

# DOCKET

09-AFC-6

DATE MAY 14 2010

RECD. MAY 20 2010

May 14, 2010

Alan Solomon  
Project Manager  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

RE: **Blythe Solar Power Project, Docket No. 09-AFC-6**  
*Responses to Questions from the April 28, 29 and May 7, 2010 CEC Workshops*  
*Preliminary Biological Survey Results – Spring 2010*  
Technical Areas: Biological resources

Dear Mr. Solomon:

Attached please find the following response to questions generated at the April 28, 29, and May 7, 2010 CEC Workshops for the Blythe Solar Power Project.

If you have any questions on this submittal, please feel free to contact me directly.

Sincerely,



Alice Harron  
Senior Director, Development

**STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION**

***In the Matter of:***  
**APPLICATION FOR CERTIFICATION**  
**for the *BLYTHE SOLAR POWER PROJECT***

**Docket No. 09-AFC-6**  
**PROOF OF SERVICE**  
***(Revised 4/19/2010)***

**APPLICANT**

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### **DECLARATION OF SERVICE**

I, Carl Lindner, declare that on, May 14, 2010, I served and filed copies of the attached Blythe Solar Power Project Materials:

Responses to Questions from the April 28, 29 and May 7, 2010 CEC Workshops –  
*Preliminary Biological Survey Results*  
Technical Areas: Biological Resources

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:

[\[http://www.energy.ca.gov/sitingcases/solar\\_millennium\\_blythe\]](http://www.energy.ca.gov/sitingcases/solar_millennium_blythe).

The document has been sent to 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 or by overnight delivery service or depositing in the United States mail at Camarillo, California with postage or fees thereon fully prepaid and addressed as provided on the Proof of Service list above 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, along with 13 CDs, as follows:

**CALIFORNIA ENERGY COMMISSION**

Attn: Docket No. 09-AFC-6  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512

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

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

Carl E. Lindner



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Suite 500  
San Diego, CA 92101  
www.aecom.com

619.233.1454 tel  
619.233.0952 fax

May 14, 2010

Ms. Susan Sanders  
California Energy Commission  
1516 Ninth Street  
Sacramento, California 95814

**Subject: Blythe Solar Power Project (09-AFC-6) – Preliminary Spring 2010 Survey Results Corrected and Preliminary Impact Calculations for Biological Resources**

Dear Ms. Sanders:

On behalf of Palo Verde Solar I, LLC, AECOM is submitting preliminary results of biological surveys conducted in spring 2010 for desert tortoise (*Gopherus agassizii*; DT), rare plants, jurisdictional waters, and incidental wildlife occurrences for the Blythe Solar Power Project. This information was requested at the Palen and Blythe Staff Workshops conducted on April 28 and 29, 2010. Additional information was also requested in a letter from Susan Sanders to Alan Solomon dated May 12, 2010.

Preliminary survey results for DT, rare plants and jurisdictional waters were submitted to the CEC on May 7, 2010. The results provided herein supersede the results provided on May 7, 2010. The previous survey results incorrectly included Coachalla Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*) as part of the rare plant botanical survey results. The proper identification of these occurrences is *Astragalus insularis* var. *harwoodii* (Harwood's milkvetch), a CNPS List 2.2 plant species. In addition, the results provided herein include an additional two mile segment of the gen-tie transmission line that was not previously reported. Surveys for jurisdictional waters have been completed and included herein for the additional transmission line; however, surveys for DT and rare plants are currently being conducted for this area. Therefore, the complete results of additional two mile segment of the transmission line will be provided in final technical reports to be submitted to the CEC in early June.

The preliminary survey results are presented in figures and tables attached. Table 1 and Figure 1 present a summary of observations of DT sign and DT occurrences noted during spring 2010 surveys. Table 2 and Figure 2 present the rare plant population counts observed during spring 2010 surveys. Figure 3 presents the results of a formal jurisdictional delineation of waters of the State. Table 3 and Figure 4 present incidental wildlife occurrences observed during protocol surveys for DT, rare plants, western burrowing owl, and jurisdictional waters. Results from the fall and spring 2009 surveys are not included in the tables and figures for DT, rare plants or incidental wildlife occurrences. However, the jurisdictional waters figure does include results from the 2009 surveys and a table presenting the results of both survey years is provided in the figure. Please note that the results provided in Tables 1 through 3 and Figures 1 through 4 are simply the results of our observations within the 100 percent coverage study area and associated buffers. These tables and figures do not represent total impacts within disturbance areas because we surveyed wider corridor widths and additional areas for contingency in the engineering design that ultimately will not be disturbed.

