



AECOM  
1420 Kettner Boulevard  
Suite 500  
San Diego, CA 92101  
www.aecom.com

619.233.1454 tel  
619.233.0952 fax

<b>DOCKET</b>	
<b>09-AFC-7</b>	
DATE	<u>MAY 07 2010</u>
RECD.	<u>MAY 12 2010</u>

May 7, 2010

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

Dear Ms. Sanders:

**Subject: Palen Solar Power Project (09-AFC-7) – Preliminary Spring 2010 Survey Results for Desert Tortoise, Rare Plants and Jurisdictional Waters**

On behalf of Palen Solar I, LLC, AECOM is submitting preliminary results of biological surveys conducted for desert tortoise (*Gopherus agassizii*; DT), rare plants, and jurisdictional waters for the Palen Solar Power Project. This information was requested at the Palen and Blythe Staff Workshops conducted on April 28 and 29, 2010.

The preliminary results are presented in the tables and figures attached. Table 1 presents a summary of the observations of DT sign and DT occurrences noted during spring 2010 surveys. Table 2 presents the rare plant population counts observed during spring 2010 surveys. Results from the fall and spring 2009 surveys are not included in DT and rare plant tables or the figures attached. However, the Jurisdictional Waters map 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 totals provided in the tables herein are simply the results of our observations. These tables do not represent total impacts nor is this an impact analysis. Comprehensive technical reports and impact analyses are currently being prepared and will be submitted to the CEC in early June.

Please let us know if you have any questions.

Sincerely,

Bill Graham  
Vice President

Attachments: Table 1. Palen Solar Power Project Desert Tortoise Observations Spring 2010  
Table 2. Palen Solar Power Project Rare Plant Populations Counts Spring 2010  
Figure. Preliminary Results Desert Tortoise Spring 2010 Surveys  
Figure. Preliminary Results Botany Rare Plants Spring 2010 Surveys  
Figure. Preliminary Results State Waters Spring 2010 Surveys  
CD. Raw Data Files

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

**Table 1. Palen 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			4	2	7
Active Tortoise Burrow or Pallet - Class 1				4		4
Tortoise Burrow or Pallet - Class 3 (deteriorated, definitely tortoise)				2		2
Possible Tortoise Burrow or Pallet (Class 4 or 5)		1		3	1	5
Tortoise Scat	4			11	3	18
Tortoise Bone Fragment - Mineralized		5		5	1	11
Tortoise Bone Fragment - Not Mineralized	2	37	1	6	1	47
Tortoise Carcass (shell bone falling apart; growth rings on scutes are peeling)				1		1
Tortoise Tracks				3		3

