2,897.97

[1] Biological communities described in Sawyer et al. (2009).
[2] Common names from DFG 2009b.
[3] DFG 2009b.
[4] Acreages were calculated using AutoCAD® functions.

1. *Larrea tridentata - Ambrosia dumosa* Shrubland (Creosote Bush - White Bursage Scrub)

The *Larrea tridentata - Ambrosia dumosa* Shrubland community is dominated by creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*) (Sawyer et al. 2009) and is the dominant community in the PSA (Appendix F; photos 1-8). This community was previously known as Sonoran Creosote Bush (Holland 1986). In many areas in the PSA, white bursage has greater absolute cover than creosote bush, but not to an extent sufficient to be classified as *Ambrosia dumosa* Shrubland (see below). Other shrubs present at low abundance are burrobrush (*Hymenoclea salsola* var. *salsola*), brittlebush (*Encelia farinosa*), and white rhatany (*Krameria grayi*). Common species in the herb layer are white tackstem (*Calycoseris wrightii*), pebble pincushion (*Chaenactis carphoclinia* var. *carphoclinia*), desert dandelion (*Malacothrix glabrata*), devil's lettuce (*Amsinckia tessellata*), *Cryptantha nevadensis*, *Pectocarya platycarpa*, mustard (*Brassica tournefortii*), rattlesnake weed (*Chamaesyce albomarginata*), *Camissonia boothii* ssp. *condensata*, plantain (*Plantago ovata*), and Mediterranean grass (*Schismus barbatus*). There are no trees present. *Larrea tridentata - Ambrosia dumosa* Shrubland has a state rarity rank of S5 and is not considered of high inventory priority to CNDDB (DFG 2009b).

2. *Ambrosia dumosa* Shrubland (White Bursage Scrub)

This community is dominated by white bursage, although creosote bush is also common (Sawyer et al. 2009). Representative photos of this community in the PSA are in Appendix F (photos 9-10). This community was separated from *Larrea tridentata - Ambrosia dumosa* Shrubland in the PSA because white bursage plants had greater than twice the absolute cover of creosote scrub (Sawyer et al. 2009). Burrobrush is also present at low cover levels in the community. The herb layer is similar to the *Larrea tridentata - Ambrosia dumosa* Shrubland. There are no trees present. *Ambrosia dumosa* Shrubland has a state rarity rank of S4 and is not considered of high inventory priority to CNDDB (DFG 2009b).

3. *Psorothamnus spinosus* Woodland (Smoke Tree Woodland)

This community is characterized by smoke tree (*Psorothamnus spinosus*), although smaller shrubs may have greater cover (Sawyer et al. 2009). A representative photo of this community in the PSA is in Appendix F (photo 12). In the PSA, burrobrush has approximately equal cover as smoke tree. In the PSA, blue palo verde (*Cercidium floridum* ssp. *floridum*) is also present in the tree layer and white bursage and creosote bush are present in the shrub layer. The nonnative, invasive annual, *Brassica tournefortii* is common in the herb layer. *Psorothamnus spinosus* Woodland has a state rarity rank of S3 and is considered of high inventory priority to CNDDB (DFG 2009b).

4. Concrete Pad

A 6.11 ac concrete pad constructed for the former Rice Airfield occurs in the northwest portion of the PSA (Appendix F; photo 11).

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 PSA. The proposed 10-mi long T-line corridor traverses relatively undisturbed *Larrea tridentata - Ambrosia dumosa* Shrubland.

V. BOTANICAL RESOURCES IN THE PROJECT STUDY AREA

A list of species observed in the PSA botanical surveys in 2009 and 2010 is in Appendix A. Six species were recorded in the PSA during the late spring (June 2010) botanical surveys that were not observed in March 2009 (*Acacia greggii*, *Bebbia juncea* var. *aspera*, *Eriogonum inflatum* var. *inflatum*, *Oligomeris linifolia*, *Porophyllum gracile*, and *Stephanomeria pauciflora*). None of these are special-status species.

A. Determination of Special-Status Plants in the Project Study Area

File data from USFWS, CNDDB, and BLM were used to determine the special-status plants that could occur in the PSA. A CNDDB 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. 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 reviewed the Botanical Inventory Report for surveys conducted in 2009, staff provided a list of 15 additional special-status species (listed below) that it believed had the potential to occur on the project site. These species do not occur on USFWS or BLM lists or on the CNDDB summary report for the 12 surrounding USGS quads. Surveys for these and other species were conducted in June 2010. 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 (and others) are included in the Species Evaluated Table (Appendix G) in this report.

1. *Acleisanthes longiflora* (angel trumpets)
2. *Androstephium breviflorum* (small-flowered androstephium)
3. *Bouteloua trifida* (three-awned grass)
4. *Calliandra eriophylla* (pink fairy-duster)
5. *Castela emoryi* (Emory's crucifixion-thorn)
6. *Ditaxis claryana* (glandular ditaxis)
7. *Ditaxis serrata* var. *californica* (California ditaxis)
8. *Mentzelia puberula* (Argus blazing star) (new addition to CNPS Inventory segregated from *M. oreophila*)
9. *Pholistoma auritum* var. *arizonicum* (Arizona pholistoma)
10. *Physalis lobata* (Lobed ground cherry)
11. *Psorothamnus fremontii* var. *attenuatus* (narrow-leaved psorothamnus)
12. *Senna covesii* (Coves' cassia)
13. *Teucrium cubense* var. *depressum* (dwarf germander)
14. *Teucrium glandulosum* (desert germander)
15. *Wislizenia refracta* (jackass clover)

Field surveys were conducted by Sycamore Environmental botanists to determine if habitat for special-status species identified in the file data was present in the PSA. Special-status species for which suitable habitat is present in the PSA are listed in Table 4. Special-status plants are listed species, 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).

The Department of Fish and Game (DFG) California Natural Diversity Database (CNDDB) tracks special-status species as well as species that have not been designated by DFG as special-status. Species that do not have formal state or federal special-status designations are not evaluated in this report.

Table 4. Special-status plants and natural communities with the potential to occur in the PSA.

Special-Status Plant Species	Common Name	Federal Status [a] / BLM [b]	State Status [a] / CNPS [b]	Source [c]
Abronia villosa var. *aurita*	Chaparral sand-verbena	--	--/ 1B.1	2
Acleisanthes longiflora	Angel trumpets	--	--/ 2.3	6
Androstephium breviflorum	Small-flowered androstephium	--	--/ 2.2	6
Astragalus insularis var. *harwoodii*	Harwood's milk-vetch	--	--/ 2.2	5
Astragalus lentiginosus var. *coachellae*	Coachella Valley milk-vetch	E	--/ 1B.2	1, 3
Astragalus tricarinatus	Triple-ribbed milk-vetch	E	--/ 1B.2	1, 3
Bouteloua trifida	Three-awned grass	--	--/ 2.3	6
Calliandra eriophylla	Pink fairy-duster	--	--/ 2.3	6
Castela emoryi	Emory's crucifixion-thorn	--	--/ 2.3	6
Coryphantha alversonii (=*Escobaria vivipara* var. *alversonii*)	Foxtail cactus	--	--/ 4.3	2
Ditaxis claryana	Glandular ditaxis	--	--/ 2.2	6
Ditaxis serrata var. *californica*	California ditaxis	--	--/ 3.2	6
Eriastrum harwoodii	Harwood's eriastrum	--	E/ 1B.2	2
Linanthus maculatus	Little San Bernardino Mountains linanthus	--/ BLM	--/ 1B.2	3
Mentzelia puberula	Argus blazing star	--	--/ 2.2	6
Pholistoma auritum var. *arizonicum*	Arizona pholistoma	--	--/ 2.3	6
Physalis lobata	Lobed ground cherry	--	--/ 2.3	6
Psorothamnus fremontii var. *attenuatus*	Narrow-leaved psorothamnus	--	--/ 2.3	6
Senna covesii	Coves' cassia	--	--/ 2.2	6
Teucrium cubense ssp. *depressum*	Dwarf germander	--	--/ 2.2	6
Wislizenia refracta ssp. *refracta*	Jackass clover	--	--/ 2.2	6

[a] **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.

[b] **Other Codes** Other codes determined from DFG (2010a, b, and c), CNPS (2010), DFG (2010 a and b), and BLM status determined from BLM (2010a and b). Codes 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

[c] **Sources** **1** = From USFWS letter (USFWS 2010a and b). **2** = From CNDDB. **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 =** California Energy Commission (CEC) Data Request #72 for RSEP Application for Certification.

B. Special-Status Species not in the Project 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 PSA, 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 CNDDB records for this species on the Rice, Grommet, or Big Maria Mountains Northwest quads. The closest CNDDB record for this species is from 1910, located approximately 8.5 mi east of the PSA on the Vidal quad. The location of this record is mapped as "best guess" by CNDDB.

