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An Employee-Owned Company

January 9, 2015

Mr. Brian Mooney, AICP
Managing Principal
Mooney Planning Collaborative
9655 Granite Ridge Dr. Suite 200
San Diego, CA 92123

Reference: Habitat Assessment and Burrowing Owl Focused Survey Results at the Lotus Ranch Project Survey Area (RECON Number 7524)

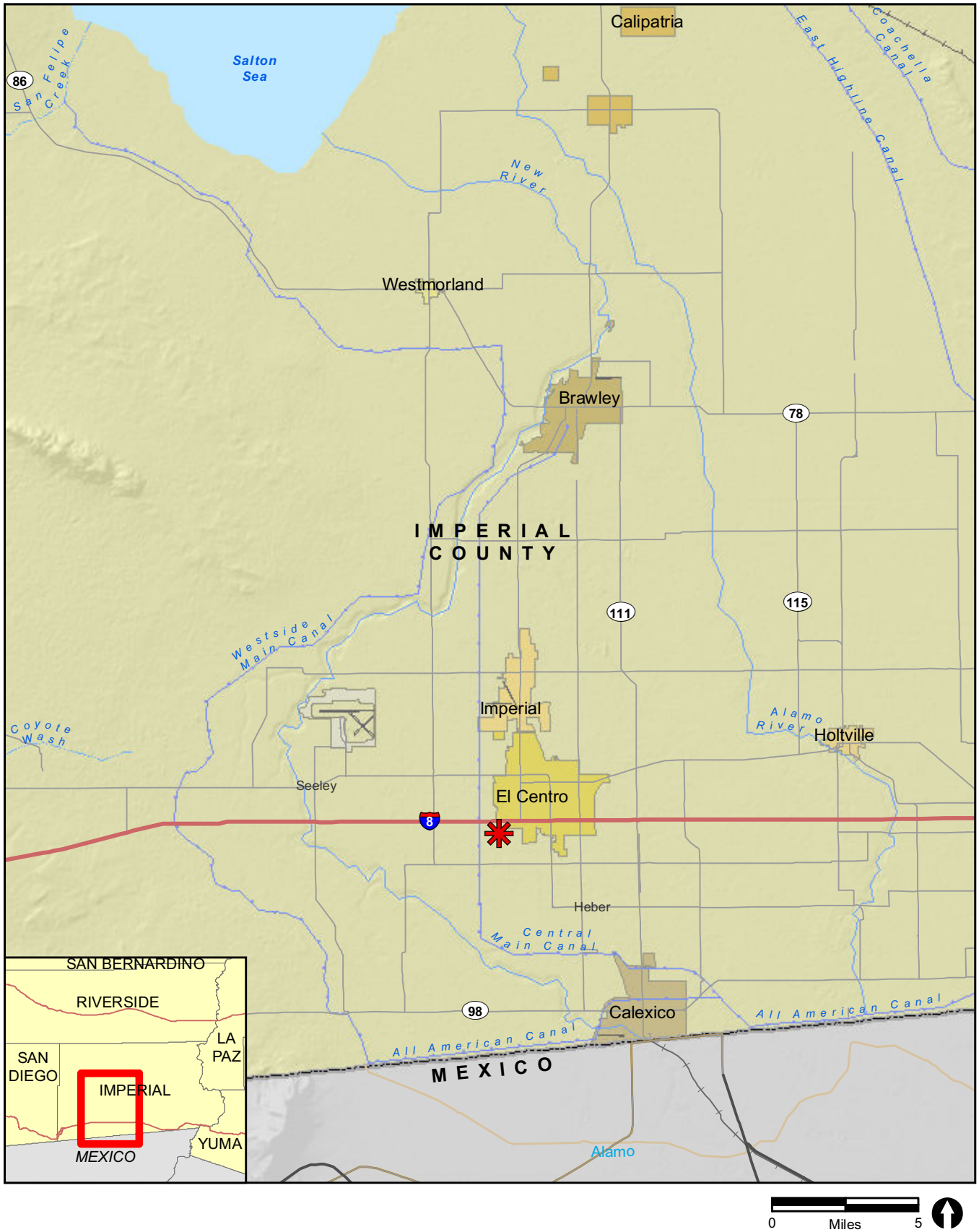
Dear Mr. Mooney:

