

DOCKET
09-AFC-7

DATE JUN 15 2010

RECD. JUN 16 2010

June 15, 2010

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

RE: Palen Solar Power Project, Docket No. 09-AFC-7
Preliminary Spring 2010 Survey Results Corrected and Preliminary Impact Calculations
Technical Area: Biological Resources

Dear Mr. Solomon:

Attached please find the Preliminary Spring 2010 Survey Results Corrected and Preliminary Impact Calculations for the Palen Solar Power Project.

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

Sincerely,



Alice Harron
Senior Director, Development



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

619.233.1454 tel
619.233.0952 fax

May 27, 2010

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

Subject: Palen Solar Power Project (09-AFC-7) – Preliminary Spring 2010 Survey Results Corrected and Preliminary Impact Calculations for Biological Resources

Dear Ms. Sanders:

On behalf of Palen 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 Palen Solar Power Project. This information was requested at the Palen and Blythe Staff Workshops conducted on April 28 and 29, 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 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, 2 and 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 surveyed in 2010 for an access road, transmission line corridor, and additional project components that are outside the 2009 project footprint. Therefore, the total Project Disturbance Area has been revised to be 4,051.1 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.

Figure 6 present preliminary direct 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,

Mr. Bill Graham
Principal

Enclosure: Table 1. Palen Solar Power Project Desert Tortoise Observations Spring 2010
Table 2. Palen Solar Power Project Rare Plant Population Counts Spring 2010
Table 3. Palen 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. Palen Solar Power Project Desert Tortoise Observations Spring 2010

Description	Proposed Project Study Area	Reconfigured Alternative Project Study Area	Proposed Project/Reconfigured Alternative Study Area¹	Buffer	Incidental Observations Outside Buffer Area	Grand Total
Adult Tortoise	1			3	3	7
Active Tortoise Burrow or Pallet - Class 1				2		2
Tortoise Burrow or Pallet - Class 3 (deteriorated, definitely tortoise)	1			2		3
Possible Tortoise Burrow or Pallet (Class 4 or 5)		1		6		7
Tortoise Scat	5			10	3	18
Tortoise Bone Fragment - Mineralized	2	5		5	1	13
Tortoise Bone Fragment - Not Mineralized	3	37	1	26	1	68
Tortoise Carcass (shell bone falling apart; growth rings on scutes are peeling)				1		1
Tortoise Tracks				2	1	3

¹This 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

Species	Proposed Project Study Area	Reconfigured Alternative Project Study Area	Proposed Project/Reconfigured Alternative Study Area²	Buffer	Incidental Observations Outside Buffer Area	Grand Total
Four wing saltbush				920		920
Cottontop cactus	1					1
Harwood's milkvetch				152		152
Harwood's wollystar		1		37		38
Ribbed cryptantha	6,750	337	30	68,859		75,976
Utah milkvine					11	11

¹ Note that each point on the figure may represent multiple individuals

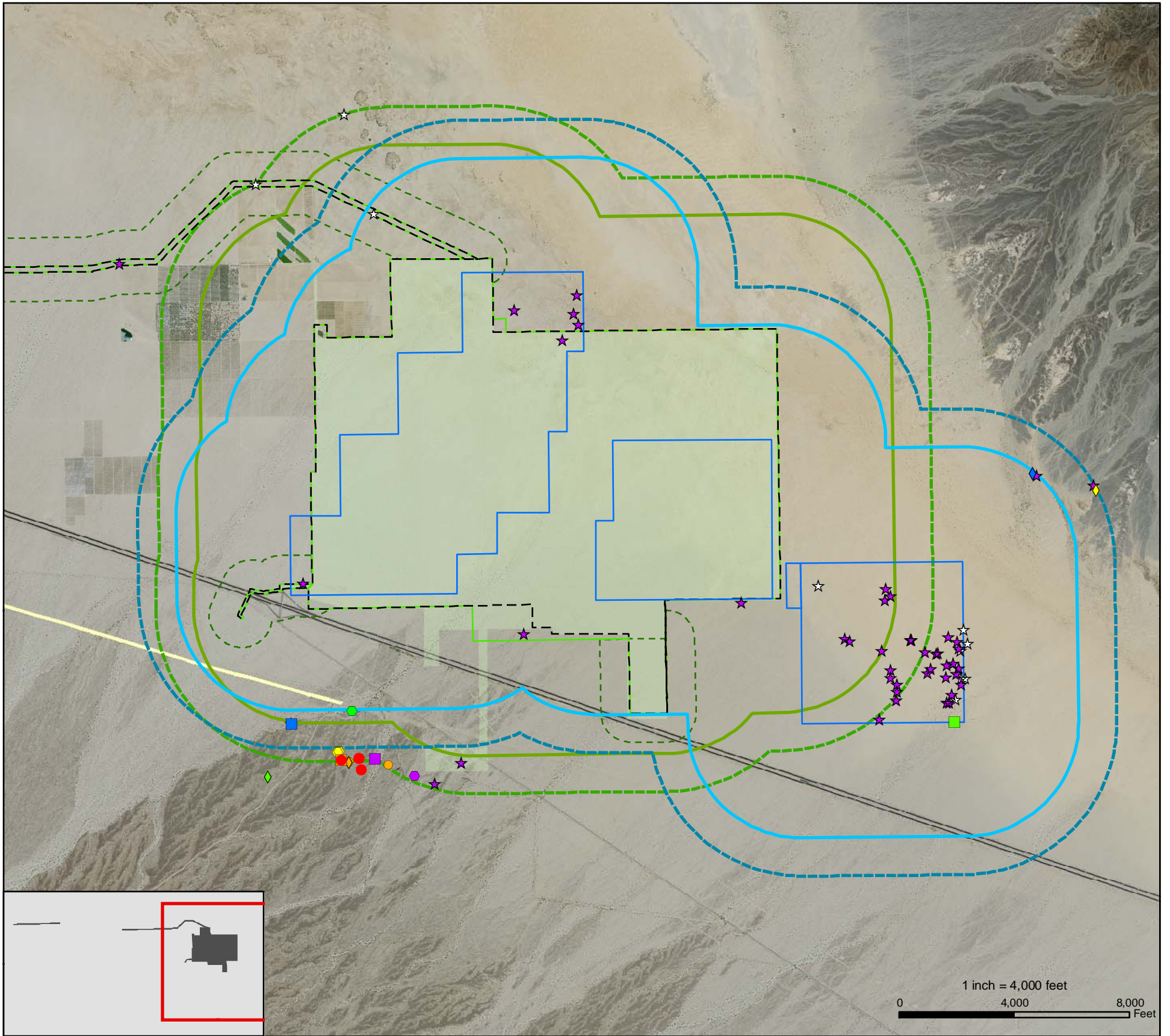
²This encompasses the areas where the Proposed Project Study Area and Reconfigured Alternative Study Area overlap.