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

DISCUSSION: Chaparral sand-verbena was not observed in the PSA during botanical surveys conducted in June and July 2010, during the evident and identifiable period. Two immature sand-verbena plants (*Abronia* sp.) were observed during botanical surveys conducted by Sycamore Environmental in March 2009. These plants could not be identified without fruits. The locations where these plants were growing in the PSA were revisited on 8 May 2009 by Sycamore Environmental, but the plants were no longer present (Sycamore Environmental 2009). The plants could have been eaten by wildlife, died and been blown away, or crushed by off-road vehicles. It is unknown whether the two immature *Abronia* sp. plants observed in March 2009 were *Abronia villosa* var. *aurita*.

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1970, approximately 18.5 mi southeast of the PSA on the Blythe Northeast quad. A collection of this plant was made in a wash near Hwy 95 near the Palo Verde Diversion Dam.

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

DISCUSSION: Angel trumpets was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted in March 2009 (Sycamore Environmental 2009). (*Acleisanthes longiflora* is the only species of this genus in CA.)

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 no CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1995, approximately 26.36 mi west of the PSA on the Cadiz Valley Southeast quad. Scarce, scattered patches of the plant were observed in *Larrea tridentata* shrubland on a sandy Mojave Desert bajada.

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

DISCUSSION: Small-flowered androstephium was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). (*Androstephium breviflorum* is the only species of this genus in CA.)

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

HABITAT AND BIOLOGY: A perennial 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: There are no CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record for this species is located approximately 24.75 mi south of the PSA on the Ripley quad. The CNDDB record does not state when this species was observed.

HABITAT PRESENT IN THE PSA: The PSA provides habitat for this species.

DISCUSSION: Harwood's milk-vetch was not observed in the PSA during the June and July 2010 botanical surveys. However, in March 2009, *Astragalus insularis* var. *harwoodii* was observed at 5 locations in the PSA (T-line alignment corridor) during botanical surveys conducted during the evident and identifiable period (Sycamore Environmental 2009).

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1973, approximately 30 mi southwest of the PSA on the East of Victory Pass quad.

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

DISCUSSION: Coachella Valley milk-vetch was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). *Astragalus insularis* var. *harwoodii* and *A. didymocarpus* var. *didymocarpus* were the only species of *Astragalus* observed in the PSA in 2009 (Sycamore Environmental 2009).

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

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1985, approximately 90.5 mi southwest of the PSA on the Martinez Mountain quad.

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

DISCUSSION: Triple-ribbed milk-vetch was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). *Astragalus insularis* var. *harwoodii* and *A. didymocarpus* var. *didymocarpus* were the only species of *Astragalus* observed in the PSA in 2009 (Sycamore Environmental 2009).

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 2003, approximately 22.2 mi northeast of the PSA 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 PSA: Marginal habitat for this species occurs in the PSA.

DISCUSSION: Three-awned grass was not observed in the PSA during the June and July 2010 botanical surveys conducted during the evident and identifiable period. This species was not observed during botanical surveys conducted in March 2009 (Sycamore Environmental 2009). No species of *Bouteloua* have been observed in the PSA.

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1964, approximately 30.9 mi southwest of the PSA 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 PSA: Habitat for this species occurs in the PSA.

DISCUSSION: Pink fairy-duster was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). (*Calliandra eriophylla* is the only species in this genus in CA.)

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 are no CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1978, approximately 22.7 mi southwest of the PSA on the Palen Mountains quad. This record is based on fewer than 50 plants that were observed at the head of a northwest trending canyon in the Palen Mountains.

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

DISCUSSION: Emory's crucifixion thorn was not observed in the PSA during the June and July 2010 botanical surveys conducted during the evident and identifiable period. This species was not observed during the March 2009 botanical surveys (Sycamore Environmental 2009). (*Castela emoryi* is the only species of this genus in CA.)

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 CNDDB record is from 1989, approximately 3.8 mi southeast of the PSA on the Big Maria Mountains Northwest quad.

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

DISCUSSION: Foxtail cactus was not observed in the PSA during the June and July 2010 botanical surveys conducted during the evident and identifiable period. This species was not observed during botanical surveys conducted in March 2009 (Sycamore Environmental 2009). No species of *Coryphantha* have been observed in the PSA.

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1980, approximately 29.3 mi northeast of the PSA on the Crossroads quad. This record is based on plants collected from gravel bar in a dry wash lined with *Olneya* and *Cercidium*, northeast of Earp, near Empire Landing Campground.

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

DISCUSSION: Glandular ditaxis was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). *Ditaxis neomexicana* was observed in the PSA (T-line corridor) in 2009 (Sycamore Environmental 2009).

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1997, approximately 38.9 mi southwest of the PSA 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 PSA: Habitat for this species occurs in the PSA.

DISCUSSION: California ditaxis was not observed in the PSA (which included the entire 10-mi long T-line corridor), during the June and July 2010 botanical surveys conducted during the evident and identifiable period. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). *Ditaxis neomexicana* was observed in the PSA (T-line corridor) in 2009 (Sycamore Environmental 2009).

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 CNDDB record is from 2008, approximately 2.4 mi west of the PSA on the Rice quad.

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

DISCUSSION: Harwood's eriastrum was not observed in the PSA during the June and July 2010 botanical surveys conducted during the evident and identifiable period. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). (In March 2010, Sycamore Environmental botanists observed Harwood's eriastrum in the same general location as the 2008 CNDDB record described above.) No species of *Eriastrum* have been observed in the PSA.

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 2001, approximately 66.4 mi west of the PSA on the Fried Liver Wash quad.

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

DISCUSSION: Little San Bernardino Mountains linanthus was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted

during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). No species of *Linanthus* have been observed in the PSA.

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1936, approximately 29.2 mi southwest of the PSA 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 PSA: Marginal habitat for this species occurs in the PSA.

DISCUSSION: Argus blazing star was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). *Mentzelia albicaulis* and *M. obscura* were observed in the PSA in March 2009. No other species of *Mentzelia* have been observed in the PSA.

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 2004, approximately 26 mi northeast of the PSA 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 PSA: Habitat for this species occurs in the PSA.

DISCUSSION: Arizona pholistoma was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). No species of *Pholistoma* have been observed in the PSA.

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1975, approximately 40.2 mi west of the PSA 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 PSA: Marginal habitat for this species occurs in the PSA.

DISCUSSION: Lobed ground cherry was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). No species of *Physalis* have been observed in the PSA.

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 2003, approximately 20.7 mi northeast of the PSA 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 PSA: Marginal habitat for this species occurs in the PSA.

DISCUSSION: Narrow-leaved psorothamnus was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted in March 2009 (Sycamore Environmental 2009). (Note: Numerous plants of narrow-leaved psorothamnus were found in the Whipple Mountains north of Parker, AZ, at an elevation of approximately 1,300 ft, during a visit by Sycamore Environmental botanists on 15 June 2010. The narrow-leaved psorothamnus plants were in flower and fruit and were readily identifiable.) *Psorothamnus spinosus* occurs in the PSA, but *P. fremontii* var. *attenuatus* does not.

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 2003, approximately 22.8 mi northeast of the PSA on the Whipple Mountains Southwest quad. This record states that plants were observed on a hillside west of Eagle Mine in the Whipple Mountains.

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

DISCUSSION: Coves' cassia was not observed in the PSA during the June and July 2010 botanical surveys conducted during the evident and identifiable period. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). No species of *Senna* have been observed in the PSA.

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1912, approximately 20.6 mi southeast of the PSA on the Blythe quad. This record states that plants were collected from flats in Palo Verde Valley, probably near Blythe.

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

DISCUSSION: Dwarf germander was not observed in the PSA during the June and July 2010 botanical surveys. This species was not observed during botanical surveys conducted during the evident and identifiable period in March 2009 (Sycamore Environmental 2009). No species of *Teucrium* have been observed in the PSA.

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 CNDDB records for this species on the Rice, Grommet, Big Maria Mountains Northwest, or the 12 surrounding quads. The closest CNDDB record is from 1936, 73.9 mi southwest of the PSA on the Thermal Canyon quad. This record states that plants were collected 10 mi east of Indio along I-10, north of Mecca Hills.

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

DISCUSSION: Jackass clover was not observed in the PSA during the June and July 2010 botanical surveys conducted during the evident and identifiable period. This species was not observed during botanical surveys in March 2009 (Sycamore Environmental 2009). There is only one species of *Wislizenia* in CA, consisting of three subspecies. No subspecies of *Wislizenia* have been observed in the PSA.

D. Summary of Special-Status Species Observed in PSA

Astragalus insularis var. *harwoodii* was found in several locations in the T-line corridor. An *Abronia* species was observed at two locations in the PSA and may have been *Abronia villosa* var. *aurita*.

E. Evaluation of Special-Status Natural Communities

Smoke Tree Woodland occurs in the PSA (5.17 ac) and has a state rarity ranking of S3. The CNDDB considers biological communities with state rarity rankings of S1-S3 to be of "high inventory priority" (DFG 2009b). A biological community with an S3 ranking is considered "rare and threatened" throughout its range by Sawyer et al. (2009). No other special-status communities occur in the PSA.