This letter summarizes the results of the 2014 focused surveys for the burrowing owl (*Athene cunicularia hypugaea*) conducted within the Lotus Ranch Project Area (project area). The project area is located in the city of El Centro, in the western half of Imperial County, California (Figure 1). The 213-acre project area is located in the U.S. Geological Survey (USGS) El Centro quadrangle, Township 16 South, Range 13 East, Sections 58 and 61 (USGS 1979; Figure 2) and within Assessor Parcel Numbers 052-280-012 and 052-380-030 (Figure 3).

RECON Environmental, Inc. (RECON) biologists conducted burrowing owl protocol surveys in suitable habitat in accordance with the guidelines developed by the California Department of Fish and Wildlife ([CDFW] 2012). Non-breeding season surveys were conducted to determine the presence or absence of the species within the project area. Two burrowing owls were detected within the project area and within the 150-meter buffer south of the project area. A discussion of the results of the surveys conducted is provided below.

Western Burrowing Owl

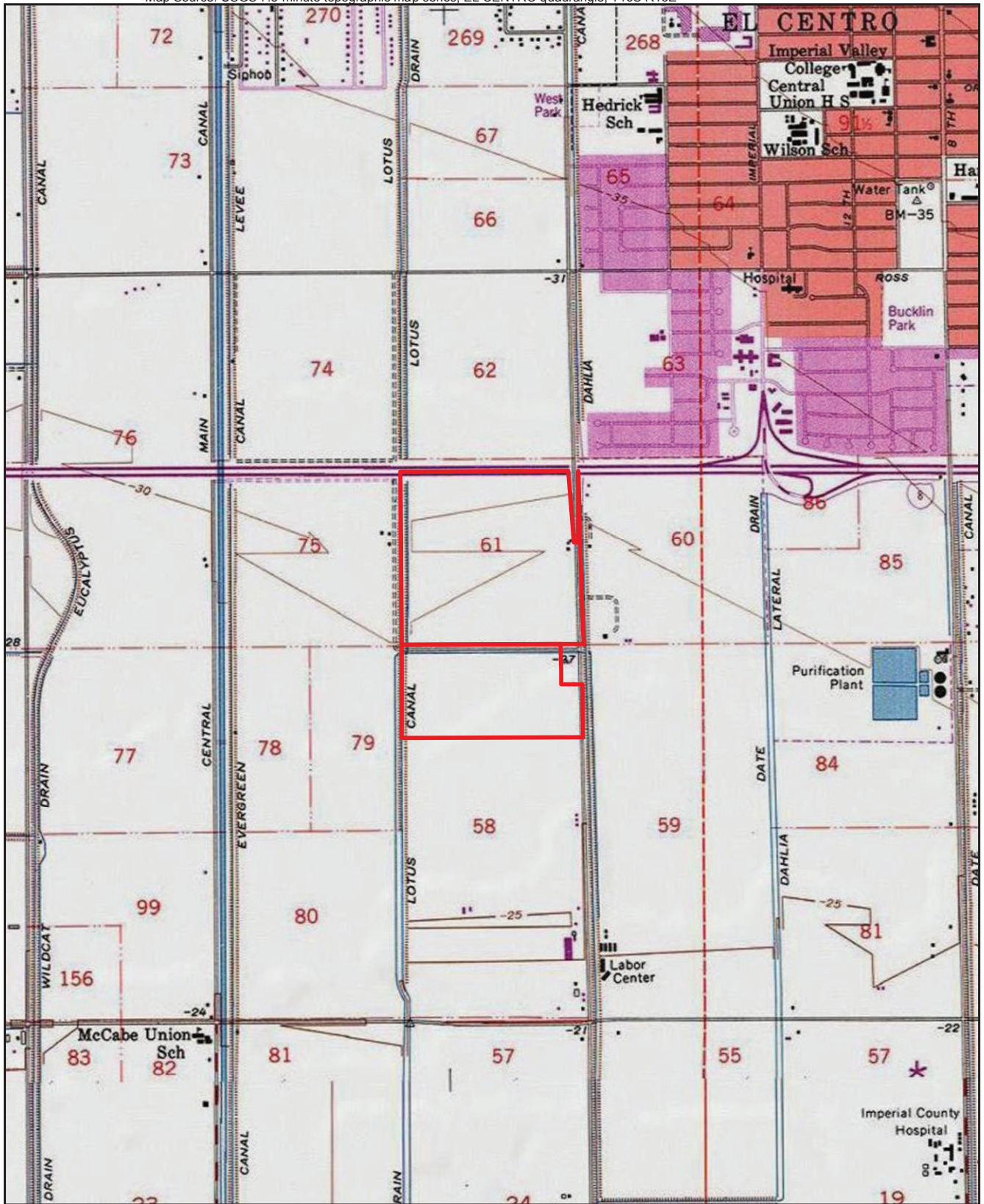
The western burrowing owl is a CDFW species of special concern. This species is primarily restricted to the western United States and Mexico. Studies conducted by Ruhlen, Rosenberg, and DeSante (2004) show that the density and abundance of this species within the Imperial Valley is exceptionally high compared to other areas in southern California. Irrigation canals, ditches, and drains immediately adjacent to agricultural fields are commonly used as nesting sites (Ruhlen, Rosenberg, and DeSante 2004). Habitat for the western burrowing owl includes dry, open, short-grass areas with level to gentle topography and well-drained soils (CDFW 2012). These areas are also often associated with burrowing mammals (Haug et al. 1993). Burrowing owls are known to use multiple burrows in addition to their nesting burrows called "satellite" burrows. These non-nesting burrows are used to seek protection from predators and for roosting during the non-breeding season (CDFW 2012).