Table 3. Palen Solar Power Project Incidental Wildlife Occurrences

Species	Proposed Project Study Area	Reconfigured Alternative Project Study Area	Proposed Project/Reconfigured Alternative Study Area¹	Buffer	Incidental Observations Outside Buffer Area	Grand Total
American Badger Den or Burrow	1	25	1	2	2	31
Ferruginous Hawk				1		1
Kit Fox Burrow or Complex	2	7		4	2	15
Loggerhead Shrike	2	1		3	3	9
Mojave Fringe-toed Lizard	5	310		62	11	388
Unidentified Woodpecker Species – Nest Cavity				1		
Northern Harrier		2		3		5
Swainson's Hawk	1	1		1		3

¹This encompasses the areas where the Proposed Project Study Area and Reconfigured Alternative Study Area overlap.



DT Observations (Spring 2010)

- | | | |
|--------------------------------------|--------------------------------------|--|
| ● Adult Tortoise | ■ Tortoise Burrow - Class 5 | ◆ Tortoise Scat - Class 3 |
| ● Juvenile Tortoise | ● Tortoise Pallet (Active) - Class 1 | ◆ Tortoise Scat - Class 4 |
| ■ Tortoise Burrow (Active) - Class 1 | ● Tortoise Pallet - Class 2 | ◆ Tortoise Scat - Class 5 |
| ■ Tortoise Burrow - Class 2 | ● Tortoise Pallet - Class 4 | ★ Tortoise Carcass - Class 4 |
| ■ Tortoise Burrow - Class 3 | ● Tortoise Pallet - Class 5 | ★ Tortoise Bone Fragment (Class 5) - Not Mineralized |
| ■ Tortoise Burrow - Class 4 | ◆ Tortoise Scat - Class 1 | ★ Tortoise Bone Fragment (Class 5) - Mineralized |
| | ◆ Tortoise Scat - Class 2 | ● Tortoise Tracks |

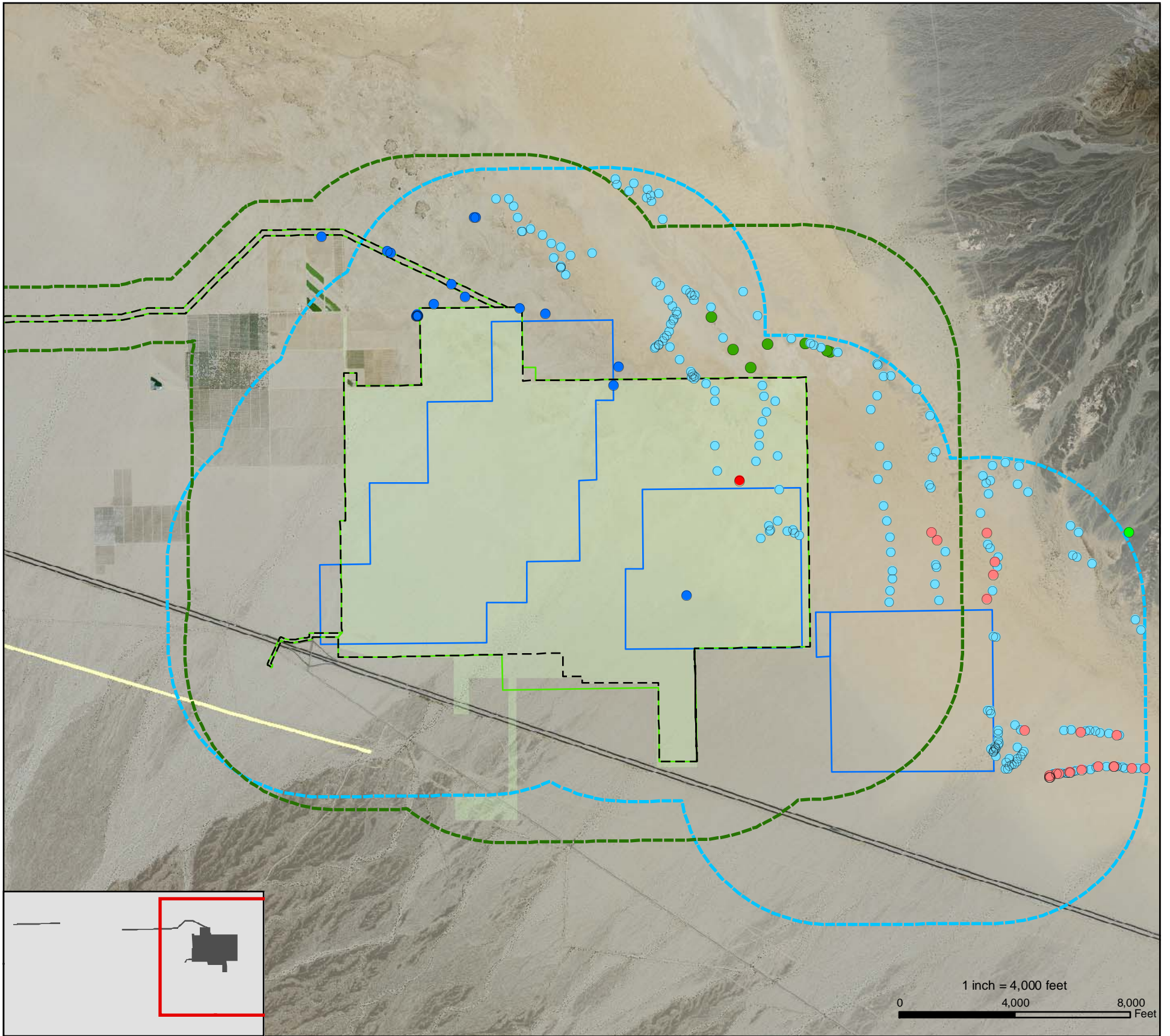


Legend	
■ Proposed Project Study Area	■ Alternative Disturbance Area
■ Project Disturbance Area	■ Alternative 3/4mile - Buffer Transect
■ 1-mile - Project Buffer Transect	■ Alternative 1mile - Buffer Transect
■ 3/4-mile - Project Buffer Transect	■ Study Area (Surveyed in 2009)
■ 1000-ft - Project Buffer Transect	■ First Solar Study Area

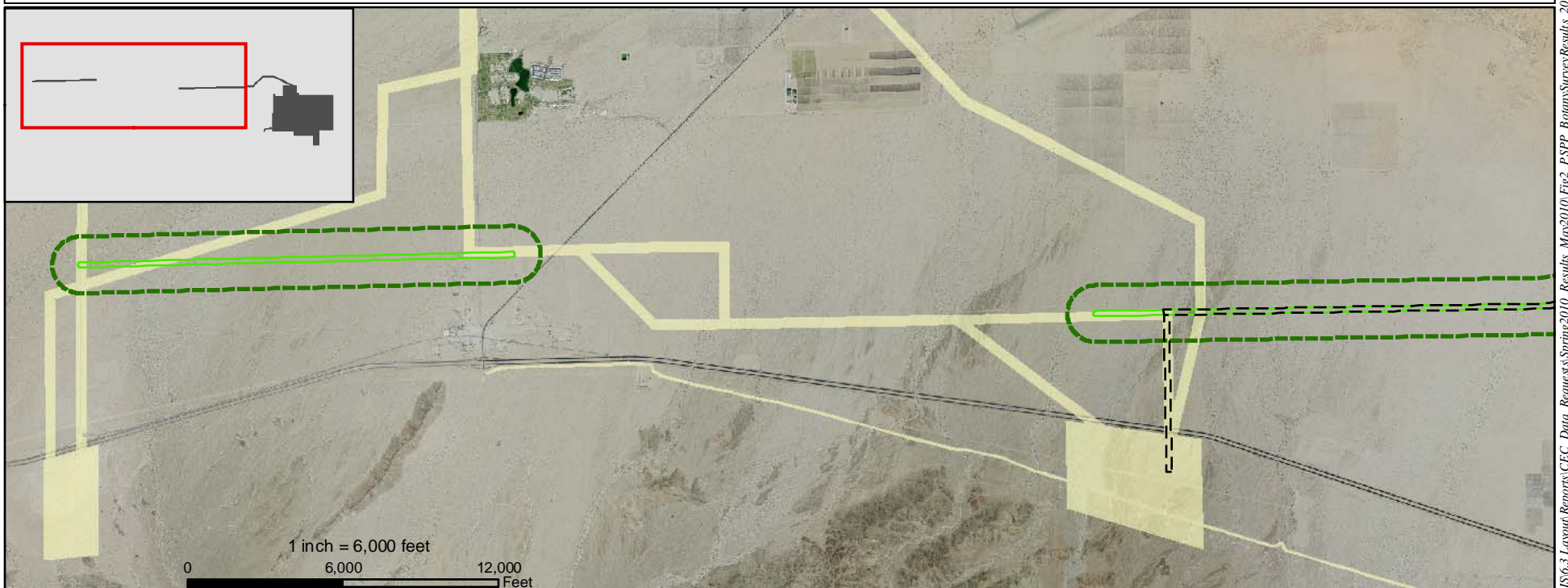
Palen Solar Power Project
Figure 1
Preliminary Results
Desert Tortoise
Spring 2010 Surveys

AECOM
 Date: May 2010

Source: NAIP 2009; AECOM 2010; SolarMillennium 2010



- Rare Plant Observations CNPS List 4**
- CNPS 1B and 2**
 - Harwood's milkvetch
 - Harwood's woollystar
 - four wing saltbush
 - CNPS List 4**
 - Utah milkvine
 - ribbed cryptantha
 - BLM-requested Cactus Species**
 - cottontop cactus



Legend	
	Project Disturbance Area
	Proposed Project Study Area
	Proposed Project BRSA
	Study Area (Surveyed in 2009)
	First Solar Study Area
	Alternative Disturbance Area
	Reconfigured Alternative BRSA

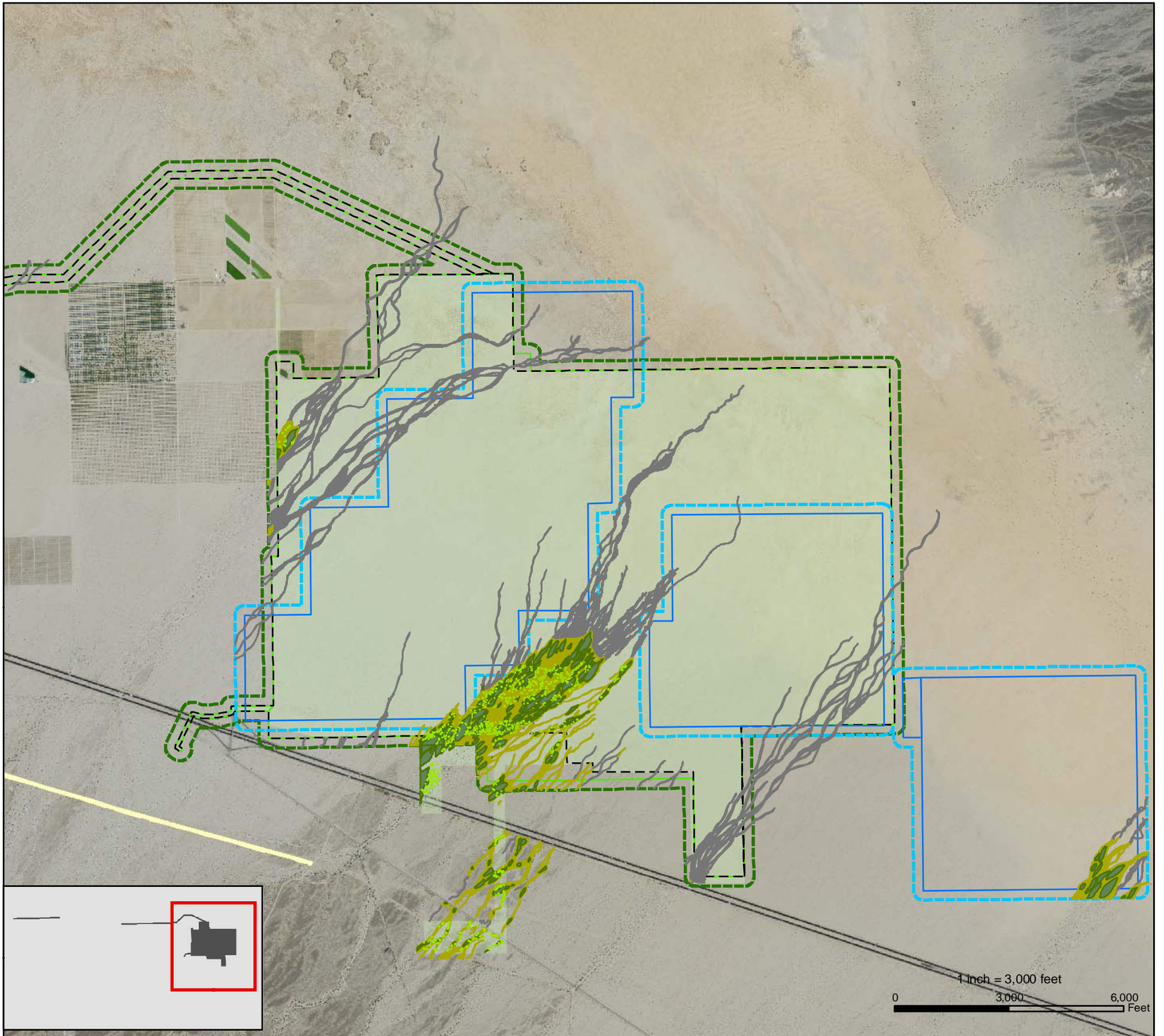
Palen Solar Power Project

Figure 2
Rare Plant
Spring 2010 Surveys

AECOM

Date: May 2010

Source: NAIP 2009; AECOM 2010; SolarMillennium 2010



Jurisdictional Waters of the State of California

Desert Dry Wash Woodland

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

Other Waters

- Unvegetated Ephemeral Dry Wash

Jurisdictional Waters of the State		Project Disturbance Area	Buffer	Reconfigured Alternative Disturbance Area	Buffer
Desert Dry Wash Woodland	Wash Dependent Vegetation	1.3	0.2	0.01	0.1
	Riparian Interfluvium	43.6	23.5	6.8	5.3
	Vegetated Ephemeral Dry Wash	99.1	61.1	13.6	11.8
Unvegetated Ephemeral Dry Wash	Unvegetated Ephemeral Dry Wash	164.0	28.7	44.5	22.8




Legend

- Proposed Project Study Area
- Reconfigured Alternative Disturbance Area
- Proposed Project DARSAs
- Reconfigured Alternative DARSAs
- Project Disturbance Area
- Study Area (Surveyed in 2009)
- First Solar Study Area

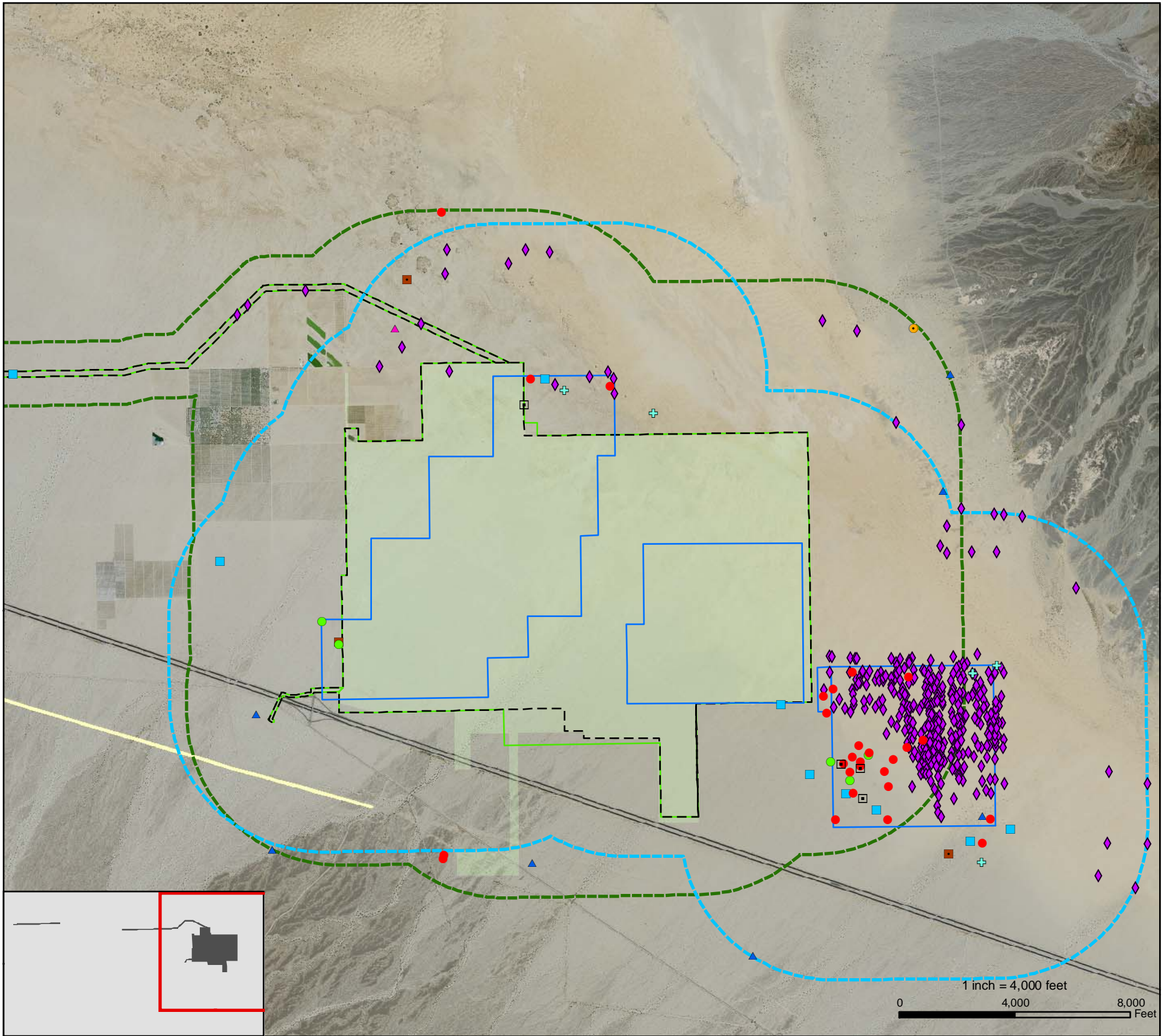
Source: NAIP 2009; AECOM 2010; SolarMillennium 2010

Palen Solar Power Project
Figure 3
Preliminary Results
State Waters
Spring 2010 Surveys



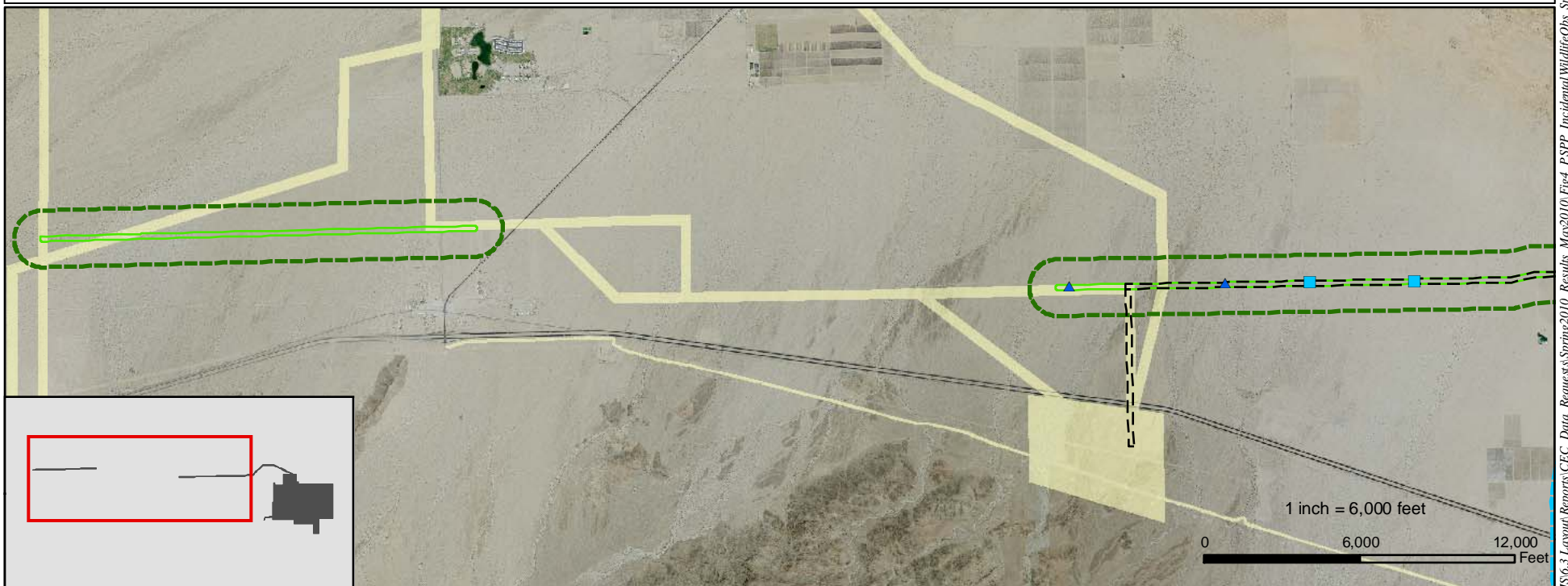
AECOM

Date: May 2010



Sensitive Wildlife Observations


- American Badger Den
- ◆ Mojave fringe-toed lizard
- American Badger Predation Burrow
- ▲ Ferruginous Hawk
- Kit Fox Burrow
- Kit Fox Complex
- ▲ Loggerhead Shrike
- Nest Cavity - Unidentified Woodpecker Species
- ⊕ Northern Harrier
- Swainson's Hawk



Legend	
 Proposed Project Study Area	 Reconfigured Alternative Disturbance Area
 Project Disturbance Area	 Reconfigured Alternative BRSA
 Project Disturbance BRSA	 Study Area (Surveyed in 2009)
	 First Solar Study Area

Palen Solar Power Project

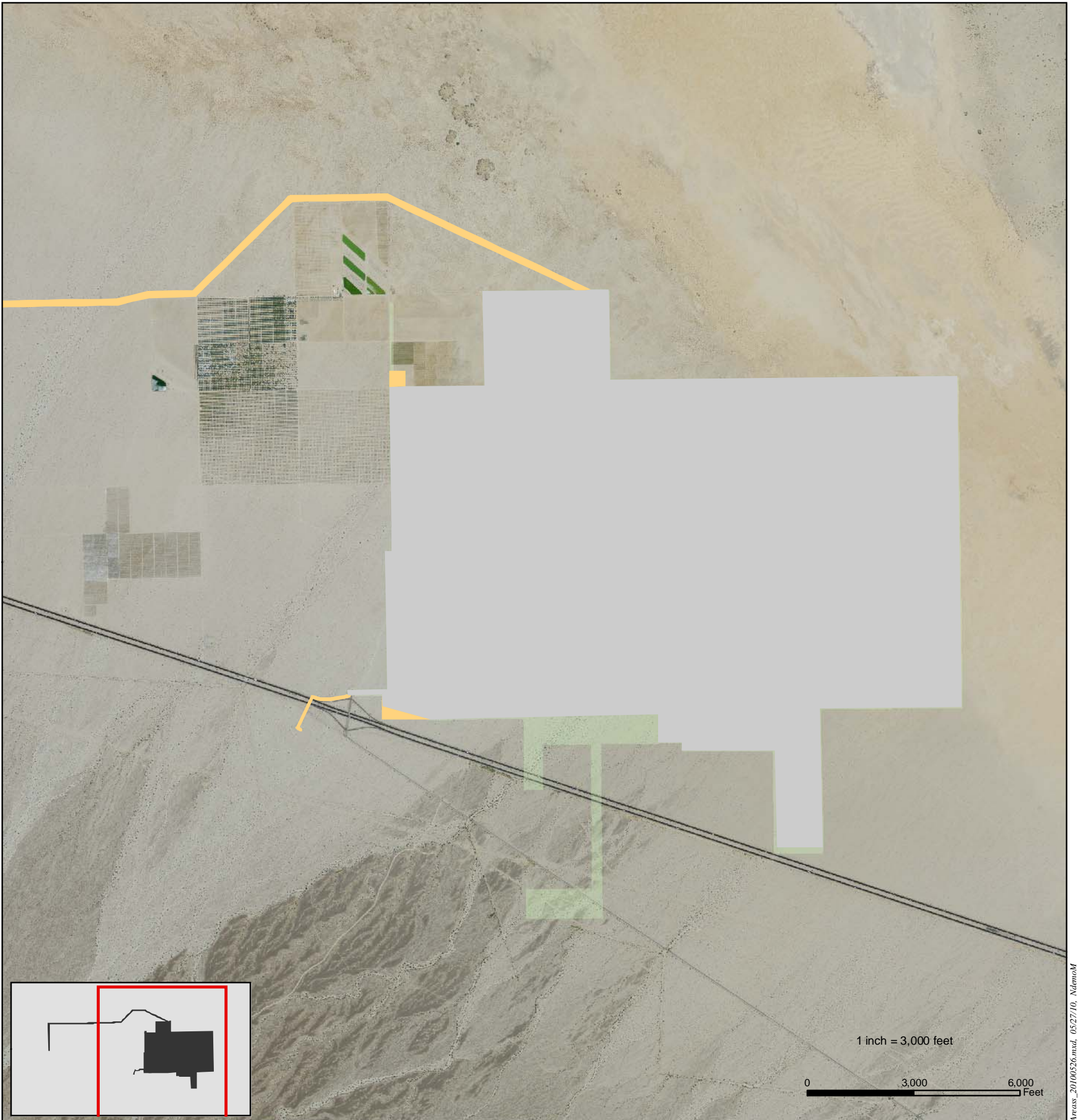
**Figure 4
Incidental Wildlife Observations
Spring 2010 Surveys**



AECOM

Date: May 2010


Source: NAIP 2009; AECOM 2010; SolarMillennium 2010



Legend	
	Disturbance Area (3,870.8 acres)
	Additional Disturbance Areas 2010 (152.3 acres)
	First Solar Overlap Area (28 acres)
	Disturbance Area 2009

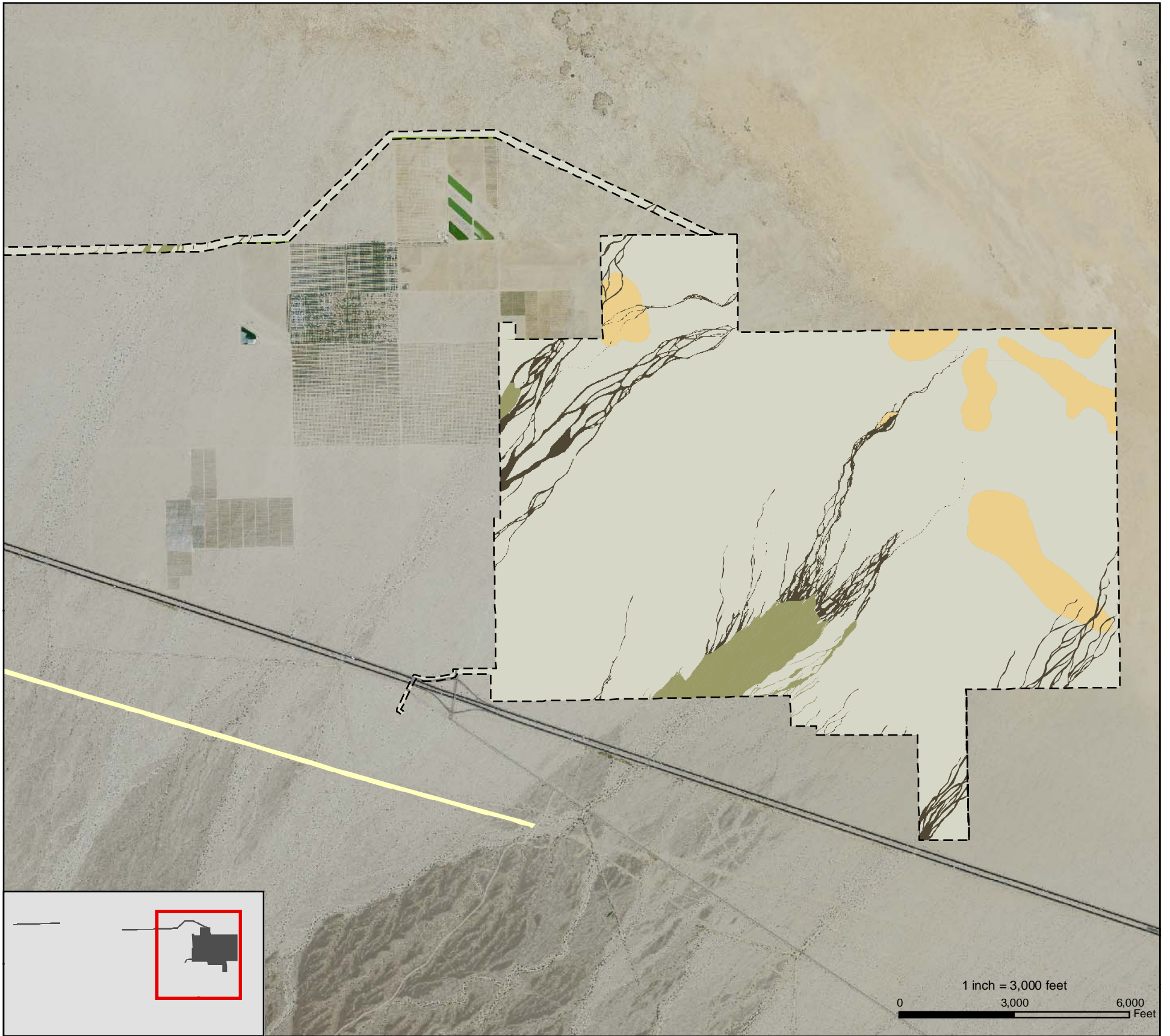
Source: NAIP 2009; AECOM 2010; SolarMillennium 2010

Palen Solar Power Project
Figure 5
Preliminary Disturbance Areas
Spring 2010 Surveys





