



California Energy Commission DOCKETED 11-AFC-4
TN # 66430 AUG 03 2012

August 2, 2012

Pierre Martinez
Project Manager
Systems Assessment & Facility Siting Division
California Energy Commission
1516 Ninth Street, MS-15
Sacramento, CA 95814

Subject: 11-AFC-04 Applicant's Supplemental Response #6 to CEC Staff Data Response Set 1A
(DRs 46 and 47)
Rio Mesa Solar Electric Generating Facility (11-AFC-04)

Dear Mr. Martinez:

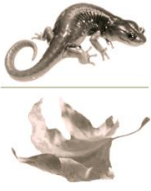
On behalf of Rio Mesa Solar I, LLC and Rio Mesa Solar II, LLC, collectively the "Applicant" for the Rio Mesa Solar Electric Generating Facility project ("Rio Mesa SEGF"), we submit the 11-AFC-04 Applicant's Supplemental Response #6 to CEC Staff Data Request Set 1A (DRs 46 and 47) – 2012 Golden Eagle Survey Summary Report.

Sincerely,

Angela Leiba, Vice President
Senior Project Manager/ Environmental Department Manager

Enclosure

cc: POS List
Project File



Bloom Biological, Inc.

Research | Consulting | Conservation

July 27, 2012

Mr. Jon Goin
Senior Biologist
URS Corporation
4225 Executive Square, Suite 1600
La Jolla, California 92037

[via email]

Subject: Results of protocol surveys to determine occupancy by nesting Golden Eagles (*Aquila chrysaetos*) within ten miles of the proposed Rio Mesa Solar Project located in the vicinity of Blythe, Riverside County, California

Summary: *BBI conducted aerial and ground surveys for nesting Golden Eagles on and within ten miles of the Rio Mesa Solar Project from March 24 to May 26, 2012. The start dates were approved by the US Fish and Wildlife Service during REAT meetings. The surveys found no active eagle nests within 10 miles of the original proposed project in 2012. In 2011 WRI found 3 inactive Golden Eagle nests: Two located near each other about 0.25 miles apart, one on the east side and one on the west side of Palo Verde Peak. As determined by BBI in 2012, two of these contained incubating Red-tailed Hawks in March and failed by the May helicopter flight.*

Dear Mr. Goin:

Bloom Biological, Inc. (BBI) was retained by URS Corporation (URS) to conduct protocol surveys to determine occupancy by nesting Golden Eagles (*Aquila chrysaetos*) on and within ten miles of the proposed Rio Mesa Solar Electric Generating Facility (RMS or Project) located in the vicinity of Blythe, Riverside County, California. The Golden Eagle is an uncommon permanent resident and migrant throughout most of California's foothills, mountains, sage-juniper flats, and deserts (CDFG 2008), and is protected under the federal Bald and Golden Eagle Protection Act, and by the California Department of Fish & Game as a Fully Protected Species. Golden Eagle status studies completed as recently as 1989 suggested a stable population for much of the western United States (Harlow and Bloom 1989); however, recent evidence suggests that eagle numbers in the western United States are now declining. As a result, the U.S. Fish and Wildlife Service (Service) is recommending focused surveys in nesting habitat within ten miles of proposed projects that might cause anthropogenic disturbances to eagles. This letter documents the methods, results and conclusions of BBI's 2012 surveys for Golden Eagle within ten miles of the proposed Project.

NATURAL HISTORY OF GOLDEN EAGLE

Kochert et al. (2002) provided a thorough description of the natural history of the Golden Eagle, noting that the species is found in a variety of habitats located in a wide range of latitudes throughout the Northern Hemisphere. In North America, Golden Eagles are most common in the western half of the continent near open spaces that provide hunting habitat, and generally with cliffs present for nesting sites. While northern populations of the species are migratory, often making trips of thousands of miles to the wintering grounds, southern populations (including those in southern California) tend to be resident throughout the year.

While Golden Eagles are capable of killing large prey such as cranes, wild ungulates, and domestic livestock, they primarily subsist on rabbits, hares, ground squirrels, and prairie dogs (Bloom and Hawks 1982, Olendorff 1976). Golden Eagles typically reach sexual maturity, form territories, and begin nesting at four years of age. Pairs generally stay within the limits of their territory, which can measure 20–30 square kilometers, and within that territory can have as many as 14 nests (Bloom pers. obs.) which are maintained and repaired as part of their courtship. Over the course of a decade several of these nests will be used and will produce young, others may only have fresh sticks added to them. Most alternate nests are important in the successful reproduction of a pair of eagles. Kochert et al. (2002) also noted that the nesting season is prolonged, extending more than 6 months from the time the 1-3 eggs are laid until the young reach independence. A typical Golden Eagle raises an average of only one young per year and up to 15 young over its lifetime. Pairs commonly refrain from laying eggs in some years, particularly when prey is scarce. The number of young that Golden Eagles produce each year depends on a combination of weather and prey conditions. Black-tailed Jackrabbits (*Lepus californicus*) are a key prey species throughout much of their range, and eagle reproductive rates fluctuate with jackrabbit population cycles. Neither jackrabbits nor jackrabbit sign were detected during BBI's ground surveys in the Survey Area.

PROJECT DESCRIPTION

The Rio Mesa Solar Electric Generating Facility will be located in Riverside County, approximately 13 miles southwest of Blythe, California. The Project will be comprised of two solar plants. The first plant, a 250 megawatt (MW) (nominal) facility known as RMS 1, will be constructed at the southeastern end of the project. The second plant, another 250 MW (nominal) facility known as RMS 2, will be located in the northwestern portion of the project site. A common facilities area including a switchyard will be located adjacent the far northern reach of the RMS 1 solar field on MWD property.

Each plant requires approximately 1,850 acres (or 2.9 square miles) and includes a power block area surrounded by an array of approximately 85,000 heliostats. The nominal capacity of each solar plant is 250 MW, for a total Project nominal output of 500 MW. The total area required for both plants, including the shared facilities and linears, is approximately 3,805 acres.