 Project Location

FIGURE 1

Regional Location



 Project Area

FIGURE 2

Project Location on USGS Map



 Project Area

FIGURE 3
Project Location on Aerial Photograph

The burrowing owl is diurnal and typically perches during daylight at the entrance to its burrow or on adjacent structures, such as low posts. Nesting occurs from March through August. Burrowing owls form a pair bond for more than one year and exhibit high site fidelity, reusing the same burrow year after year (Haug et al. 1993). The female remains inside the burrow during most of the egg laying and incubation period and is fed by the male throughout brooding. Western burrowing owls are opportunistic feeders, consuming a diet that includes arthropods, small mammals, and birds, and occasionally amphibians and reptiles (Haug et al. 1993).

Urbanization has greatly reduced the amount of suitable habitat for this species. Other contributions to the decline of this species include the poisoning of fossorial mammals, road and ditch maintenance, and collisions with automobiles (CDFW 2012).

Survey Methods

RECON biologists Beth Procsal, Cailin O'Meara, and Andy Smisek conducted burrowing owl surveys in accordance with the guidelines developed by the CDFW (CDFW 2012). Prior to start of surveys, a search for burrowing owl occurrences was completed through California Natural Diversity Database (CNDDDB). Although no records were found within CNDDDB, previous observations were made within the project area in 2005 (Mooney-Jones and Stokes 2005).