AECOM

Date: May 2010





Vegetation Communities



Riparian

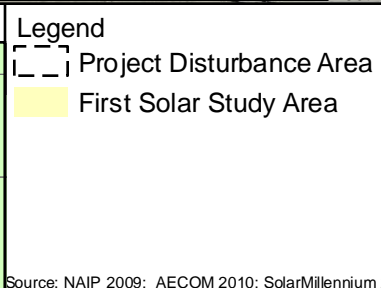
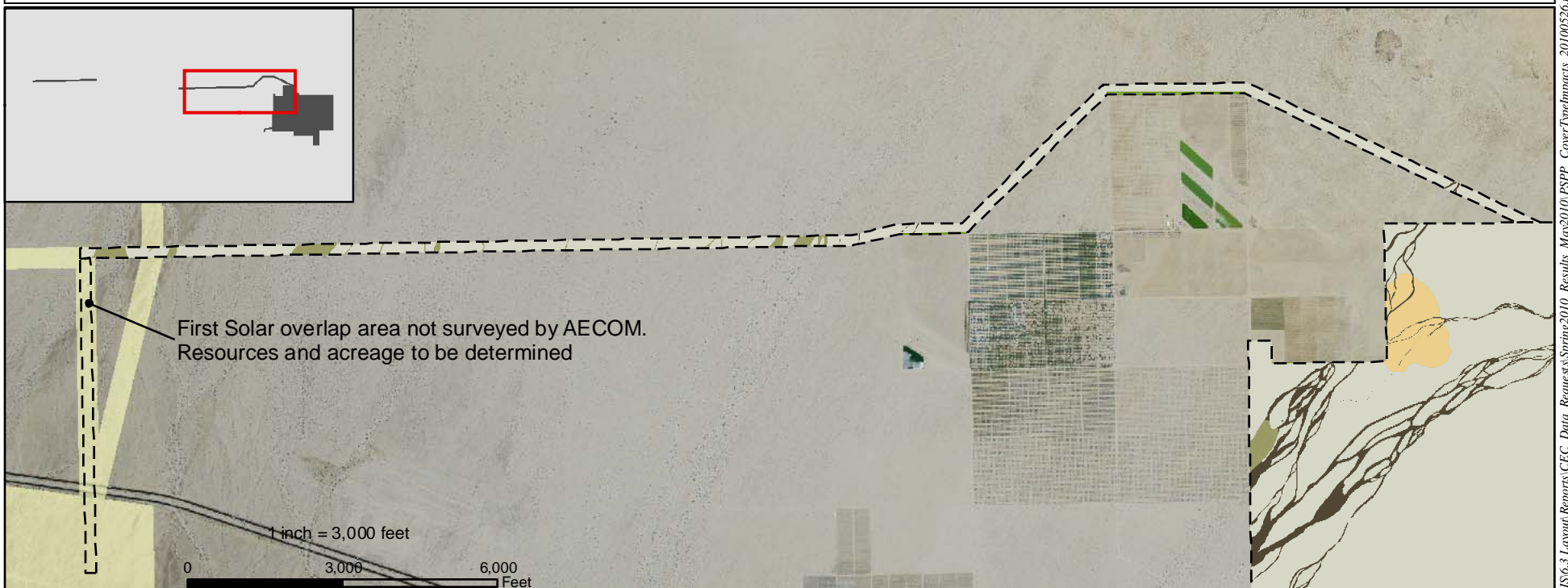
-  Desert dry wash woodland (147.5 acres)
-  Unvegetated ephemeral dry wash (164.0 acres)

Upland

-  Sonoran creosote bush scrub (3421.9 acres)
-  Stabilized and partially stabilized desert dunes (284.7 acres)

Other

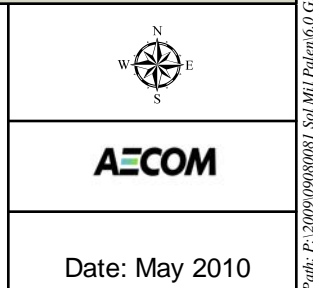
-  Agriculture (3.0 acres)
-  Developed (1.9 acres)



Palen Solar Power Project
Figure 6
Preliminary Impacts to Cover Types
May 2010

AECOM

Date: May 2010



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

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

Docket No. 09-AFC-7
PROOF OF SERVICE
(Revised 5/14/2010)

APPLICANT

Alice Harron
Senior Director of Project Development
1625 Shattuck Avenue, Suite 270
Berkeley, CA 94709-1161
harron@solarmillennium.com

Elizabeth Ingram,
Associate Developer
Solar Millennium LLC
1625 Shattuck Avenue, Suite 270
Berkeley, CA 94709
berg@solarmillennium.com

Ram Ambatipudi
Chevron Energy Solutions
150 E. Colorado Blvd., Ste. 360
Pasadena, CA 91105

APPLICANT'S CONSULTANT

Arrie Bachrach
AECOM Project Manager
1220 Avenida Acaso
Camarillo, CA 93012
arrie.bachrach@aecom.com

COUNSEL FOR APPLICANT

Scott Galati, Esq.
Galati/Blek, LLP
455 Capitol Mall, Suite 350
Sacramento, CA 95814
sgalati@gb-llp.com

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

INTERESTED AGENCIES

Holly L. Roberts, Project Manager Bureau
of Land Management
Palm Springs-South Coast Field Office
1201 Bird Center Drive Palm Springs, CA
92262
CAPSSolarPalen@blm.gov

California ISO
e-recipient@caiso.com

INTERVENORS

California Unions for Reliable Energy
(CURE)
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
jholder@adamsbroadwell.com

Michael E. Boyd, President
Californians for Renewable Energy, Inc.
5439 Soquel Drive
Soquel, CA 95073-2659
michaelboyd@sbcglobal.net

Alfredo Figueroa
Californians for Renewable Energy, Inc.
424 North Carlton
Blythe, CA 92225
lacunadeaztlan@aol.com

Basin and Range Watch
Kevin Emmerich/Laura Cunningham
P.O. Box 153
Baker, CA 92309
atomicoadranch@netzero.net

ENERGY COMMISSION

Robert Weisenmiller
Commissioner and Presiding Member
rweisenm@energy.state.ca.us

Karen Douglas
Chair and Associate Member
kldougla@energy.state.ca.us

Raoul Renaud
Hearing Officer
rrenaud@energy.state.ca.us

Alan Solomon
Project Manager
asolomon@energy.state.ca.us

Lisa DeCarlo
Staff Counsel
ldecarlo@energy.state.ca.us

Jennifer Jennings
Public Adviser's Office
publicadviser@energy.state.ca.us

DECLARATION OF SERVICE

I, Carl Lindner, declare that on, June 15, 2010, I served and filed copies of the attached Preliminary Spring 2010 Survey Results Corrected and Preliminary Impact Calculations for Biological Resources, dated May 27, 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:
[\[http://www.energy.ca.gov/sitingcases/solar_millennium_palen\]](http://www.energy.ca.gov/sitingcases/solar_millennium_palen).

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:

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:

sending an original paper copy and one electronic copy, mailed 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-7
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.