SURVEY AREA DESCRIPTION

The "Survey Area" in this report is all areas within ten miles of the originally proposed Rio Mesa project prior to a recent reduction in scope. At the time of surveys, the total area required for the proposed project, including the shared facilities and linears, was 5,750 acres, which has subsequently been reduced to approximately 3805 acres through the removal of the northernmost project (RMS-3). As a result, the Survey Area includes an area that is larger than ten miles around the proposed Project. To determine the limits of the Survey Area, a buffer of ten miles from the older project boundary was calculated using GIS software. These limits are shown in Exhibit 1, and were placed on handheld GPS units for use in the field. The Survey Area is comprised of approximately 480 square miles located in all or portions of the US Geological Survey's 7.5-minute *McCoy Peak*, *McCoy Wash*, *Hopkins Well*, *Roosevelt Mine*, *Ripley*, *Blythe*, *Wileys Well*, *Thumb Peak*, *Palo Verde*, *West of Palo Verde Peak*, and *Palo Verde Peak* quadrangles. Mountain ranges in the Survey Area, which serve as potential nesting sites for eagles, include the southern edge of the McCoy Mountains to the north, the Mule Mountains in the central portion, and the Palo Verde Mountains to the south. Elevations in the Survey Area range from approximately 250 feet above mean sea level (amsl) in the east along the Colorado River to 1,600 feet amsl on Palo Verde Peak in the south.

Figure 1. Survey Area relative to the state (left) and county (right).



METHODS

BBI's survey approach followed guidance in the Service's interim Golden Eagle inventory and monitoring protocol (Pagel et al. 2010). As stated in Pagel et al. (2010), "the first objective of these surveys is to... identify areas occupied by Golden Eagles". Other objectives are presented, but are only valid if occupancy is first determined. The recommendations of Pagel et al. (2010) include at least two surveys if aerial surveys are completed, as "nesting territory or inventoried habitat should be designated as unoccupied by Golden Eagles ONLY after at least 2 complete aerial surveys in the breeding season."

The recommendations of Pagel et al. (2010) include survey timing, with a recommended start during courtship when Golden Eagles are aerial and easily viewed, particularly from the ground as they can also be heard. BBI requested from the Service to start at a later date, with the Renewable Energy Action Team (REAT) concurring during a presentation at the California Energy Commission (CEC) Status Conference on March 19th and noting that "acceptance is project-specific and not precedent setting" (REAT 2012). Starting this early in the season is not always feasible because of adverse weather conditions rendering helicopter flights unsafe. In addition, surveys this early often yield empty nests (with some built on and others indeterminate, most have no eggs) and it is not always feasible at such an early date to differentiate between floaters (non-territorial adults) and potential resident territory holders, which are the ultimate targets of the survey (Bloom pers. obs.). For these reasons, surveys were initiated in March, when most pairs of eagles and other raptors with large nests have laid their eggs. These surveys also benefited from existing survey data from this project (WRI 2011).

Pagel et al. (2010) notes that helicopter surveys are an accepted and efficient means to monitor large areas of habitat, to inventory potential habitat, and monitor known territories, as eagles nest on cliffs or large trees in open areas and build a large platform nest often initially 10 feet across and 3 feet high of sticks, twigs, and greenery (CDFG 2008). Because of their large size, these nests are easy to spot at a great distance from the air and in California can be distinguished from Red-tailed Hawk (*Buteo jamaicensis*), Common Raven (*Corvus corax*), and Bald Eagle (*Haliaeetus leucocephalus*) nests by biologists experienced with the nests of those species.

As noted previously, the Survey Area included the limits of the originally proposed project and all lands within a ten mile radius surrounding the project, with a particular emphasis on topographic features and large power line rights-of-way where Golden Eagles are likely to be located (see Exhibit 1). The first survey flights were conducted on March 24, 25, and 26, 2012 with Pete Bloom

and Scott Thomas. The helicopter portion of the second survey was conducted on May 5, 2012 with Pete Bloom and Joe Papp. As noted by Pagel et al. (2010), helicopter surveys “can be the primary survey method, or can be combined with follow-up ground surveys.” As no active eagle nests were detected during the surveys, ground surveys were conducted on April 8, April 9 and May 26, 2012 to look for potential post-breeding dispersants from adjacent areas.

Helicopter surveys followed the helicopter survey methodology described in Section VII.b Aerial Surveys of Pagel et al. (2010). Two GPS units, one primary and one backup, were used to document geographic locations of importance and the routes taken. The survey duration was adequate to cover the entire area and reexamine large stick nests for the presence of inactive and active Golden Eagle nests. The survey dates, times, weather conditions and personnel are summarized below in Table 1.

Table 1. Field survey dates, times and weather conditions.

Date	Time	Weather	Biologist(s)
05/26/12	0400-2200h	Start: 60° F, 0% cloud cover, Calm End: 74° F, 0% cloud cover, Breeze out of the N	Peter H. Bloom
05/05/12	0600-1800h	No rain; No fog; No snow Start: 70° F, 0% cloud cover, Calm End: 85° F, 0% cloud cover, Light Wind out of the N	Peter H. Bloom
04/09/12	0630-1230h	No rain; No fog; No snow Start: 58° F, 0% cloud cover, Calm End: 63° F, 1-25% cloud cover, Calm out of the NE	Peter H. Bloom Joe Papp
		No rain; No fog; No snow	

Date	Time	Weather	Biologist(s)
04/08/12	0630-1830h	Start: 59° F, 1-25% cloud cover, Breeze out of the NE End: 74° F, 1-25% cloud cover, Breeze out of the NE No rain; No fog; No snow	Peter H. Bloom Joe Papp
03/26/12	0630-1400h	Start: 48° F, 1-25% cloud cover, Calm End: 65° F, 0% cloud cover, Light Wind out of the SW No rain; No fog; No snow	Peter H. Bloom Scott Thomas
03/25/12	0700-1800h	Start: 49° F, 51-75% cloud cover, Light Wind out of the SW End: 65° F, 26-50% cloud cover, Strong Wind out of the S No rain; No fog; No snow	Peter H. Bloom Scott Thomas
03/24/12	1200-1800h	Start: 75° F, 51-75% cloud cover, Light Wind out of the SW End: 78° F, 76-99% cloud cover, Calm No rain; No fog; No snow	Peter H. Bloom Scott Thomas

RESULTS & DISCUSSION

No active Golden Eagle nests were found within the Survey Area despite a thorough search by air and on the ground. BBI identified the locations of 39 other raptor or corvid nests of the following species: Red-tailed Hawk (25), Prairie Falcon (1, [*Falco mexicanus*]), Turkey Vulture (3, [*Cathartes aura*]) and Common Raven (10). Details of these nests are provided in Attachment A and all nest locations are shown on Exhibit 1.