Surveys included a habitat assessment and four non-breeding season burrowing owl surveys. For the purposes of this report, the "survey area" includes the project's proposed ground disturbance footprint (project area) and a 150-meter buffer (Figure 4). Meandering transects were walked through all suitable habitat identified within the project area with focused attention on where burrowing owls were detected within the project area in 2005. The 150-meter buffer was surveyed using binoculars, as access onto private property was not granted. All wildlife species observed during the surveys were noted. Common bird species observed during the surveys included common ground-dove (*Columbina passerina pallescens*), Say's phoebe (*Sayornis saya*), American kestrel (*Falco sparverius sparverius*), northern harrier (*Circus cyaneus hudsonius*), and great egret (*Ardea alba*). Survey dates, times, and weather conditions are provided in Table 1.

**TABLE 1
SURVEY INFORMATION**

Date	Survey Type	Surveyors	Beginning Conditions	Ending Conditions
10/20/14	Habitat Assessment	C. O'Meara, B. Procsal	9:15 a.m.; 79°F; 0–1 mph; 0% cc	12:30 p.m.; 91 °F; 0–1 mph; 0% cc
10/30/14	Burrowing Owl Survey #1	C. O'Meara, A. Smisek	8:15 a.m.; 68°F; 0 mph; 15% cc	11:00 a.m.*; 88 °F; 0–4 mph; 55% cc
11/10/14	Burrowing Owl Survey #2	C. O'Meara, B. Procsal	8:10 a.m.; 69°F; 2–5 mph; 0% cc	10:00 a.m.; 74°F; 0-1 mph; 0% cc
12/09/14	Burrowing Owl Survey #3	C. O'Meara, A. Smisek	8:04 a.m.; 60°F; 0 mph; 5% cc	9:54 p.m.; 72°F; 0–1 mph; 10% cc
12/30/14	Burrowing Owl Survey #4	C. O'Meara, B. Procsal	3:15 p.m.; 59°F; 0–2 mph; 75% cc	4:40 p.m.; 58°F; 3-6 mph with gusts to 8; 98% cc

°F = degrees Fahrenheit; mph = miles per hour; % = percent; cc = cloud cover.

* = the 10:00 a.m. to 11:00 a.m. hour was spent mapping the culverts using a global positioning system (GPS) and taking photographs of the project area.





-  Project Area
-  Lotus Ranch Survey Area

FIGURE 4
Lotus Ranch Burrowing Owl
Survey Area on Aerial Photograph

Habitat Assessment Results

Existing Conditions

A burrowing owl habitat assessment was conducted on October 20, 2014, within and adjacent to the Lotus Ranch project area. The survey area, consisting of two Lotus Ranch parcels and the surrounding 150-meter buffer, occurs in the City of El Centro. The project area is immediately restricted by Interstate 8 to the north, La Brucherie Road to the east, and development to the south (see Figure 3). A mosaic of agricultural land and residential development further surrounds the project area. Six soil types occur within the project area: Glenbar clay loam, wet; Holtville silty clay, wet; Imperial silty clay, wet; Imperial-Glenbar silty clay loam, wet, Imperial-Glenbar silty clay loam, wet, 0 to 2 percent slopes; Indio loam, wet; and Vint and Indio very fine sandy loam (USDA 1973). No burrows of any kind were detected within the agricultural fields or along the roads. No signs of recent disking were observed within the project area.

The project area is relatively flat with earthen berms around many of the parcel edges. Currently, there are dirt roads that separate each agricultural field from one another and from the surrounding paved roads and canals.

The project area supports two land cover types: agriculture (fallow) and unvegetated (Figure 5). The agricultural land is made up of three fields consisting of alfalfa (*Medicago sativus*) and Sudan grass (*Sorghum* sp.), which have gone fallow, and covers the majority of the project area (Photographs 1 and 2). The unvegetated land consists of bare ground as part of the dirt roads (Photograph 3). Both land cover types are discussed in further detail below.