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

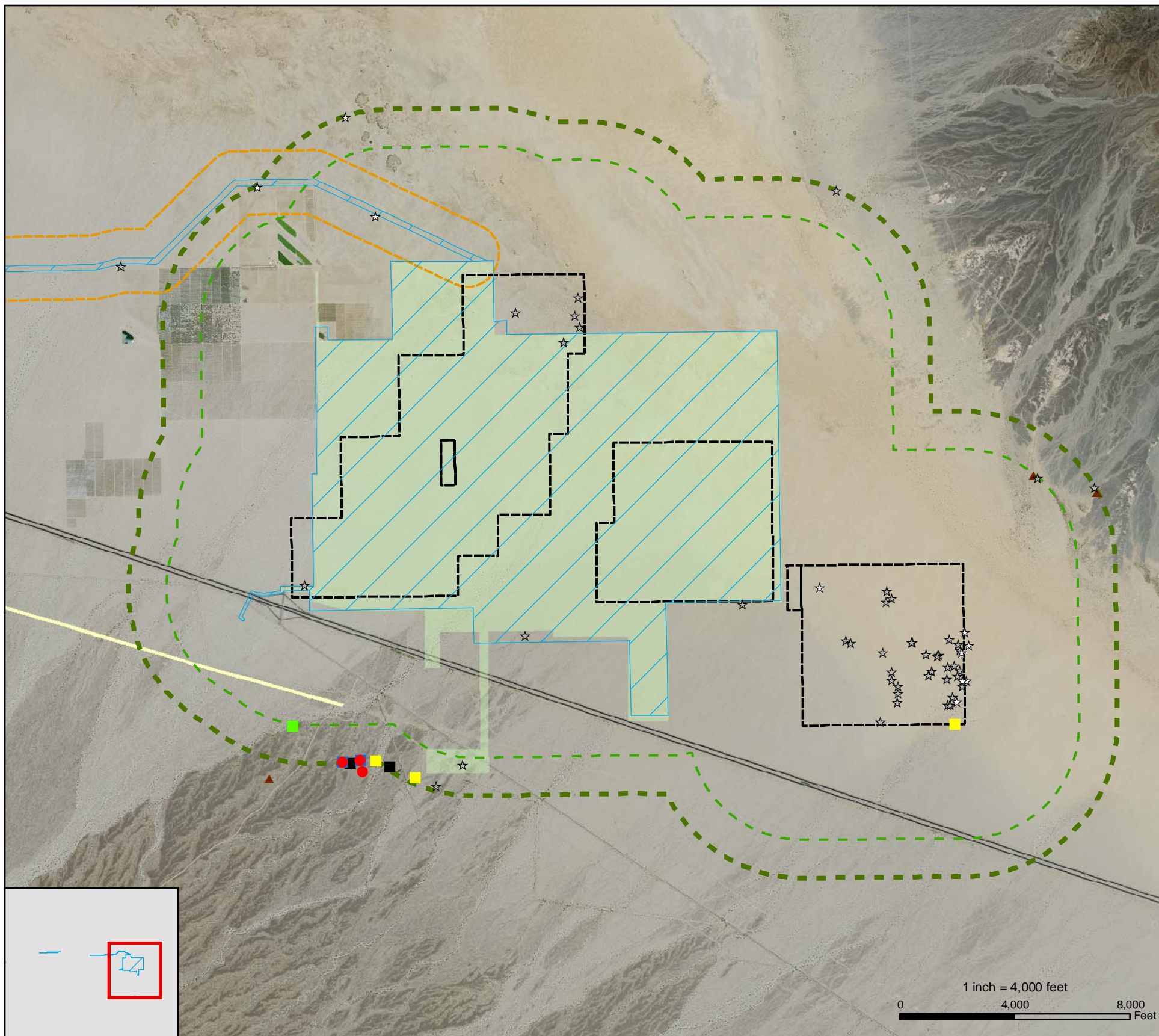
**Table 2. Palen Solar Power Project Rare Plant Population Counts Spring 2010<sup>1</sup>**

<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>
Atriplex canescens				920		920
Cottontop cactus	1					1
Harwood's milkvetch	4		1	172		177
Harwood's woollystar				13		13
Ribbed cryptantha	6,750	337	30	68,859		75,976
Utah milkvine					11	11

<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.





DT Observation Spring 2010

- Adult Tortoise
- Tortoise Burrow or Pallet - Class 1 (Active)
- ▲ Tortoise Scat
- ★ Tortoise Bone Fragment - Mineralized
- ★ Tortoise Bone Fragment - Not Mineralized
- Tortoise Burrow or Pallet - Class 3 (Deteriorated)
- Possible Tortoise Burrow or Pallet
- Tortoise Tracks
- Tortoise Carcass - Class 4