WRI (2011) found three inactive Golden Eagle nests within the area delimited as the 2012 Survey Area. These nest locations were checked by BBI during the 2012 surveys and are shown on Exhibit 1. The two adjacent nests at WRI 1 are believed to be synonymous with Red-tailed Hawk nests 903 and 1022. Nest WRI 2 is believed to be synonymous with BBI nest 1021, which was identified as a probable old Golden Eagle nest used by Red-tailed Hawks in 2012. It is important to note that GPS readings are not entirely accurate, and GPS errors are exacerbated when surveying via helicopter, particularly in strong winds.

BBI biologists also documented all fauna observed during the surveys. The list of 30 bird, 6 mammal and 3 reptile species observed are included in the Faunal Compendium which is provided as Attachment B. Photos taken during the survey are provided in Exhibit 2.

It is likely that the ecology, geography and topography of this local region result in a low number of Golden Eagles across seasons and years compared to other areas they inhabit in the western United States. In particular, the following features of this Survey Area are factors that likely contributed to the absence of Golden Eagles in the Survey Area in 2012:

- Climate severity and limited water resources, except near the Colorado River which is largely in close proximity to regular anthropogenic disturbance and activity;
- Scant vegetation for primary Golden Eagle prey resources such as lagomorphs;
- The presence of few lagomorphs (primary prey) in the region in 2011 and 2012; and
- Existing transmission line towers appear to be structurally incapable of supporting eagle nests, many new towers are designed this way

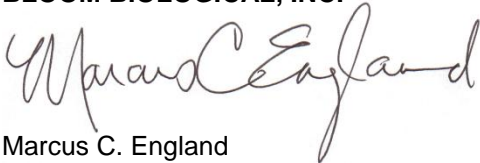
Cliffs and/or rock outcrops of the size that attract nesting eagles are present particularly in the areas where large nests were identified, but are few in number compared to the size of the study

area. Several of the cliffs that appear to be structurally capable of supporting eagle nests do not have them perhaps in part because they have nesting Red-tailed Hawks and/or Prairie Falcons on them.

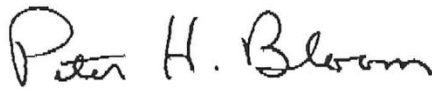
If you have any questions or comments regarding this report please feel free to contact Marcus C. England at 213-304-1826.

Sincerely,


BLOOM BIOLOGICAL, INC.



Marcus C. England
Vice President



Peter H. Bloom
President



Scott Thomas
Field Manager

LITERATURE CITED

Bloom, P. H. and S. J. Hawks. 1982. Food habits of nesting Golden Eagles in northeast California and northwest Nevada. Raptor Res. 16:110-115.

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ATTACHMENT A. SURVEY RESULTS

The following table lists the full results of BBI's surveys for Golden Eagle nests conducted within ten miles of the proposed Rio Mesa project from March 24 to May 26, 2012. Nest locations are shown on the attached Exhibit 1. Distances between the nest locations and the project site were measured using the ST_Distance function in a PostGIS-enabled geospatial database.

#	Easting	Northing	Date	Species	Substrate	Contents	Quan.	notes	Dist. From Rio Mesa	
									miles	ft
903	706337.61 5	3687598.5 6	2012-05- 05	Red-tailed Hawk	Cliff	Empty	0	Possibly synonymous with inactive Golden Eagle nest WRI 1 from 2011 (shown on Exhibit 1)	8.68	45839
904	705160.92 1	3685805.7 3703221.4	2012-05- 05	Red-tailed Hawk	Utility Pole	Empty	0		9.78	51639
905	707833.4 708435.77	8 3711056.9	2012-05- 05	Red-tailed Hawk	Utility Pole	Young	2	0.04	195	
906	708435.77 9	3711056.9 7	2012-05- 05	Red-tailed Hawk	Utility Pole	Empty	0	0.2	1035	
907	711180.23 5	3716461.1 8	2012-05- 05	Red-tailed Hawk	Utility Pole	Young	2	3.9	20598	
908	708167.23 2	3710778.2 9	2012-05- 05	Red-tailed Hawk	Utility Pole	Young	2	0.03	140	
909	707084.29 9	3709618.1 5	2012-05- 05	Red-tailed Hawk	Utility Pole	Empty	0	0	0	
910	705774.59 1	3708065.1 7	2012-05- 05	Red-tailed Hawk	Utility Pole	Young	2	0	0	
911	705085.59 1	3707921.7 2	2012-05- 05	Red-tailed Hawk	Utility Pole	Empty	0	0	0	
912	701747.73 2	3708410.7 3	2012-05- 05	Red-tailed Hawk	Utility Pole	Empty	0	1.54	8115	
913	700850.60 2	3708536.1 7	2012-05- 05	Red-tailed Hawk	Utility Pole	Empty	0	1.97	10385	
914	697837.60 5	3708181.1 8	2012-05- 05	Red-tailed Hawk	Utility Pole	Young	2	3.5	18489	
915	693940.13 693300.08	3706495.2 5	2012-05- 05	Red-tailed Hawk	Utility Pole	Young	2	5.74	30325	
924	5	3718679.7 9	2012-05- 05	Common Raven	Utility Pole	Young	1	9.7	51203	
925	693823.30	3718654.3	2012-05-	Common Raven	Utility Pole	Young	1	9.45	49899	