F. Summary of Findings

The PSA provides suitable habitat for 21 special-status plant species. No federal or state listed species or BLM sensitive species were observed in the PSA during botanical surveys conducted in March 2009 and June and July 2010. Smoke Tree Woodland (5.17 ac), which has a state rarity ranking of S3, is the only special-status biological community in the PSA.

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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.

VII. PREPARERS

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 (#801073-04), and DFG Rare, Threatened and Endangered Plant Voucher Collecting Permit (#09054).
Responsibilities: Project Manager, senior technical lead, report preparation, and botanical survey fieldwork, plant identification.

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 (#802060-04).
Responsibilities: Botanical survey fieldwork, report preparation, and plant identification.

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 (TE799564-2). 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 (CNDDB/ RareFind), and researches special-status species for projects. 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, report preparation, and plant identification.

Jessica Easley, B.S., Wildlife Biology, University of Montana, College of Forestry and Conservation, Missoula, MT. 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 (CNDDB/ RareFind), and researches special-status species for projects. She is an ISA Certified Arborist (WE-7845A), holds a California Department of Fish and Game Scientific Collecting Permit (#801180-02), and a DFG Rare, Threatened and Endangered Plant Voucher Collecting Permit (#2081(a)-10-06-V). Attended California red-legged frog (*Rana draytonii*) training (Mar 2009) and California tiger salamander (*Ambystoma californiense*) training (Mar 2010) at the Elkhorn Slough National Estuarine Research Reserve, Monterey County, CA.
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, CNDDB 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, CNDDB species, critical habitat and mitigation.
Responsibilities: Figure preparation and spatial analysis.

Cynthia Little, Principal, Sycamore Environmental.
Responsibilities: Senior editor, quality control.

APPENDIX A.

Plant Species Observed June & July 2010

Rice Solar Energy Project
Riverside County, CA

Plant Species Observed June 2010.

FAMILY	SCIENTIFIC NAME	COMMON NAME	N/I [a]	March 2009		June & July 2010 [b]	
				Plant Site	T-Line	Plant Site	T-Line
DICOTS							
Asclepiadaceae	*Asclepias subulata*	Rush milkweed	N	X		X	
	Sarcostemma hirtellum	Trailing townula	N	X		X	X
Asteraceae	*Ambrosia dumosa*	Burro-weed	N	X	X	X	X
	Bebbia juncea var. *aspera*	Sweetbush	N			X	
	Calycoseris wrightii		N	X	X		
	Chaenactis carphoclinia var. *carphoclinia*	Pebble pincushion	N	X	X	X	X
	Chaenactis fremontii	Desert pincushion	N	X	X	X	X
	Chaenactis stevioides	Desert pincushion	N	X			
	Chaenactis xantiana	Pincushion	N	X	X		
	Encelia farinosa	Brittlebush	N	X	X	X	X
	Geraea canescens	Desert-sunflower	N	X	X	X	X
	Hymenoclea salsola var. *salsola*	Burrobrush	N	X	X	X	X
	Malacothrix glabrata	Desert dandelion	N	X	X	X	X
	Monoptilon bellioides	Desert star	N	X	X		
	Palafoxia arida var. *arida*		N	X		X	X
	Porophyllum gracile	Odora	N				X
	Rafinesquia neomexicana	California chicory	N	X	X		
	Stephanomeria exigua ssp. *exigua*		N	X	X	X	X
	Stephanomeria pauciflora	Wire-lettuce	N				X
Boraginaceae	*Amsinckia menziesii* var. *intermedia*	Rancher's fireweed	N	X	X		
	Amsinckia tessellata	Devil's lettuce	N	X	X		
	Cryptantha angustifolia		N	X	X		
	Cryptantha barbigera		N	X	X		
	Cryptantha maritima		N	X	X	X	X
	Cryptantha nevadensis		N	X	X		
	Pectocarya heterocarpa		N	X	X		
	Pectocarya platycarpa		N	X			
	Pectocarya recurvata		N	X	X		
Brassicaceae	*Brassica tournefortii*	Mustard	I	X	X	X	X
	Dithyrea californica	Spectacle-pod	N	X	X		
	Lepidium lasiocarpum var. *lasiocarpum*	Peppergrass	N	X	X	X	
Cactaceae	*Mammillaria tetrancistra*	Fish-hook cactus	N	X	X		
	Echinocactus polycephalus var. *polycephalus*	Clustered barrel cactus	N		X		X
	Ferocactus cylindraceus var. *cylindraceus*	California barrel cactus	N	X		X	
	Opuntia basilaris var. *basilaris*	Beavertail cactus	N	X	X	X	X
	Opuntia bigelovii	Teddy-bear cholla	N	X		X	
	Opuntia echinocarpa	Silver cholla	N	X	X	X	X
	Opuntia ramosissima	Pencil cactus	N		X		X
Campanulaceae	*Nemacladus glanduliferus* var. *orientalis*		N	X			

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

[a] N = Native; I= Introduced.
[b] Most plants in the PSA were not in flower in June 2010. Consequently, some plants were identified only to genus. Species that were observed in the PSA in June 2010, but not identified to species (because they were completely dried out) include, e.g., *Chaenactis* sp., *Amsinckia* spp., *Cryptantha* spp., *Eriogonum* spp., *Loeseliastrum* spp., *Pectocarya* spp., *Phacelia* spp., and *Schismus* spp. Bold font "**X**" indicates plants that were in bloom during surveys conducted in June 2010.

APPENDIX B.

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

Rice Solar Energy Project
Riverside County, CA

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California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name - Landscape
Rice Botanical Inventory Report (2010)

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

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APPENDIX C.

USFWS Species Lists

Rice Solar Energy Project
Riverside County, CA

Includes list from the VFWO and CFWO.

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Ventura Fish and Wildlife Office

Pacific Southwest Region

- Ventura Homepage
- About This Office
- People and Nature
- Partnerships
- Endangered Species
- News and Publications
- Species Information
- Tools for Kids and Teachers
- Tools for Landowners

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 trallii 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 agassizzii	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

Ventura Fish & Wildlife Office | Contact Us
Pacific Southwest Regional Office

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

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

Branchinecta sandiegonensis	San Diego fairy shrimp	SDFS	CFWO	E	fr-07	F 98	2008		X			X		62:4925	3-Feb-97
Dinacoma caseyi	Casey's June beetle	CJB	CFWO	pE	p-09						X			74:32857	9-Jul-09
Euphilotes battoides allyni	El Segundo blue butterfly	ESB	CFWO	E		F 98	2008	X						41:22041	1-Jun-76
Euphydryas editha quino	Quino checkerspot butterfly	QCB	CFWO	E	fr-09	F 03	2009		X	X	X	X		62:2313	16-Jan-97
Glaucopsyche lygdamus palosverdesensis	Palos Verdes blue butterfly	PVB	CFWO	E	f-80	F 84	2008	X						45:44939	2-Jul-80
Pyrgus ruralis lagunae	Laguna Mountains skipper	LMS	CFWO	E	f-06		2007					X		62:2313	16-Jan-97
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	DSF	CFWO	E		F 97	2008			X	X			58:49887	23-Sep-93
Streptocephalus woottoni	Riverside fairy shrimp	RFS	CFWO	E	f-05	F 98	2008	X	X		X	X		58:41391	3-Aug-93
FISH															
Catostomus santaanae	Santa Ana sucker	SAS	CFWO	T	pr-09		in prep	X	X	X	X			65:19686	12-Apr-00
Cyprinodon macularius	desert pupfish		R02	E	f-86	F 93					X	X	X	51:10850	31-Mar-86
Eucyclogobius newberryi	tidewater goby	TWG	VFWO	E	fr-08	D 04	2007		X			X		59:5494	4-Feb-94
Gasterosteus aculeatus williamsoni	unarmored threespine		VFWO	E	p-80	F 85	2009	X		X		X		35:16047	13-Oct-70
Gila bicolor mohavensis	Mohave tui chub		VFWO	E		F 84	2009			X				35:16047	13-Oct-70
Gila elegans	bonytail chub		R06	E	f-94	F 90				X	X		X	45:27713	23-Apr-80
Oncorhynchus mykiss	southern steelhead (So Cal DPS)		R09	E				X	X			X		71:833	5-Jan-06
Ptychocheilus lucius	Colorado squawfish		R06	E	f-94	F 91				X	X		X	50:30194	24-Jul-85
Xyrauchen texanus	razorback sucker		R06	E	f-94					X	X		X	56:54967	23-Oct-91
AMPHIBIANS															
Anaxyrus californicus (B. microscaphus c.) [1]	arroyo toad (a. southwestern t.)	ARTO	VFWO	E	pr-09	F 99	2009	X	X	X	X	X		59:64866	16-Dec-94
Batrachoseps aridus	desert slender salamander	DSS	CFWO	E		F 82	2009				X			38:14678	4-Jun-73
Rana draytoni	California red-legged frog	CRLF	SAC	T	pr-08	F 02		X	X	X	X	X		61:25832	23-May-96
Rana muscosa (So Cal DPS)	mountain yellow-legged frog	MYLF	CFWO	E	f-06			X		X	X			67:44382	2-Jul-02
REPTILES															
Gopherus agassizii	desert tortoise	DETO		T	f-94	F 94				X	X		X	55:12191	2-Apr-90
Phrynosoma mcallii	flat-tailed horned lizard	FTHL	CFWO	pT							X	X	X	58:62624	29-Nov-93
Uma inornata	Coachella Valley fringe-toed	CVFTL	CFWO	T	f-80	F 85	in prep.				X			45:63812	25-Sep-80
Xantusia riversiana	island night lizard	INL	CFWO	T		F 84	2006	X						42:40685	11-Aug-77
BIRDS															
Amphispiza belli clementeae	San Clemente sage sparrow	SCSS	CFWO	T		F 84	2009	X						42:40685	11-Aug-77