Map Location



Legend

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

Source: NAIP 2009; AECOM 2010; SolarMillennium 2010

**Palen Solar Power Project**

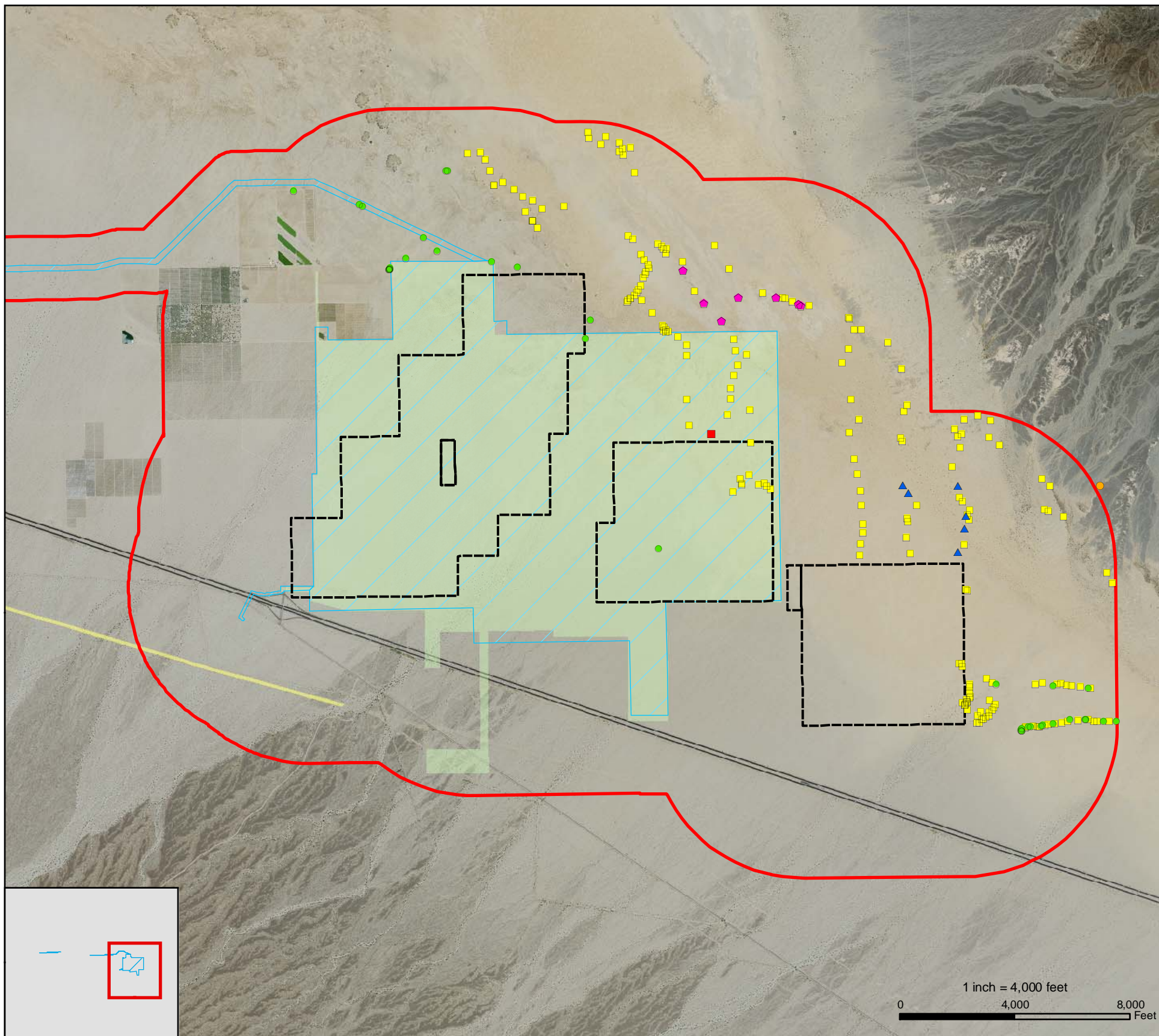
**Preliminary Results  
Desert Tortoise  
Spring 2010 Surveys**