#	Easting	Northing	Date	Species	Substrate	Contents	Quan.	notes	Dist. From Rio Mesa	
									miles	ft
	5		05							
926	697062.36	3718608.4	2012-05-03	Red-tailed Hawk	Utility Pole	Young	1		7.92	41839
927	698096.38	3718577.7	2012-05-01	Common Raven	Utility Pole	Young	1		7.42	39165
928	699723.68	3718550.0	2012-05-07	Red-tailed Hawk	Utility Pole	Young	2		6.68	35258
929	700802.40	3718524.4	2012-05-02	Common Raven	Utility Pole	Empty	0		6.23	32873
930	701344.68	3718492.9	2012-05-06	Common Raven	Utility Pole	Empty	0		6	31706
931	702377.53	3718463.8	2012-05-03	Red-tailed Hawk	Utility Pole	Empty	0		5.63	29740
932	704930.61	3716837.3	2012-05-07	Red-tailed Hawk	Utility Pole	Young	2		4.03	21294
933	706898.26	3715208	2012-05-06	Red-tailed Hawk	Utility Pole	Young	2		2.8	14763
102	697150	3696631	2012-03-26	Red-tailed Hawk	Cliff	Unknown	0	Active	5.7	30075
102	697788	3697449	2012-03-26	Red-tailed Hawk	Cliff	Empty	0	Inactive	5.09	26894
102	706360	3687691	2012-03-25	Red-tailed Hawk	Cliff	Empty	0	Active – Incubating – Possibly synonymous with inactive Golden Eagle nest WRI 1 from 2011 (shown on Exhibit 1)	8.62	45537
102	706871	3689666	2012-03-25	Red-tailed Hawk	Cliff	Unknown	0	Active – Incubating – Possibly synonymous with inactive Golden Eagle nest WRI 2 from 2011 (shown on Exhibit 1)	7.4	39095
101	704597	3724542	2012-03-25	Red-tailed Hawk	Cliff	Empty	0	Failed	8.73	46098
101	701151	3723959	2012-03-25	Turkey Vulture	Cliff	Unknown	0	Status Unknown	9.02	47611
101	687183	3706999	2012-03-25	Turkey Vulture	Cliff	Unknown	0	Status Unknown	9.95	52530
101	703878	3712529	2012-03-25	Common Raven	Cliff	Unknown	0	Active	2.29	12067

#	Easting	Northing	Date	Species	Substrate	Contents	Quan.	notes	Dist. From Rio Mesa	
									miles	ft
1019	706516	3689801	2012-03-25	Prairie Falcon	Cliff	Unknown	0	Active	7.32	38627
1020	706556	3689316	2012-03-25	Common Raven	Cliff	Unknown	0	Active– Possibly synonymous with inactive Golden Eagle nest WRI 1 from 2011 (shown on Exhibit 1)	7.62	40221
1025	698449	3698434	2012-03-26	Red-tailed Hawk	Cliff	Unknown	0	Likely Active	4.44	23464
1026	698957	3698257	2012-03-26	Turkey Vulture	Cliff	Unknown	0	Status Unknown	4.21	22251
1027	698372	3698282	2012-03-26	Red-tailed Hawk	Cliff	Empty	0	Inactive	4.53	23911
1028	698169	3700485	2012-03-26	Common Raven	Cliff	Unknown	0	Active	3.82	20185
1029	698099	3700227	2012-03-26	Common Raven	Cliff	Empty	0	Inactive	3.95	20860
1030	697689	3704416	2012-03-26	Common Raven	Cliff	Empty	0	Inactive	3.45	18200

ATTACHMENT B. FAUNAL COMPENDIUM

This faunal compendium lists 30 bird, 6 mammal and 3 reptile species detected by BBI during Golden Eagle surveys conducted in 2012. Note: all Anseriformes, Suliformes, Pelecaniformes and Gruiformes were detected over the agricultural fields and riparian areas near the Colorado River, east of the proposed Project site.

Birds

Anseriformes - Screamers, Swans, Geese, and Ducks | Anatidae - Ducks, Geese, and Swans
Mallard *Anas platyrhynchos*

Galliformes - Gallinaceous Birds | Odontophoridae - New World Quail
Gambel's Quail *Callipepla gambelii*

Suliformes - Frigatebirds, Boobies, Cormorants, Darters, and Allies | Phalacrocoracidae - Cormorants
Double-crested Cormorant *Phalacrocorax auritus*

Pelecaniformes - Pelicans, Herons, Ibises, and Allies | Ardeidae - Herons, Bitterns, and Allies
Great Egret *Ardea alba*
Black-crowned Night-Heron *Nycticorax nycticorax*

Accipitriformes - Hawks, Kites, Eagles, and Allies | Cathartidae - New World Vultures
Turkey Vulture *Cathartes aura*

Accipitriformes - Hawks, Kites, Eagles, and Allies | Pandionidae - Ospreys
Osprey *Pandion haliaetus*

Accipitriformes - Hawks, Kites, Eagles, and Allies | Accipitridae - Hawks, Kites, Eagles, and Allies
Swainson's Hawk *Buteo swainsoni*
Red-tailed Hawk *Buteo jamaicensis*

Falconiformes - Caracaras and Falcons | Falconidae - Caracaras and Falcons
American Kestrel *Falco sparverius*

Gruiformes - Rails, Cranes, and Allies | Rallidae - Rails, Gallinules, and Coots
American Coot *Fulica americana*

Columbiformes - Pigeons, and Doves | Columbidae - Pigeons and Doves
Eurasian Collared-Dove *Streptopelia decaocto*
White-winged Dove *Zenaida asiatica*
Mourning Dove *Zenaida macroura*

Cuculiformes - Cuckoos and Allies | Cuculidae - Cuckoos, Roadrunners, and Anis
Greater Roadrunner *Geococcyx californianus*

Passeriformes - Passerine Birds | Tyrannidae - Tyrant Flycatchers
Cassin's Kingbird *Tyrannus vociferans*

Passeriformes - Passerine Birds | Corvidae - Crows and Jays
Common Raven *Corvus corax*

Passeriformes - Passerine Birds | Alaudidae - Larks

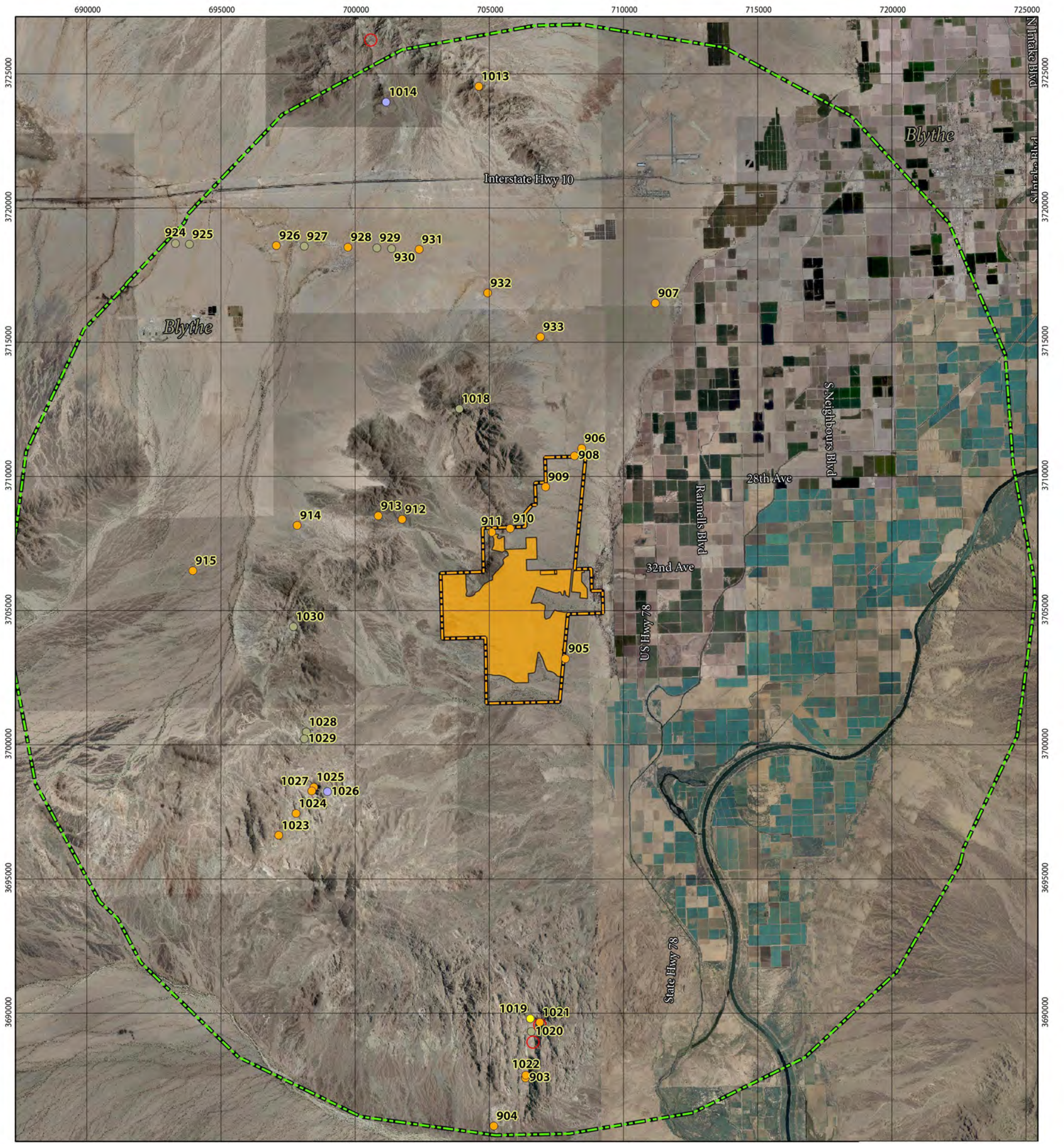
- Horned Lark *Eremophila alpestris*
- Passeriformes - Passerine Birds | Hirundinidae - Swallows
Northern Rough-winged Swallow *Stelgidopteryx serripennis*
Cliff Swallow *Petrochelidon pyrrhonota*
- Passeriformes - Passerine Birds | Remizidae - Penduline Tits and Verdins
Verdin *Auriparus flaviceps*
- Passeriformes - Passerine Birds | Sturnidae - Starlings
European Starling *Sturnus vulgaris*
- Passeriformes - Passerine Birds | Parulidae - Wood-Warblers
Yellow-rumped Warbler *Setophaga coronata*
- Passeriformes - Passerine Birds | Icteridae - Blackbirds
Red-winged Blackbird *Agelaius phoeniceus*
Western Meadowlark *Sturnella neglecta*
Yellow-headed Blackbird *Xanthocephalus xanthocephalus*
Brewer's Blackbird *Euphagus cyanocephalus*
Common Grackle *Quiscalus quiscula*
Great-tailed Grackle *Quiscalus mexicanus*
- Passeriformes - Passerine Birds | Fringillidae - Fringilline and Cardueline Finches and Allies
House Finch *Carpodacus mexicanus*

Mammals

- Lagomorpha | Leporidae
Desert Cottontail *Sylvilagus audubonii*
- Rodentia | Sciuridae
White-tailed Antelope Squirrel *Ammospermophilus leucurus*
Round-tailed Ground Squirrel *Spermophilus tereticaudus*
- Rodentia | Heteromyidae
Desert Kangaroo Rat *Dipodomys deserti*
Merriam's Kangaroo Rat *Dipodomys merriami*
- Artiodactyla | Bovidae
Bighorn Sheep *Ovis canadensis*

Reptiles

- Squamata | Phrynosomatidae
Zebra-tail Lizard *Callisaurus draconoides*
Side-blotched Lizard *Uta stansburiana*
- Squamata | Teiidae
Western Whiptail *Aspidoscelis tigris*



UTM NAD 83 Zone 11 Coordinates
 Author: Marcus C. England
 Map Date: 25 July 2012
 Aerial Photography: US Department of Agriculture

- Proposed Project Boundary at Time of Survey
- Revised Project Boundary
- Ten Mile Project Buffer
- 2011 Locations of Nests Identified as Golden Eagle by WRI
- Nest Locations**
- Common Raven
- Prairie Falcon
- Red-tailed Hawk
- Turkey Vulture

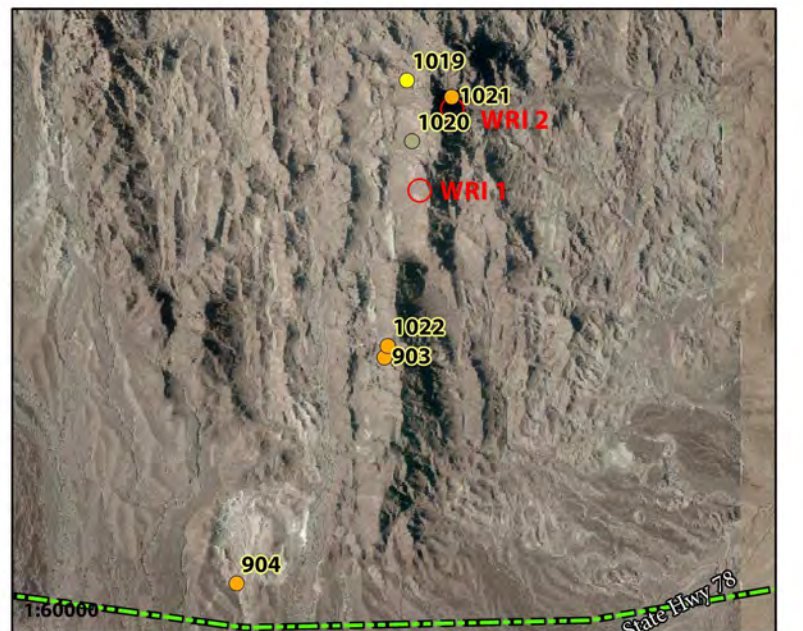
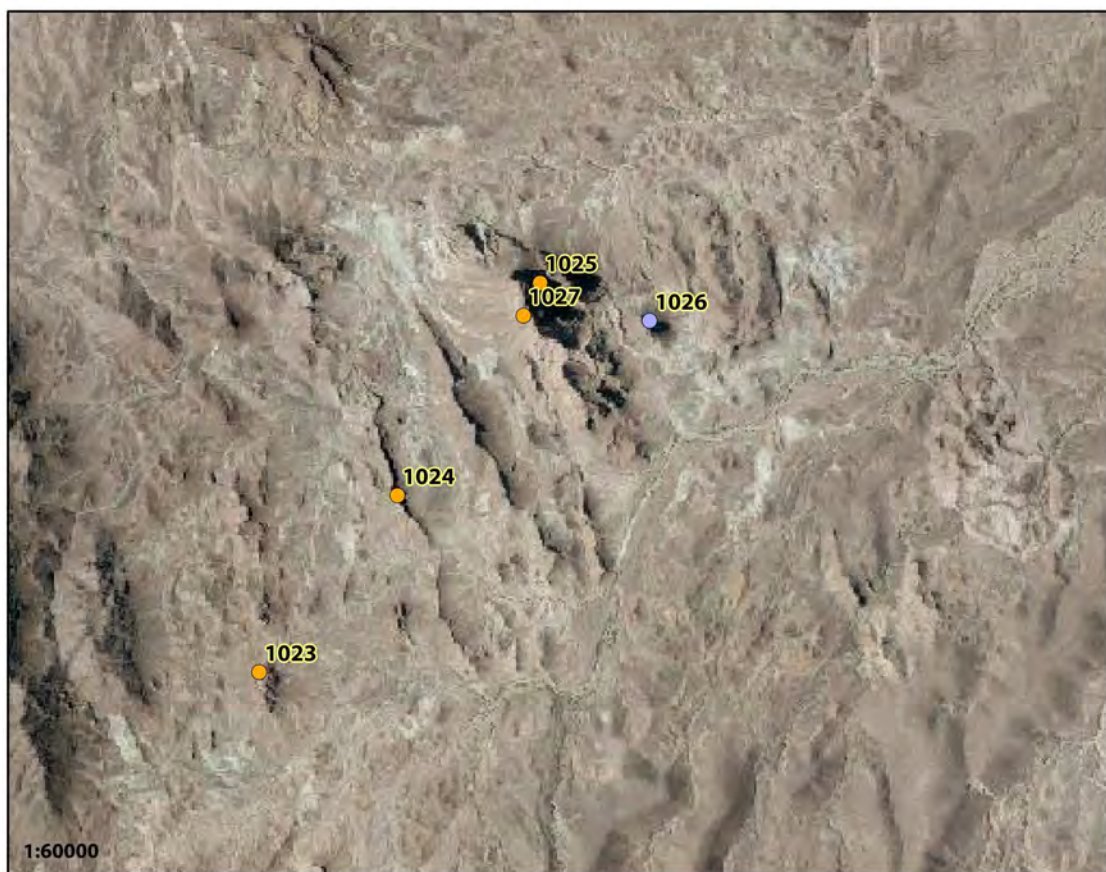
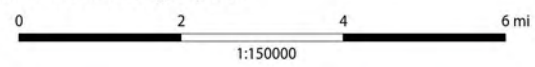
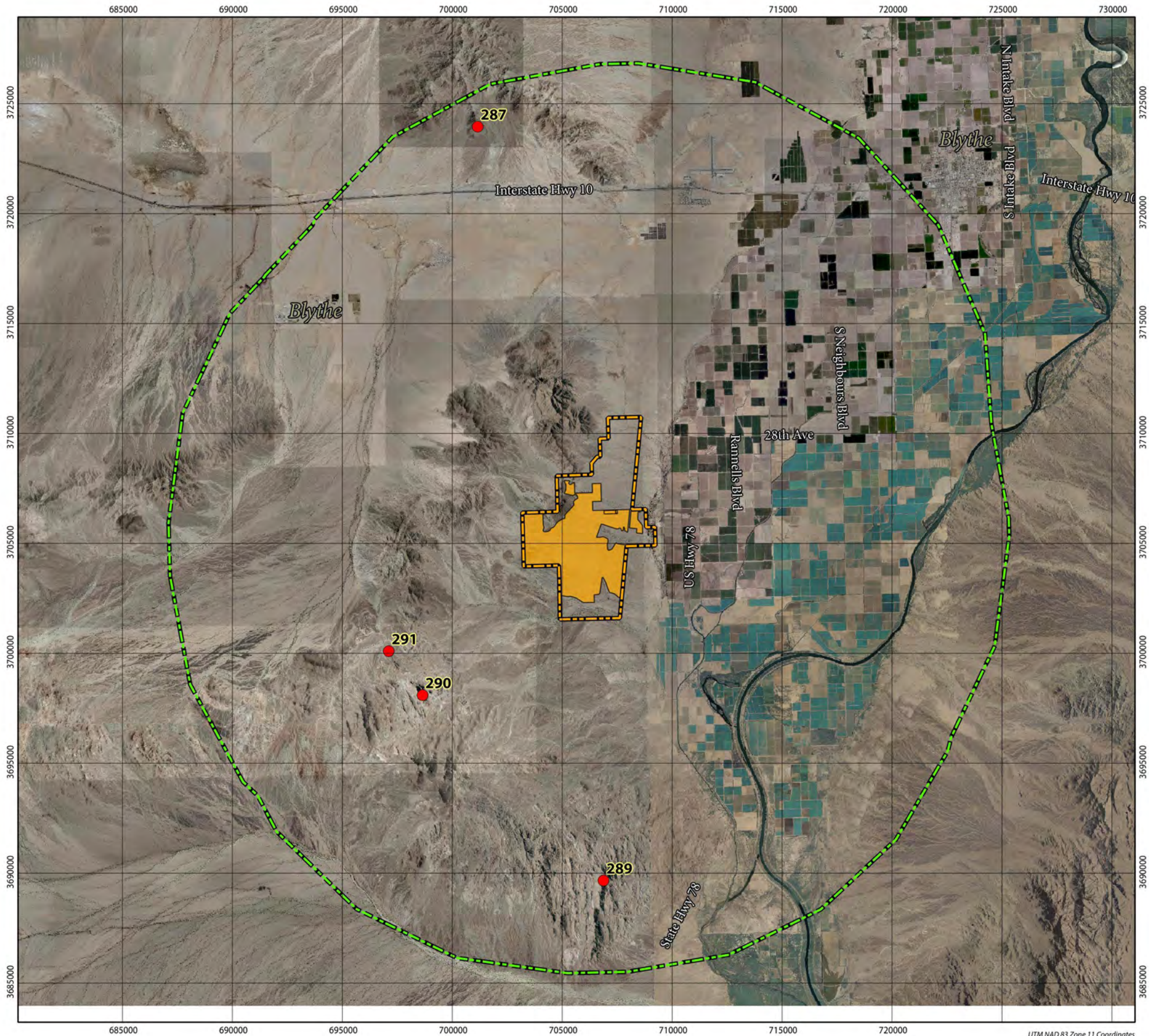


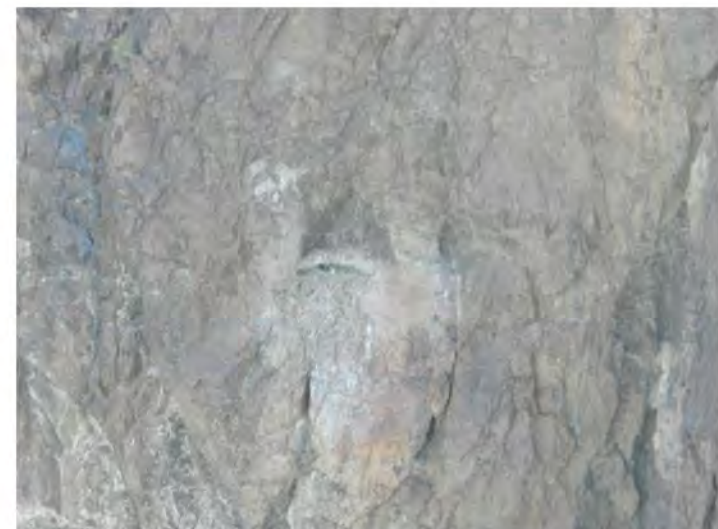
Exhibit 1: 2012 Survey Results
 Rio Mesa | Riverside County, California



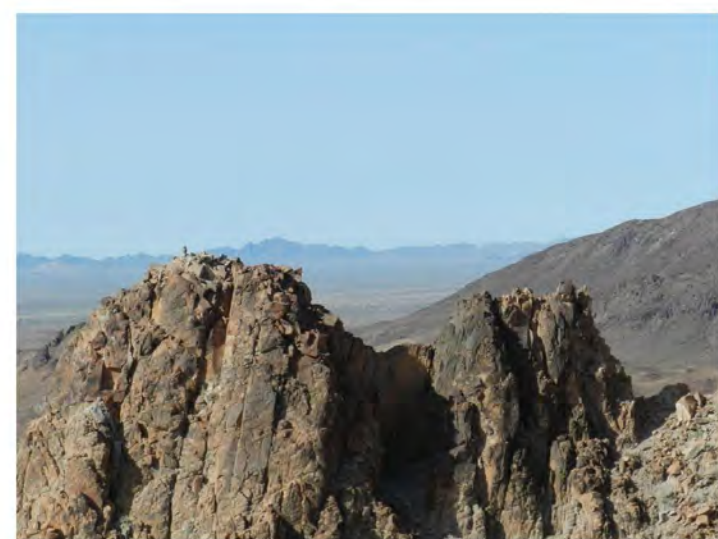
UTM NAD 83 Zone 11 Coordinates
 Author: Marcus C. England
 Map Date: 22 June 2012
 Aerial Photography: US Department of Agriculture



Waypoint: 287
 UTM Easting: 701151
 UTM Northing: 3723959
 Biologist: Scott Thomas
 Direction: SE
 Description: Turkey Vulture Nest Site



Waypoint: 289
 UTM Easting: 706871
 UTM Northing: 3689666
 Biologist: Scott Thomas
 Direction: W
 Description: Red-tailed Hawk incubating on previously described GOEA nest