Figure 5 presents the additional disturbance areas for the temporary construction access road, transmission line corridor, utility corridor, road improvements to Black Rock Road, and additional project components that are outside the 2009 project footprint. Please note that some disturbance areas proposed in the 2009 project footprint have been removed in the 2010 project footprint. Therefore, the total Project Disturbance Area has been revised to be 6,983.9 acres. This total is still preliminary and subject to further refinement in the engineering design. A revised total disturbance area will be provided in final technical reports to be submitted to the CEC in early June.



Ms. Susan Sanders  
May 14, 2010  
Page 2

Figure 6 presents preliminary impacts to all cover types, including state waters, resulting from the revised Project Disturbance Area. These impact calculations are still preliminary and subject to further refinement in the engineering design. Revised impact calculations will be provided in final technical reports to be submitted to the CEC in early June.

Please let us know if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "W. Graham", is positioned above the typed name.

Mr. William Graham  
Principal  
AECOM

Attachments: Table 1. Blythe Solar Power Project Desert Tortoise Observations Spring 2010  
Table 2. Blythe Solar Power Project Rare Plant Populations Counts Spring 2010  
Table 3. Blythe Solar Power Project Incidental Wildlife Occurrences  
Figure 1. Preliminary Results Desert Tortoise Spring 2010 Surveys  
Figure 2. Preliminary Results Botany Rare Plants Spring 2010 Surveys  
Figure 3. Preliminary Results State Waters Spring 2010 Surveys  
Figure 4. Preliminary Results Incidental Wildlife Occurrences Spring 2010 Surveys  
Figure 5. Preliminary Disturbance Areas May 2010  
Figure 6. Preliminary Impacts to Cover Types May 2010  
CD. Raw Data Files in Excel and Shapefiles

cc: Alice Harron, Solar Millennium  
Elizabeth Ingram, Solar Millennium  
Scott Galati, Solar Millennium Counsel  
Mark Luttrell, AECOM

**Table 1. Blythe Solar Power Project Desert Tortoise Observations Spring 2010**

<b>Description</b>	<b>Proposed Project Study Area</b>	<b>Reconfigured Alternative Project Study Area</b>	<b>Proposed Project/Reconfigured Alternative Study Area<sup>1</sup></b>	<b>Buffer</b>	<b>Incidental Observations Outside Buffer Area</b>	<b>Grand Total</b>
Adult Tortoise		1		2		3
Adult Tortoise - Second Observation		1				1
Active Tortoise Burrow or Pallet - Class 1		3	1	22	4	30
Tortoise Burrow or Pallet - Class 2 (good condition, no evidence of recent use)	2	4		20	1	27
Tortoise Burrow or Pallet - Class 3 (deteriorated, definitely tortoise)		5		5	3	13
Possible Tortoise Burrow or Pallet (Class 4 or 5)		13		50	9	72
Tortoise Scat		2		2	1	5
Fossilized Turtle/Tortoise Bone		1		1		2
Tortoise Bone Fragment - Mineralized	10	10		6		26
Tortoise Bone Fragment - Not Mineralized	20	22	3	17	2	64
Tortoise Carcass (not disarticulated and scattered)	1	4		5		10
Tortoise Egg Shell Fragment		3				3
Tortoise Tracks	1	3	2	1		7
Tortoise Drinking Depression		1				1

<sup>1</sup>This encompasses the areas where the Proposed Project Study Area and Reconfigured Alternative Study Area overlap.

**Table 2. Blythe Solar Power Project Rare Plant Population Counts Spring 2010<sup>1</sup>**

<b>Species</b>	<b>Proposed Project Study Area</b>	<b>Reconfigured Alternative Project Study Area</b>	<b>Propose Project/Reconfigured Alternative Study Area<sup>2</sup></b>	<b>Buffer</b>	<b>Incidental Observations Outside Buffer Area</b>	<b>Grand Total</b>
Cottontop cactus	1		5	10		16
Harwood's milkvetch	677	60	128	1,837	60	2,762
Harwood's woollystar	2,134			1,287	8	3,429
Desert unicorn	4	15	6	1		26
Ribbed cryptantha	32,367			37,377	1,909	71,653 <sup>3</sup>
Utah milkvine	14	78	12	526		630
Winged cryptantha				15		15

<sup>1</sup> Note that each point on the figure may represent multiple individuals

<sup>2</sup> This encompasses the areas where the Proposed Project Study Area and Reconfigured Alternative Study Area overlap.

<sup>3</sup> Ribbed cryptantha was observed during 2010 botanical surveys as a generally continuous population throughout the stabilized and partially stabilized desert dunes south of I-10. This number represents the total number of plants physically counted during subsampling efforts; the actual population is currently estimated in the tens of millions (a more accurate population estimate will be provided in the Botanical Survey Report).