Burrowing Owl Habitat

Suitable habitat was evaluated within the survey area during the habitat assessment. The fallow agricultural fields are not considered suitable nesting burrowing owl habitat due to the density of vegetation that included the dried thatch from the previous year, and no burrows of any size were detected within the fields. Suitable foraging habitat may be present during the times of year when the vegetation within the fields has died back. Within the buffer, dirt roads surrounding the agricultural lots within the project area, neighboring (active) agricultural lots, residential and commercial development exist. The dirt roads and earthen, unvegetated berms adjacent to the dry irrigation canals within the survey area provide suitable burrowing habitat, although no burrows were detected. All surrounding agricultural fields, which were active, and residential development can be excluded due to the lack of suitable nesting habitat. As these neighboring fields are receiving supplemental water, this eliminates the potential for these areas to be suitable nesting habitat. The commercial development south of the southern parcel supports several massive, covered haystacks, which the two detected burrowing owls have been observed perching on top and outside of.

Burrowing owl sign (white wash and feathers) was detected within several culverts (Culverts A-E) associated with a dry, earthen irrigation canal along the southern border of the project area (Photographs 4 and 5). Also, sign known as decoration (cardboard trash) was detected within Culvert E (Photograph 6). Additionally, two burrowing owl individuals (presumably a pair) were observed flying from two separate culverts during the habitat assessment on October 20, 2014 and later perched on top of a covered haystack south of the project area.










-  Project Area
-  Agricultural Land (Fallow)
-  Unvegetated Land
-  Burrowing Owl (BUOW) Observation – 10/20/2014
-  BUOW Observation – 10/30/2014
-  BUOW Observation – 12/30/2014
-  Culvert with BUOW Sign

FIGURE 5

Lotus Ranch Burrowing Owl Survey Results



PHOTOGRAPH 1
View of Agricultural (Fallow) Land along the Southern
Boundary of the Project Area, Looking East, Photo Date: 10/20/2014



PHOTOGRAPH 2
View of Agricultural (Fallow) Land within the
Project Area, Looking Northwest, Photo Date: 10/20/2014



PHOTOGRAPH 3
View of Unvegetated Land (Dirt Road) within the
Project Area, Looking West, Photo Date: 10/20/2014



PHOTOGRAPH 4
Burrowing Owl Sign (Feathers and White Wash) within
Culvert C, Looking South. Photo Date: 10/30/2014



PHOTOGRAPH 5
Close-up of Burrowing Owl Sign (Feathers and White Wash), within Culvert E, Looking South, Decoration Shown in Foreground, Photo Date: 10/30/2014



PHOTOGRAPH 6
Burrowing Owl Sign (Decoration, Feathers and White Wash) within Culvert E, Looking South, Photo Date: 10/30/2014

Focused Burrowing Owl Surveys Results

Focused burrowing owl surveys were conducted on four separate dates: October 30, November 10, December 9, and December 30, 2014. These non-breeding season surveys were conducted using the same methods as the breeding season surveys and were scheduled evenly throughout the non-breeding season of September 1 to January 31. The first three surveys were conducted between morning civil twilight and 10:00 a.m. The final survey was conducted between two hours before sunset until evening civil twilight. Meandering transects were walked through all suitable habitat identified within the project area. The 150-meter buffer was surveyed using binoculars. During survey #1, one burrowing owl was observed on the ground outside of a covered haystack south of the project area (see Figure 5) and no burrowing owl were detected during surveys #2 and #3. Lastly, one burrowing owl was observed within two culverts along the southern edge of the survey area during survey #4 (see Figure 5).

Conclusion and Mitigation Requirements

Burrowing owl individuals were detected within the project area and/or directly adjacent to the southern project boundary during the habitat assessment and two focused surveys. The burrowing owl pair was only observed together during the habitat assessment. These observations are recorded on California Native Species Field Survey Forms and will be submitted to CNDDB (Attachment 1). With the sign detected, it is apparent that one or more of the burrowing owls is using the culverts along the southern boundary of the southern parcel intermittently as "satellite" or non-nesting burrows.