Waypoint: 290
 UTM Easting: 698633
 UTM Northing: 3698103
 Biologist: Scott Thomas
 Direction: E
 Description: Thumb Mountain resident Red-tailed Hawk

- Proposed Project Boundary at Time of Survey
- Revised Project Boundary
- Ten Mile Project Buffer
- Photo Locations

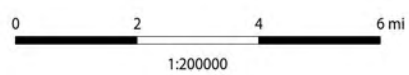


Exhibit 2: Photographs
 Rio Mesa | Riverside County, California



**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**

**APPLICATION FOR CERTIFICATION
FOR THE *RIO MESA SOLAR*
*ELECTRIC GENERATING FACILITY***

**DOCKET NO. 11-AFC-04
PROOF OF SERVICE
(Revised 7/11/12)**

APPLICANTS' AGENTS

BrightSource Energy, Inc.
Todd Stewart, Senior Director
Project Development
1999 Harrison Street, Suite 2150
Oakland, CA 94612
tstewart@brightsourceenergy.com

BrightSource Energy, Inc.
Michelle Farley
1999 Harrison Street, Suite 2150
Oakland, CA 94612
mfarley@brightsourceenergy.com

BrightSource Energy, Inc.
Brad DeJean
1999 Harrison Street, Suite 2150
Oakland, CA 94612
e-mail service preferred
bdejean@brightsourceenergy.com

APPLICANTS' CONSULTANTS

Grenier and Associates, Inc.
Andrea Grenier
1420 E. Roseville Parkway
Suite 140-377
Roseville, CA 95661
e-mail service preferred
andrea@agrenier.com

URS Corporation
Angela Leiba
4225 Executive Square, Suite 1600
La Jolla, CA 92037
angela_leiba@urscorp.com

COUNSEL FOR APPLICANTS

Ellison, Schneider, & Harris
Christopher T. Ellison
Brian S. Biering
2600 Capitol Avenue, Suite 400
Sacramento, CA 95816-5905
cte@eslawfirm.com
bsb@eslawfirm.com

INTERESTED AGENCIES

Mojave Desert AQMD
Chris Anderson, Air Quality Engineer
14306 Park Avenue
Victorville, CA 92392-2310
canderson@mdaqmd.ca.gov

California ISO
e-mail service preferred
e-recipient@caiso.com

Bureau of Land Management
Cedric Perry
Lynnette Elser
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553
cperry@blm.gov
lelser@blm.gov

Katherine Lind
Tiffany North
Office of Riverside County Counsel
County of Riverside
3960 Orange Street, Suite 500
Riverside, CA 92501
e-mail service preferred
klind@co.riverside.ca.us
tnorth@co.riverside.ca.us

INTERVENORS

Center for Biological Diversity
Lisa T. Belenky, Senior Attorney
351 California Street, Suite 600
San Francisco, CA 94104
e-mail service preferred
lbelenky@biologicaldiversity.org

Center for Biological Diversity
Ileene Anderson
Public Lands Desert Director
PMB 447, 8033 Sunset Boulevard
Los Angeles, CA 90046
e-mail service preferred
ianderson@biologicaldiversity.org

**ENERGY COMMISSION –
DECISIONMAKERS**

CARLA PETERMAN
Commissioner and Presiding Member
carla.peterman@energy.ca.gov

KAREN DOUGLAS
Commissioner and Associate Member
e-mail service preferred
karen.douglas@energy.ca.gov

*Kenneth Celli
Hearing Adviser
e-mail service preferred
[*ken.celli@energy.ca.gov](mailto:ken.celli@energy.ca.gov)

Jim Bartridge
Advisor to Presiding Member
jim.bartridge@energy.ca.gov

Galen Lemei
Advisor to Associate Member
e-mail service preferred
galen.lemei@energy.ca.gov

Jennifer Nelson
Advisor to Associate Member
e-mail service preferred
jennifer.nelson@energy.ca.gov

ENERGY COMMISSION STAFF

Pierre Martinez
Project Manager
pierre.martinez@energy.ca.gov

Lisa DeCarlo
Staff Counsel
lisa.decarlo@energy.ca.gov

Eileen Allen
Commissioners' Technical
Advisor for Facility Siting
e-mail service preferred
eileen.allen@energy.ca.gov

**ENERGY COMMISSION –
PUBLIC ADVISER**

Jennifer Jennings
Public Adviser's Office
e-mail service preferred
[*publicadviser@energy.ca.gov](mailto:publicadviser@energy.ca.gov)

DECLARATION OF SERVICE

I, Nickolaus Jacobs, declare that on August 2, 2012, I served and filed a copy of the attached document 11-AFC-04 Applicant's Supplemental Response #6 to CEC Staff Data Request Set 1A (DRs 46 and 47), Dated August 2, 2012. This document is accompanied by the most recent Proof of Service list, located on the web page for this project at: <http://www.energy.ca.gov/sitingcases/riomesa/index.html>.

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 or Chief Counsel, as appropriate, in the following manner:

(Check all that Apply)

For service to all other parties:

- Served electronically to all e-mail addresses on the Proof of Service list;
- Served by delivering on this date, either personally, or for mailing with the U.S. 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 "e-mail preferred."

AND

For filing with the Docket Unit at the Energy Commission:

- by sending electronic copies to the e-mail address below (preferred method); **OR**
- by depositing an original and 12 paper copies in the mail with the U.S. Postal Service with first class postage thereon fully prepaid, as follows:

CALIFORNIA ENERGY COMMISSION – DOCKET UNIT
Attn: Docket No. 11-AFC-04
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.ca.gov

OR, if filing a Petition for Reconsideration of Decision or Order pursuant to Title 20, § 1720:

- Served by delivering on this date one electronic copy by e-mail, and an original paper copy to the Chief Counsel at the following address, either personally, or for mailing with the U.S. Postal Service with first class postage thereon fully prepaid:

California Energy Commission
Michael J. Levy, Chief Counsel
1516 Ninth Street MS-14
Sacramento, CA 95814
michael.levy@energy.ca.gov

I declare under penalty of perjury under the laws of the State of California 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.

Original Signed by: _____
Nickolaus Jacobs