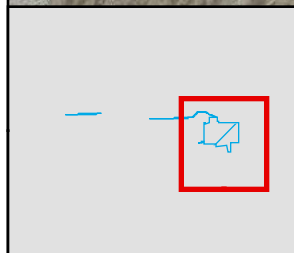
**AECOM**

Date: May 2010



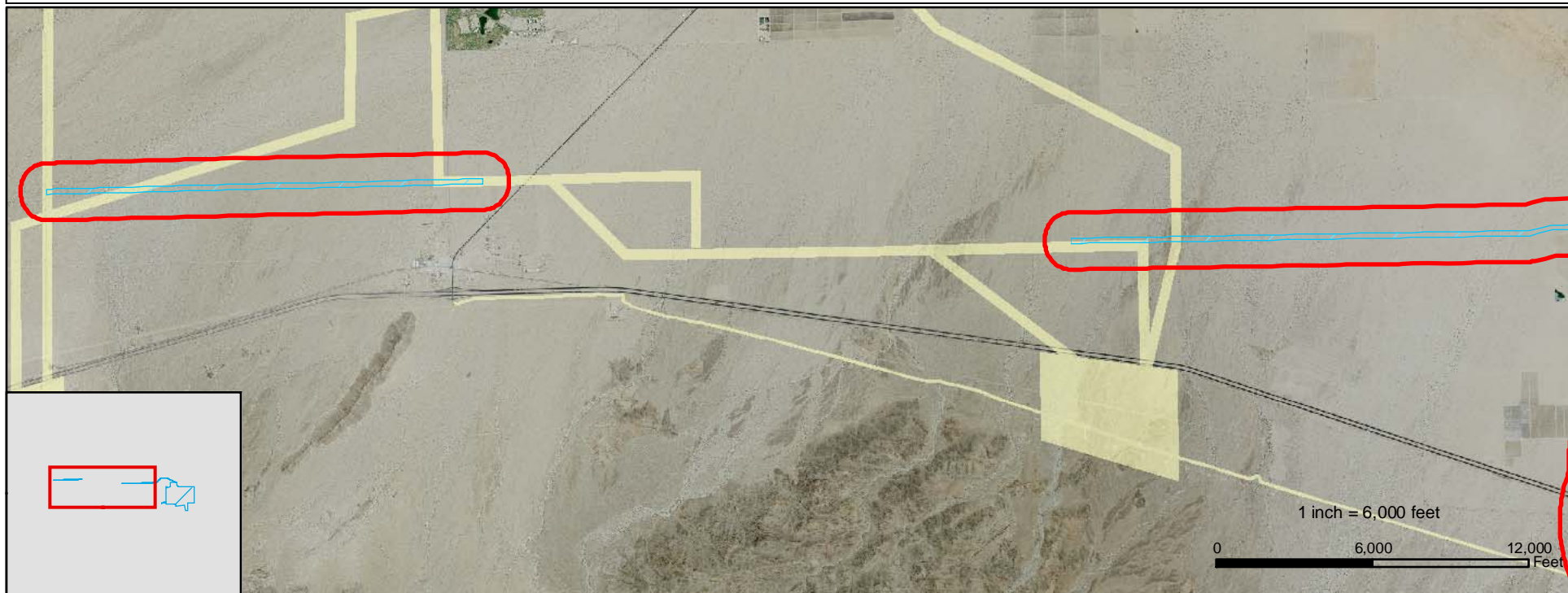


1 inch = 4,000 feet  
 0 4,000 8,000 Feet

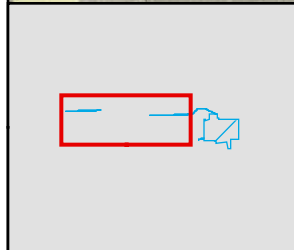


**Rare Plant Observations**

- Utah milkvine
- cottontop cactus
- ▲ Harwood's wollystar
- ◆ Atriplex canescens
- Harwood's milkvetch
- ribbed cryptantha



1 inch = 6,000 feet  
 0 6,000 12,000 Feet




Legend	
<span style="border: 1px solid blue; display: inline-block; width: 15px; height: 10px;"></span>	Project Study Area
<span style="border: 1px dashed black; display: inline-block; width: 15px; height: 10px;"></span>	Reconfigured Alternative Study Area
<span style="border: 1px solid red; display: inline-block; width: 15px; height: 10px;"></span>	BRSA
<span style="background-color: #90EE90; display: inline-block; width: 15px; height: 10px;"></span>	Study Area (Surveyed in 2009)
<span style="background-color: #FFFF00; display: inline-block; width: 15px; height: 10px;"></span>	First Solar Study Area

**Palen Solar Power Project**

**Preliminary Results  
 Botany Rare Plants  
 Spring 2010 Surveys**

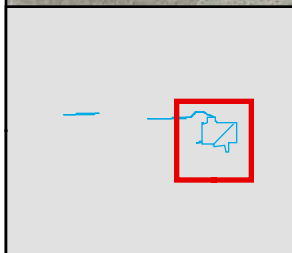
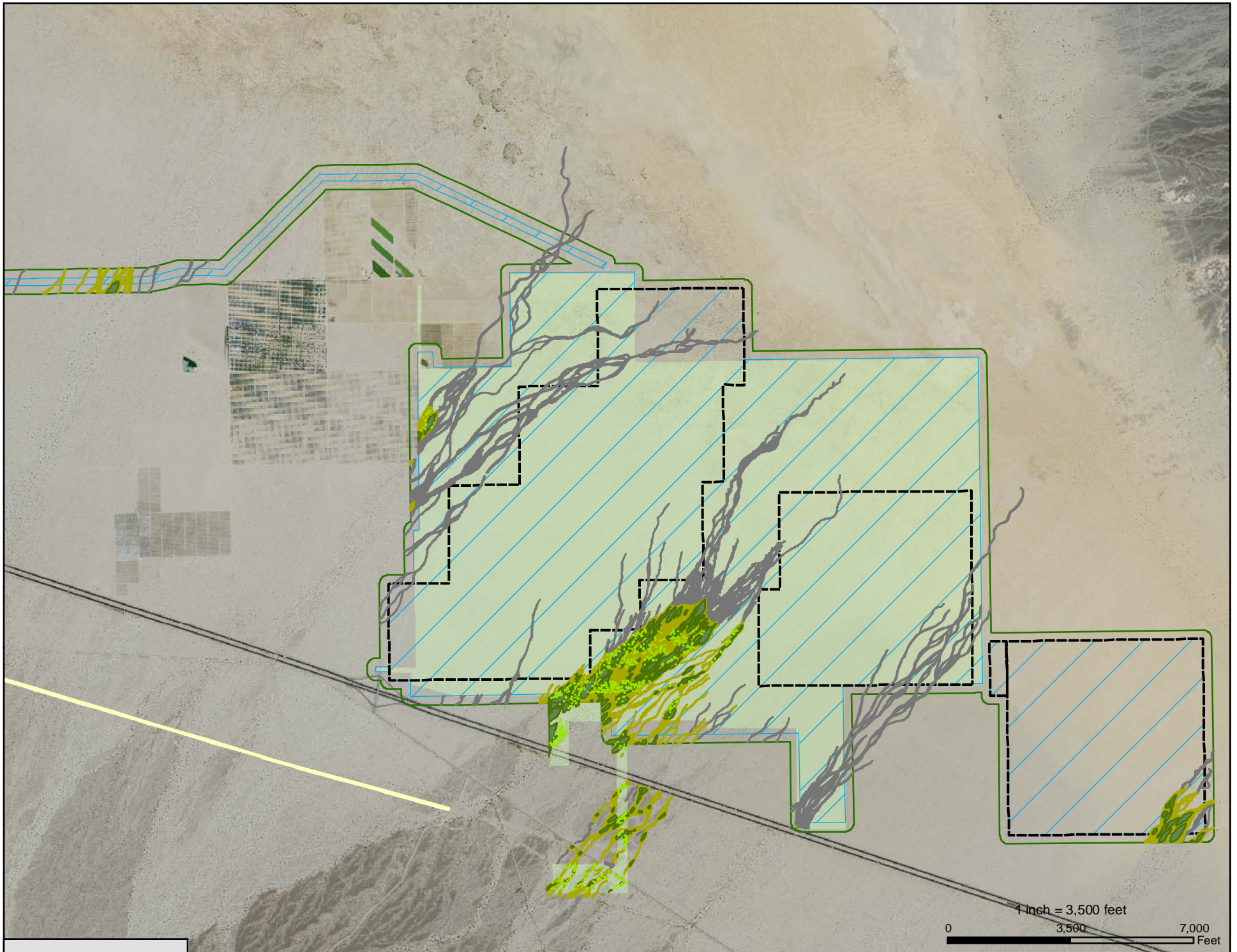
Source: NAIP 2009; AECOM 2010