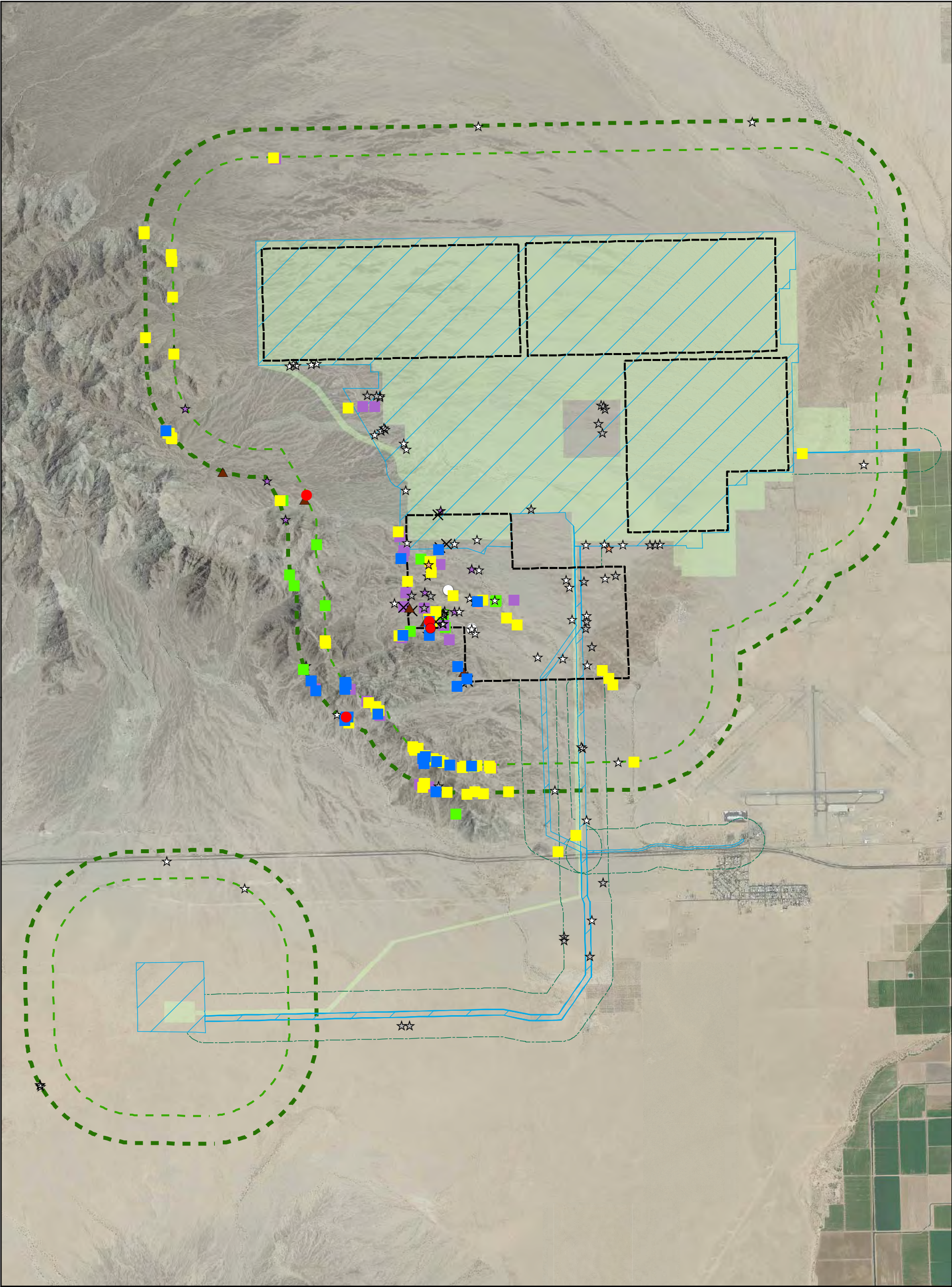
**Table 3. Blythe Solar Power Project Incidental Wildlife Occurrences Spring 2010<sup>1</sup>**

<b>Species Observations or Sign</b>	<b>Project Study Area</b>	<b>Reconfigured Alternative Study Area<sup>2</sup></b>	<b>Buffer</b>	<b>Grand Total</b>
American Badger Den	2	6		8
American Badger Predation Burrow		1	1	2
Bat Guano - Unknown Species		1		1
Cooper's Hawk			1	1
Ferruginous Hawk			1	1
Kit Fox Burrow	6	6	2	14
Kit Fox Complex	5	10	7	22
Loggerhead Shrike	2	2	6	10
Loggerhead Shrike Nest			1	1
Mojave Fringe-toed Lizard	86		48	134
Nest Cavity - Unidentified Woodpecker Species			1	1
Northern Harrier	1	1	1	3
Potential Pond for Couch's Spadefoot	3	2	9	14
Swainson's Hawk	4		5	9
Unknown Raptor Nest			1	1
Western Burrowing Owl	1	1	1	3

<sup>1</sup> These observations were noted during protocol surveys conducted for desert tortoise, rare plants, western burrowing owl, jurisdictional waters and vegetation mapping.