Brachyramphus marmoratus	marbled murrelet	MAMU	POR	T	pr-08	F 97		X			X		57:45337	1-Oct-92
Charadrius alexandrinus nivosus	western snowy plover	WSP	SAC	T	fr-05	D 01	2006	X	X		X		58:12874	5-Mar-93
Coccyzus americanus	yellow-billed cuckoo	YBCU	SAC	C				X	X	X	X	X	X	66:38611	25-Jul-01
Empidonax traillii extimus	southwestern willow flycatcher	SWFL	R02	E	fr-05	D		X	X	X	X	X	X	60:10715	27-Feb-95
Gymnogyps californianus	California condor	CACO	VFO	E		F 96		X		X		X		61:54057	16-Oct-96
Haliaeetus leucocephalus	bald eagle	BAEA	R03	PDM		F 86		X	X	X	X	X	X	60:36010	12-Jul-95
Lanius ludovicianus mearnsi	San Clemente loggerhead shrike	SCLS	CFWO	E		F 84	2009	X						42:40685	11-Aug-77
Pelecanus occidentalis	brown pelican	BRPE	VFWO	PDM	pde-	F 83	2007	X	X	X	X	X	X	50:4945	4-Feb-85
Phoebastria albatrus	short-tailed albatross	STAL	JFO	E				X	X			X		65:46643	31-Jul-00
Polioptila californica californica	coastal California gnatcatcher	CAGN	CFWO	T	fr-07		in prep.	X	X	X	X	X		58:16757	30-Mar-93
Rallus longirostris levipes	light-footed clapper rail	LFCR	CFWO	E		F 85	2009	X	X			X		35:16047	13-Oct-70
Rallus longirostris yumanensis	Yuma clapper rail	YUCR	R02	E						X	X		X	32:4001	11-Mar-67
Sternula (Sterna) antillarum browni [1]	California least tern	CLT	CFWO	E		F 85	2006	X	X		X	X	X	35:8495	2-Jun-70
Vireo bellii pusillus	least Bell's vireo	LBV	CFWO	E	fr-94	D 98	2006	X	X	X	X	X	X	51:16482	2-May-86
MAMMALS															
Dipodomys merriami parvus	San Bernardino kangaroo rat	SBKR	CFWO	E	fr-08		2009	X		X	X			63:51005	24-Sep-98
Dipodomys stephensi	Stephens' kangaroo rat	SKR	CFWO	E		D 97	in prep.			X	X	X		53:38469	30-Sep-88
Enhydra lutris nereis	southern sea otter	SSO	VFO	T/X*		D 00		X	X			X		52:29780	11-Aug-87
Ovis canadensis nelsoni	Peninsular bighorn sheep	PBS	CFWO	E	fr-09	F 00	in prep.				X	X	X	63:13134	18-Mar-98
Perognathus longimembris pacificus	Pacific pocket mouse	PPM	CFWO	E		F 98	in prep.	X	X			X		59:49752	29-Sep-94
Spermophilus tereticaudus chlorus	Palm Springs ground squirrel		CFWO	C							X			64:57534	25-Oct-99
Urocyon littoralis catalinae	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

APPENDIX D.

BLM Sensitive Species Lists

Rice Solar Energy Project
Riverside County, CA

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 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.

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

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.

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.

 **Coachella Valley Milk-Vetch** *Astragalus lentiginosus* var. *coachellae*	 **Deane's Milk-Vetch** *Astragalus deanei*	 **Dunn's Mariposa Lily** *Calochortus dunnii*
 **Encinitas Baccharis** *Baccharis vanessae*	 **Gander's Pitcher-Sage** *Lepechinia ganderi*	 **Jacumba Milk-Vetch** *Astragalus douglasii* var. *perstrictus*
 **Lakeside Ceanothus** *Ceanothus cyaneus*	 **Little San Bernardino Mountains Linanthus** *Linanthus maculatus*	 **Many-Stemmed Dudleya** *Dudleya multicaulis*

 **Mexican Flannelbush** *Fremontodendron mexicanum*	 **Mountain Springs Bush Lupine** *Lupinus excubitus* var. *medius*	 **Munz Cholla** *Opuntia munzii*
 **Nevin's Barberry** *Berberis nevinii*	 **Orcutt's Brodiaea** *Brodiaea orcuttii*	 **Otay Manzanita** *Arctostaphylos otayensis*
 **Otay Tarplant** *Deinandra conjugens* Also listed under (*Hemizonia conjugens*)	 **Parish's Daisy** *Erigeron parishii*	 **Parry's Tetracoccus** *Tetracoccus dioicus*
 **Robison's Monardella** *Monardella robisonii*	 **Santa Ana River Woolystar** *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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APPENDIX E.

CNPS Rapid Assessment Protocol Data Sheets

Rice Solar Energy Project
Riverside County, CA

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CALIFORNIA NATIVE PLANT SOCIETY - VEGETATION RAPID ASSESSMENT FIELD FORM

(Desert Version Revised Feb 21, 2007)

For Office Use:	Final database #:	Final vegetation type name:	Alliance_____ Association_____

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION

Polygon/Stand #:	Air photo #:	Date:	Name(s) of surveyors:
1		20 Feb 2010	Chuck Hughes, Mike Bower

GPS waypoint #: _____ **GPS name:** _____ **GPS datum: (e.g. NAD 83)** WGS84 **Zone: 10S / 10T /** **11S** (circle one)

UTM field reading: **UTME** 701490 ___ ___ ___ ___ **UTMN** 3772834 ___ ___ ___ ___ ___ **GPS Error: ±** 1.4 **ft** / **m**

Is GPS within stand? **Yes** / **No** **If No, cite from GPS point to stand, the distance** _____**(in meters) and bearing** _____**(degrees)**

Elevation: **ft / m** **Photograph #'s**:

Geology code: SAAL **Soil Texture code:** MESA | **Upland** **or** **Wetland/Riparian** (circle one)

Topography: Macro: top upper mid **lower** bottom | **Micro:** convex flat concave **undulating** (circle one)

% Surface cover: **Lg rock:** 1 **Sm rock:** 2 **Bare/Fine:** 93 **Litter:** 2 **BA Stems:** 2 **Water:** 0 **=sums to100%**
(>25 cm diam) (2mm-25 cm diam) (<2 mm, Incl sand, mud)

Slope exposure, Actual °: _____ **General:** **NE** **NW** **SE** **SW** **Flat** **Variable /All** (circle one)

Slope steepness, Actual °: _____ **General:** **0°** **1-5°** **5-25°** **> 25°** (circle one)

Size of stand: <1 acre___ **1-5 acres**___ **>5 acres** X **Plot: Yes / No** **If yes, denote size: 100 m² /** **400m²** **/ 1000 m² / Other**

Site history, stand age, and comments: Former military airstrip. Natural alluvial flow along ephemeral washes altered by CO aqueduct and Highway 62.

Type/ Level of disturbance codes: 02 / L 14 / L 28 / M ____/___ ____/___ **"Other"**

II. HABITAT AND VEGETATION DESCRIPTION

Tree DBH : **T1** (<1" dbh), **T2** (1-6" dbh), **T3** (6-11" dbh), **T4** (11-24" dbh), **T5** (>24" dbh), **T6** (multi-layered) (circle one)

If Tree, list 1-3 dominant overstory spp.:_____

Shrub: **S1** seedling (<3 yr. old), **S2** young (<1% dead), **S3** mature (1-25% dead), **S4** decadent (>25% dead)

Herbaceous: **H1** (<12" plant ht.), **H2** (>12" ht.) **Desert Riparian Tree/Shrub:** **1** (<2ft. stem ht.), **2** (2-10ft. ht.), **3** (10-20ft. ht.), **4** (>20ft. ht.)