**AECOM**

Date: May 2010

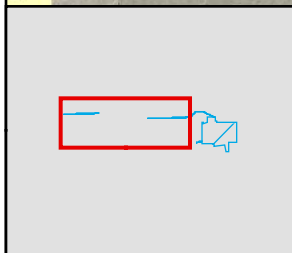
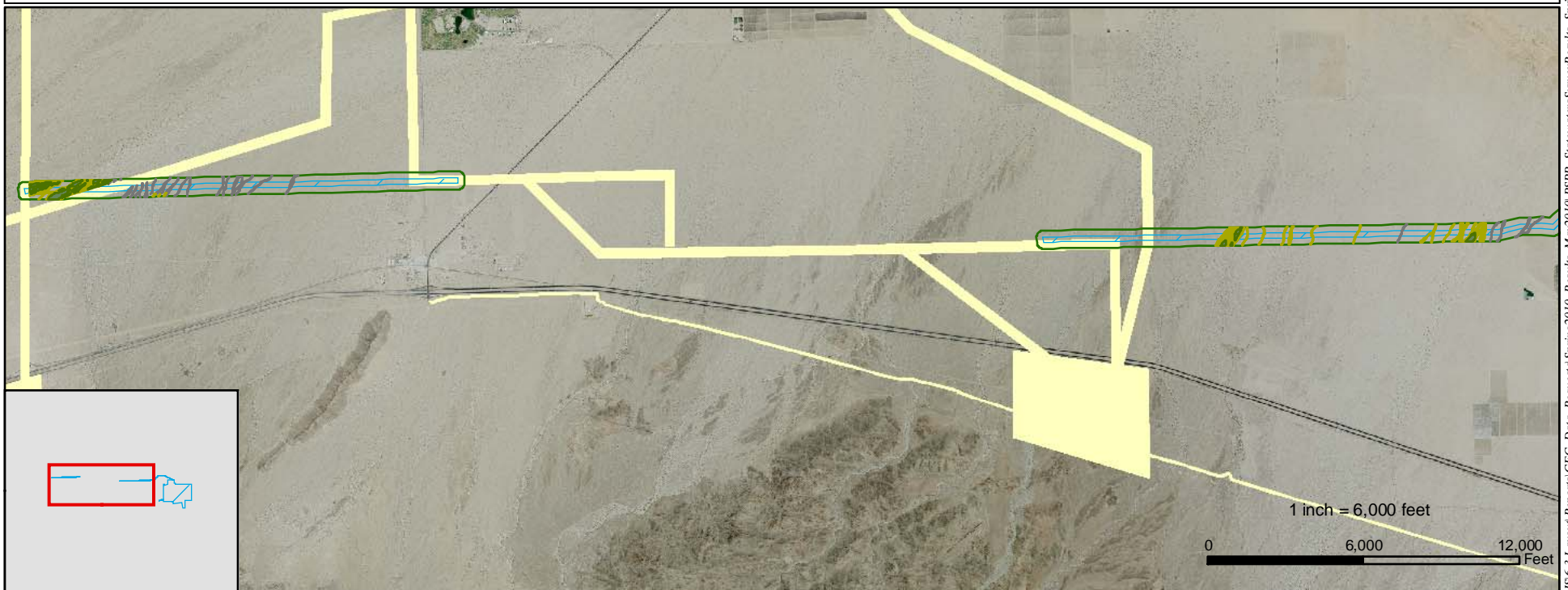




Jurisdictional Waters of the State		Project Study Area (acres)	Buffer (acres)	Reconfigured Alternative Study Area (acres)	Buffer (acres)
Desert Dry Wash Woodland	Riparian Interfluve	49.1	19.8	6.8	5.3
	Vegetated Ephemeral Dry Wash	119.3	39.1	13.6	11.8
	Wash Dependent Vegetation	1.4	0.1	0.0	0.1
Other Waters	Unvegetated Ephemeral Dry Wash	167.6	25.2	44.5	22.8

**Jurisdictional Waters of the State of California**

- Desert Dry Wash Woodland**
- Vegetated Ephemeral Dry Wash
- Wash Dependent Vegetation
- Riparian Interfluve
- Other Waters**
- Unvegetated Ephemeral Dry Wash



**Legend**

- Project Study Area
- Study Area (Surveyed in 2009)
- 250-foot Buffer Study Area
- First Solar Study Area

Source: NAIP 2009; SolarMillennium 2010; AECOM 2010

**Palen Solar Power Project**

**Preliminary Results State Waters Spring 2010 Surveys**

**AECOM**

Date: May 2010





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

APPLICATION FOR CERTIFICATION  
FOR THE *PALEN SOLAR POWER*  
PLANT PROJECT

Docket No. 09-AFC-7

**PROOF OF SERVICE**  
(Revised 4/19/10)

**APPLICANT**

Alice Harron  
Senior Director of Project  
Development  
1625 Shattuck Avenue, Suite 270  
Berkeley, CA 94709-1161  
[harron@solarmillenium.com](mailto:harron@solarmillenium.com)

Elizabeth Ingram, Associate  
Developer, Solar Millennium, LLC  
1625 Shattuck Avenue  
Berkeley, CA 94709  
[ingram@solarmillennium.com](mailto:ingram@solarmillennium.com)

Arrie Bachrach  
AECOM Project Manager  
1220 Avenida Acaso  
Camarillo, CA 93012  
[arrie.bachrach@aecom.com](mailto:arrie.bachrach@aecom.com)

Ram Ambatipudi  
Chevron Energy Solutions  
150 E. Colorado Blvd., Ste. 360  
Pasadena, CA 91105  
[rambatipudi@chevron.com](mailto:rambatipudi@chevron.com)

**Co-COUNSEL**

Scott Galati, Esq.  
Galati/Blek, LLP  
455 Capitol Mall, Suite 350  
Sacramento, CA 95814  
[sgalati@gb-llp.com](mailto:sgalati@gb-llp.com)

**Co-COUNSEL**

Peter Weiner, Matthew Sanders  
Paul, Hastings, Janofsky &  
Walker LLP  
55 2nd Street, Suite 2400-3441  
San Francisco, CA 94105  
[peterweiner@paulhastings.com](mailto:peterweiner@paulhastings.com)  
[matthewsanders@paulhastings.com](mailto:matthewsanders@paulhastings.com)

**INTERVENORS**

California Unions for Reliable  
Energy (CURE)  
c/o Tanya A. Gulesserian,  
Marc D. Joseph  
\*Jason W. Holder  
Adams Broadwell Joseph &  
Cardozo  
601 Gateway Boulevard,  
Suite 1000  
South San Francisco, CA 94080  
[tgulesserian@adamsbroadwell.com](mailto:tgulesserian@adamsbroadwell.com)  
[jholder@adamsbroadwell.com](mailto:jholder@adamsbroadwell.com)\*

Michael E. Boyd, President  
Californians for Renewable  
Energy, Inc.  
5439 Soquel Drive  
Soquel, CA 95073-2659  
[michaelboyd@sbcglobal.net](mailto:michaelboyd@sbcglobal.net)

Alfredo Figueroa  
Californians for Renewable  
Energy, Inc.  
424 North Carlton  
Blythe, CA 92225  
[lacunadeaztlan@aol.com](mailto:lacunadeaztlan@aol.com)

**\*Basin and Range Watch**

Kevin Emmerich  
Laura Cunningham  
P.O. Box 153  
Baker, CA 92309  
[atomictoadranch@netzero.net](mailto:atomictoadranch@netzero.net)

**INTERESTED AGENCIES**

California ISO  
[e-recipient@caiso.com](mailto:e-recipient@caiso.com)

Holly L. Roberts, Project Manager  
Bureau of Land Management  
Palm Springs-South Coast  
Field Office  
1201 Bird Center Drive  
Palm Springs, CA 92262  
[CAPSSolarBlythe@blm.gov](mailto:CAPSSolarBlythe@blm.gov)

**ENERGY COMMISSION**

ROBERT WIESENMILLER  
Commissioner and Presiding  
Member  
[rweisenm@energy.state.ca.us](mailto:rweisenm@energy.state.ca.us)

KAREN DOUGLAS  
Chairman and Associate Member  
[kldougla@energy.state.ca.us](mailto:kldougla@energy.state.ca.us)

Raoul Renaud  
Hearing Officer.  
[rrenaud@energy.state.ca.us](mailto:rrenaud@energy.state.ca.us)

Alan Solomon  
Siting Project Manager  
[asolomon@energy.state.ca.us](mailto:asolomon@energy.state.ca.us)

Lisa DeCarlo  
Staff Counsel  
[ldecarlo@energy.state.ca.us](mailto:ldecarlo@energy.state.ca.us)

Jennifer Jennings  
Public Adviser's Office  
[publicadviser@energy.state.ca.us](mailto:publicadviser@energy.state.ca.us)

**DECLARATION OF SERVICE**

I, Carl Lindner, declare that on May 11, 2010, I mailed hard copies of the attached Preliminary Spring 2010 Survey Results for Desert Tortoise, Rare Plants & Jurisdictional Waters. 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: [\[http://www.energy.ca.gov/sitingcases/solar\\_millennium\\_palen\]](http://www.energy.ca.gov/sitingcases/solar_millennium_palen)

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:**

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

**AND**

**FOR FILING WITH THE ENERGY COMMISSION:**

- 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-7  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512  
[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

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