<sup>2</sup>This encompasses the areas where the Proposed Project Study Area and Reconfigured Alternative Study Area overlap.





<b>DT Observations (Spring 2010)</b>		
● Adult Tortoise	✕ Tortoise Tracks	■ Tortoise Burrow or Pallet - Class 2 (good condition, no evidence of recent use)
● Adult Tortoise - Second Observation	★ Fossilized Turtle/Tortoise Bone	■ Tortoise Burrow or Pallet - Class 3 (deteriorated, definitely tortoise)
■ Active Tortoise Burrow or Pallet - Class 1	■ Possible Tortoise Burrow or Pallet (Class 4 or 5)	★ Tortoise Carcass (not disarticulated and scattered)
▲ Tortoise Scat	★ Tortoise Bone Fragment - Mineralized	○ Tortoise Drinking Depression
	★ Tortoise Bone Fragment - Not Mineralized	○ Tortoise Egg Shell Fragment

**Map Location**

**Legend**  
■ Project Study Area  
■ Reconfigured Alternative Study Area  
■ Study Area (Surveyed in 2009)  
■ Buffer Transect 1000-foot  
■ Buffer Transect 3/4-mile  
■ Buffer Transect 1-mile

**Scale**  
0 4,500 9,000 Feet

**Blythe Solar Power Project**  
**Figure 1**  
**Preliminary Results**  
**Desert Tortoise**  
**Spring 2010 Surveys**

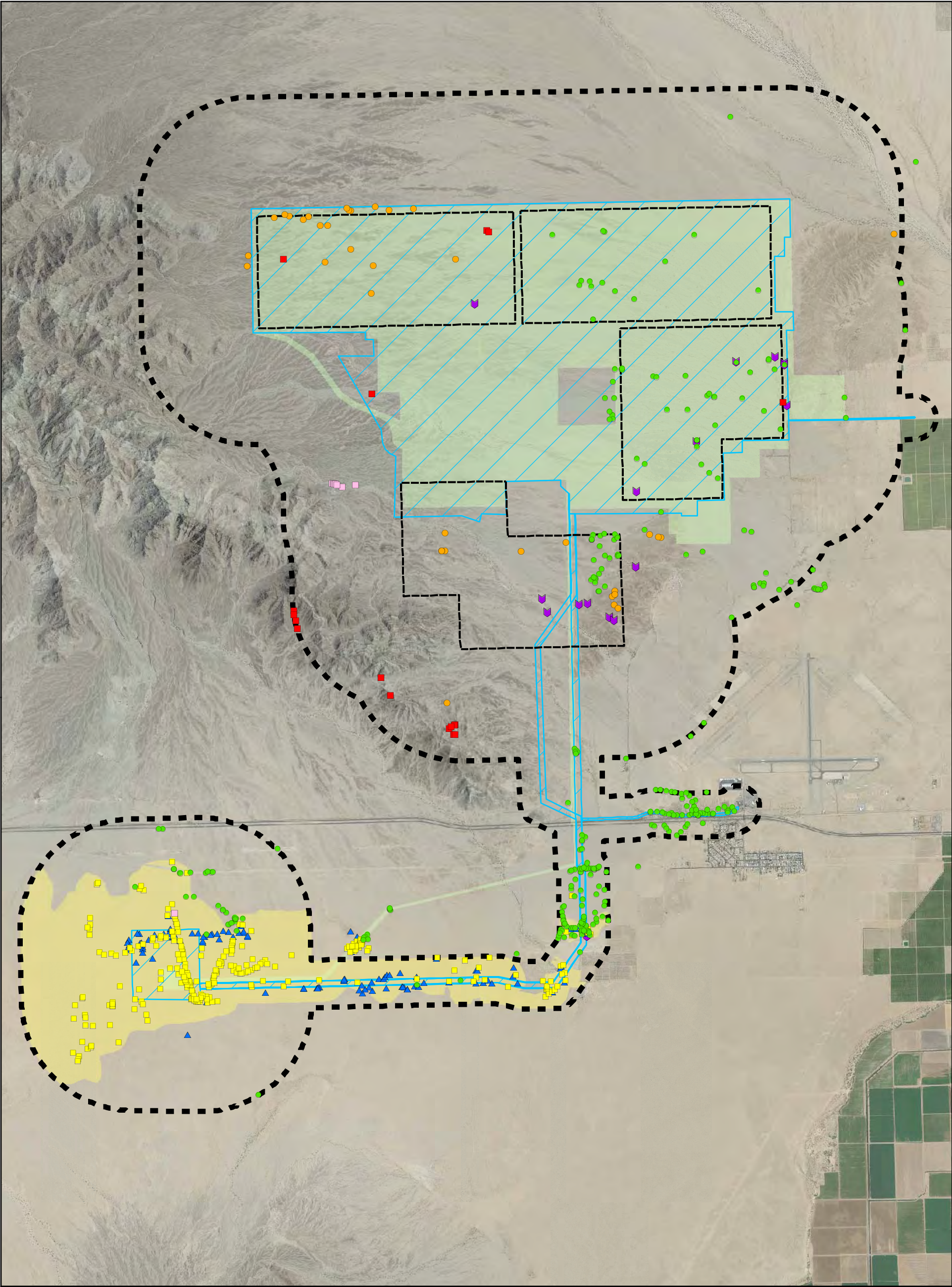
Source: NAIP 2009; AECOM 2010

1 inch = 4,500 feet

**AECOM**

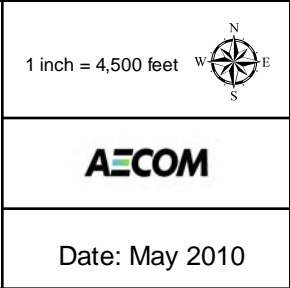
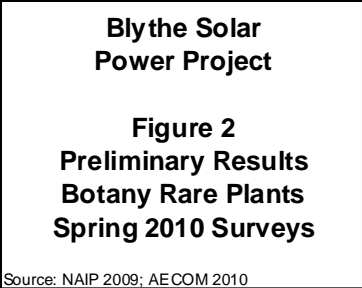
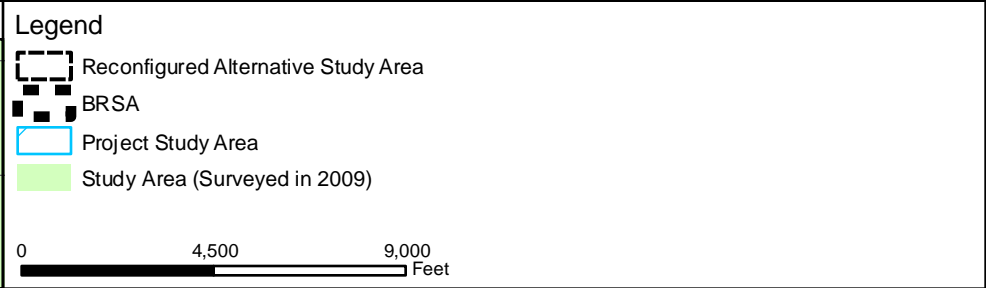
Date: May 2010