Desert Palm/Joshua Tree: **1** (<1.5" base diameter), **2** (1.5-6" diam.), **3** (>6" diam.) **% NonVasc cover:** <1 **Total % Veg cover:** 15

% Cover -Overstory Tree Conifer/Hardwood: ____/____ **Understory tree-Tall shrub:** ____ **Shrub:** 14 **Herbaceous:** 1

Height Class - Overstory Conifer/Hardwood: ____/____ **Understory tree-Tall shrub:** ____ **Shrub:** 02 **Herbaceous:** 01

Height classes: 01=<1/2m 02=1/2-1m 03=1-2m 04=2-5m 05=5-10m 06=10-15m 07=15-20m 08=20-35m 09=35-50m 10=>50m

Species (List up to 20 major species), Stratum, and Approximate % cover: Stratum categories: T= Overstory tree, U= Understory tree S = Shrub, H= Herb, N= Non-vascular. *% cover intervals for reference*: <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Strata	Species	% cover		Strata	Species	% cover
S	*Larrea tridentata*	1				
S	*Ambrosia dumosa*	13				
S	*Hymenoclea salsola* var. *salsola*	<1				
H	*Plantago ovata*	1				
H	*Brassica tournefortii*	<1				

Unusual species: _____

III. INTERPRETATION OF STAND

Field-assessed vegetation alliance name: *Ambrosia dumosa* Shrubland

Field-assessed association name (optional): _____

Adjacent alliances: *Larrea tridentata - Ambrosia dumosa* Shrubland / _____

Confidence in alliance identification: **L** **M** **H** **Explain:** Few species present, *Ambrosia dumosa* clearly higher cover.

Other identification problems: Very subtle change from adjacent alliance with slightly more *Larrea tridentata*.

Has the vegetation changed since air photo taken? **Yes / No** **If Yes, What has changed?**

Polygon is more than one type: (Yes, No) _____ **(Note:** type with greatest coverage in polygon should be entered in above section)

Other types: _____

CALIFORNIA NATIVE PLANT SOCIETY - VEGETATION RAPID ASSESSMENT FIELD FORM

(Desert Version Revised Feb 21, 2007)

For Office Use:	Final database #:	Final vegetation type name:	Alliance_____ Association_____

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION

Polygon/Stand #:	Air photo #:	Date:	Name(s) of surveyors:
2		20 Feb 2010	Chuck Hughes

GPS waypoint #: _____ **GPS name:** _____ **GPS datum: (e.g. NAD 83)** WGS84 **Zone: 10S / 10T / (11S** (circle one)

UTM field reading: **UTME** 703027 ___ ___ ___ ___ **UTMN** 3772616 ___ ___ ___ ___ ___ **GPS Error: ±** 2.5 **(ft)** / **m**

Is GPS within stand? (Yes) / **No If No, cite from GPS point to stand, the distance** _____**(in meters) and bearing** _____**(degrees)**

Elevation: **ft / m Photograph #'s**:

Geology code: SAAL **Soil Texture code:** MESA | **(Upland)** **or** **Wetland/Riparian** (circle one)

Topography: Macro: top upper mid **(lower)** bottom | **Micro:** convex flat concave **(undulating)** (circle one)

% Surface cover: Lg rock: 0 **Sm rock:** 2 **Bare/Fine:** 95 **Litter:** 1 **BA Stems:** 2 **Water:** 0 **=sums to100%**
(>25 cm diam) (2mm-25 cm diam) (<2 mm, Incl sand, mud)

Slope exposure, Actual °: _____ **General: NE NW SE (SW) Flat Variable /All** (circle one)

Slope steepness, Actual °: _____ **General: 0° (1-5°) 5-25° > 25°** (circle one)

Size of stand: <1 acre___ **1-5 acres**___ **>5 acres** X **Plot: Yes / No If yes, denote size: 100 m² / (400m²) / 1000 m² / Other**

Site history, stand age, and comments: Former military airstrip. Natural alluvial flow along ephemeral washes altered by CO aqueduct and Highway 62.

Type/ Level of disturbance codes: 02 / L 14 / L 28 / M ____/___ ____/___ **"Other"**

II. HABITAT AND VEGETATION DESCRIPTION

Tree DBH : T1 (<1" dbh), **T2** (1-6" dbh), **T3** (6-11" dbh), **T4** (11-24" dbh), **T5** (>24" dbh), **T6** (multi-layered) (circle one)

If Tree, list 1-3 dominant overstory spp.:_____

Shrub: S1 seedling (<3 yr. old), **S2** young (<1% dead), **(S3** mature (1-25% dead), **S4** decadent (>25% dead)

Herbaceous: H1 (<12" plant ht.), **H2** (>12" ht.) **Desert Riparian Tree/Shrub: 1** (<2ft. stem ht.), **2** (2-10ft. ht.), **3** (10-20ft. ht.), **4** (>20ft. ht.)

Desert Palm/Joshua Tree: 1 (<1.5" base diameter), **2** (1.5-6" diam.), **3** (>6" diam.) **% NonVasc cover:** <1 **Total % Veg cover:** 14

% Cover -Overstory Tree Conifer/Hardwood: ____/____ **Understory tree-Tall shrub:** ____ **Shrub:** 13 **Herbaceous:** 1

Height Class - Overstory Conifer/Hardwood: ____/____ **Understory tree-Tall shrub:** ____ **Shrub:** 02 **Herbaceous:** 01

Height classes: 01=<1/2m 02=1/2-1m 03=1-2m 04=2-5m 05=5-10m 06=10-15m 07=15-20m 08=20-35m 09=35-50m 10=>50m

Species (List up to 20 major species), Stratum, and Approximate % cover: Stratum categories: T= Overstory tree, U= Understory tree S = Shrub, H= Herb, N= Non-vascular. *% cover intervals for reference*: <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Strata	Species	% cover		Strata	Species	% cover
S	*Larrea tridentata*	5				
S	*Ambrosia dumosa*	8				
H	*Plantago ovata*	1				
H	*Brassica tournefortii*	<1				

Unusual species: Single *Ferocactus cylindraceus* var. *cylindraceus* nearby.

III. INTERPRETATION OF STAND

Field-assessed vegetation alliance name: *Larrea tridentata - Ambrosia dumosa* Shrubland

Field-assessed association name (optional): _____

Adjacent alliances: *Ambrosia dumosa* Shrubland ___ _____ / _____ _____

Confidence in alliance identification: L M (H) Explain: Few species present.

Other identification problems: _____

Has the vegetation changed since air photo taken? Yes / (No) If Yes, What has changed?

Polygon is more than one type: (Yes, No) _____ **(Note:** type with greatest coverage in polygon should be entered in above section)

Other types: _____

CALIFORNIA NATIVE PLANT SOCIETY - VEGETATION RAPID ASSESSMENT FIELD FORM

(Desert Version Revised Feb 21, 2007)

For Office Use:	Final database #:	Final vegetation type name:	Alliance_____ Association_____

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION

Polygon/Stand #:	Air photo #:	Date:	Name(s) of surveyors:
4		21 Feb 2010	Mike Bower, Chuck Hughes, Adam Forbes

GPS waypoint #: _____ **GPS name:** _____ **GPS datum: (e.g. NAD 83)** WGS84 **Zone: 10S / 10T / (11S)** (circle one)

UTM field reading: **UTME** 703718 ___ ___ ___ ___ **UTMN** 3770665 ___ ___ ___ ___ ___ **GPS Error: ±** 2.1 **(ft) / m**

Is GPS within stand? (Yes) / No If No, cite from GPS point to stand, the distance _____**(in meters) and bearing** _____**(degrees)**

Elevation: **ft / m Photograph #'s**:

Geology code: MIAL **Soil Texture code:** MESA | **(Upland) or Wetland/Riparian** (circle one)

Topography: Macro: top upper mid (lower) bottom | Micro: convex flat concave (undulating) (circle one)

% Surface cover: Lg rock: 0 **Sm rock:** 2 **Bare/Fine:** 95 **Litter:** 1 **BA Stems:** 2 **Water:** 0 **=sums to100%**
(>25 cm diam) (2mm-25 cm diam) (<2 mm, Incl sand, mud)

Slope exposure, Actual °: _____ **General: NE NW SE (SW) Flat Variable /All** (circle one)

Slope steepness, Actual °: _____ **General: 0° (1-5°) 5-25° > 25°** (circle one)

Size of stand: <1 acre___ **1-5 acres**___ **>5 acres** X **Plot: Yes / No If yes, denote size: 100 m² / (400m²) / 1000 m² / Other**

Site history, stand age, and comments: Former military airstrip. Natural alluvial flow along ephemeral washes altered by CO aqueduct and Highway 62.

Type/ Level of disturbance codes: 02 / L 14 / L 28 / M ____/___ ____/___ **"Other"**

II. HABITAT AND VEGETATION DESCRIPTION

Tree DBH : T1 (<1" dbh), **T2** (1-6" dbh), **T3** (6-11" dbh), **T4** (11-24" dbh), **T5** (>24" dbh), **T6** (multi-layered) (circle one)

If Tree, list 1-3 dominant overstory spp.:_____

Shrub: S1 seedling (<3 yr. old), **S2** young (<1% dead), **(S3** mature (1-25% dead), **S4** decadent (>25% dead)

Herbaceous: H1 (<12" plant ht.), **H2** (>12" ht.) **Desert Riparian Tree/Shrub: 1** (<2ft. stem ht.), **2** (2-10ft. ht.), **3** (10-20ft. ht.), **4** (>20ft. ht.)

Desert Palm/Joshua Tree: 1 (<1.5" base diameter), **2** (1.5-6" diam.), **3** (>6" diam.) **% NonVasc cover:** <1 **Total % Veg cover:** 10

% Cover -Overstory Tree Conifer/Hardwood: ____/____ **Understory tree-Tall shrub:** ____ **Shrub:** 8 **Herbaceous:** 2

Height Class - Overstory Conifer/Hardwood: ____/____ **Understory tree-Tall shrub:** ____ **Shrub:** 02 **Herbaceous:** 01

Height classes: 01=<1/2m 02=1/2-1m 03=1-2m 04=2-5m 05=5-10m 06=10-15m 07=15-20m 08=20-35m 09=35-50m 10=>50m

Species (List up to 20 major species), Stratum, and Approximate % cover: Stratum categories: T= Overstory tree, U= Understory tree S = Shrub, H= Herb, N= Non-vascular. *% cover intervals for reference*: <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Strata	Species	% cover		Strata	Species	% cover
S	*Larrea tridentata*	4				
S	*Ambrosia dumosa*	4				
S	*Opuntia bigelovii*	<1				
H	*Plantago ovata*	2				
H	*Brassica tournefortii*	<1				
H	*Chaenactis* sp.	<1				

Unusual species: _____

III. INTERPRETATION OF STAND

Field-assessed vegetation alliance name: *Larrea tridentata - Ambrosia dumosa* Shrubland

Field-assessed association name (optional): _____

Adjacent alliances: *Ambrosia dumosa* Shrubland ___ _____ / _____ _____

Confidence in alliance identification: L M (H) Explain: Few species present.

Other identification problems: _____

Has the vegetation changed since air photo taken? Yes / (No) If Yes, What has changed?

Polygon is more than one type: (Yes, No) _____ **(Note:** type with greatest coverage in polygon should be entered in above section)

Other types: _____

CALIFORNIA NATIVE PLANT SOCIETY - VEGETATION RAPID ASSESSMENT FIELD FORM

(Desert Version Revised Feb 21, 2007)

For Office Use:	Final database #:	Final vegetation type name:	Alliance_____ Association_____

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION

Polygon/Stand #:	Air photo #:	Date:	Name(s) of surveyors:
5		21 Feb 2010	Chuck Hughes, Mike Bower, Adam Forbes

GPS waypoint #: _____ **GPS name:** _____ **GPS datum: (e.g. NAD 83)** WGS84 **Zone: 10S / 10T** (**11S**) (circle one)

UTM field reading: **UTME** 701597 ___ ___ ___ ___ **UTMN** 3771148 ___ ___ ___ ___ ___ **GPS Error:** ± 1.9 (**ft**) / **m**

Is GPS within stand? (**Yes**) / **No** **If No, cite from GPS point to stand, the distance** _____**(in meters) and bearing** _____**(degrees)**

Elevation: **ft / m** **Photograph #'s**:

Geology code: MIAL **Soil Texture code:** MESA | (**Upland**) **or** **Wetland/Riparian** (circle one)

Topography: Macro: **top** **upper** **mid** (**lower**) **bottom** | **Micro:** **convex** **flat** **concave** (**undulating**) (circle one)

% Surface cover: **Lg rock:** 0 **Sm rock:** 2 **Bare/Fine:** 96 **Litter:** 1 **BA Stems:** 1 **Water:** 0 **=sums to100%**
(>25 cm diam) (2mm-25 cm diam) (<2 mm, Incl sand, mud)

Slope exposure, Actual °: _____ **General:** **NE** **NW** **SE** (**SW**) **Flat** **Variable /All** (circle one)

Slope steepness, Actual °: _____ **General:** **0°** (**1-5°**) **5-25°** **> 25°** (circle one)

Size of stand: <1 acre___ **1-5 acres**___ **>5 acres** X **Plot:** (**Yes**) / **No** **If yes, denote size: 100 m²** / (**400m²**) / **1000 m²** / **Other**

Site history, stand age, and comments: Former military airstrip. Natural alluvial flow along ephemeral washes altered by CO aqueduct and Highway 62.

Type/ Level of disturbance codes: 02 / L 14 / L 28 / M ____/___ ____/___ **"Other"**

II. HABITAT AND VEGETATION DESCRIPTION

Tree DBH : **T1** (<1" dbh), **T2** (1-6" dbh), **T3** (6-11" dbh), **T4** (11-24" dbh), **T5** (>24" dbh), **T6** (multi-layered) (circle one)

If Tree, list 1-3 dominant overstory spp.:_____

Shrub: **S1** seedling (<3 yr. old), **S2** young (<1% dead), (**S3** mature (1-25% dead)), **S4** decadent (>25% dead)

Herbaceous: **H1** (<12" plant ht.), **H2** (>12" ht.) **Desert Riparian Tree/Shrub:** **1** (<2ft. stem ht.), **2** (2-10ft. ht.), **3** (10-20ft. ht.), **4** (>20ft. ht.)

Desert Palm/Joshua Tree: **1** (<1.5" base diameter), **2** (1.5-6" diam.), **3** (>6" diam.) **% NonVasc cover:** <1 **Total % Veg cover:** 5

% Cover **-Overstory Tree Conifer/Hardwood:** ____/____ **Understory tree-Tall shrub:** ____ **Shrub:** 3 **Herbaceous:** 2

Height Class **- Overstory Conifer/Hardwood:** ____/____ **Understory tree-Tall shrub:** ____ **Shrub:** 03 **Herbaceous:** 01

Height classes: 01=<1/2m 02=1/2-1m 03=1-2m 04=2-5m 05=5-10m 06=10-15m 07=15-20m 08=20-35m 09=35-50m 10=>50m

Species (List up to 20 major species), Stratum, and Approximate % cover: Stratum categories: T= Overstory tree, U= Understory tree S = Shrub, H= Herb, N= Non-vascular. *% cover intervals for reference*: <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Strata	Species	% cover		Strata	Species	% cover
S	*Larrea tridentata*	2				
S	*Ambrosia dumosa*	1				
S	*Opuntia basilaris*	<1				
H	*Plantago ovata*	1				
H	*Chaenactis* sp.	1				
H	*Brassica tournefortii*	<1				

Unusual species: _____

III. INTERPRETATION OF STAND

Field-assessed vegetation alliance name: *Larrea tridentata - Ambrosia dumosa* Shrubland

Field-assessed association name (optional): _____

Adjacent alliances: *Ambrosia dumosa* Shrubland ___ _____ / _____ _____

Confidence in alliance identification: **L** **M** (**H**) **Explain:** Few species present.

Other identification problems: _____

Has the vegetation changed since air photo taken? **Yes** / (**No**) **If Yes, What has changed?**

Polygon is more than one type: (Yes, No) _____ **(Note:** type with greatest coverage in polygon should be entered in above section)

Other types: _____

CALIFORNIA NATIVE PLANT SOCIETY - VEGETATION RAPID ASSESSMENT FIELD FORM

(Desert Version Revised Feb 21, 2007)

For Office Use:	Final database #:	Final vegetation type name:	Alliance_____ Association_____

I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION

Polygon/Stand #:	Air photo #:	Date:	Name(s) of surveyors:
6		21 Feb 2010	Chuck Hughes, Mike Bower

GPS waypoint #: _____ **GPS name:** _____ **GPS datum: (e.g. NAD 83)** WGS84 **Zone: 10S / 10T / (11S)** (circle one)

UTM field reading: **UTME** 700991 ___ ___ ___ ___ **UTMN** 3773092 ___ ___ ___ ___ ___ **GPS Error: ±** 2.1 **(ft) / m**

Is GPS within stand? (Yes) / No If No, cite from GPS point to stand, the distance _____**(in meters) and bearing** _____**(degrees)**

Elevation: **ft / m Photograph #'s**:

Geology code: MIAL **Soil Texture code:** COSA | **Upland or (Wetland/Riparian)** (circle one)

Topography: Macro: top upper mid (lower) bottom | Micro: convex flat (concave) undulating (circle one)

% Surface cover: Lg rock: 1 **Sm rock:** 1 **Bare/Fine:** 96 **Litter:** 1 **BA Stems:** 1 **Water:** 0 **=sums to100%**
(>25 cm diam) (2mm-25 cm diam) (<2 mm, Incl sand, mud)

Slope exposure, Actual °: _____ **General: NE NW SE (SW) Flat Variable /All** (circle one)

Slope steepness, Actual °: _____ **General: 0° (1-5°) 5-25° > 25°** (circle one)

Size of stand: <1 acre___ 1-5 acres___ >5 acres___ Plot: Yes / No If yes, denote size: 100 m² / (400m²) / 1000 m² / Other

Site history, stand age, and comments: Ephemeral wash channeled under County aqueduct and Highway 62. Constrained in artificially constructed berms.