Avoidance. Per the CDFW 2012 guidelines, avoidance measures are required, such as the avoidance of impacting burrows occupied during the non-breeding season by migratory or non-migratory resident burrowing owls.

Take-Avoidance (Pre-Construction) Surveys. Pre-construction surveys will be required at least 14 days prior to ground disturbance to detect the presence of burrowing owls and inform necessary take avoidance actions. These surveys will include all areas where suitable habitat is present within the survey area (CDFW 2012).

Burrow Exclusion and Closure. The CDFW 2012 guidelines state "Burrow exclusion is a technique of installing one-way doors in burrowing openings during the non-breeding season to temporarily exclude burrowing owls, or permanently exclude burrowing owls and close burrows after verifying burrows are empty by site monitoring and scoping." Although there were no formal burrows being used by the burrowing owls detected on-site, the culverts are being used as burrows. The burrow exclusion and closure technique will apply to these culverts along the southern boundary of the southern parcel.

Formal consultation with CDFW will be required in order to develop the appropriate mitigation plans for the Lotus Ranch project. Other mitigation measures such as translocation of burrowing owls, artificial burrow construction, and/or habitat preservation may be required.

If you have any questions concerning the contents of this letter, please contact me or Lance Unverzagt at (619) 308-9333.

Sincerely,


Beth Procsal
Biologist

EAP:jg

References Cited

- California Department of Fish and Wildlife (CDFW)
2012 Staff Report on Burrowing Owl Mitigation. March.
- Haug, E.A., B.A. Millsap, and M.S. Martell
1993 Burrowing Owl. The Birds of North America, No. 61. Edited by A. Poole and F. Gill.
- Mooney-Jones and Stokes
2005 Results of Burrowing Owl Surveys for Lotus Ranch. September.
- Ruhlen, E.D., D.K. Rosenberg, and D.F. DeSante
2004 Density and Abundance of Burrowing Owls in the Agricultural Matrix of Imperial Valley, California. Studies in Avian Biology, No. 27 (2004): 116-119.
- United States Geological Survey (USGS)
1979 El Centro 7.5 Minute Topographic Map.

ATTACHMENT 1

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@wildlife.ca.gov

For Office Use Only

Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Date of Field Work (mm/dd/yyyy): 10/20/2014

California Native Species Field Survey Form

Scientific Name: Athene cunicularia hypugaea

Common Name: burrowing owl

Species Found? Yes No _____ If not found, why? _____

Total No. Individuals: 2 Subsequent Visit? Yes No

Is this an existing NDDDB occurrence? _____ No Unk. Yes, Occ. # _____

Collection? If yes: _____ Number _____ Museum / Herbarium _____

Reporter: Beth Procsal

Address: 1927 Fifth Avenue
San Diego, CA 92101

E-mail Address: bprocsal@reconenvironmental.com

Phone: 619-308-9333

Plant Information Phenology: _____ % vegetative _____ % flowering _____ % fruiting _____	Animal Information <u>2</u> # adults # juveniles # larvae # egg masses # unknown <input checked="" type="checkbox"/> wintering <input type="checkbox"/> breeding <input type="checkbox"/> nesting <input type="checkbox"/> rookery <input type="checkbox"/> burrow site <input type="checkbox"/> lek <input type="checkbox"/> other
---	---

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Imperial Landowner / Mgr: Gary McPhetridge

Quad Name: El Centro Elevation: -28 feet

T 16S R 13E Sec 58, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model: Trimble Geo XH

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy: 10 feet _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 **OR** Geographic (Latitude & Longitude)

Coordinates: 32.76339, -115.58407

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*

Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Habitat description: A pair of burrowing owls were using culverts along the boundary of an abandoned agricultural field of alfalfa (Medicago sativus). One owl was detected in a culvert, and the second owl was detected in the next culvert 15 ft east.