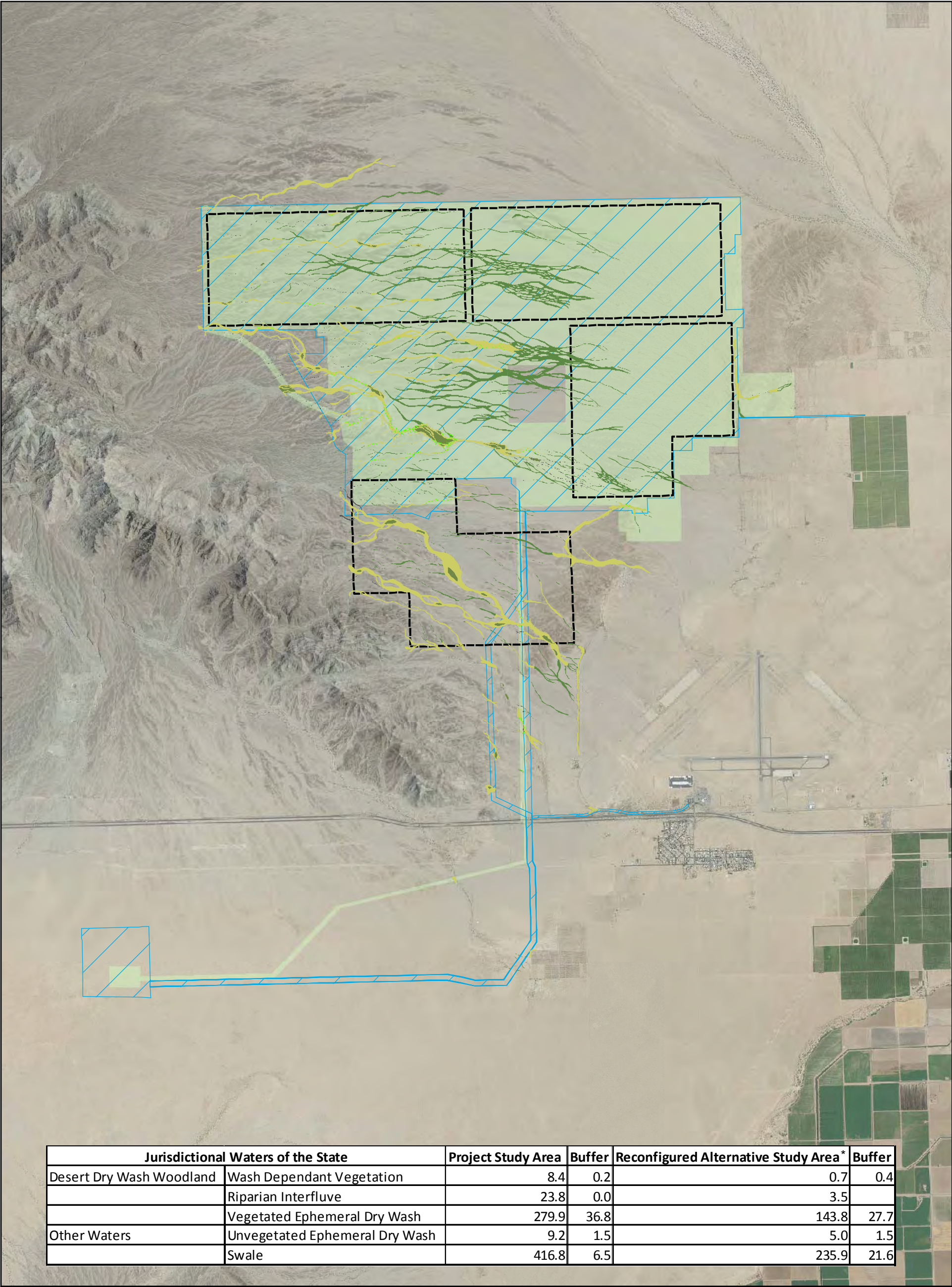


Rare Plant Observations

- |                   |                      |                                    |
|-------------------|----------------------|------------------------------------|
| Winged cryptantha | Utah milkvine        | Ribbed cryptantha                  |
| Cottontop cactus  | Harwood's woollystar | Ribbed cryptantha occupied habitat |
| Desert unicorn    | Harwood's milkvetch  |                                    |







Jurisdictional Waters of the State		Project Study Area	Buffer	Reconfigured Alternative Study Area *	Buffer
Desert Dry Wash Woodland	Wash Dependant Vegetation	8.4	0.2	0.7	0.4
	Riparian Interfluve	23.8	0.0	3.5	
	Vegetated Ephemeral Dry Wash	279.9	36.8	143.8	27.7
Other Waters	Unvegetated Ephemeral Dry Wash	9.2	1.5	5.0	1.5
	Swale	416.8	6.5	235.9	21.6

**Jurisdictional Waters of the State of California**

**Desert Dry Wash Woodland**

- Wash Dependent Vegetation
- Riparian Interfluve
- Vegetated Ephemeral Dry Wash

**Other Waters**

- Swale
- Unvegetated Ephemeral Dry Wash
- Study Area (Surveyed in 2009)

**Map Location**

**Legend**

- Project Study Area
- Reconfigured Alternative Boundary\*
- 250-foot Buffer Study Area
- Study Area (Surveyed in 2009)

0 4,500 9,000 Feet

**Blythe Solar Power Project**

**Figure 3**

**Preliminary Results**

**State Waters**

**Spring 2010 Surveys**

Source: NAIP 2009; AECOM 2010

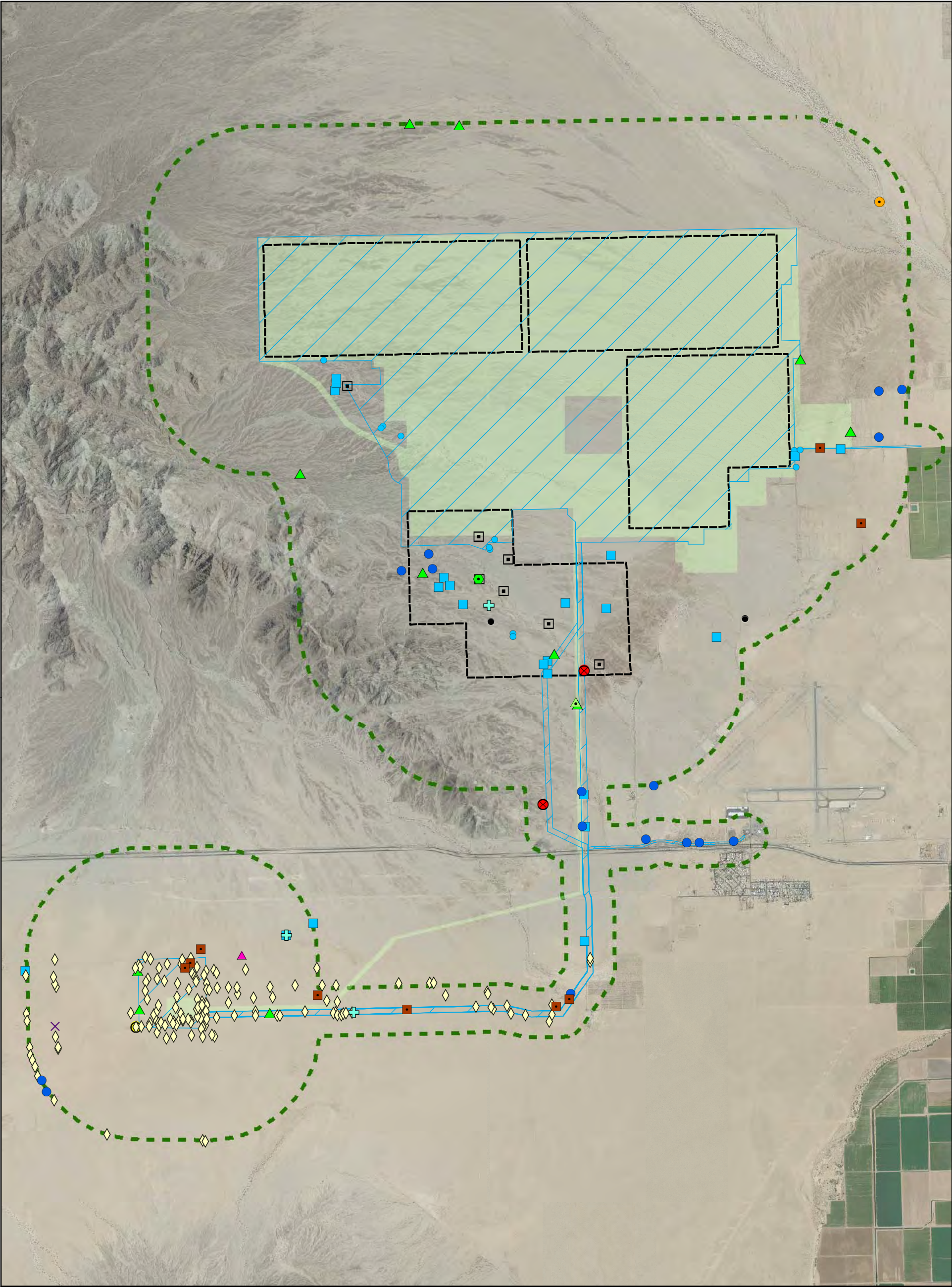
1 inch = 4,500 feet

**AECOM**

Date: May 2010

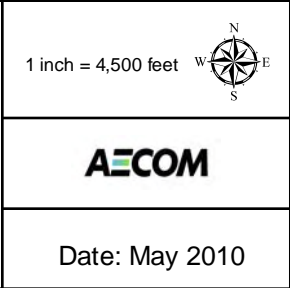
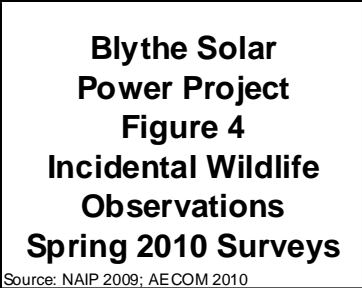
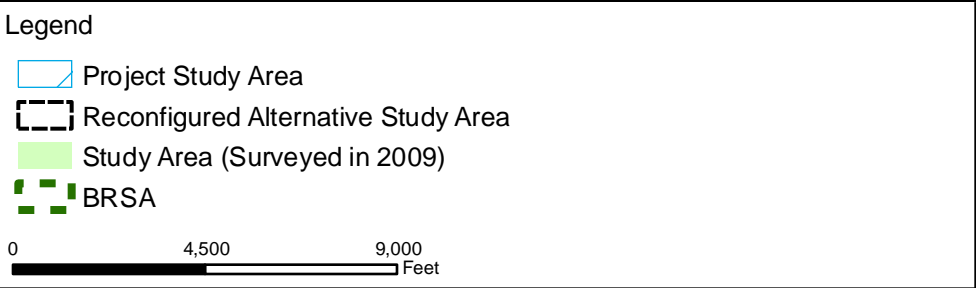
\*Note: The Reconfigured Alternative Disturbance Area encompasses the disturbance caused by construction of the solar power blocks only and is not a complete engineering design.



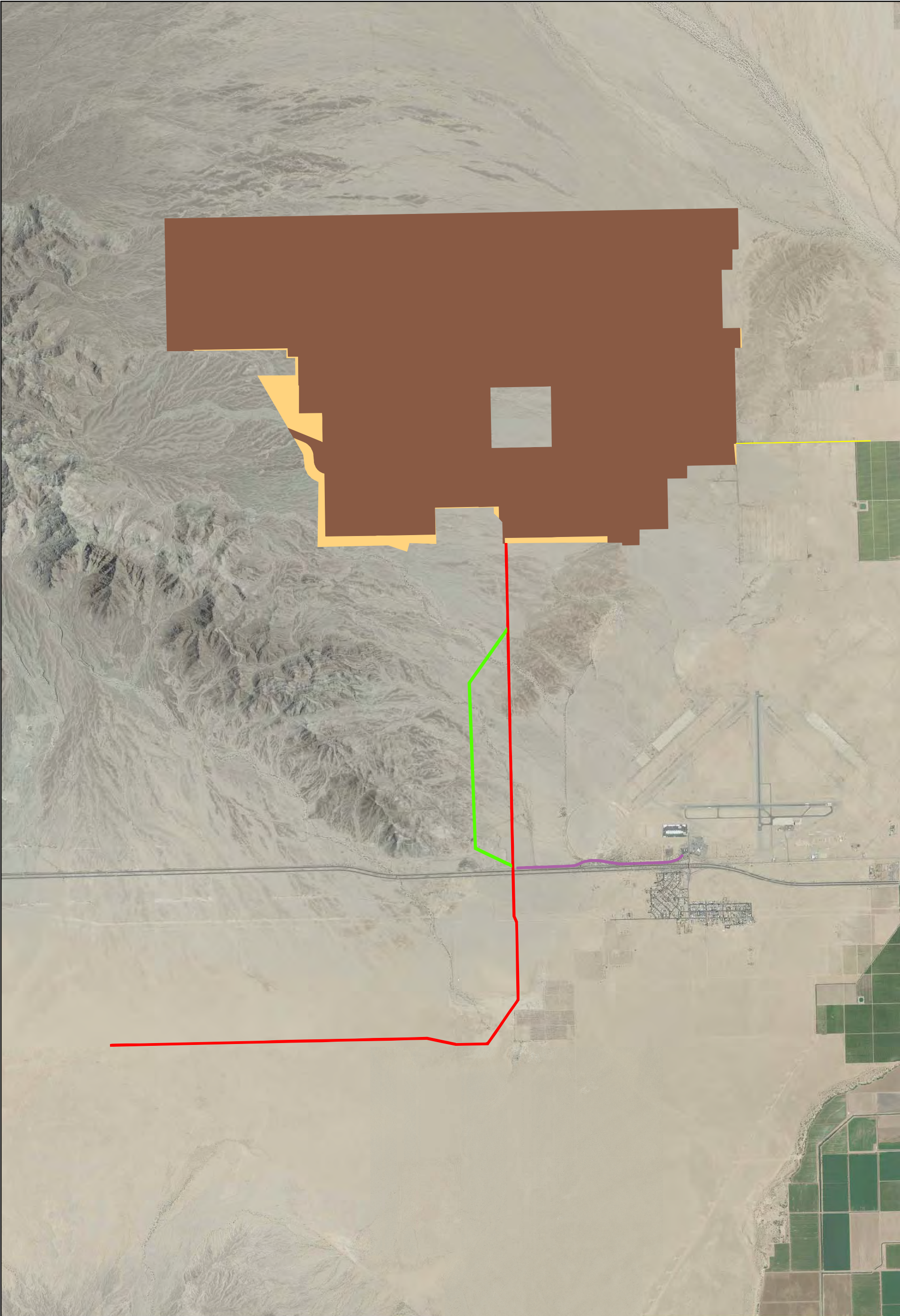


Sensitive Wildlife Observations

- |                                    |                     |   |                         |
|------------------------------------|---------------------|---|-------------------------|
| □ American Badger Den              | ▲ Ferruginous Hawk  | ▲ Loggerhead Shrike Nest                        | ⊗ Western Burrowing Owl |
| ● American Badger Predation Burrow | ● Kit Fox Burrow    | ◇ Mojave Fringe-toed Lizard                     | ✕ Unknown Raptor Nest   |
| ● Bat Guano - Unknown Species      | ■ Kit Fox Complex   | ● Potential Pond for Couch's Spadefoot          | ⊕ Northern Harrier      |
| ● Cooper's Hawk                    | ▲ Loggerhead Shrike | ● Nest Cavity - Unidentified Woodpecker Species | ■ Swainson's Hawk       |







Legend	
Impact Boundaries	
	Disturbance Area (6,603.4 acres)
	Additional Disturbance Areas 2010 (236.5 acres)
	Gen-Tie Alignment Disturbance Area (33.2 acres)
	Temporary Construction Power Disturbance Area (2.7 acres)
	Utility Corridor Disturbance Area (90.8 acres)
	Black Rock Road Access Disturbance Area (17.3 acres)
0 4,000 8,000 Feet	

**Blythe Solar  
Power Project  
Spring 2010 Surveys**

**Figure 5  
Preliminary  
Disturbance Areas**

Source: NAIP 2009; AECOM 2010

1 inch = 4,000 feet

Date: May 2010