Type/ Level of disturbance codes: 33 / S 02 / L 05 / L ____/___ ____/___ **"Other"**

II. HABITAT AND VEGETATION DESCRIPTION

Tree DBH : T1 (<1" dbh), **(T2** (1-6" dbh), **(T3** (6-11" dbh), **T4** (11-24" dbh), **T5** (>24" dbh), **T6** (multi-layered) (circle one)

If Tree, list 1-3 dominant overstory spp.: *Cercidium* sp. , *Psorothamnus spinosus - S*

Shrub: S1 seedling (<3 yr. old), **S2** young (<1% dead), **(S3** mature (1-25% dead), **S4** decadent (>25% dead)

Herbaceous: H1 (<12" plant ht.), **H2** (>12" ht.) **Desert Riparian Tree/Shrub: 1** (<2ft. stem ht.), **2** (2-10ft. ht.), **3** (10-20ft. ht.), **(4** (>20ft. ht.)

Desert Palm/Joshua Tree: 1 (<1.5" base diameter), **2** (1.5-6" diam.), **3** (>6" diam.) **% NonVasc cover:** 0 **Total % Veg cover:** 5

% Cover -Overstory Tree Conifer/Hardwood: ____/ <1 **Understory tree-Tall shrub:** 2 **Shrub:** 2 **Herbaceous:** 1

Height Class - Overstory Conifer/Hardwood: ____/ 05 **Understory tree-Tall shrub:** 03 **Shrub:** 02 **Herbaceous:** 01

Height classes: 01=<1/2m 02=1/2-1m 03=1-2m 04=2-5m 05=5-10m 06=10-15m 07=15-20m 08=20-35m 09=35-50m 10=>50m

Species (List up to 20 major species), Stratum, and Approximate % cover: Stratum categories: T= Overstory tree, U= Understory tree S = Shrub, H= Herb, N= Non-vascular. *% cover intervals for reference*: <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Strata	Species	% cover		Strata	Species	% cover
O	*Cercidium* sp.	<1				
U	*Psorothamnus spinosus*	2				
S	*Hymenoclea salsola* var. *salsola*	2				
S	*Ambrosia dumosa*	<1				
S	*Larrea tridentata*	<1				
H	*Brassica tournefortii*	1				
H	*Cryptantha* sp.	<1				
H	*Plantago ovata*	<1				

Unusual species: _____

III. INTERPRETATION OF STAND

Field-assessed vegetation alliance name: *Psorothamnus spinosus* Woodland

Field-assessed association name (optional): _____

Adjacent alliances: *Larrea tridentata - Ambrosia dumosa* Shrubland _____ _____

Confidence in alliance identification: L M (H) Explain: Few species present.

Other identification problems: _____

Has the vegetation changed since air photo taken? Yes / (No) If Yes, What has changed?

Polygon is more than one type: (Yes, No) _____ **(Note:** type with greatest coverage in polygon should be entered in above section)

Other types: _____ _____

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APPENDIX F.

Photographs

Rice Solar Energy Project
Riverside County, CA

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Photo 1. View toward north at creosote bush - white bursage scrub in the northwest portion of the PSA. Turtle Mtns. in background. 11 June 2010.

Photo 2. View toward east at creosote bush - white bursage scrub in the northwest portion of the PSA. West Riverside Mtns. in background. 11 June 2010.

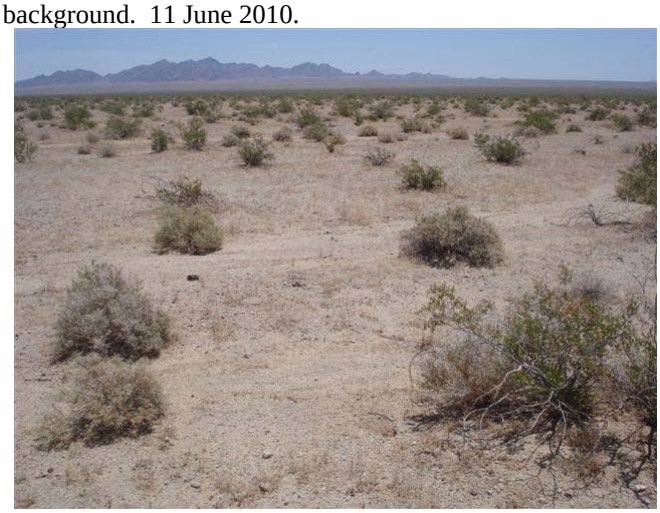

Photo 3. View toward east at creosote bush - white bursage scrub in the northeast portion of the PSA. West Riverside Mtns. in background. 11 June 2010.

Photo 4. View toward southeast at creosote bush - white bursage scrub in the southern portion of the PSA. Big and Little Maria Mtns. in background. 14 June 2010.

Photo 5. View toward south at creosote bush - white bursage scrub adjacent to southern boundary of the T-line corridor. 15 July 2010.

Photo 6. View toward west at creosote bush - white bursage scrub in the T-line corridor. 15 July 2010.

Photo 7. View east at creosote bush - white bursage scrub from the western portion of the T-line corridor. West Riverside Mtns. in background. 14 June 2010.

Photo 8. View toward southeast at creosote bush - white bursage scrub from the western portion of the T-line corridor. 14 June 2010.

Photo 9. View toward northeast at white bursage scrub in the northwest portion of the PSA. 11 June 2010.

Photo 10. View toward north at white bursage scrub in the northwest portion of the PSA. Turtle Mtns. in background. 11 June 2010.

Photo 11. View toward east at concrete pad in the northwest portion of the PSA. West Riverside Mtns. in background. 25 March 2009.

Photo 12. View toward south at smoke tree woodland in the northwest portion of the PSA. Big and Little Maria Mtns. in background. 19 February 2010.

APPENDIX G.

Species Evaluated Table

Rice Solar Energy Project
Riverside County, CA

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Abronia villosa var. *aurita* chaparral sand-verbena	--	--/ 1B.1	2, 5	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.
Acanthomintha ilicifolia San Diego thorn-mint	T	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 PSA.
Acanthoscyphus (=Oxytheca) parishii var. *goodmaniana* 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 PSA. The PSA is outside the elevation range of this species as cited in CNPS 2010.
Acleisanthes longiflora Angel trumpets	--	--/ 2.3	6	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.
Allium munzii 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 PSA.

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Ambrosia pumila 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 PSA.
Androstephium breviflorum Small-flowered androstephium	--	--/ 2.2	6	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.
Arctostaphylos otayensis 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 PSA. The PSA is outside the geographic range of this species as cited in CNPS 2010.
Arenaria paludicola 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 PSA.
Arenaria ursina 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 PSA. The PSA is outside the geographic range of this species as cited in CNPS 2010.
Astragalus albens 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 PSA is outside the elevation range of this species as cited in CNPS 2010.
Astragalus deanei 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 PSA. The PSA is outside the geographic range of this species as cited in CNPS 2010.

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Astragalus douglasii var. *perstrictus* Jacumba milk-vetch	--	--/ 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 PSA. The PSA is outside the geographic range of this species as cited in CNPS 2010.
Astragalus insularis var. harwoodii Harwood's milk-vetch	--	--/ 2.2	2, 5	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.
Astragalus jaegerianus 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 PSA is outside the geographic and elevation range of this species as cited in CNPS 2010.
Astragalus lentiginosus var. *coachellae* Coachella Valley milk-vetch	E	--/ 1B.2	1, 3	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 though May (CNPS 2010).	Yes. See text.
Astragalus oocarpus 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. Blooms May through August (CNPS 2010). Also known to occur on dry brush slopes and in openings in chaparral and oak woodland (BLM 2010a).	No. Suitable habitat does not occur in the PSA. The PSA is outside the geographic range of this species as cited in CNPS 2010.
Astragalus tricarinatus Triple-ribbed milk-vetch	E	--/ 1B.2	1, 3	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).	Marginal. See text.
Atriplex coronata var. *notatior* San Jacinto Valley crownscale	E	--/ 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 PSA.

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Baccharis vanessae Encinitas baccharis	T	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 PSA. The PSA is outside the geographic range of this species as cited in CNPS 2010.
Berberis nevinii Nevin's barberry	E	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 PSA.
Bouteloua trifida Three-awned grass	--	--/ 2.3	6	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).	Yes. See text.
Brodiaea filifolia 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 PSA.
Brodiaea orcuttii 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 PSA.
Calliandra eriophylla Pink fairy-duster	--	--/ 2.3	6	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.
Calochortus dunnii Dunn's mariposa lily	--	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 PSA.

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Castela emoryi Emory's crucifixion-thorn	--	--/ 2.3	6	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.
Castilleja cinerea 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 PSA is outside the elevation range of this species as cited in CNPS 2010.
Ceanothus cyaneus 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 PSA. The PSA is outside the geographic range of this species as cited in CNPS 2010.
Ceanothus ophiochilus 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 PSA. The PSA is outside the geographic range of this species as cited in CNPS 2010.
Chorizanthe parryi var. *fernandina* San Fernando Valley 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 PSA.
Coryphantha alversonii (=*Escobaria vivipara* var. *alversonii*) Foxtail cactus	--	--/ 4.3	2	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.
Cupressus (=*Callitropsis*) *forbesii* 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 PSA.