Animal Behavior: They were detected within the openings of separate culverts associated with a dry irrigation canal. Both owls flew off south of the project area.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: residential, commercial, and agricultural uses

Visible disturbances: culvert edges are degraded and falling apart

Threats: To owls and culverts - impacts with vehicles, maintenance of crops including disking and pesticide use.

Comments: _____

Determination: (check one or more, and fill in blanks) <input type="checkbox"/> Keyed (cite reference): _____ <input type="checkbox"/> Compared with specimen housed at: _____ <input type="checkbox"/> Compared with photo / drawing in: _____ <input type="checkbox"/> By another person (name): _____ <input type="checkbox"/> Other: _____	Photographs: (check one or more) Slide Print Digital Plant / animal <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Habitat <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Diagnostic feature <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> May we obtain duplicates at our expense? <input type="radio"/> yes <input type="radio"/> no
--	---

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@wildlife.ca.gov

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Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Date of Field Work (mm/dd/yyyy): 10/30/2014

California Native Species Field Survey Form

Clear Form Print Form

Scientific Name: *Athene cucularia hypugaea*

Common Name: burrowing owl

Species Found? Yes No _____ If not found, why? _____

Total No. Individuals: 1 Subsequent Visit? Yes No

Is this an existing NDDDB occurrence? _____ No Unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Cailin O'Meara

Address: 1927 Fifth Avenue
San Diego, CA 92101

E-mail Address: comeara@reconenvironmental.com

Phone: 619-308-9333

Plant Information

Phenology: _____
% vegetative _____ % flowering _____ % fruiting _____

Animal Information

1
adults # juveniles # larvae # egg masses # unknown

wintering breeding nesting rookery burrow site lek other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Imperial Landowner / Mgr: Gary McPhetridge

Quad Name: El Centro Elevation: -27 feet

T 16S R 13E Sec 58, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model: Trimble Geo XH

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy: 10 feet _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 **OR** Geographic (Latitude & Longitude)

Coordinates: 32.76271, -115.58293

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Habitat description: Unpaved, commercial lot with giant, covered haystacks.
Animal Behavior: The burrowing owl was detected on the dirt outside of a covered haystack immediately south of the project area.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: residential, commercial, and agricultural uses

Visible disturbances: _____

Threats: Impacts with vehicles

Comments: _____

Determination: (check one or more, and fill in blanks)

Keyed (cite reference): _____

Compared with specimen housed at: _____

Compared with photo / drawing in: _____

By another person (name): _____

Other: _____

Photographs: (check one or more)

	Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@wildlife.ca.gov

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Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Date of Field Work (mm/dd/yyyy): 12/30/2014

California Native Species Field Survey Form

Clear Form Print Form

Scientific Name: *Athene cunicularia hypugaea*

Common Name: burrowing owl

Species Found? Yes No _____ If not found, why? _____

Total No. Individuals: 1 Subsequent Visit? Yes No

Is this an existing NDDDB occurrence? _____ No Unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Cailin O'Meara

Address: 1927 Fifth Avenue
San Diego, CA 92101

E-mail Address: comeara@reconenvironmental.com

Phone: 619-308-9333

Plant Information

Phenology: _____
% vegetative _____ % flowering _____ % fruiting _____

Animal Information

1
adults # juveniles # larvae # egg masses # unknown

wintering breeding nesting rookery burrow site lek other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Imperial Landowner / Mgr: Gary McPhetridge

Quad Name: El Centro Elevation: -28 feet

T 16S R 13E Sec 58, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model: Trimble Geo XH

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy: 10 feet _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 **OR** Geographic (Latitude & Longitude)

Coordinates: 32.76339, -115.580653

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Habitat description: One burrowing owl was detected using a culvert along the southern boundary of an abandoned agricultural field of alfalfa (Medicago sativus).

Animal Behavior: It was detected within the openings of two culverts associated with a dry irrigation canal and flew off.