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Deinandra (=*Hemizonia*) *conjugens* Otay tarplant	E	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 PSA.
Deinandra (=*Hemizonia*) *floribunda* 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. Blooms August through October (CNPS 2010). Typically found on dry slopes and in valleys (BLM 2010a).	No. Suitable habitat does not occur in the PSA.
Ditaxis claryana Glandular ditaxis	--	--/ 2.2	6	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.
Ditaxis serrata var. *californica* California ditaxis	--	--/ 3.2	6	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.
Dodecahema leptoceras Slender-horned spineflower	E	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 PSA.
Dudleya multicaulis 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 PSA.
Dudleya variegata 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. Blooms April through June (CNPS 2010). Typically found on dry hillsides, stony places, and mesas (BLM 2010a).	No. Suitable habitat does not occur in the PSA.
Echinocereus engelmannii var. *howei* 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 PSA is outside the geographic and elevation range of this species as cited in CNPS 2010.

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Eriastrum densifolium ssp. *sanctorum* Santa Ana River woolly-star	E	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. Blooms May through September (CNPS 2010). Also known to occur in gravelly river beds, coastal sage scrub, and chaparral (BLM 2010a).	No. Suitable habitat does not occur in the PSA.
Eriastrum harwoodii Harwood's eriastrum	--	E/ 1B.2	2	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.
Erigeron parishii Parish's daisy	T	--/ 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. Blooms May through August (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).	No. The PSA is outside the geographic and elevation range of this species as cited in CNPS 2010.
Eriogonum ericifolium var. *thornei* Thorne's buckwheat	--	E/	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. Blooms July through August (CNPS 2010). Found on copper-rich gravel substrates in pinyon and juniper woodland (BLM 2010b).	No. Suitable habitat does not occur in the PSA.
Eriogonum kennedyi var. *austromontanum* Southern mountain wild 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 PSA. The PSA is outside the elevation range of the species (CNPS 2010).
Eriogonum ovalifolium var. *vineum* 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 PSA is outside the elevation range of this species as cited in CNPS 2010.

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Eryngium aristulatum var. *parishii* 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 PSA.
Fremontodendron mexicanum Mexican flannelbush	E	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 PSA.
Galium hilendiae ssp. *kingstonense* 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 PSA. The PSA is outside the geographic and elevation range of the species as cited in CNPS 2010.
Glossopetalon pungens 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. Blooms May through June (CNPS 2010). Typical habitat also includes limestone cliffs (BLM 2010b).	No. Suitable habitat does not occur in the PSA. The PSA is outside the elevation range of this species as cited in CNPS 2010.
Ivesia jaegeri 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. Blooms June through July (CNPS 2010). Typical habitat also includes limestone crevices and vertical rocks (BLM 2010b).	No. Suitable habitat does not occur in the PSA. The PSA is outside the elevation range of this species as cited in CNPS 2010.
Ivesia patellifera 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 PSA. The PSA is outside the elevation range of this species as cited in CNPS 2010.

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Lepechinia ganderi Gander's pitcher-sage	--	--/ 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 PSA. The PSA is outside the geographic range of this species as cited in CNPS 2010.
Linanthus maculatus Little San Bernardino Mountains linanthus	--/BLM Sensitive	--/ 1B.2	3	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.
Lupinus excubitus var. *medius* Mountain Springs bush lupine	--/BLM Sensitive	--/ 1B.3	3	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 PSA is outside the geographic and elevation range of this species as cited in CNPS 2010.
Mentzelia puberula Argus blazing star	--	--/ 2.2	6	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. Blooms March through May (CNPS 2010). Habitat also reported as sandy crevices in cliffs or rocky slopes (Brokaw et al. 2009).	Yes. See text.
Monardella robinsonii 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 PSA. The PSA is outside the elevation range of this species as cited in CNPS 2010.
Navarretia fossalis 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 PSA.
Opuntia munzii Munz cholla	--/BLM Sensitive	--/ 1B.3	3	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 PSA is outside the geographic range of this species as cited in CNPS 2010.

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Orcuttia californica 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 PSA.
Penstemon stephensii 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. Blooms April through June (CNPS 2010). Typical habitat also includes rocky slopes and sagebrush scrub (BLM 2010b).	No. The PSA is outside the elevation range of this species as cited in CNPS 2010.
Phacelia stellaris 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 PSA.
Pholistoma auritum var. *arizonicum* Arizona pholistoma	--	--/ 2.3	6	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).	Yes. See text.
Physalis lobata Lobed ground cherry	--	--/ 2.3	6	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. Blooms September through January (sometimes 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).	Yes. See text.
Physaria (=*Lesquerella*) *kingii* ssp. *bernardina* San Bernardino Mountains 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 PSA. The PSA is outside the geographic and elevation range of this species as cited in CNPS 2010.

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Poa atropurpurea 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 PSA. The PSA is outside the geographic and elevation range of this species as cited in CNPS 2010.
Psorothamnus fremontii var. *attenuatus* Narrow-leaved psorothamnus	--	--/ 2.3	6	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.
Rorippa (=*Nasturtium*) *gambellii* 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 PSA.
Senna covesii Coves' cassia	--	--/ 2.2	6	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.
Sidalcea pedata 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 PSA. The PSA is outside the geographic and elevation range of this species as cited in CNPS 2010.
Sphaeralcea rusbyi var. *eremicola* 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 PSA is outside the geographic and elevation range of this species as cited in CNPS 2010.
Taraxacum californicum 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 PSA. The PSA is outside the geographic and elevation range of this species as cited in CNPS 2010.

Special-Status Species Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Tetracoccus dioicus 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. Blooms April through May (CNPS 2010). Typical habitat includes dry stony slopes (BLM 2010a).	No. Suitable habitat does not occur in the PSA.
Teucrium cubense ssp. *depressum* Dwarf germander	--	--/ 2.2	6	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.
Teucrium glandulosum Desert germander	--	--/ 2.3	6	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. Blooms April through May (CNPS 2010). Habitat has also been described as rocky slopes and canyons (Baldwin et al. 2002).	No. Suitable habitat does not occur in the PSA. The PSA is outside the elevation range of this species as cited in CNPS 2010.
Thelypodium stenopetalum Slender-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 PSA. The PSA is outside the geographic and elevation range of this species as cited in CNPS 2010.
Trichostema austromontanum ssp. *compactum* 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 PSA. The PSA is outside the geographic and elevation range of this species as cited in CNPS 2010.
Wislizenia refracta ssp. *refracta* Jackass clover	--	--/ 2.2	6	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).	Yes. See text.

Common Name	Federal Status [a, b]	State Status [a, b]	Source [c]	Habitat Requirements	Potential to Occur in the PSA
Natural Communities					
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 *Carex* sp., *Eleocharis* sp., *Scirpus* sp., *Typha* sp., and *Verbena bonariensis*. 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 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: *Amaranthus palmeri, Ambrosia dumosa, Atriplex canescens, Atriplex lentiformis, Atriplex polycarpa, Celtis reticulata, Cercidium floridum, Coldenia palmeri, Cucurbita* spp., *Larrea tridentata, Lycium* spp., *Prosopis glandulosa, Prosopis pubescens, Prosopis velutina, Sambucus mexicana, Sarcostemma* spp., and *Suaeda torreyana* (Holland 1986).	This community type does not occur in the PSA.
Sonoran Cottonwood Willow Riparian Forest	--	--/ --	2	A broadleaved, winter-deciduous streamside forests reaching 60 feet tall. Dominated by *Populus fremontii* with dense understories of *Salix* spp. Formerly widespread along the lower Colorado River but has been mostly eliminated by flood control, agriculture, or Tamarisk invasion. Characteristic species include: *Arundo donax, Aster spinosus, Atriplex lentiformis, Baccharis glutinosa, Baccharis sarothroides, Phragmites australis, Pluchea sericea, Populus fremontii, Salix exigua, Salix gooddingii, Sesbania macrocarpa, Tamarix* spp. (Holland 1986).	This community type does not occur in the PSA.

[a] **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.

[b] **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

[c] **Sources** **1** = From USFWS letter (USFWS 2010a and b). **2** = From CNDDB. **3** = BLM List for Palm Springs District (BLM 2010a). **4** = BLM List for Needles District (BLM 2010b). **5 =** Observed or included by Sycamore Environmental (Sycamore Environmental 2009)**. 6 =** CEC Data Request #72 for RSEP Application for Certification.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA
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APPLICATION FOR CERTIFICATION FOR THE *RICE SOLAR ENERGY POWER PLANT PROJECT*

Docket No. 09-AFC-10

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(Revised 3/4/2010)

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DECLARATION OF SERVICE

I, Mary Finn, declare that on July 21, 2010, I served and filed copies of the attached, 09-AFC-10-RSEP Response to CEC Staff Data Request #72 – Spring 2010 Supplemental Botanical Inventory Report dated July 20, 2010. 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].

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 the 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:

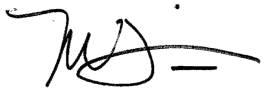
x_____ sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (***preferred method***);

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

I declare under penalty of perjury that the foregoing is true and correct.



Mary Finn