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: residential, commercial, and agricultural uses

Visible disturbances: _____

Threats: To owls and culverts - impacts with vehicles, maintenance of crops including disking and pesticide use.

Comments: _____

Determination: (check one or more, and fill in blanks)

Keyed (cite reference): _____

Compared with specimen housed at: _____

Compared with photo / drawing in: _____

By another person (name): _____

Other: _____

Photographs: (check one or more)

	Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

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Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDDB@wildlife.ca.gov

For Office Use Only

Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Date of Field Work (mm/dd/yyyy): 10/20/2014

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: *Athene cunicularia hypugaea*

Common Name: burrowing owl

Species Found? Yes No _____ If not found, why?

Total No. Individuals: 2 Subsequent Visit? Yes No

Is this an existing NDDDB occurrence? _____ No Unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Beth Procsal

Address: 1927 Fifth Avenue

San Diego

E-mail Address: bprocsal@reconenvironmental.com

Phone: 619-308-9333

Plant Information

Phenology:
% vegetative _____ % flowering _____ % fruiting _____

Animal Information

2
adults # juveniles # larvae # egg masses # unknown
 wintering breeding nesting rookery burrow site lek other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Imperial Landowner / Mgr: Gary McPhetridge

Quad Name: El Centro Elevation: -28

T 16S R 13E Sec 58, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model: Trimble Geo XH

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy: _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 OR Geographic (Latitude & Longitude)

Coordinates: 32.762963, -115.582837

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Habitat Description: commercial lot with covered haystacks.

Animal behavior: burrowing owl pair was perched on top of covered haystack

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: residential, commercial, and agricultural uses

Visible disturbances: _____

Threats: Impacts with vehicles

Comments: _____

Determination: (check one or more, and fill in blanks)

- Keyed (cite reference): _____
- Compared with specimen housed at: _____
- Compared with photo / drawing in: _____
- By another person (name): _____
- Other: _____

Photographs: (check one or more)

	Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no

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EO Index: _____ Map Index: _____

Date of Field Work (mm/dd/yyyy): 10/30/2014

California Native Species Field Survey Form

Clear Form Print Form

Scientific Name: *Athene cunicularia hypugaea*

Common Name: burrowing owl

Species Found? Yes No _____ If not found, why? _____

Total No. Individuals: 1 Subsequent Visit? Yes No

Is this an existing NDDDB occurrence? _____ No Unk.
Yes, Occ. # _____

Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Cailin O'Meara

Address: 1927 Fifth Avenue
San Diego

E-mail Address: comeara@reconenvironmental.com

Phone: 619-308-9333

Plant Information

Phenology: _____
% vegetative _____ % flowering _____ % fruiting _____

Animal Information

1
adults # juveniles # larvae # egg masses # unknown

wintering breeding nesting rookery burrow site lek other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Imperial Landowner / Mgr: Gary McPhetridge

Quad Name: El Centro Elevation: -28

T 16S R 13E Sec 58, _____ 1/4 of _____ 1/4, Meridian: H M S Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H M S GPS Make & Model: Trimble Geo XH

DATUM: NAD27 NAD83 WGS84 Horizontal Accuracy: _____ meters/feet

Coordinate System: UTM Zone 10 UTM Zone 11 **OR** Geographic (Latitude & Longitude)

Coordinates: 32.762707, -115.58293

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Habitat Description: commerical lot with covered haystacks.
Animal behavior: burrowing owl was observed on ground at the foot of a covered haystack

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): Excellent Good Fair Poor

Immediate AND surrounding land use: residential, commercial, and agricultural uses

Visible disturbances: _____

Threats: Impacts with vehicles

Comments: _____

Determination: (check one or more, and fill in blanks)

Keyed (cite reference): _____

Compared with specimen housed at: _____

Compared with photo / drawing in: _____

By another person (name): _____

Other: _____

Photographs: (check one or more)

	Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes no