APPENDIX E COMPLIANCE DOCUMENTS

Contents

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

June 15, 2016

Ms. Shivani Sidhar
San Diego Gas and Electric Company
8330 Century Park Court, CP31F
San Diego, CA 92123

RE: Review of Facilities Color and Surface Treatment Plan, Stormwater Pollution Prevention Plan, and Stormwater Quality Management Plan.

Dear Ms. Sidhar,

The California Public Utilities Commission (CPUC) Energy Division CEQA Unit has reviewed the following mitigation Plans submitted by San Diego Gas & Electric Company (SDG&E) on June 03, 2016 for the Salt Creek Substation Project:

- Facilities Color and Surface Treatment Plan
- Stormwater Pollution Prevention Plan (SWPPP)
- Stormwater Quality Management Plan (SWQMP)

APPROVED PLANS

The CPUC has no further comments on, and approves the following Plans:

- Facilities Color and Surface Treatment Plan
- Stormwater Pollution Prevention Plan (SWPPP)
- Stormwater Quality Management Plan (SWQMP)

Please direct questions related to these comments to me at (415) 703-2168 or connie.chen@cpuc.ca.gov

Sincerely,

Connie Chen
Project Manager
Energy Division, CEQA Unit

cc: Susanne Heim, Panorama Environmental
Aaron Lui, Panorama Environmental
Sheila Hoyer, Panorama Environmental

Attachment A: Mitigation Plan Review Status

Attachment A - Mitigation Plan Review Status

Attachment A – Mitigation Plan Review Status

Plan Title	Date 1st Version Received from SDG&E	Date Comments Provided by CPUC	Date 2nd Version Received from SDG&E	Date Comments Provided by CPUC	Date 3rd Version Received from SDG&E	Date Comments Provided by CPUC	Status/Timing
Dust Control Management Plan	3/8/16	3/31/16	4/22/16	Approved 5/16/16			**Approved**
Landscape, Irrigation Plan and Temporary Impact Restoration Plan	May 2015		5/11/16	5/24/16			SDG&E is addressing comments
Cultural Resources Mitigation Monitoring Plan (CRMMP)	2/12/16	3/9/16	4/22/16	Approved 5/17/16			**Approved**
Hazardous Substance Management and Emergency Response (HSMER) Plan	3/8/16	3/31/16	4/22/16	5/17/16	06/03/16	Approved 06/06/16	**Approved**
Stormwater Pollution Prevention Plan (SWPPP)	2/12/16	3/9/16	4/22/16	5/17/16	06/03/16	Approved 06/15/16	**Approved**
Stormwater Quality Management Plan (SWQMP)	4/22/16	5/17/16	06/03/16	Approved 06/15/16			**Approved**
Transportation Management Plan	3/8/16	3/31/16	4/22/16	Approved 5/17/16			**Approved**
Pre-Project Trail Condition Report	4/13/16	Approved 5/17/16					**Approved**
Facilities Color Treatment Plan and Surface Treatment Plan	2/12/16	3/9/16	06/03/16	Approved 6/15/16			**Approved**
Habitat Enhancement Plan for Vegetation Communities	1/29/16	Approved					**Approved**
Salvage and Relocation Plan for Special-Status Plants	2/12/16	3/9/16					SDG&E is addressing comments
Spill Prevention, Control, and Countermeasure (SPCC) Plan							30 days prior to installation of transformers
Environmental Training Program (including all training materials)	06/03/16	06/15/16					SDG&E is addressing comments

STATE OF CALIFORNIA EDMUND G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

June 16, 2016

Ms. Shivani Sidhar
San Diego Gas and Electric Company
8330 Century Park Court, CP31F
San Diego, CA 92123

RE: Approval of Facilities Color Treatment and Surface Treatment Plan, Stormwater Pollution Prevention Plan, and Stormwater Quality Management Plan.

Dear Ms. Sidhar,

The California Public Utilities Commission (CPUC) Energy Division CEQA Unit has completed its review of the revised Stormwater Pollution Prevention Plan (SWPPP) submitted on June 9, 2016, and the revised Facilities Color Treatment Plan and Surface Treatment Plan submitted on June 13, 2016 by San Diego Gas & Electric Company (SDG&E) for the Salt Creek Substation Project. The CPUC has also reviewed SDG&E's clarification regarding the calculations of impervious surfaces in the SWPPP and the Stormwater Quality Management Plan. The CPUC has no further comments on the Facilities Color Treatment and Surface Treatment Plan, SWPPPP, or Stormwater Quality Management Plan and we approve these plans. Attachment A provides the status of the required mitigation plans.

If you have any questions or would like further clarification, please contact me at connie.chen@cpuc.ca.gov.

Connie Chen
Project Manager
Energy Division, CEQA Unit

cc: Susanne Heim, Panorama Environmental
Aaron Lui, Panorama Environmental
Sheila Hoyer, Panorama Environmental

Attachment A: Mitigation Plan Review Status

Attachment A - Mitigation Plan Review Status

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Dust Control Management Plan	3/8/16	3/31/16	4/22/16	Approved 5/17/16			**Approved**
Landscape, Irrigation Plan and Temporary Impact Restoration Plan	May 2015		5/11/16	5/24/16			SDG&E is addressing comments
Cultural Resources Mitigation Monitoring Plan (CRMMP)	2/12/16	3/9/16	4/22/16	Approved 5/17/16			**Approved**
Hazardous Substance Management and Emergency Response (HSMER) Plan	3/8/16	3/31/16	4/22/16	5/17/16	06/03/16	Approved 06/06/16	**Approved**
Stormwater Pollution Prevention Plan (SWPPP)	2/12/16	3/9/16	4/22/16	5/17/16	06/03/16	Approved 06/16/16	**Approved**
Stormwater Quality Management Plan (SWQMP)	4/22/16	5/17/16	Clarification provided 06/03/16	Approved 06/16/16			**Approved**
Transportation Management Plan	3/8/16	3/31/16	4/22/16	Approved 5/17/16			**Approved**
Pre-Project Trail Condition Report	4/13/16	Approved 5/17/16					**Approved**
Facilities Color Treatment Plan and Surface Treatment Plan	2/12/16	3/9/16	06/03/16	Approved 6/16/16			**Approved**
Habitat Enhancement Plan for Vegetation Communities	1/29/16	Approved					**Approved**
Salvage and Relocation Plan for Special-Status Plants	2/12/16	3/9/16					SDG&E is addressing comments
Spill Prevention, Control, and Countermeasure (SPCC) Plan							30 days prior to installation of transformers
Environmental Training Program (including all training materials)	06/03/16	06/14/16					SDG&E is addressing comments

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

July 29, 2016

Ms. Shivani Sidhar
San Diego Gas and Electric Company
8330 Century Park Court, CP31F
San Diego, CA 92123

RE: Review of Special-Status Plant Mitigation and Monitoring Plan

Dear Ms. Sidhar,

The California Public Utilities Commission (CPUC) Energy Division CEQA Unit has reviewed the Special-Status Plant Mitigation and Monitoring Plan submitted by San Diego Gas & Electric Company (SDG&E) in July 2016 for the Salt Creek Substation Project:

The CPUC's comments on the Plan are summarized below. Detailed comments are provided in the Plan pdf file. A link to the pdf file will be provided separately by Panorama Environmental.

Special-Status Plant Mitigation and Monitoring Plan

Comments on the Plan are detailed in the pdf and include:

1. **Otay tarplant.** Insert the following text on page 1 of the report: "Otay tarplant was not detected during the verification survey performed on June 24, 2016."
   Insert the following text on page 4: "Verification surveys performed during the blooming season in 2016 did not detect the presence of Otay tarplant."

2. **Receiver site.** A receiver site needs to be defined prior to plan approval. The following information is required for the receiver site:
   a. Location including a map with existing vegetation communities
   b. Soils and site conditions relative to species habitat requirements
   c. Site preparation, weed management activities, and proposed fencing needs
   d. Mechanisms to preserve the site as open space, if needed

Wright's Field is not considered to be suitable as it is located too far east. The receiver site should be located in the general vicinity of the project in an area with the presence of active coastal sage scrub and suitable clay soils.

Please direct questions related to these comments to me at (415) 703-2168 or connie.chen@cpuc.ca.gov

Sincerely,

Connie Chen
Project Manager
Energy Division, CEQA Unit

cc: Susanne Heim, Panorama Environmental

Sheila Hoyer, Panorama Environmental
Aaron Lui, Panorama Environmental

Attachments (Provided Electronically via Egnyte)
Special-Status Plant Mitigation and Monitoring Plan

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

October 10, 2016

Ms. Shivani Sidhar
San Diego Gas and Electric Company
8330 Century Park Court, CP31F
San Diego, CA 92123

RE: Review of Special-Status Plant Mitigation and Monitoring Plan

Dear Ms. Sidhar,

The California Public Utilities Commission (CPUC) Energy Division CEQA Unit has reviewed the Special-Status Plant Mitigation and Monitoring Plan submitted by San Diego Gas & Electric Company (SDG&E) in October 2016 for the Salt Creek Substation Project:

The CPUC approves the Plan with the condition that the following information pertaining to the receiver site will be provided as an addendum to the Plan following the spring 2017 surveys:

a. Location of the site including a map with existing vegetation communities
b. Soils and site conditions relative to species habitat requirements
c. Site preparation, weed management activities, and proposed fencing needs
d. Mechanisms to preserve the site as open space, if needed

Please direct questions related to these comments to me at (415) 703-2642 or william.maguire@cpuc.ca.gov.

Sincerely,

William Maguire
Project Manager
Energy Division, CEQA Unit

cc: Susanne Heim, Panorama Environmental
Sheila Hoyer, Panorama Environmental

Attachments (Provided Electronically via Egnyte)
Special-Status Plant Mitigation and Monitoring Plan

Salt Creek Substation Off-Road Equipment Inventory (8/8/2016)

Off-road Construction Equipment Inventory - Tier Engine Compliance Evaluation								
Contractor	**Equipment Description**	**Manufacturer**	**Make/Model**	**Engine Model Year**	**HP**	**Equipment Identification Number (EIN)**	**PERP Registration Number (if applicable)**	**Engine Tier Level**
Geo Pacific	GE-201 Skidsteer	Cat	289c	2011	83	RP9N93	N/A	T3
Geo Pacific	GE-203 Backhoe	Cat	430E	2011	110	SG5X58	N/A	T3
Geo Pacific	GE-204 DOZER	Cat	D-5K	2012	99.9	JV8W33	N/A	T3
Geo Pacific	GE-205 Backhoe	Cat	430E	2007	100	VF3W38	N/A	T2
Geo Pacific	GE-206 SKIPLOADER	JOHN DEERE	210LE	2005	78	VV7M99	N/A	T2
Geo Pacific	GE-208 WHEEL LOADER	CAT	930H	2008	153	FC5K95	N/A	T3
Geo Pacific	GE-218 Skidsteer	Cat	289c2	2012	74	AY3S57	N/A	T4I
Geo Pacific	GE-246 EXCAVATOR	Cat	308DCR	2011	58	BJ5k74	N/A	T4I
Geo Pacific	GE-249 SKIPLOADER	JOHN DEERE	210LJ	2016	70	NN9S33	N/A	T4F
Geo Pacific	GE-250 Skidsteer	Cat	259D	2016	73	WJ3T96	N/A	T4F
Geo Pacific	GE-256 WHEEL LOADER	Cat	966K	2011	190	KN9L66	N/A	T4I
Geo Pacific	GE-257 GRADER	Cat	16M	2008	520	RS5H79	N/A	T3
Geo Pacific	FJ-511 WHEEL DOZER	Cat	834B	2013	475	KA8E89	N/A	T3
Geo Pacific	FJ-623 SCRAPER	Cat	637	1979	675	JG9W79	N/A	0
Geo Pacific	FJ-637 SCRAPER	Cat	637	2008	761	EY7C63	N/A	T3
Geo Pacific	FJ-629 SCRAPER	Cat	637	2010	761	DA7T36	N/A	T3
Geo Pacific	FJ-625 SCRAPER	Cat	637	2014	761	JE3A36	N/A	T3
Geo Pacific	57-33 SCRAPER	Cat	657	2007	1040	NP6Y75 & RX8U86	N/A	T3
Geo Pacific	90-38 DOZER	Cat	D-9T	2006	410	TE7C46	N/A	T3

AECOM
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619.233.1454 tel
619.233.0952 fax

August 30, 2013

Ms. Susie Tharratt
Recovery Permit Coordinator
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011

RE: 45-Day Summary Report of 2013 Focused Surveys for the Quino Checkerspot Butterfly for the Proposed Salt Creek Substation Project for SDG&E

Dear Ms. Tharratt:

In compliance with the Special Terms and Conditions for Endangered and Threatened Wildlife Species Permit TE027736-5, AECOM submits this letter report summarizing the results of focused surveys conducted in 2013 for the federally endangered Quino checkerspot butterfly (*Euphydryas editha quino*; QCB) for the proposed Salt Creek Substation Project (Proposed Project site). Wildlife biologist Erik LaCoste, working on behalf of GeomorphIS, LLC for AECOM, currently holds an Endangered and Threatened Species Permit issued by the U.S. Fish and Wildlife Service (USFWS) under Section 10(a) of the federal Endangered Species Act. This permit authorizes Mr. LaCoste to conduct presence/absence surveys for QCB and other species. Surveys were conducted on behalf of San Diego Gas and Electric (SDG&E).

Project Description

The Proposed Project site would be located on an 11.6-acre site directly south of Hunte Parkway, near the southern terminus of Exploration Falls Drive and adjacent to the Miguel to Mexico Transmission Corridor (Figure 1). A QCB survey for the proposed Salt Creek Substation was completed in 2011 (AECOM 2011).

Site Description

For purposes of this report, the term “Proposed Project survey area” refers to the Proposed Project site plus a 500-foot survey buffer, excluding areas surveyed during 2011 for the same project (AECOM 2011). The Proposed Project survey area occurs within the City of Chula Vista’s Multiple Species Conservation Program (MSCP) Subarea Plan Otay Ranch Planning Area, within areas planned for development (e.g., outside of the Otay Ranch Preserve). The Proposed Project survey area contains landscaped and developed areas, along with native habitats, including disturbed coastal sage scrub, riparian scrub, and grassland. There are also areas of nonnative habitat including nonnative grassland and disturbed areas.

Based on the habitat assessment and QCB surveys conducted in 2011 for the same project, and a follow-up habitat assessment conducted during the first 2013 QCB survey, approximately 15.4 acres of suitable QCB habitat occurs in the Proposed Project survey area (Figure 2). Habitat conditions remained generally consistent from 2011 to 2013. Though habitat in the Proposed Project survey area has been significantly disturbed in the past, a small patch of dwarf, or dot-seed plantain (*Plantago erecta*), the primary QCB host plant, occurs in a single location.

Background Information

QCB was added by USFWS to the federal Endangered Species List on January 16, 1997 (USFWS 1997). The species (*E. editha*) has a range extending from British Columbia and Alberta, Canada, south through Colorado and Utah, and west along the coast to northern Baja California. It is divided into 20 subspecies, each with its own range and biological and morphological characteristics. Twelve subspecies are found in California, (Garth and Tilden 1986). Three other subspecies of *E. editha* are currently known to occur in Southern California. QCB is the southwesternmost subspecies of *E. editha* (Mattoni et al. 1997).

QCB is known to occur in association with a variety of plant communities, soil types, and elevations (up to 5,000 feet). The plant communities include clay soil meadows, open grasslands, coastal sage scrub, chaparral, and semi-desert scrub (Ballmer et al. 2001). QCB is also associated with clay soils that possess cryptogamic crusts and vernal pools (USFWS 2002).

QCB is a medium-sized butterfly (approximately 0.8- to 1.1-inch wingspan) belonging to the family *Nymphalidae*. The adults are primarily orange-red with white and have black markings on the dorsal wing surface. They are active primarily in March and April. This active period may vary depending on weather conditions (Ballmer et al. 2001). The adult butterfly feeds on nectar, which it obtains from spring annuals such as popcorn flower (*Cryptantha* sp.), Layia (*Layia* sp.), goldenbush (*Ericameria* spp.), onion (*Allium* sp.), fiddleneck (*Amsinckia intermedia*), chia (*Salvia columbariae*), and blue dicks (*Dichelostemma pulchella*). It cannot use flowers that possess deep corolla tubes, such as monkeyflower (*Mimulus* spp.), or those that can be opened by bees, such as snapdragons (USFWS 2002). Adult males and virgin females sometimes “hilltop,” or travel to elevated locations to find mates. While waiting for females to arrive, the males will often exhibit “territorial behavior” and will chase other butterflies that approach them. Frequently, the butterflies are observed in meadows or clearings where their host plants occur (Ballmer et al. 2001).

A female may lay 20 to 75 eggs at one time and may produce up to 1,200 eggs in her lifetime. The eggs hatch in approximately 10 days under favorable weather conditions and the young larvae will immediately begin to feed on a host plant. The feeding larvae use the dot-seed plantain as their primary host plant in the coastal and inland valley areas (e.g., Otay Mesa area). In higher elevation areas, QCB have been known to use Patagonia plantain (*Plantago patagonica*), white snapdragon (*Antirrhinum coulterianum*), and Chinese houses (*Collinsia concolor*) as their host plants (Pratt 2009). Bird’s-beak (*Cordylanthus*

rigidus) and owl's clover (*Castilleja exserta*) are considered secondary hosts (USFWS 2002). After feeding, the early larva enters an obligatory aestival diapause (a dormant stage), which may be broken after fall or winter rains (Murphy and White 1984; Osborne 1998). If adverse weather conditions occur, the emergent larva may reenter a diapause stage repeatedly, for up to 5 or 6 years, until favorable weather conditions permit sufficient growth of the host plant to allow the larva to complete its development.

QCB was once common in Southern California. It ranged north into Ventura County, west to the Pacific Ocean, east to the deserts, and south into northern Baja California. Currently, it is known to occur only in a few, probably isolated, colonies in southwestern Riverside County, San Diego County, and northern Baja California. Reasons for the butterfly's reduction in population are not well known. Habitat loss due to degradation and fragmentation caused by urban and rural development, agricultural conversion, off-road-vehicular use, the invasion of nonnative plants and insects, fire management practices, over-collecting, and adverse weather conditions have likely contributed to the species' decline (USFWS 1997).

Survey Methodology

Protocol-level surveys were determined necessary by the presence of suitable QCB habitat in the Proposed Project survey area. Approximately 15.4 acres of suitable QCB habitat was identified for surveys.

USFWS recommends that focused QCB surveys be conducted a minimum of five times during the adult flight season by biologists possessing a recovery permit for this species, pursuant to Section 10(a)(1)(A) of the Endangered Species Act. The QCB flight season within a given area has in the past been determined by the activity of known QCB populations that are monitored annually by USFWS. Prior to the anticipated start of the 2013 QCB flight season, it was announced that USFWS would no longer be providing this service. During previous years, the results of these monitoring surveys were presented on the USFWS Carlsbad Field Office web page, enabling QCB surveyors to plan start dates for upcoming surveys. To help aid in determining start dates for surveys, the LinkedIn Quino Biologists United web page group volunteered their time to continue monitoring the reference population site for QCB activity. The group then posted their findings on the LinkedIn web page (http://www.linkedin.com/groups/Quino-Biologists-United-3801513).

Using the reported findings of the LinkedIn group, QCB surveys were initiated on March 5 and terminated on April 9, 2013. A total of six visits, one per week, were conducted between those dates (Table 1). All surveys were conducted by permitted wildlife biologist Erik LaCoste (TE-027736-5).

Table 1
Quino Checkerspot Butterfly Survey Schedule

Survey Week	Date	Time	% Cloud Cover	Temp. (°F)	Wind (mph) Avg/Max.
1	3/5/13	1300-1425	25-30%	67-69	3-8
2	3/14/13	1400-1500	0%	81	3-6
3	3/22/13	1200-1315	0-5%	68-70	2-4
4	3/28/13	1215-1315	5%	78	1-6
5	4/2/13	1130-1230	50%	72-73	2-7
6	4/9/13	1300-1415	0%	69	3-6

Surveys were terminated after the week 6 survey on April 9, 2013. At that time, QCB host plants in the Proposed Project survey area were senesced and gone to seed. It was also reported by Allison Anderson of the LinkedIn Quino Biologists United website that on an "April 10 visit to the NE Otay Mesa site where Quino were so abundant this season, and the Marron Valley site—all host plants gone or dried up. No pre-diapause larvae or adults" were reported.

The habitat assessment and presence/absence surveys followed the current USFWS survey protocol for the species (USFWS 2002). All butterfly species and flowering plant species with potential as a nectar source were recorded during surveys. All suitable QCB habitat within the Proposed Project survey area was surveyed six times over a 6-week period.

Results

A summary of the survey schedule and weather conditions is presented in Table 1. Field data sheets are available in Appendix A.

Butterfly species observed within the Proposed Project survey area are summarized in Table 2. A list of potential nectaring plant species in flower each week is presented in Appendix B.

Consistent with the findings of QCB surveys conducted in 2011 for the same project, no QCB were observed within the Proposed Project survey area during 2013 surveys. A single small population of dot-seed plantain, the QCB primary host plant species, was detected within the Proposed Project survey area (Figure 2). The dot-seed plantain population was dry and dropping seed by the sixth and final survey.

Table 2
Summary of Butterfly Species Observed during Quino Checkerspot Butterfly Surveys for the Salt Creek Substation Proposed Project Survey Area

Common Name	Scientific Name	Survey Week 1 Mar 5	2 Mar 14	3 Mar 22	4 Mar 28	5 Apr 2	6 Apr 9	Totals
Acmon Blue	*Icaria acmon*			1	1			2
Behr's metalmark	*Apodemia virgulti*	1		3	5	2	7	18
Common white	*Pontia protodice*				1			1
Common California ringlet	*Ceononypha tullia*	1	1	4	1		1	8
Funereal duskywing	*Erynnis funeralis*		8	4	1	1	1	15
Painted lady	*Vanessa cardui*	4	2	1				7
Perplexing hairstreak	*Callophyrs perplexa*		1					1
Pygmy blue	*Brephidium exilis*		1	2	1			4
Southern blue	*Glaucopsyche lygdamus*		1	1				2
Totals per Week		6	14	16	10	3	9	

Unidentified moths were also detected during QCB surveys but are not included in this list.

Discussion

USFWS discontinued monitoring several reference sites for QCB larvae and adult presence for the first time in 2013. However, a dedicated group of biologists began monitoring the reference sites privately and were posting results of their surveys online at LinkedIn.com. According to the reference sites near the Proposed Project survey area, specifically areas at East Otay Mesa, Rancho Jamul, and Marron Valley, QCB were flying in early March of 2013. These observations indicate that AECOM's surveys were conducted during a suitable time period to detect QCB on-site, had they been present.

Nine butterfly species were detected during protocol QCB surveys in the Proposed Project survey area. The most commonly observed species were Behr's metalmark (*Apodemia virgulti*) and funereal duskywing (*Erynnis funeralis*) (Table 2). Relatively small numbers of the more common species were detected during surveys, and diversity of nectar sources was limited. Overall, butterfly abundance and species diversity were low during the 6-week survey period.

The low butterfly diversity may be due to the lower than normal rainfall totals observed during the 2012/13 rainy season. Typical rainfall totals from October of each year through the following April in Chula Vista are approximately 9.5 inches. However, rainfall totals for October 2012 through April 2013 totaled only approximately 1.5 inches. Such low rainfall totals may have strained host plant development as well as limited nectar source abundance.

Certification Statement

The qualified wildlife biologist who conducted QCB surveys for SDG&E's Proposed Salt Creek Substation Project survey area certifies that the information in this survey report fully and accurately represents the work performed. The results of focused surveys for listed species are typically considered valid for 1 year by the resource agencies.

If you have any questions or comments regarding this letter report, please contact me at (760) 500-8802.

Sincerely,

Erik LaCoste
Wildlife Biologist
On behalf of AECOM

Attachments:
Figure 1 Regional Map
Figure 2 Quino Checkerspot Butterfly Survey Spring 2013
Appendix A Field Data Sheets from Quino Checkerspot Butterfly Protocol Surveys
Appendix B Flowering Plant Observations at the Salt Creek Substation Site

Literature Cited

AECOM. 2011. *45-Day Summary Report of Focused Surveys for the Quino Checkerspot Butterfly for the Proposed Salt Creek Substation for SDG&E.* October 4.

Ballmer, G. R, D. C. Hawks, K. H. Osborne, and G. F. Pratt. 2001. *The Quino Checkerspot Butterfly (Euphydryas editha quino).* Year 2000 QCB Workshop.

Garth, J. S., and J. W. Tilden. 1986. *California Butterflies*. University of California Press, Berkeley, California, 246 pp.

Mattoni, R., G. F. Pratt, T. R. Longcore, J. F. Emmel, and J. N. George. 1997. The Endangered Quino Checkerspot Butterfly, Euphydryas editha quino (Lepidoptera: Nymphalidae). *Journal Res. Lepid*. 34:99–118.

Murphy, D. D., and R. R. White. 1984*. Rainfall, Resources, and Dispersal in Southern Populations of Euphydryas editha (Lepidoptera: Nymphalidae). Pan-Pac Entomol*. 60:350–354.

Osborne, K. H. 1998. Microhabitat Conditions Associated with the Distribution of Post-Diapause Larvae of Euphydryas Editha Quino and its Host, Plantago erecta (Chapter 4). In *A Description of Arthropod Community Structure in Southern Californian Coastal Sage Scrub* (Chapter 4). Master's thesis, University of California, Riverside, California.

Pratt, G. F. 2009. A New Larval Food Plant, Collinsia concolor, for the Endangered Quino Checkerspot, Euphydryas editha quino. *J. of Lepid. Soc.* 64(1):36–37.

U.S. Fish and Wildlife Service (USFWS). 1997. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Laguna Mountains Skipper and Quino Checkerspot Butterfly. *Federal Register* 58:16742–16757.

U.S. Fish and Wildlife Service (USFWS). 2002. *Survey Protocol for the Endangered Quino Checkerspot Butterfly (Euphydryas editha quino) for the Year 2002 Field Season*. February 2002. 6 pp. + appendices.

FIGURES

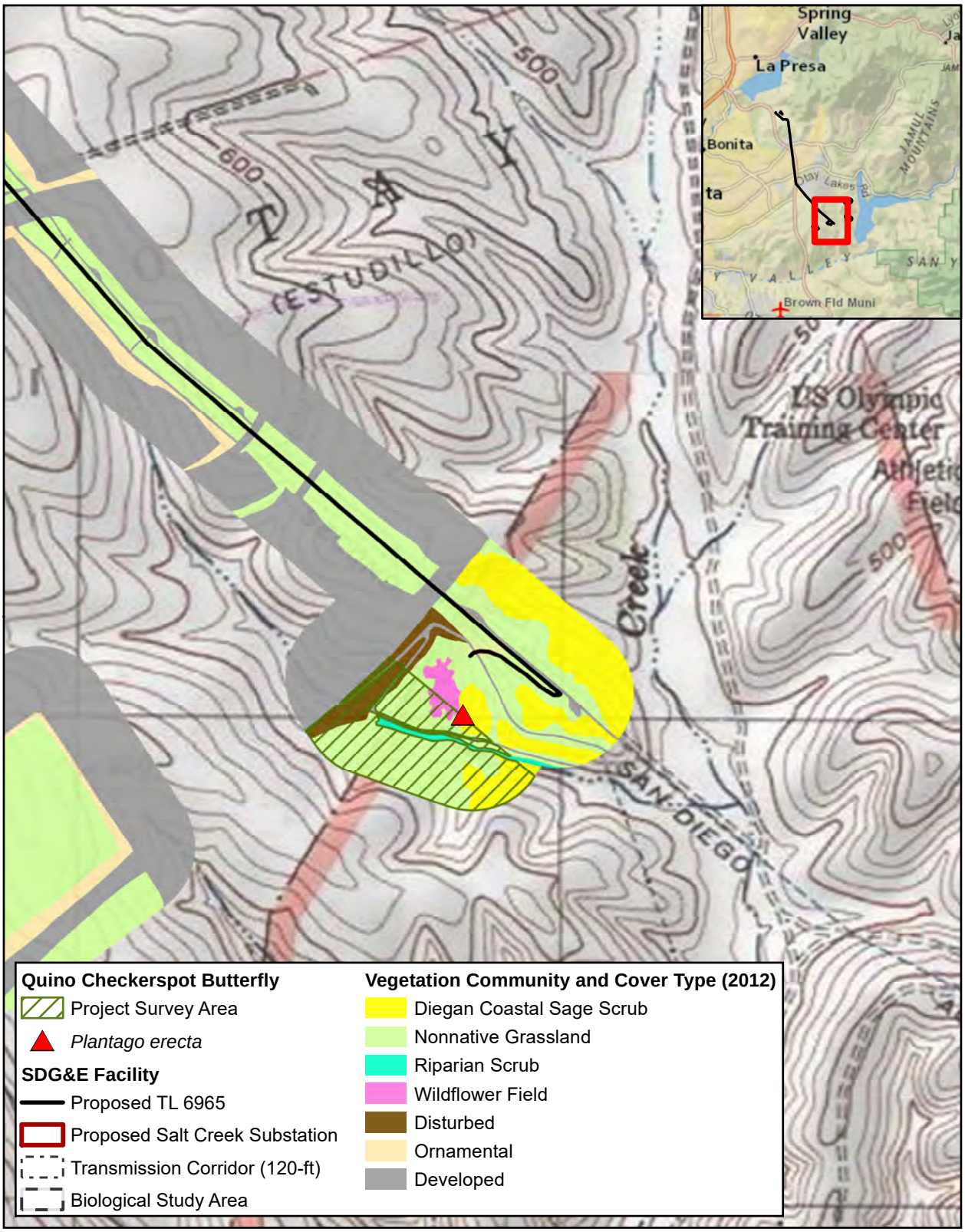
Source: GeomorphIS LLC, AECOM, SDG&E, 2013; Esri Basemaps, 2013

0 2 4 Miles

Scale: 1:250,000 1 inch = 4 miles

Figure 1
Regional Map

SDG&E is providing this map with the understanding that the map is not survey grade.



Source: GeomorphIS LLC, AECOM, SDG&E, 2013; Esri Basemaps, USA Topo 1:24,000 scale, 2011

0 500 1,000 Feet

Scale: 1:12,000 1 inch = 1,000 feet

Figure 2
Quino Checkerspot Butterfly Survey Spring 2013

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Map_MXD\Fig2_QCB_Survey_2013.mxd, 8/12/2013, E D Goff

SDG&E is providing this map with the understanding that the map is not survey grade.

APPENDIX A

FIELD DATA SHEETS FROM QUINO CHECKERSPOT BUTTERFLY PROTOCOL SURVEYS

Field Data Sheet

Project: Salt Creek Sub Date of Survey: 3/5/13 Page 1 of 1
Type of Survey: QCB Survey Number: 1 of 6
Personnel: Erik LaCoste TE027736-5
Notes:

Time		Temp (°F)	Wind (mph)	Sky (% clouds)	Precipitation
Start	100	69	3-6	30	0
Finish	215	67	4-3	25	0

Species		Bloomers
Common Ringlet	1	Mustard
Behrs Metalmark	1	Astragalus
		Deerweed
		Erodium sp.
		Popcorn Flower
		Blue Dicks
		Mellolo sp.
		Blue Eye Grass

Notes:

Field Data Sheet

Project: Salt Creek Sub Date of Survey: 3/14/17 Page 1 of 1
Type of Survey: QCB Survey Number: 2 of 6
Personnel: Erik LaCoste
Notes:

Time		Temp (°F)	Wind (mph)	Sky (% clouds)	Precipitation
Start	200	81	3-5	0	0
Finish	300	81	3-6	0	0

Species		
Common Ringlet	1	Bloomers
Funereal Duskywing	1111 111	mustard
Pers hairstreak	1	Deerweed
Painted Lady	11	Erodium
Ruddy blue	1	Astragulus
Southern Blue	1	Cryptantha
		Bluedicks
		Goldfields
		S.D. sunflower
		Lotus
		Medicago indica
		Marigolds
		Dotseed plantain
		Blue-eye Grass
		Cal Buckwheat

Notes:

Field Data Sheet

Project: Salt Creek Sub Date of Survey: 3/22/13 Page 1 of 1
Type of Survey: QCB #3 Survey Number: 3 of 6
Personnel: Erik LaCoste
Notes:

Time		Temp (°F)	Wind (mph)	Sky (% clouds)	Precipitation
Start	1200	68	2-4	5%	0
Finish	115	70	2-4	0	0

Species		
Acmon Blue	1	Bloomers
Fivespot Duskywing	IIII	Mangold
Behrs Metalmark	III	Mustard
Common Ringlet	IIII	Erodium
Rytny Blue	II	Deerweed
Southern Blue	1	Blue dicks
Painted lady	1	Palmers Grapplinghook
		Plantago erecta
		Hypocoris glabra
		Raphinus sativus
		Blue eye Grass
		Sunrick - pup Flower

Notes:

Field Data Sheet

Project: Salt Creek Sub Date of Survey: 3/28/17 Page 1 of 1
Type of Survey: QCB Survey Number: 4 of 6
Personnel: Erik LaCoste
Notes:

Time		Temp (°F)	Wind (mph)	Sky (% clouds)	Precipitation
Start	1215	78	1-4	5	0
Finish	1:15	78	2-6	5	0

Species		Bloomers
Common Ringlet	1	Medicago polymorpha
Behrs METALMark	TTH	Marigold
Pygmy blue	1	Raphinus Sativus
Acmon blue	1	Deerweed
Common White	1	S.D. Sunflower
Funereal Duskywing	1	Erodium sp.
		Cal Buckwheat
		Tarweed.
		Mustard sp.
		Creteweed
		Dot-seed Plantain

Notes:

Field Data Sheet

Project: Salt Creek Sub Date of Survey: 4/2/13 Page 1 of 1
Type of Survey: QCB Survey Number: 5 of 6
Personnel: Erik LaLoste
Notes:

Time		Temp (°F)	Wind (mph)	Sky (% clouds)	Precipitation
Start	1130	73	2-4	50	0
Finish	1230	72	4-7	50	0

Species		Bloomers.
Behrs metriumarie	11	
Funereal Duskywing	1	None new.

Notes:

Portage is nearly Dry.

Field Data Sheet

Project: Salt Creek Sub Date of Survey: 4/9/13 Page 1 of 1
Type of Survey: QCB Survey Number: 6 of 6
Personnel: Erik LaCoste
Notes:

Last Survey

Time		Temp (°F)	Wind (mph)	Sky (% clouds)	Precipitation
Start	1100	49	3-6	0	0
Finish	215	69	3-5	0	0

Species		Bloomers.
Behrs Metalmark	IIII II	none new
Funereal Duskywing	III	
Common Ringlet	I	

Notes:

Plantago 100% Dry & Ht Seed.

APPENDIX B

FLOWERING PLANT OBSERVATIONS AT THE SALT CREEK SUBSTATION SITE

Flowering Plant Observations

Common Name	Scientific Name
Annual lotus	*Lotus* sp.
Blue dicks	*Dichelostemma capitatum*
Blue-eyed grass	*Sisyrinchium bellum*
Crete hedypnois	*Hedypnois cretica*
Deer weed	*Acmispon glaber* var. *glaber*
Desert marigold	*Baileya multiradiata*
Dot-seed plantain[1]	*Plantago erecta*
False dandelion	*Hypochaeris glabra*
Filaree	*Erodium* sp.
Flat-topped buckwheat	*Eriogonum fasciculatum*
Goldfields	*Lasthenia* sp.
Locoweed	*Astragalus* sp.
Palmer's grapplinghook	*Harpagonella palmeri*
Popcorn flower sp.	*Plagiobothrys* sp.
Purple sanicle	*Sanicula bipinnatifada*
San Diego sunflower	*Viguiera laciniata*
Short-pod mustard	*Hirschfeldia incana*
Tarweed	*Deinandra fasciculata*
Wild radish	*Raphanus sativus*
Yellow sweetclover	*Melilotus officinalis*

[1] QCB Primary Host Plant

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September 13, 2013

Kyle Dutro and Stephanie Ponce
California Department of Fish and Wildlife
3883 Ruffin Road
San Diego, CA 92123

RE: 2013 Western Burrowing Owl Summary Report for Salt Creek Substation and Power Line Project, Chula Vista, California

Dear Mr. Dutro and Ms. Ponce:

AECOM submits this letter report to summarize the results of focused surveys conducted in 2013 for the California Department of Fish and Wildlife's (CDFW; formerly California Department of Fish and Game [CDFG]) "species of special concern" western burrowing owl (*Athene cunicularia hypugaea;* WBO). Focused surveys were conducted for the proposed Salt Creek Substation and Power Line Project (project) in Chula Vista, California for San Diego Gas & Electric (SDG&E). AECOM complies with all guiding principles in the current CDFW protocol for 2012, Staff Report on Burrowing Owl Mitigation (CDFG 2012). AECOM biologists meet all qualifications to perform burrowing owl habitat assessments and surveys.

Project Location

The project site is situated approximately 15 miles southeast of downtown San Diego and 5 miles north of the international border with Mexico (Figure 1). The proposed Salt Creek Substation and the majority of the proposed power line are located in the eastern portion of the City of Chula Vista, California (Figure 2). The proposed Salt Creek Substation is located adjacent to and southeasterly of Hunte Parkway, where SDG&E's Existing Miguel Substation (Existing Substation)-Mexico transmission corridor crosses Hunte Parkway. Approximately 4,700 linear feet of the northernmost portion of the proposed power line is located in the unincorporated portion of San Diego County on SDG&E fee-owned land surrounding the Existing Substation. The remaining portion of the proposed power line is located within the City of Chula Vista. The Existing Substation is located east of State Route (SR) 125 in the unincorporated portion of San Diego County, bounded by San Miguel Road on the north and the City of Chula Vista to the south.

Project Description

The proposed project includes the installation of a new substation (proposed Salt Creek Substation), a new 69-kilovolt (kV) power tie-line (TL) from the Existing Substation to the proposed Salt Creek Substation (TL 6965), and modifications to the Existing Substation. The primary objectives of the proposed project are to provide additional capacity to serve existing area load and future customer-driven electrical load growth, and to provide the necessary distribution and transmission network to prevent long-term outages or disruptions of service to existing customers in the southeastern portion of SDG&E's service territory.

The proposed project includes four primary components:

- Construction and operation of a 120-megavolt ampere 69/12kV proposed Salt Creek Substation, including construction and operation of underground 12kV distribution circuits.
- Power lines, including construction and operation of a 5-mile-long overhead 69kV power line 6965 (TL 6965), from the Existing Substation to the proposed Salt Creek Substation, and construction and operation of a 69kV power line loop-in (TL 6910) to the proposed Salt Creek Substation. TL 6965 would use approximately 48 pole structures (49 poles), including eight existing poles (seven associated with TL 643 and one associated with TL 6910). Approximately 40 new structures (41 poles) would be erected on the new 69kV power line, including 29 galvanized steel pole structures (30 poles) (one H-frame double-pole structure), 10 galvanized engineered foundation poles, and one engineered foundation cable pole.
- Modifications at the Existing Substation, including installation of a new 69kV power line position.
- Three temporary staging yards identified for the project; one at the Existing Substation (Existing Staging Yard), a second on the north side of Hunte Parkway between Discovery Falls, Eastlake Parkway, and Crossroads Street (Hunte Parkway Staging Yard), and a third within the transmission corridor between Eastlake Parkway and SR-125 (Eastlake Parkway Staging Yard). Five alternate staging yards sites at the Olympic Training Center facility, south of Olympic Parkway, have also been identified. These five alternate staging sites are not included in the project analysis provided herein.

Site Description

The project survey area includes the proposed Salt Creek Substation, the TL corridor, and three staging yards plus a 500-foot (150-meter) survey buffer around each of these areas (Figure 2). The project survey area occurs within the City of Chula Vista's Multiple Species Conservation Program Subarea Plan (Subarea Plan) Otay Ranch Planning Area, within areas planned for development (i.e., outside of the Otay Ranch Preserve) (Figure 2).

The project site is located on flat-to-gentle slopes along previously disturbed areas near the Existing Substation and within an existing SDG&E right-of-way. The transmission corridor is located within urban developed, landscape/ornamental, disturbed, nonnative grassland and coastal sage scrub habitats and cover types. The proposed Salt Creek Substation is primarily flat with a gentle slope across the site. The site is composed primarily of nonnative grassland, Diegan coastal sage scrub, and ornamental/landscaped cover types. Commercial and residential developments are located within and adjacent to the project site. Other development features present include major transportation corridors (SR-125), asphalt and compacted earthen roads, trails, fencing, ephemeral and intermittent stream features,

culverts, and swales. Potential jurisdictional "waters of the U.S." (including wetlands) are also present on-site, including stream features and vegetated wetlands.

Western Burrowing Owl Background Information

Regulatory Status

The WBO is protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703–712). The MBTA makes it unlawful to take this species, its eggs, or its nests. Sections 3505, 3503.5, and 3800 of the California Fish and Game Code prohibit the take or destruction of the bird, its nests, or eggs. The WBO is also a Species of Special Concern to California (CDFW 2013) and, as such, the California Environmental Quality Act requires mandatory findings of significance (i.e., significant or not significant) if impacts are likely to occur to this species. It is a CDFW designated Species of Special Concern in California because its population has suffered precipitous declines due to habitat loss, degradation and modification, and loss of suitable burrows (CDFG 2012).

Habitat Status

WBO habitat consists of annual and perennial grasslands, deserts, agricultural areas, disturbed habitat, and scrublands characterized by low-growing vegetation (CBOC 1993; Zarn 1974). Suitable WBO habitat may also include trees and shrubs if the canopy covers less than 30% of the ground surface (DeSante et al. 1996*)*. Burrows are an essential component of burrowing owl habitat, and both natural and artificial burrows provide protection, shelter, and nests. WBO often use burrows made by mammals such as California ground squirrels (*Spermophilus beecheyi)* in southern California, but may also use human-made structures such as cement culverts; riprap; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. WBO may use a particular site for migratory stopovers, or for breeding and foraging year-round. Suitable habitat is considered occupied if there is an observation of at least one burrowing owl occupying a burrow within the last 3 years, or burrowing owl sign around a burrow such as molted feathers, cast pellets, prey remains, eggshell fragments, or feces (CDFG 2012). Burrowing owls tend to exhibit high site fidelity, reusing the same site year after year (Feeney 1992; Rich 1984).

Population Status

WBO is found sparsely distributed in southern California; including San Diego County (DeSante et al. 1997; Klute et al. 2003; Lincer and Bloom 2007). The vast majority of the California breeding population of WBO occurs in the Central and Imperial Valleys, primarily in agricultural areas, often associated with canals and drainages (and their berms). Small, scattered populations occur in the Mojave Desert. Population density seems to be correlated with prey availability, particularly small mammals (Klute et al. 2003). Breeding season in California takes place usually from February 1 through August 31 but varies by climatic conditions and latitude. The peak of breeding season occurs April 15 through July 15, when

nests are most active and occupied by eggs or young (CDFG 2012). WBO may change burrows many times during the breeding season after nestlings reach 3 weeks old. This can be dependent on predation or disturbance.

Burrowing owls have disappeared or declined in several southern California counties and in coastal areas, including San Diego County (DeSante et al. 1997; Klute et al. 2003; Lincer and Bloom 2007). This trend is not, however, limited to California; in 1992, 16 (67%) of 24 states and provinces polled reported burrowing owl population declines and no states reported an increase (James and Espie 1997).

Survey Methodology

Survey methods were conducted for the proposed project in accordance with the CDFG's Staff Report on Burrowing Owl Mitigation (CDFG 2012). WBO surveys were conducted to determine the presence or absence, abundance, and breeding status of the species within suitable habitat within the larger project survey area.

CDFW (2012) protocol requires that the project footprint and a 500-foot (150-meter) buffer surrounding the project footprint be surveyed for the presence/absence of WBO. The proposed project footprint and a 500-foot (150-meter) buffer are collectively referred to as the biological survey area (BSA) herein (Figure 2). The BSA encompasses approximately 775 acres (313.6 hectares) (AECOM 2013). The BSA was surveyed to assess suitable burrowing owl habitat that may be directly or indirectly affected by project activities.

An initial habitat assessment of the entire survey area and buffer (within 500 feet [150 meters] of the survey area) was conducted by AECOM biologists during previous surveys for sensitive species in 2012. Consulting biologist Jeffrey L. Lincer, PhD, conducted a follow-up habitat assessment for burrowing owl on March 16, 2012, prior to initiating burrow and burrowing owl surveys during spring and summer 2012. AECOM biologists conducted a habitat assessment prior to initiating 2013 surveys to confirm current habitat suitability. Suitable WBO habitat included native and nonnative/disturbed habitats. The total acreage of suitable burrowing owl habitat within the BSA is 235.67 acres (95.37 hectares) (Figure 3).

Suitable burrowing owl habitat characteristics within the BSA include open, native and nonnative annual grassland, numerous fossorial mammal burrows, and several adequate perch sites. Vegetation communities within the BSA that are suitable for burrowing owls include open coastal sage scrub, native and nonnative annual grassland, landscape/ ornamental, and disturbed habitats (Figure 3). Natural burrows and perch sites (fence posts, fencing, dirt mounds, berms, and debris piles) occur in each vegetation community.

Visits and Timing

Burrowing owls are more detectable during the breeding season with detection probabilities being highest during the nestling stage (Conway et al. 2008). In California, the WBO

breeding season extends generally from February 1 through August 31 (Haug et al. 1993) with some variances by geographic location and climatic conditions. As indicated by CDFG (2012), several researchers suggest three or more survey visits during daylight hours (Haug and Diduik 1993; Conway and Simon 2003) and recommend each visit occur at least 3 weeks apart during the peak of the breeding season, commonly accepted in California as between April 15 and July 15 (CBOC 1997).

Per CDFW 2012 requirements, where suitable WBO habitat exists, WBO breeding season surveys should consist of four survey visits based on the following timing:

- One survey visit between February 1 and April 15
- Two survey visits, at least 3 weeks apart, between April 15 and July 15
- One survey visit after June 15 but prior to the end of the breeding season (August 31), at least 3 weeks after previous survey

The first survey was conducted on April 11 and 12, 2013. The second survey was conducted on May 7, 8, and 9, 2013. The third survey was conducted on June 12, 13, and 14, 2013. The fourth WBO survey was conducted on July 9, 10, and 11, 2013. All surveys were conducted according to current CDFW (2012) guidelines and all surveys were at least 3 weeks apart. To ensure the greatest detection probability, surveys were conducted at times of high burrowing owl activity: dawn to early morning, and evening to dusk. Biologists timed surveys to coincide with the burrowing owl laying and incubation period, nesting period, and the late nestling period when owls are most present above ground. Surveys were not conducted when wind speeds exceeded 12.4 miles per hour (20 kilometers per hour) or when it was raining or during the presence of dense fog. Surveys were conducted only between morning civil twilight and 10:00 AM and 2 hours before sunset until evening civil twilight. Breeding season survey dates, observer, weather data, times, and observations are presented in Table 1.

Survey Method

Surveys were conducted by walking through all suitable habitats within the BSA using 100% visual coverage, focusing on visual signs of burrowing owl (burrows, pellets, white wash, etc.). Distance between transects was no greater than 65 feet (20 meters) during each survey. While walking transects, the biologists would continuously scan the BSA to detect owls. As owls were detected, biologists would observe the owls from a distance of at least 165 feet (50 meters) so that burrowing owls were not disturbed. The number and age of individuals were recorded for observed WBO. At each suitable burrow, presence of WBO sign (e.g., pellets, prey remains, whitewash, decorations, tracks) and number of WBO present at that burrow were recorded for each survey visit. After a burrow was marked, it was revisited on all follow-up surveys; biologists also continued to survey for new burrows during follow-up surveys.

Table 1
Survey Dates, Personnel, and Weather Conditions

Survey Number	Date	Survey Personnel	Time	Weather Conditions
1a	4/11/2013	Andrew Fisher	0621–1000	Start: 50°F, wind 0 mph, 0% cover End: 82°F, wind 2 mph, 0% cover
1b	4/11/2013	Andrew Fisher, James McMorran	1726–1934	Start: 65°F, wind 4 mph, 5% cover End: 60°F, wind 3 mph, 30% cover
1c	4/12/2013	Michael Anguiano, Andrew Fisher, James McMorran, Brennan Mulrooney, Mark Roll	0609–1000	Start: 57°F, wind 1 mph, 100% cover End: 64°F, wind 3 mph, 0% cover
1d	4/12/2013	James McMorran, Brennan Mulrooney, Mark Roll	1716–1809	Start: 65°F, wind 3 mph, 4% cover End: 62°F, wind 1 mph, 5% cover
2a	5/7/2013	Andrew Fisher, James McMorran	1726–1945	Start: 68°F, wind 5 mph, 40% cover End: 56°F, wind 3 mph, 20% cover
2b	5/8/2013	Andrew Fisher, James McMorran	0543–0959	Start: 61°F, wind 0 mph, 55% cover End: 64°F, wind 2 mph, 98% cover
2c	5/8/2013	Michael Anguiano, Andrew Fisher, James McMorran	1737–1942	Start: 64°F, wind 4 mph, 50% cover End: 63°F, wind 2 mph, 75% cover
2d	5/9/2013	Michael Anguiano, James McMorran	0541–0906	Start: 55°F, wind 0 mph, 10% cover End: 65°F, wind 1 mph, 50% cover
3a	6/12/2013	Andrew Fisher, James McMorran, Brennan Mulrooney	0512–0952	Start: 63°F, wind 0 mph, 100% cover End: 67°F, wind 3 mph, 100% cover
3b	6/13/2013	Andrew Fisher, James McMorran, Brennan Mulrooney	0532–0959	Start: 63°F, wind 0 mph, 100% cover End: 67°F, wind 2 mph, 30% cover
3c	6/14/2013	Brennan Mulrooney	0715–0951	Start: 61°F, wind 1 mph, 100% cover End: 69°F, wind 3 mph, 30% cover
4a	7/9/2013	Michael Anguiano, James McMorran	0528–1008	Start: 66°F, wind 0 mph, 10% cover End: 72°F, wind 5 mph, 10% cover
4b	7/10/2013	Michael Anguiano, Brennan Mulrooney, Brynne Mulrooney	0533–1019	Start: 69°F, wind 0 mph, 10% cover End: 76°F, wind 3 mph, 100% cover
4c	7/11/2013	Michael Anguiano, Brennan Mulrooney	0554–0929	Start: 67°F, wind 1 mph, 100% cover End: 69°F, wind 2 mph, 100% cover

During each visit, the “survey status” of a burrow for the given survey period was classified as follows:

- Occupied – a WBO individual was observed to be present at the burrow;
- Active – a WBO burrow with fresh WBO sign but no WBO individual was present;
- Inactive – suitable for WBO but no WBO individuals or sign was observed; or
- No longer suitable – previously suitable burrow that was no longer suitable due to erosion, a natural burrow collapse, or inadvertent damage from anthropogenic activities.

Following the completion of surveys, the cumulative visits to each burrow resulted in a survey history for each burrow detected within in the survey area. As a result, a cumulative burrow status was assigned to each burrow for impact analysis purposes. Burrows were classified as occupied due to the presence of owls directly at the burrow during at least one survey. Burrows were classified as active due to the presence of fresh or recent sign during at least one survey (no owls observed at the burrows). Burrows were classified as inactive due to the absence of an owl, or fresh or recent sign, during all four surveys.

All data were recorded using electronic data forms installed on HP iPAQ Travel Companions (Attachment A). Electronic data forms included built-in data validation procedures for quality assurance and control purposes.

Results

A total of 229 potentially suitable burrows, or burrow clusters, were documented within the BSA (Attachment A and Figure 4). Each known burrow was visited on each survey during burrowing owl protocol surveys by AECOM biologists. Table 2 summarizes the progression of cumulative burrow status by survey number, and Table 3 provides the maximum number of adults and burrowing owls of unknown age observed at each potentially occupied burrow. Burrows were considered occupied if at least one adult burrowing owl was detected during at least one of the four protocol surveys.

Table 2
Progression of Cumulative Burrow Status by Survey Number

Cumulative Burrow Status	Count of Burrows by Survey Number			
	1	2	3	4
Burrows				
Occupied	**1**	**1**	**1**	**1**
Active	**0**	**0**	**0**	**0**
Inactive (including no longer suitable)	**166**	**226**	**228**	**228**
Total	**167**	**227**	**229**	**229**

Table 3
Maximum Number of Owls Present at Each Burrow[1]

Burrow ID	Maximum Number of Adults	Maximum Number of Juveniles	Maximum Number of Individuals of Unknown Age
173	1	0	0
Total Number of Occupied Burrows: 1			

[1] Summary of those burrows with burrowing owls present. Individual burrowing owls are not marked; these numbers represent the maximum number of individuals present at the occupied burrow during a survey pass across all four surveys.

One out of the 229 mapped burrows was considered inhabited by WBO. The occupied burrow was located within the BSA, west of the Hunte Parkway Staging Yard (Figure 4). The burrow was occupied by an adult WBO during the first survey and had no signs of juvenile burrowing owls. The WBO was not observed at this burrow during surveys 2 through 4.

Additional sensitive wildlife species detected during burrowing owl surveys are included in Attachment B (Figures 5a and 5b).

Discussion

One out of 229 potential burrows was considered occupied at the time of surveys, with one adult burrowing owl individual observed in the BSA. This observed number could fluctuate from year to year, but it illustrates burrowing owl use of the area, and that more burrows may be occupied than directly observed based on the potential for burrowing owls to use satellite burrows. Burrowing owls are known to use up to 11 satellite burrows (CDFG 2012). The majority of burrows were concentrated in the central portion of the TL corridor, and in the southern portion of the project near the proposed Salt Creek Substation and the Hunte Parkway Staging Yard.

If you have any questions or comments regarding this letter report, please contact me at 619.233.1454.

Sincerely,

Brynne Mulrooney

Brynne Mulrooney
AECOM Biologist

cc: Leslie Nelson, San Diego Gas & Electric

Attachments:

- Figure 1 – Regional Map
- Figure 2 – Project Components and Vicinity Map
- Figure 3 – Suitable Western Burrowing Owl Habitat
- Figures 4a and 4b – Western Burrowing Owl Burrow Locations
- Figures 5a and 5b – Other Sensitive Species Observations
- Attachment A – Burrow Data Summary for Burrowing Owl Surveys
- Attachment B – Wildlife Species Detected within the Salt Creek Substation and Power Line Project Biological Study Area

Certification

Qualified biologists who conducted burrowing owl surveys within the burrowing owl BSA for the proposed project certify that the information in this survey report fully and accurately represents the work performed. Signatures of permitted biologists who conducted protocol surveys are included below. The results of focused surveys for listed species are typically considered valid for 1 year by the resource agencies.

Brennan Mulrooney
AECOM Biologist

Andrew Fisher
AECOM Biologist

James McMorran
AECOM Biologist

Brynne Mulrooney
AECOM Biologist

Michael Anguiano
AECOM Biologist

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FIGURES

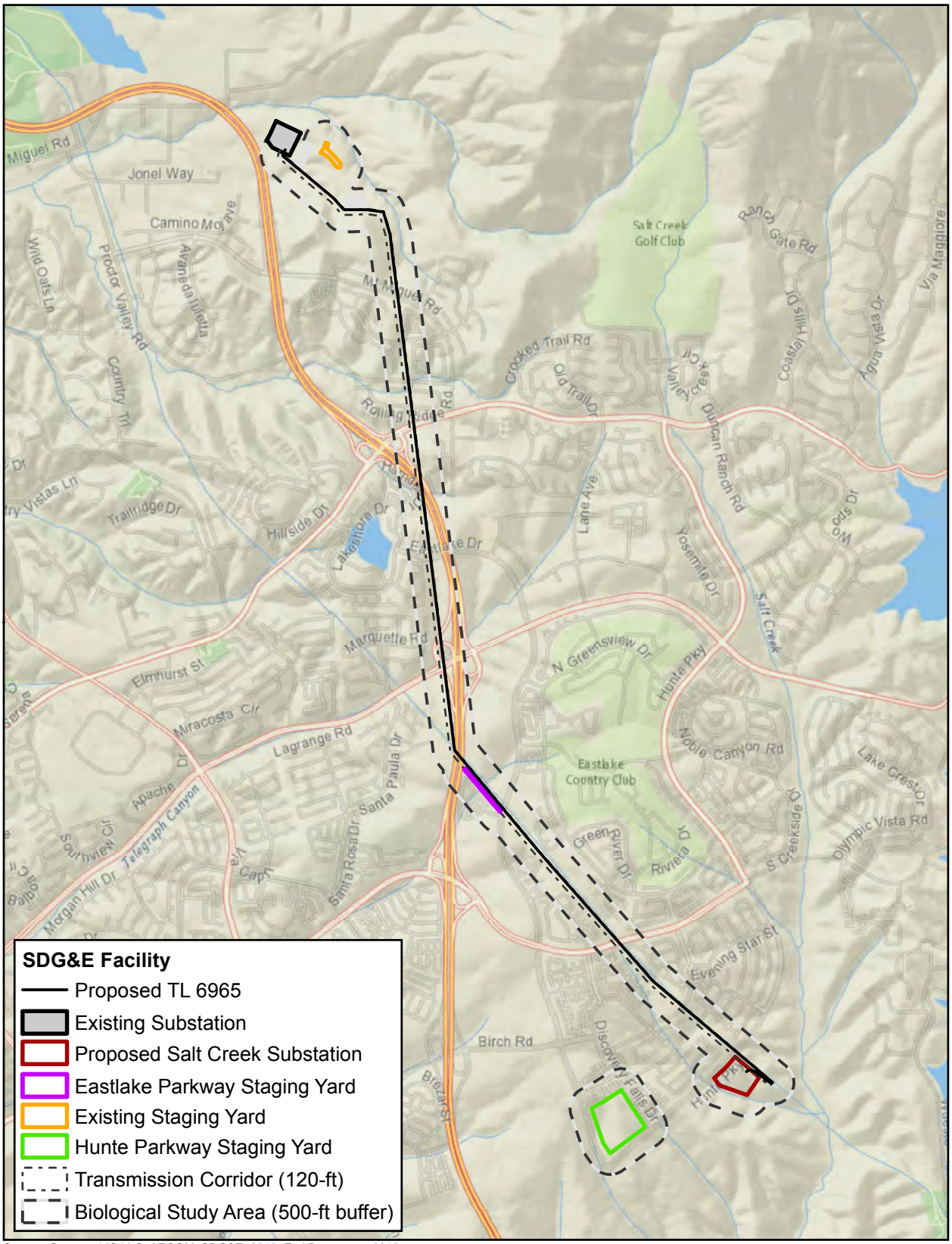
Source: GeomorphIS LLC, AECOM, SDG&E, 2013; Esri Basemaps, 2013

0 2 4 Miles

Scale: 1:250,000 1 inch = 4 miles

Figure 1
Regional Map

SDG&E is providing this map with the understanding that the map is not survey grade.



Source: GeomorphIS LLC, AECOM, SDG&E, 2013; Esri Basemaps, 2013

0 0.5 1 Mile

Scale: 1:40,800 1 inch = 1 mile

Figure 2
Project Components and Vicnity Map

SDG&E is providing this map with the understanding that the map is not survey grade.

Western Burrowing Owl Suitable Habitat

SDG&E Facility

Proposed TL 6965

Existing Substation

Proposed Salt Creek Substation

Eastlake Parkway Staging Yard

Existing Staging Yard

Hunte Parkway Staging Yard

Transmission Corridor (120-ft)

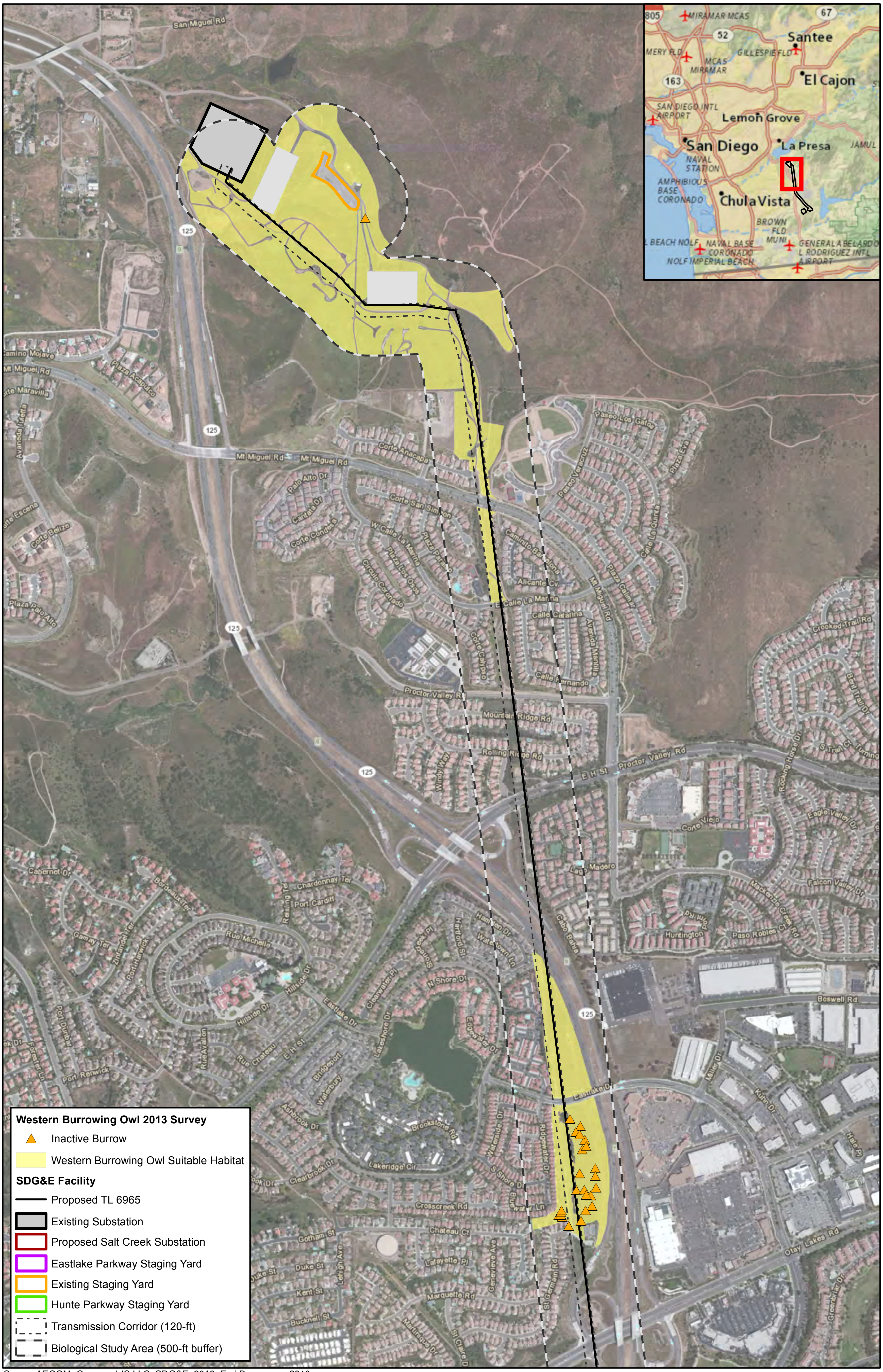
Biological Study Area (500-ft buffer)

Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 1,000 2,000 Feet

Scale: 1:24,000 1 inch = 2,000 feet

Figure 3
Suitable Western Burrowing Owl Habitat

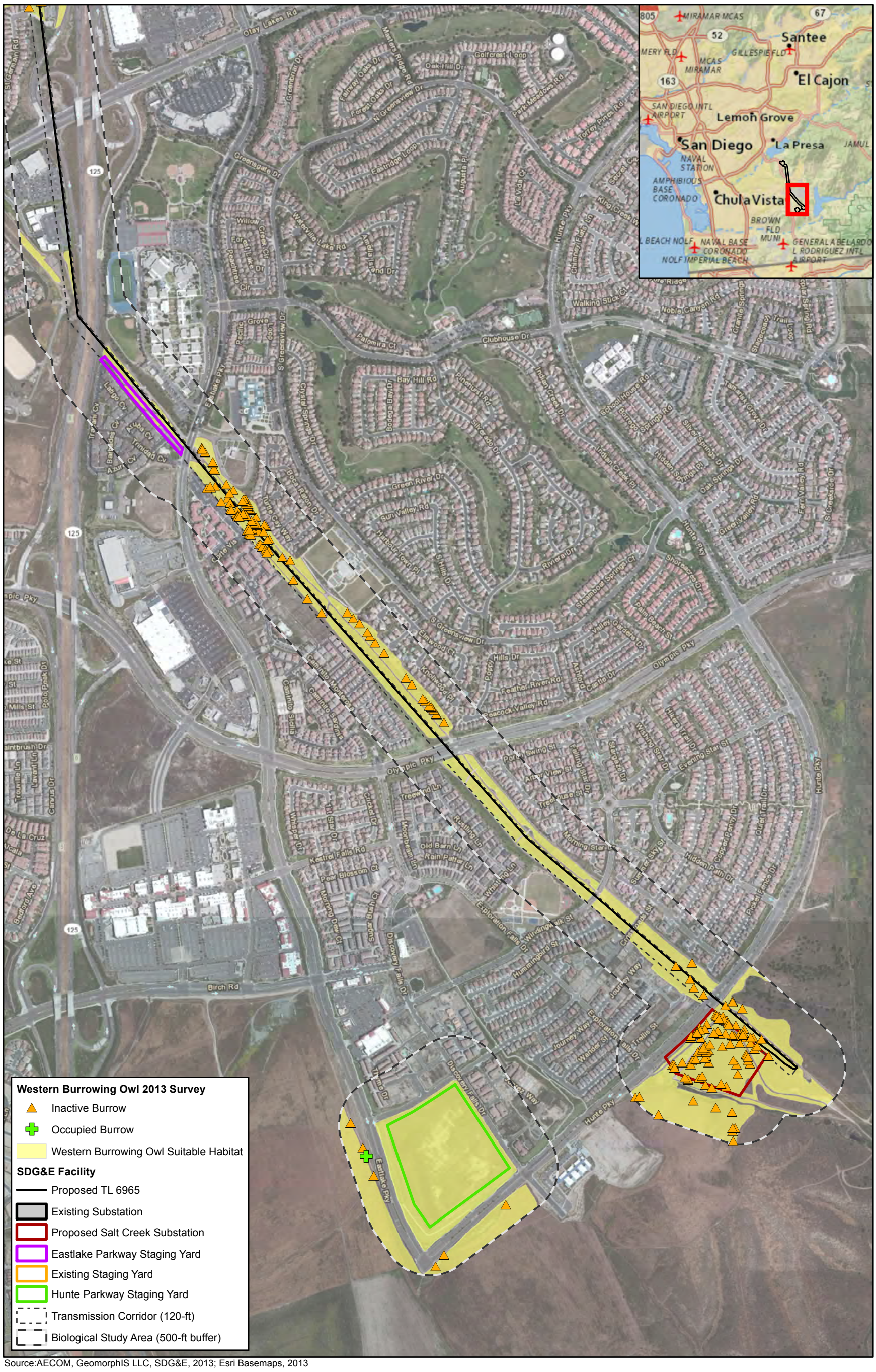


Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 500 1,000 Feet

Scale: 1:12,000 1 inch = 1,000 feet

Figure 4a
Western Burrowing Owl Burrow Locations



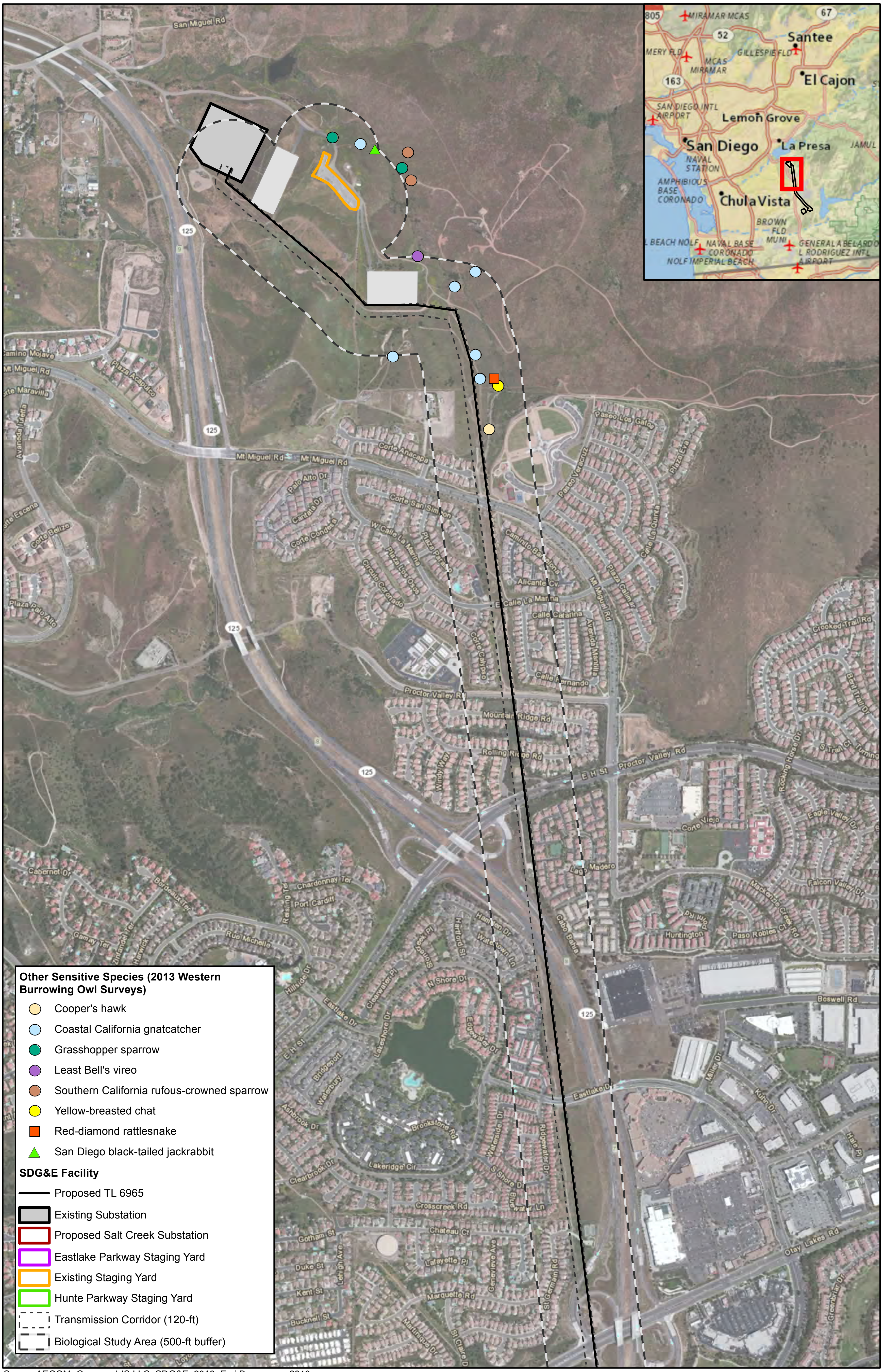
Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 500 1,000 Feet

Scale: 1:12,000 1 inch = 1,000 feet

Figure 4b
Western Burrowing Owl Burrow Locations

SDG&E is providing this map with the understanding that the map is not survey grade.



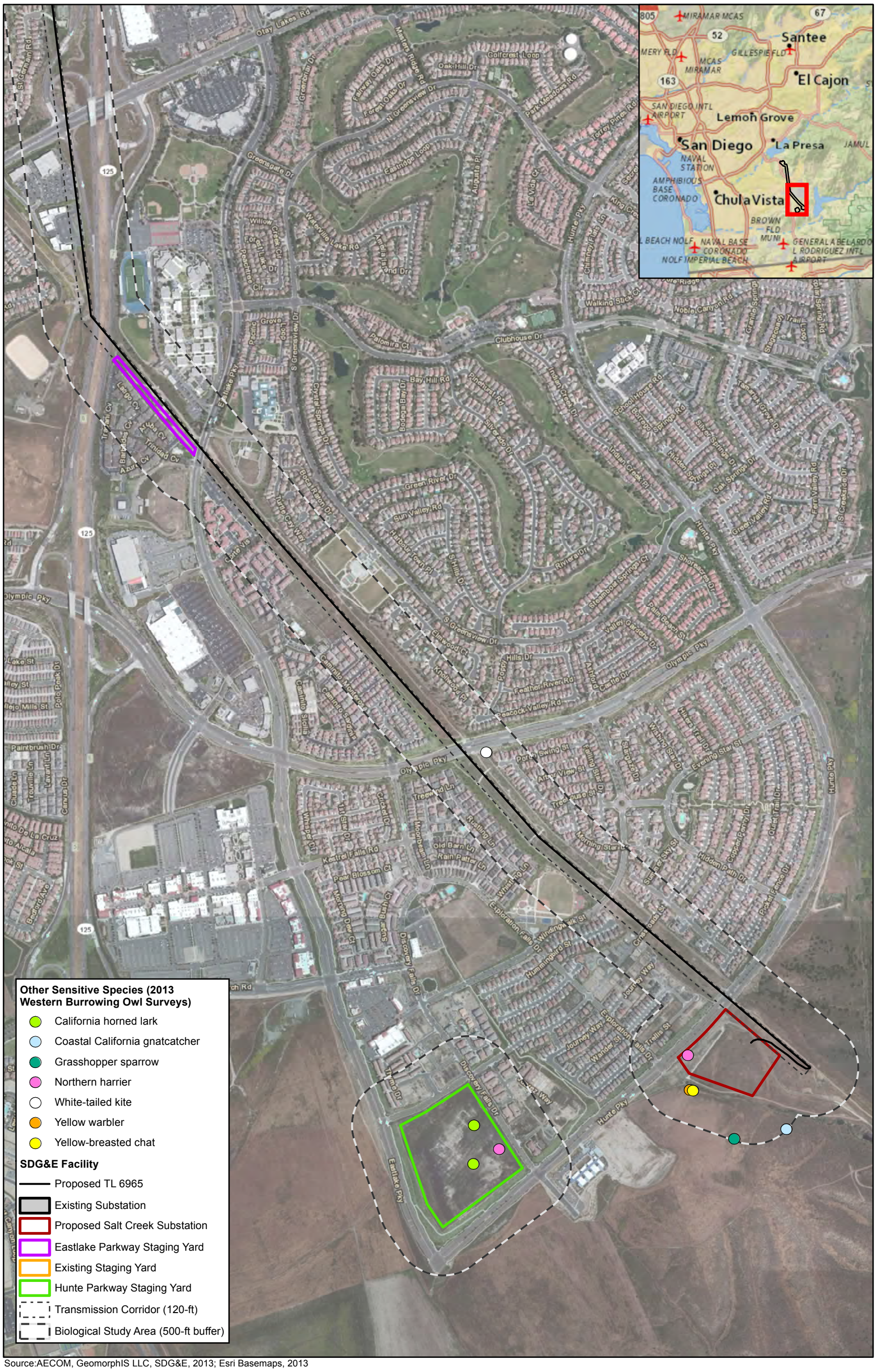
Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 500 1,000 Feet

Scale: 1:12,000 1 inch = 1,000 feet

Figure 5a
Other Sensitive Species Observations

SDG&E is providing this map with the understanding that the map is not survey grade.



Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 500 1,000 Feet

Scale: 1:12,000 1 inch = 1,000 feet

Figure 5b
Other Sensitive Species Observations

ATTACHMENT A

BURROW DATA SUMMARY FOR PHASE III BURROWING OWL SURVEYS

ATTACHMENT A
BURROW DATA SUMMARY FOR BURROWING OWL SURVEYS

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
1	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. About 5 adjacent ground squirrel burrows along cement canal.
1	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1	3	6/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, multiple burrow entrances.
1	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
2	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 3 ground squirrel burrows
2	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
2	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances
2	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
3	1	4/11/2013	Inactive	Inactive	-	-	-	None	Ground squirrel sign. 5 suitable ground squirrel burrows.
3	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
3	3	6/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
3	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
4	1	4/11/2013	Inactive	Inactive	-	-	-	None	Ground squirrel sign
4	2	5/8/2013	Inactive	Inactive	-	-	-	None	At base of fence.
4	3	6/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel
4	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
5	1	4/11/2013	Inactive	Inactive	-	-	-	None	Ground squirrel sign. Several ground squirrel burrows.
5	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
5	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances
5	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
6	1	4/11/2013	Inactive	Inactive	-	-	-	None	Ground squirrel sign. At least 3 suitable burrow entrances.
6	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
6	3	6/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
6	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
7	1	4/11/2013	Inactive	Inactive	-	-	-	None	Burrow in eroded bank occupied by ground squirrel. 4 burrow entrances.
7	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
7	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
7	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
8	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
8	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
8	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
8	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
9	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 3 burrow entrances.
9	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
9	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
9	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
10	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. Several burrow entrances.
10	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
10	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
10	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
11	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. Several burrow entrances.
11	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
11	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
11	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
12	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
12	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
12	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
12	4	7/9/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
13	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 9 burrow entrances.
13	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
13	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
13	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
14	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
14	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
14	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
14	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
15	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 3 burrow entrances.
15	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
15	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
15	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
16	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 7 burrow entrances.
16	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
16	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
16	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
17	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 2 large burrow entrances about 5 meters apart.
17	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
17	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
17	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
18	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
18	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
18	3	6/12/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Filled in.
18	4	7/9/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
19	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 2 burrow entrances.
19	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
19	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
19	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
20	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
20	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
20	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
20	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
21	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 6 burrow entrances.
21	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
21	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
21	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
22	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
22	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
22	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
22	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
23	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 3 entrances.
23	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
23	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
23	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
24	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
24	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
24	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
24	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
25	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
25	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
25	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
25	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
26	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. Several burrow entrances.
26	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
26	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
26	4	7/9/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	-
27	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 5 burrow entrances.
27	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
27	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
27	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
28	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
28	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
28	3	6/12/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Multiple burrow entrances.
28	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
29	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
29	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
29	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
29	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
30	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
30	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
30	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
30	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
31	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
31	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
31	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
31	4	7/9/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
32	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 3 burrow entrances.
32	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
32	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
32	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
34	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 3 burrow entrances a few meters apart.
34	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
34	3	6/12/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Filled in.
34	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
35	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 2 burrow entrances.
35	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
35	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
35	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
37	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 5 burrow entrances.
37	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
37	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
37	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
38	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 3 burrow entrances separated by a few meters.
38	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
38	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
38	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
39	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
39	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
39	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
39	4	7/9/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
40	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. Burrows under cement water pipe.
40	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
40	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
40	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
41	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
41	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
41	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
41	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
42	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. Several burrow entrances.
42	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
42	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
42	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
44	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
44	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
44	3	6/12/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Filled in.
44	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
45	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
45	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
45	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
45	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
48	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. Several entrances a few meters apart.
48	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
48	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
48	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
49	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
49	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
49	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
49	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
50	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
50	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
50	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
50	4	7/9/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	-
51	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
51	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
51	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
51	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
52	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
52	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
52	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
52	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
53	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
53	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
53	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
53	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
54	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
54	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
54	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
54	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
55	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
55	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
55	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
55	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
56	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 4 burrow entrances.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
56	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
56	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
56	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
58	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
58	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
58	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
58	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
62	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
62	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
62	3	6/12/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Filled in.
62	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
63	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 3 burrow entrances.
63	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, multiple burrow entrances.
63	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
63	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
64	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. At least 2 burrow entrances.
64	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
64	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
64	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
65	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
65	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
65	3	6/12/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	-
65	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
68	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
68	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
68	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
68	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
69	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
69	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
69	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
69	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
71	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
71	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
71	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
71	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
72	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. Several burrow entrances.
72	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
72	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
72	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
73	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
73	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
73	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
73	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
74	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. Several burrow entrances.
74	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
74	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
74	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
75	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
75	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
75	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
75	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
76	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
76	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
76	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
76	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
77	1	4/11/2013	Inactive	Inactive	-	-	-	None	Under cement water pipe.
77	2	5/7/2013	Inactive	Inactive	-	-	-	None	-
77	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
77	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
78	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
78	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
78	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
78	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
79	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
79	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
79	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
79	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
80	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel. 2 burrow entrances.
80	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
80	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
80	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
81	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 2 burrow entrances.
81	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
81	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
81	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
82	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 4 burrow entrances.
82	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
82	3	6/12/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
82	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
83	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
83	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
83	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
83	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
84	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
84	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
84	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
84	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
85	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 2 burrow entrances.
85	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
85	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
85	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
86	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
86	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
86	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
86	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
87	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
87	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
87	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
87	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
88	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
88	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
88	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
88	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
89	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 2 burrow entrances.
89	2	5/8/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
89	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
89	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
90	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
90	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
90	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
90	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
91	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 2 burrow entrances.
91	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
91	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
91	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
92	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
92	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
92	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
92	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
93	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 2 burrow entrances under shrubs.
93	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
93	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
93	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
94	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 2 burrow entrances 2 meters apart.
94	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
94	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
94	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
95	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
95	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
95	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
95	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
96	1	4/11/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
96	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
96	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
96	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
97	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, about 3 burrow entrances.
97	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
97	3	6/14/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
97	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
98	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
98	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
98	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
98	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
99	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 5 Burrow entrances by corner of metal fence.
99	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
99	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
99	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
100	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
100	2	5/8/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Burrow no longer exists.
100	3	6/14/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Graded over.
100	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
101	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
101	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
101	3	6/14/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
101	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
102	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, in iceplant.
102	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
102	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
102	4	7/11/2013	Inactive	Inactive	-	-	-	None	Dead lizard at burrow. Not killed by an owl. Likely killed by rodent.
103	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
103	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
103	3	6/14/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
103	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
104	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
104	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
104	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
104	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
106	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
106	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
106	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
106	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
107	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
107	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
107	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
107	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
108	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
108	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
108	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
108	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
110	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
110	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
110	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
110	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
112	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
112	2	5/8/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
112	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
112	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
113	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
113	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
113	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
113	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
114	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 2 entrances.
114	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
114	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
114	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
117	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
117	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
117	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
117	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
118	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
118	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
118	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
118	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
121	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
121	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
121	3	6/14/2013	Inactive	Inactive	-	-	-	None	Located at bottom of hill.
121	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
122	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
122	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
122	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
122	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
123	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 4 burrow entrances.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
123	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
123	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
123	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
125	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 2 burrow entrances.
125	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel
125	3	6/14/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
125	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
127	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 4 burrow entrances.
127	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
127	3	6/14/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
127	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
128	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 3 burrow entrances 2 meters apart.
128	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
128	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
128	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
130	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 2 burrow entrances.
130	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
130	3	6/14/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
130	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
131	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
131	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
131	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
131	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
132	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, under grass.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
132	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
132	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
132	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
133	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
133	2	5/8/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Recently mowed area appears to have partially filled in burrow.
133	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
133	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
134	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
134	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
134	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
134	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
135	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
135	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
135	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
135	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
136	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
136	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
136	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
136	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
137	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
137	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
137	3	6/14/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Filled in.
137	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
138	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
138	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
138	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
138	4	7/11/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
139	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
139	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
139	3	6/14/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Filled in.
139	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
140	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
140	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
140	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
140	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
141	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
141	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
141	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
141	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
142	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
142	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
142	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
142	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
143	1	4/11/2013	Inactive	Inactive	-	-	-	None	2 entrances.
143	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
143	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
143	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
144	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
144	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
144	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
144	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
145	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
145	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
145	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
145	4	7/11/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
146	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
146	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
146	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
146	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
147	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
147	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
147	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
147	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
148	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
148	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
148	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
148	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
149	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
149	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
149	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
149	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
150	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
150	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
150	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
150	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
151	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
151	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
151	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
151	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
152	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
152	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
152	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
152	4	7/11/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
153	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
153	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
153	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
153	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
154	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
154	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
154	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
154	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
155	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
155	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
155	3	6/14/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
155	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
156	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
156	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel; About 8-10 burrow entrances.
156	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
156	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
161	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 2 burrow entrances.
161	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
161	3	6/14/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
161	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
162	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
162	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
162	3	6/14/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
162	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
164	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 3 burrows separated by 2 meters
164	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 3 burrow entrances.
164	3	6/14/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
164	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
165	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
165	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
165	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
165	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
166	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
166	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
166	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
166	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
168	1	4/11/2013	Inactive	Inactive	-	-	-	None	-
168	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
168	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
168	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
169	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
169	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
169	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
169	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
171	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
171	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
171	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
171	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
172	1	4/11/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
172	2	5/7/2013	Inactive	Inactive	-	-	-	None	-
172	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
172	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
173	1	4/12/2013	Occupied	Occupied	1	0	0	Whitewash; pellets; tracks; feathers	-
173	2	5/7/2013	Occupied	Inactive	-	-	-	None	Three burrow entrances with no sign.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
173	3	6/12/2013	Occupied	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
173	4	7/9/2013	Occupied	Inactive	-	-	-	None	-
174	1	4/12/2013	Inactive	Inactive	-	-	-	None	2 burrow entrance. Occupied by squirrel.
174	2	5/7/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 2 burrow entrances.
174	3	6/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
174	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
175	1	4/12/2013	Inactive	Inactive	-	-	-	None	3 burrow entrances. Occupied by ground squirrel.
175	2	5/7/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
175	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
175	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
176	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by squirrel. Burrow complex.
176	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
176	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
176	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
177	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
177	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
177	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
177	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
178	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 4 burrow entrances.
178	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
178	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
178	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
179	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 3 burrow entrances.
179	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
179	3	6/13/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
179	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
180	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
180	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
180	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
180	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
181	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
181	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
181	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
181	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
182	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
182	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
182	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
182	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
183	1	4/12/2013	Inactive	Inactive	-	-	-	None	-
183	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
183	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
183	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
184	1	4/12/2013	Inactive	Inactive	-	-	-	None	-
184	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
184	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
184	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
187	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
187	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
187	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
187	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
188	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
188	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
188	3	6/13/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
188	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
189	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
189	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
189	3	6/13/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	-
189	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
190	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 2 entrances 2 meters apart.
190	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
190	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
190	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
191	1	4/12/2013	Inactive	Inactive	-	-	-	None	2 burrows.
191	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
191	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
191	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
193	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 3 burrow entrances.
193	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
193	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
193	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
194	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 3 burrow entrances a few meters apart.
194	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
194	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
194	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
195	1	4/12/2013	Inactive	Inactive	-	-	-	None	-
195	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
195	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
195	4	7/10/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
196	1	4/12/2013	Inactive	Inactive	-	-	-	None	-
196	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
196	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
196	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
197	1	4/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 2 burrow entrances separated by 3 meters.
197	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
197	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
197	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
198	1	4/12/2013	Inactive	Inactive	-	-	-	None	-
198	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
198	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
198	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
199	1	4/12/2013	Inactive	Inactive	-	-	-	None	-
199	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
199	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
199	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
1001	2	5/7/2013	Inactive	Inactive	-	-	-	None	Several burrow entrances along fence line.
1001	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1001	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1002	2	5/7/2013	Inactive	Inactive	-	-	-	None	-
1002	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1002	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1003	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1003	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
1003	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1004	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1004	3	6/14/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
1004	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1005	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 2 burrow entrances.
1005	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
1005	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1006	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1006	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
1006	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1007	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, at least 3 burrow entrances.
1007	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
1007	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1008	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1008	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
1008	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1009	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1009	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1009	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1010	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1010	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1010	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1011	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1011	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1011	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1012	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1012	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
1012	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1013	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1013	3	6/14/2013	Inactive	Inactive	-	-	-	None	On slope.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
1013	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1014	2	5/8/2013	Inactive	Inactive	-	-	-	None	Burrows in grassland.
1014	3	6/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1014	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1015	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1015	3	6/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1015	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1016	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1016	3	6/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1016	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1017	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1017	3	6/12/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Filled in.
1017	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1018	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, multiple burrow entrances.
1018	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1018	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1019	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1019	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
1019	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1020	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1020	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
1020	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1021	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1021	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1021	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1022	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
1022	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
1022	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1023	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1023	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
1023	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1024	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel, 2 burrow entrances about 3 meters apart.
1024	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1024	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1025	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1025	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
1025	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1026	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1026	3	6/11/2013	Inactive	Inactive	-	-	-	None	-
1026	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1027	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1027	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1027	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1029	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1029	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1029	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1030	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1030	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1030	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1031	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1031	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1031	4	7/9/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
1032	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1032	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
1032	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1033	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1033	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1033	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1034	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1034	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1034	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1035	2	5/8/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1035	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1035	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1036	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1036	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
1036	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1037	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1037	3	6/13/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1037	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
1038	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1038	3	6/13/2013	Inactive	Inactive	-	-	-	None	-
1038	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
1039	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1039	3	6/13/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	-
1039	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
1040	2	5/7/2013	Inactive	Inactive	-	-	-	None	3 burrows in close proximity.

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
1040	3	6/12/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Graded over, could not locate burrow.
1040	4	7/9/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Plowed over.
1041	2	5/7/2013	Inactive	Inactive	-	-	-	None	-
1041	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1041	4	7/9/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Graded.
1042	2	5/7/2013	Inactive	Inactive	-	-	-	None	-
1042	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1042	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1043	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1043	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
1043	4	7/11/2013	Inactive	Inactive	-	-	-	None	-
1044	2	5/8/2013	Inactive	Inactive	-	-	-	None	2 burrows close together.
1044	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
1044	4	7/11/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Filled in.
1045	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1045	3	6/12/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	-
1045	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1046	2	5/8/2013	Inactive	Inactive	-	-	-	None	2 burrows.
1046	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1046	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1047	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1047	3	6/12/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	Filled in.
1047	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1048	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1048	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1048	4	7/9/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
1049	2	5/8/2013	Inactive	Inactive	-	-	-	None	2 burrows
1049	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
1049	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1050	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1050	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1050	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1051	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1051	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1051	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1052	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1052	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1052	4	7/9/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	-
1053	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1053	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1053	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1054	2	5/7/2013	Inactive	Inactive	-	-	-	None	-
1054	3	6/12/2013	Inactive	Inactive	-	-	-	None	Occupied by ground squirrel.
1054	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1056	2	5/8/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
1056	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
1056	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1058	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1058	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1058	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1059	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1059	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1059	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1061	2	5/8/2013	Inactive	Inactive	-	-	-	None	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Survey Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
1061	3	6/11/2013	Inactive	Inactive	-	-	-	None	-
1061	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1062	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1062	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances.
1062	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1063	2	5/8/2013	Inactive	Inactive	-	-	-	None	-
1063	3	6/12/2013	Inactive	Inactive	-	-	-	None	-
1063	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1064	2	5/9/2013	Inactive	Inactive	-	-	-	None	-
1064	3	6/13/2013	No Longer Suitable	No Longer Suitable	-	-	-	None	In road, no longer suitable.
1064	4	7/10/2013	Inactive	Inactive	-	-	-	None	-
1100	3	6/12/2013	Inactive	Inactive	-	-	-	None	Multiple burrow entrances, occupied by ground squirrel.
1100	4	7/9/2013	Inactive	Inactive	-	-	-	None	-
1101	3	6/14/2013	Inactive	Inactive	-	-	-	None	-
1101	4	7/11/2013	Inactive	Inactive	-	-	-	None	-

[1] Burrow IDs are not sequential due to burrows in close proximity being lumped together as a burrow complex in follow-up surveys.

[2] Note that not all burrows will have four surveys as a result of cumulatively adding burrows (i.e., new burrows were found throughout the survey season).

[3] Burrows were classified as occupied due to presence of owls directly at the burrow during either the habitat assessment or Surveys 1 - 4. Burrows were classified as active due to the presence of fresh or recent sign during either the habitat assessment or Surveys 1 - 4 (no owls observed at the burrows). Burrows were classified as inactive due to the absence of fresh or recent sign during either the habitat assessment or Surveys 1 - 4. Burrows were classified as no longer suitable due to a previously suitable burrow that was no longer suitable due to erosion, a natural burrow collapse, or inadvertent damage from anthropogenic activities.

[4] Classification status of the burrow for the given survey period.

ATTACHMENT B

WILDLIFE SPECIES DETECTED WITHIN THE SALT CREEK SUBSTATION AND POWERLINE PROJECT BIOLOGICAL STUDY AREA

ATTACHMENT B
WILDLIFE SPECIES DETECTED WITHIN THE SALT CREEK SUBSTATION AND POWER LINE PROJECT BIOLOGICAL STUDY AREA

Common Name	Scientific Name	Order	Family	Federal Status (Endangered/ Threatened)	California Status (Endangered/ Threatened)
Invertebrates					
Western Black Widow	*Latrodectus Hesperus*	Araneae	Theridiidae	None	None
Behr's Metalmark	*Apodemia mormo virgulti*	Lepidoptera	Riodinidae	None	None
Funereal Duskywing	*Erynnis funeralis*	Lepidoptera	Hesperiidae	None	None
White Checkered Skipper	*Pyrgus albescens*	Lepidoptera	Hesperiidae	None	None
Anise Swallowtail	*Papilio zelicaon*	Lepidoptera	Papilionidae	None	None
Reptiles & Amphibians					
Western Fence Lizard	*Sceloporus occidentalis*	Squamata	Phrynosomatidae	None	None
Side-Blotched Lizard	*Uta stansburiana*	Squamata	Phrynosomatidae	None	None
Red-diamond Rattlesnake[1,2]	*Crotalus ruber*	Serpentes	Viperidae	None	None
Avian					
Cooper's Hawk[1,3]	*Accipiter cooperii*	Accipitriformes	Accipitridae	None	None
Red-tailed Hawk	*Buteo jamaicensis*	Accipitriformes	Accipitridae	None	None
Northern Harrier[1,2]	*Circus cyaneus*	Accipitriformes	Accipitridae	None	None
White-tailed Kite	*Elanus leucurus*	Accipitriformes	Accipitridae	None	None
Mallard	*Anas platyrhynchos*	Anseriformes	Anatidae	None	None
Vaux's Swift	*Chaetura vauxi*	Apodiformes	Apodidae	None	None
Costa's Hummingbird	*Calypte costae*	Apodiformes	Trochilidae	None	None
Rufous Hummingbird	*Selasphorus rufus*	Apodiformes	Trochilidae	None	None
Killdeer	*Charadrius vociferus*	Charadriiformes	Charadriidae	None	None
Western Gull	*Larus occidentalis*	Charadriiformes	Laridae	None	None
Mourning Dove	*Zenaida macroura*	Columbiformes	Columbidae	None	None
Greater Roadrunner	*Geococcyx californianus*	Cuculiformes	Cuculidae	None	None
American Kestrel	*Falco sparverius*	Falconiformes	Falconidae	None	None
California Quail	*Callipepla californica*	Galliformes	Odontophoridae	None	None
Virginia Rail	*Rallus limicola*	Gruiformes	Rallidae	None	None

Common Name	Scientific Name	Order	Family	Federal Status (Endangered/ Threatened)	California Status (Endangered/ Threatened)
Bushtit	*Psaltriparus minimus*	Passeriformes	Aegithalidae	None	None
Horned Lark	*Eremophila alpestris*	Passeriformes	Alaudidae	None	None
California Horned Lark[3]	*Eremophila alpestris actia*	Passeriformes	Alaudidae	None	None
Cedar Waxwing	*Bombycilla cedrorum*	Passeriformes	Bombycillidae	None	None
Blue Grosbeak	*Passerina caerulea*	Passeriformes	Cardinalidae	None	None
American Crow	*Corvus brachyrhynchos*	Passeriformes	Corvidae	None	None
Common Raven	*Corvus corax*	Passeriformes	Corvidae	None	None
Southern California Rufous-crowned Sparrow[1,3]	*Aimophila ruficeps canescens*	Passeriformes	Emberizidae	None	None
Grasshopper Sparrow[1,2]	*Ammodramus savannarum*	Passeriformes	Emberizidae	None	None
Lincoln's Sparrow	*Melospiza lincolnii*	Passeriformes	Emberizidae	None	None
Song Sparrow	*Melospiza melodia*	Passeriformes	Emberizidae	None	None
California Towhee	*Melozone crissalis*	Passeriformes	Emberizidae	None	None
House Finch	*Haemorhous mexicanus*	Passeriformes	Fringillidae	None	None
Lawrence's Goldfinch	*Spinus lawrencei*	Passeriformes	Fringillidae	None	None
Lesser Goldfinch	*Spinus psaltria*	Passeriformes	Fringillidae	None	None
American Goldfinch	*Spinus tristis*	Passeriformes	Fringillidae	None	None
Cliff Swallow	*Petrochelidon pyrrhonota*	Passeriformes	Hirundinidae	None	None
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*	Passeriformes	Hirundinidae	None	None
Red-winged Blackbird	*Agelaius phoeniceus*	Passeriformes	Icteridae	None	None
Brewer's Blackbird	*Euphagus cyanocephalus*	Passeriformes	Icteridae	None	None
Hooded Oriole	*Icterus cucullatus*	Passeriformes	Icteridae	None	None
Western Meadowlark	*Sturnella neglecta*	Passeriformes	Icteridae	None	None
Northern Mockingbird	*Mimus polyglottos*	Passeriformes	Mimidae	None	None
Common Yellowthroat	*Geothlypis trichas*	Passeriformes	Parulidae	None	None
Yellow-breasted Chat[2]	*Icteria virens*	Passeriformes	Parulidae	None	None
Yellow Warbler[2]	*Setophaga petechia brewsteri*	Passeriformes	Parulidae	None	None
Coastal California Gnatcatcher[1,2]	*Polioptila californica californica*	Passeriformes	Polioptilidae	Threatened	None
House Wren	*Troglodytes aedon*	Passeriformes	Troglodytidae	None	None
Pacific-slope Flycatcher	*Empidonax difficilis*	Passeriformes	Tyrannidae	None	None
Ash-throated Flycatcher	*Myiarchus cinerascens*	Passeriformes	Tyrannidae	None	None

Common Name	Scientific Name	Order	Family	Federal Status (Endangered/ Threatened)	California Status (Endangered/ Threatened)
Black Phoebe	*Sayornis nigricans*	Passeriformes	Tyrannidae	None	None
Say's Phoebe	*Sayornis saya*	Passeriformes	Tyrannidae	None	None
Western Kingbird	*Tyrannus verticalis*	Passeriformes	Tyrannidae	None	None
Cassin's Kingbird	*Tyrannus vociferans*	Passeriformes	Tyrannidae	None	None
Least Bell's Vireo[1]	*Vireo bellii pusillus*	Passeriformes	Vireonidae	Endangered	Endangered
Warbling Vireo	*Vireo gilvus*	Passeriformes	Vireonidae	None	None
Great Blue Heron	*Ardea herodias*	Pelecaniformes	Ardeidae	None	None
Great Horned Owl	*Bubo virginianus*	Strigiformes	Strigidae	None	None
Double-crested Cormorant	*Phalacrocorax auritus*	Suliformes	Phalacrocoracidae	None	None
Mammals					
Mule Deer[1]	*Odocoileus hemionus*	Artiodactyla	Cervidae	None	None
San Diego Black-tailed Jackrabbit[1,2]	*Lepus californicus bennettii*	Lagomorpha	Leporidae	None	None
Desert Cottontail	*Sylvilagus audubonii*	Lagomorpha	Leporidae	None	None
California Ground Squirrel	*Spermophilus beecheyi*	Rodentia	Sciuridae	None	None

[1] SDG&E Natural Community Conservation Plan Species
[2] CDFW Species of Special Concern
[3] CDFW Watch List

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November 7, 2014

Ms. Stacey Love
2177 Salk Avenue, Ste. 250
Carlsbad, CA 92008

RE: 2014 Coastal California Gnatcatcher Survey Report for Salt Creek Substation and Power Line Project, Chula Vista, California

Dear Ms. Love:

This letter summarizes results of protocol surveys for the coastal California gnatcatcher (*Polioptila californica californica*; CAGN) conducted during 2014 by GeomorphIS for AECOM for the proposed Salt Creek Substation and Power Line Project (project) in Chula Vista, California, for San Diego Gas & Electric (SDG&E). GeomorphIS complied with all guiding principles in the current U.S. Fish and Wildlife (USFWS) protocol for 2001. This report is submitted as a condition of the Threatened and Endangered Species Permit TE799569-5.

Project Location

The project site is situated approximately 15 miles southeast of downtown San Diego and 5 miles north of the international border with Mexico (Figure 1). The proposed Salt Creek Substation and the majority of the proposed power line are located in the eastern portion of the City of Chula Vista, California (Figure 2). The proposed Salt Creek Substation is located adjacent to and southeasterly of Hunte Parkway in the City of Chula Vista. Approximately 4,700 linear feet of the northernmost portion of the proposed power line is located in the unincorporated portion of San Diego County on SDG&E fee-owned land surrounding the Existing Miguel Substation (Existing Substation). The remaining portion of the proposed power line is located within the City of Chula Vista.

Project Description

The proposed project includes the installation of a new substation (proposed Salt Creek Substation), a new 69-kilovolt (kV) power tie-line (TL) from the Existing Substation to the proposed Salt Creek Substation (TL 6965), and modifications to the Existing Substation. The primary objectives of the proposed project are to provide additional capacity to serve existing area load and future customer-driven electrical load growth, and to provide the necessary distribution and transmission network to prevent long-term outages or disruptions of service to existing customers in the southeastern portion of SDG&E's service territory.

The proposed project includes four primary components:

- Construction and operation of a 120-megavolt ampere 69/12kV proposed Salt Creek Substation, including construction and operation of underground 12kV distribution circuits.

- Power lines, including construction and operation of a 5-mile-long overhead 69kV power line 6965 (TL 6965), from the Existing Substation to the proposed Salt Creek Substation, and construction and operation of a 69kV power line loop-in (TL 6910) to the proposed Salt Creek Substation.
- Modifications at the Existing Substation, including installation of a new 69kV power line position.
- Three temporary staging yards have been identified for the project: one at the Existing Substation (Existing Staging Yard); a second on the north side of Hunte Parkway between Discovery Falls, Eastlake Parkway, and Crossroads Street (Hunte Parkway Staging Yard); and a third within the transmission corridor between Eastlake Parkway and State Route (SR) 125 (Eastlake Parkway Staging Yard). Alternate staging sites at the Olympic Training Center facility, south of Olympic Parkway, have also been identified. These alternate staging sites are not included in the project analysis provided herein.

Site Description

The biological study area includes the proposed Salt Creek Substation, the TL corridor, and three staging yards plus a 500-foot (150-meter) survey buffer around each of these areas (Figure 2). The biological study area occurs within the City of Chula Vista's Multiple Species Conservation Program Subarea Plan (Subarea Plan) Otay Ranch Planning Area, within areas planned for development (i.e., outside of the Otay Ranch Preserve) (Figure 2).

The project site is located on flat-to-gentle slopes along previously disturbed areas near the Existing Substation and within an existing SDG&E right-of-way. The proposed Salt Creek Substation is primarily flat with a gentle slope across the site. Habitat at the northern end of the transmission line corridor, near the existing Miguel Substation, includes nonnative grassland, Diegan coastal sage scrub, and riparian scrub. Habitat along the central portion of the transmission line corridor consists of grassland habitats, disturbed areas with very little native vegetation, and native vegetation consisting of small patches of coastal sage scrub. Habitat at the southern end of the transmission line corridor near the proposed Salt Creek Substation is dominated by nonnative grassland, Diegan coastal sage scrub, riparian scrub, and disturbed areas.

Commercial and residential developments are located within and adjacent to the project site. Other development features present include major transportation corridors (SR-125), asphalt and compacted earthen roads, trails, fencing, ephemeral and intermittent stream features, culverts, and swales. Potential jurisdictional "waters of the U.S." (including wetlands) are also present on-site, including stream features and vegetated wetlands.

The CAGN preferred breeding habitat, coastal sage scrub, is dominated on-site by California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*) and, to a much lesser extent, includes native species such as deerweed *(Lotus scoparius)*, laurel sumac (*Malosma laurina),* and desertbroom *(Baccharis sarothroides)*.

CAGN surveys were historically completed for the project in 2011 within the proposed Salt Creek Substation and 500-foot buffer, and in 2012 within the proposed transmission corridor, staging yards, and a 500-foot buffer.

Background Information

CAGN is federally listed as threatened by USFWS (USFWS 1993) and is considered a species of special concern by the California Department of Fish and Wildlife (CDFW 2014. Critical habitat was originally designated by USFWS for CAGN in 2000 and was revised with a final rule published in 2007 (USFWS 2007). CAGN is an uncommon year-round resident of Southern California. Its populations over the past few decades have declined drastically due to the loss, degradation, and fragmentation of coastal sage scrub habitat in the six Southern California counties located within the coastal plain (San Bernardino, Ventura, Los Angeles, Orange, San Diego, and Riverside). CAGN have been demonstrated as susceptible to the negative impacts of habitat fragmentation and development activity (Atwood 1990; ERCE 1990), and USFWS has estimated that coastal sage scrub habitat has been reduced by 70% to 90% from its historical extent (USFWS 1991).

CAGN generally inhabit Diegan coastal sage scrub and Riversidian coastal sage scrub typically dominated by California sagebrush and California buckwheat along the coastal slope. CAGN pairs will attempt several nests each year, each placed in a different location inside of their breeding territory, but most nest attempts are unsuccessful due to predation by a variety of species (Atwood and Bontrager 2001). Clutch size ranges from one to five eggs, with three or four eggs most common. CAGN tend to have smaller clutches and commence nest building later than usual in years with below normal rainfall, and will experience a higher rate of mortality during cold winters (Atwood and Bontrager 2001; Grishaver et al. 1998). CAGN remain paired through the nonbreeding season and will expand their home range, including sporadic use of other habitats bordering coastal sage scrub.

Survey Methodology

A minimum of 55 acres of potentially suitable CAGN habitat occurs within the project biological study area (Figures 3a and 3b), some of which is contiguous with coastal sage scrub habitat that extends well beyond the project borders. Surveys were conducted by project biologist Renée Owens in June 2014 within and bordering all suitable CAGN habitat in the biological study area (Figure 2). Three repeat surveys were carried out during times and conditions appropriate for protocol surveys (between 6 a.m. and 12 noon). Each survey took place across 2 calendar days.

The surveys were conducted by methodically walking transects along and within the habitat, including areas proximal to the perimeter of the study area. The route was arranged to ensure complete survey coverage of the site and the immediately contiguous areas.

Binoculars were used to aid in bird detection. The permitted biologist's endangered species permit for presence/absence and monitoring allows for the use of song playback to aid detection of CAGN; however, vocalizations were played very sparingly, and only if or when

other means of detection failed after 15 to 20 minutes of passive observation within a given area. Upon CAGN detection, use of playback was discontinued. Surveys were not conducted during periods of inclement weather such as extreme wind or during a rain event, and followed the *Coastal California Gnatcatcher Presence/Absence Survey Guidelines* (USFWS 1997).

Results

A summary of survey dates, times, and weather conditions is presented in Table 1. Locations of all CAGN detections are indicated in Figure 3. In the discussion below, CAGN observation numbers correspond to distinct locations, or parts of "territories" repeatedly used by members of a family group, as described. Adult males and females were distinguished from each other, and from juveniles, based on plumage and behavior. None of the CAGN detected were banded. A photo of a CAGN individual within the project area is provided in Figure 5.

Table 1
Coastal California Gnatcatcher Survey Conditions and Results

Survey	Date	Time	% Cloud Cover (Start–End)	Temperature (°F) (Start–End)	Average Wind Speed (mph) (Start–End)	CAGN Observed
1	June 13, 2014	0700–1200	100–15	62–75	0 – 3.5	Yes
1	June 14, 2014	0700–0910	100–25	63–71	0 – 1.8	Yes
2	June 20, 2014	0610–1200	100–5	65–76	0 – 3.3	Yes
2	June 21, 2014	0715–0845	90–15	64–70	0 – 2.0	Yes
3	June 27, 2014	0625–1200	90–5	64–77	0 – 4.5	Yes
3	June 28, 2014	0705–0830	100–30	65–71	0 – 1.7	Yes

°F = degrees Fahrenheit; mph = mile per hour

Throughout the three surveys, a total of 20 gnatcatchers were observed comprising seven family groups; with seven adult males, seven adult females, four juveniles, and two nestlings. It should be noted that one of the adult pairs was observed foraging primarily to the west just beyond the biological study area (Figure 3b).

(1A) Adult pair detected flying throughout this section of habitat (Figure 3a), observed together foraging, no signs of nesting at the time were noted (e.g., nest site searching behavior, nest building, nest defense vocalizations, carrying food to nest area, carrying fecal sac away from nest area, etc.). This pair was detected on each survey date briefly joining the two juveniles that were focusing their foraging efforts in location #1B (Figure 3a).

(1B) Two juveniles occasionally joined and followed by pair #1, but focusing the majority of their foraging efforts farther north of where pair #1 was observed foraging most of the time (Figure 3a).

(2) Adult pair with **two nestlings,** nest located in sagebrush (*Artemesia californica)*. No juveniles observed, pair observed switching incubating throughout all three surveys. Nest was approached only once to maintain minimal disturbance (Figure 3a).

(3) *Adult pair, during the first survey observed female foraging, male scolding while flying to and from a shrub with an empty CAGN nest. Nest showed no evidence of having held nestlings (no dander, fecal remnants, parasites, etc.), was not old, and could have been recently predated or abandoned. Nest was not observed being used or visited during any other surveys; pair observed foraging widely between the general nest area and habitat to the east, including habitat that within approximately 100 feet east of the project site buffer (Figure 3a).

*This pair's habitat use was proximal to, but outside of, the project area.

(4) Adult pair with two juveniles observed foraging widely. During the first survey, the adult male of the group was observed countersinging with male from location #5 (Figure 3b).

(5) Adult pair, observed moving and foraging in coastal sage scrub habitat to the north and east, including foraging in riparian habitat to the east. No sign of nesting observed, no fledges or juveniles were observed. Male briefly countersang with pair #4 (Figure 3b).

(6) Adult pair, observed foraging in coastal sage scrub and also willow riparian habitat. Male scolded and countersang with male from pair/observation #7 (Figure 3b). No sign of nesting observed, no fledges or juveniles observed; however, pair stayed close to this locale and was not observed to move widely beyond this general location.

(7) Adult pair, observed foraging widely in coastal sage scrub habitat from this locale to habitat farther east and south of the pond. Male observed countersinging with male from neighboring pair (observation #6, (Figure 3b).

In addition to the CAGN, five special-status wildlife species (CDFG 2014) were detected during CAGN surveys within or adjacent to the biological study area. (Table 2). Also, a San Diego cactus wren (*Campylorhynchus brunneicapillus couesi*) was heard vocalizing to the east of the southernmost survey area; however, this species was over 200 feet from the survey area and is thus not included in Table 2. All species detected incidentally within or bordering the biological study area are listed in Appendix A.

While observing gnatcatcher pair #6, a least Bell's vireo (LBV) was detected vocalizing and demonstrating nest-building behavior nearby; the LBV was in close proximity to the CAGN pair. Because the project biologist, Renée Owens, is also federally permitted to conduct nest monitoring surveys of LBV, and because she was in a position to easily observe (with minimal disturbance) the LBV as it moved through a very narrow riparian corridor, Ms. Owens located the nest as it was initially being constructed by the LBV pair (Figure 4). The nest area general location was also noted (Figure 3b).

Table 2
Special-Status Species Detected In Survey Area

Special-Status Species	Scientific name	GPS Location (UTM)
Least Bell's vireo (confirmed nesting)	*Vireo bellii pusillus*	11 S 0504904 3608909
Orange-throated whiptail	*Aspidoscelis hyperythra beldingi*	11 S 0505164 3609082
Yellow-breasted chat	*Icteria virens*	11 S 0505178 3609205
Yellow warbler	*Setophaga petechial*	11 S 0505027 3608889
Red-tailed hawk (confirmed nesting)	*Buteo jamaicensis*	11 S 0501845 3615395

GPS = Global Positioning System; UTM = Universal Transverse Mercator

If you have any questions or comments regarding this letter report, please contact me at 619.233.1454.

Sincerely,

Erin Riley
AECOM Senior Biologist

cc: Stephanie Ponce, California Department of Fish and Wildlife
Leslie Nelson, San Diego Gas & Electric
Pat Gower, U.S. Fish and Wildlife Service
Kyle Dutro, California Department of Fish and Wildlife
Bruce Goff, GeomorphIS

Certification Statement

This concludes the report for the 2014 focused survey for the coastal California gnatcatcher for the proposed Salt Creek Substation and Power Line Project for SDG&E, Chula Vista, California. The information in this survey report and attached exhibits fully and accurately represents the work of independent and permitted biologist Renée Owens; signature included below.

Renée Owens
Senior Biologist
Sage Wildlife Biology
Tel: 619-201-1965
Email: renee@wildlifezone.net

Attachments:
Figure 1 – Regional Map
Figure 2 – Project Components
Figures 3a, 3b – Coastal California Gnatcatcher Detections and Other Special-Status Species
Figure 4 – Least Bell's Vireo in Biological Study Area
Figure 5 – Coastal California Gnatcatcher in Biological Study Area
Appendix A –Wildlife Species Detected during Coastal California Gnatcatcher Surveys

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FIGURES

0 2 4 Miles

Scale: 1:250,000 1 inch = 4 miles

Figure 1
Regional Map

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2014\CAGN_2014\SaltCreek_CAGNSurvey2014_Fig1.mxd, 10/22/2014, E.D.Goff

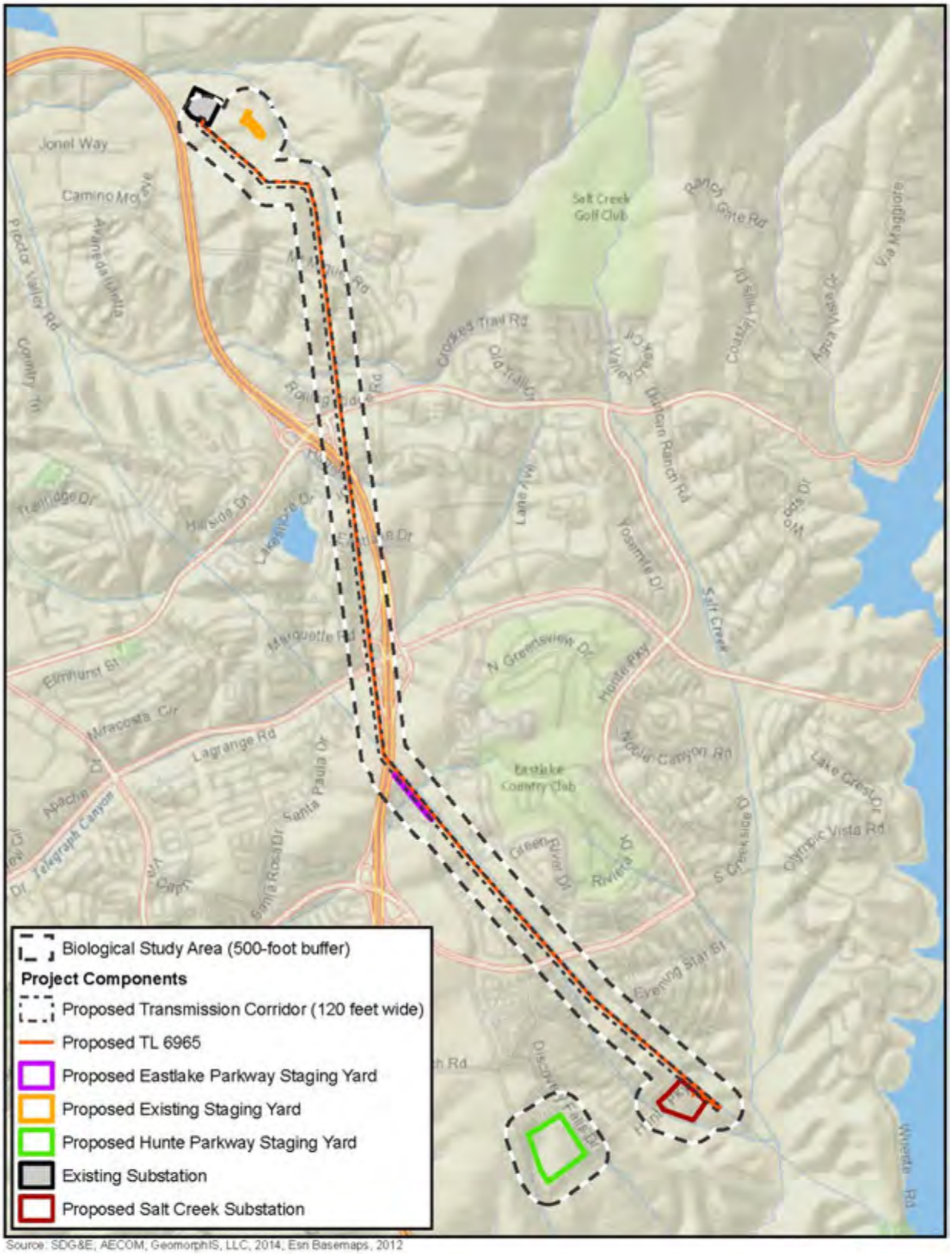


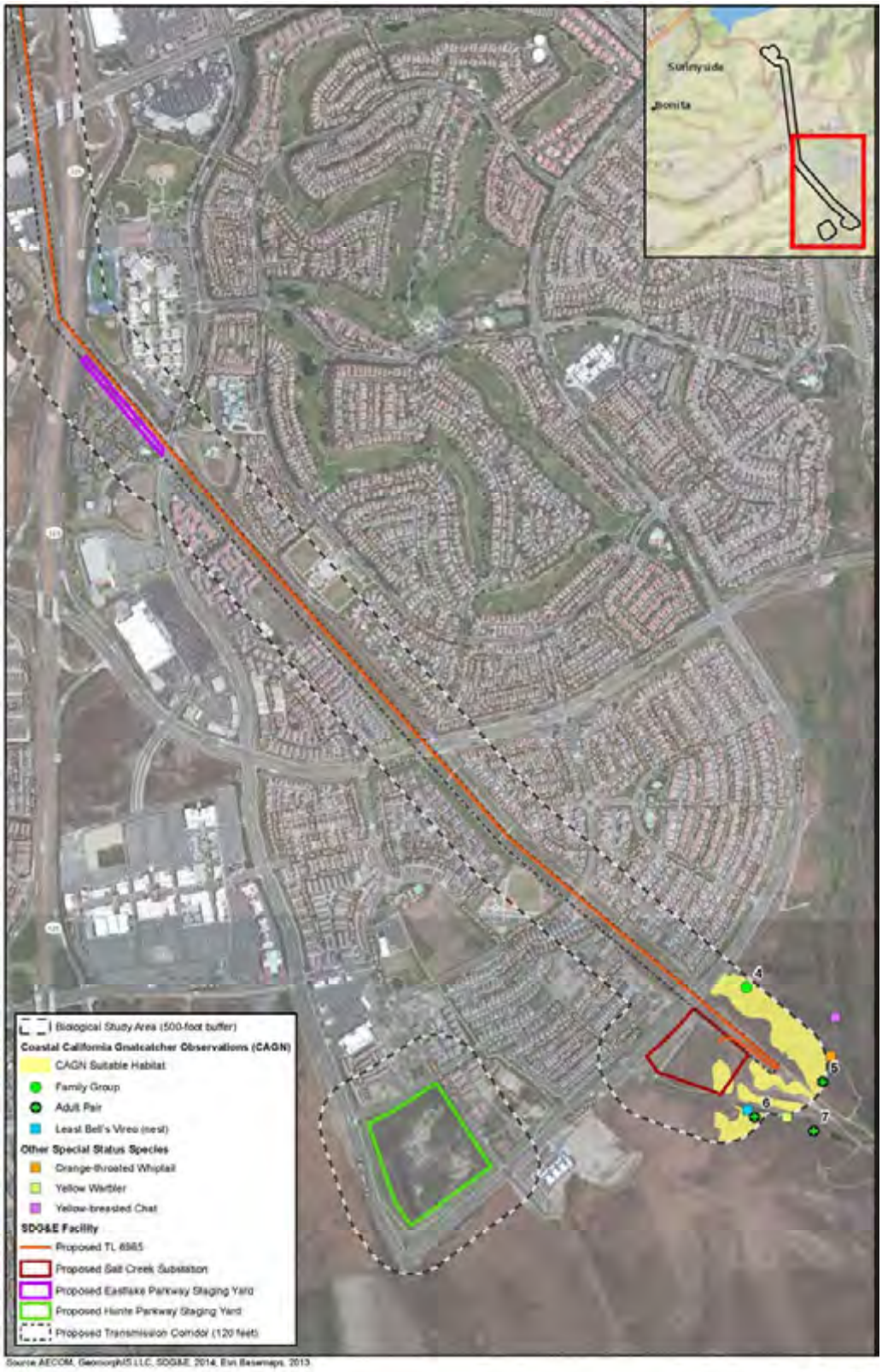
Figure 2
Project Components

Source: AECOM, Geomorphis LLC, SDG&E, 2014, Esri Basemaps, 2013

0 500 1,000 Feet

Scale: 1:12,000. 1 inch = 1,000 feet

Figure 3a
Coastal California Gnatcatcher Detections and Other Special-Status Species



Source: AECOM, GeomorphIS LLC, SDG&E 2014; Esri Basemaps, 2013

0 500 1,000 Feet

Scale: 1:12,000 1 inch = 1,000 feet

Figure 3b
Coastal California Gnatcatcher Detections and Other Special-Status Species

Figure 4 Least Bell's Vireo in Biological Study Area

Figure 5 Coastal California Gnatcatcher in Biological Study Area

APPENDIX A

WILDLIFE SPECIES DETECTED DURING COASTAL CALIFORNIA GNATCATCHER SURVEYS

Wildlife Species Incidentally Detected

TERRESTRIAL INVERTEBRATES	
Apidae	
Honey bee	*Apis mellifera*
Coenagrionidae	
Vivid dancer	*Argia vivida*
Formicidae	
California harvester ant	*Pogonomyrmex californicus*
Hesperiidae	
Sachem skipper	*Atalopedes campestris*
Lycaenidae	
Acmon blue	*Plebejus acmon*
Libellulidae	
Flame skimmer	*Libellula saturata*
Riodinidae	
Behr's metalmark	*Apodemia virgulti*
Nymphalidae	
California sister	*Adelphia bredowii californica*
Coronis fritillary	*Speyeria coronis*
Monarch	*Danaus plexippus*
Mourning Cloak	*Nymphalis antiopa*
Painted lady	*Vanessa cardui*
Papilionidae	
Pale swallowtail	*Papilio eurymedon*
Pieridae	
Cabbage white	*Pieris rapae*
Pompilidae	
Tarantula hawk wasp	*Pepsis* sp.
Tenebrionidae	
Darkling beetle	*Coelocnemis californicus*

REPTILES	
Colubridae	
San Diego gopher snake	*Pituophis catenifer annectens*
Phrynosomatidae	
Granite spiny lizard	*Sceloporus orcuttii*
Western fence lizard	*Sceloporus occidentalis*
Western side-blotched lizard	*Uta stansburiana elegans*
Teiidae	
Orange-throated whiptail	*Aspidoscelis hyperythra beldingi* ±

BIRDS	
Accipitridae	
Red-tailed hawk	*Buteo jamaicensis* ± †
Aegithalidae	
Bushtit	*Psaltriparus minimus*
Ardeidae	
Snowy egret	*Egretta thula*
Cardinalidae	

BIRDS	
Blue grosbeak	*Passerina caerulea*
Black-headed grosbeak	*Pheucticus melanocephalus*
Cathartidae	
Turkey vulture	*Cathartes aura* (flyover)
Charadriidae	
Killdeer	*Charadrius vociferus*
Columbidae	
Mourning dove	*Zenaida macroura*
Corvidae	
American crow	*Corvus brachyrhyncus*
Common raven	*Corvus corax*
Western scrub jay	*Aphelocoma coerulescens*
Cuculidae	
Greater roadrunner	*Geococcyx californianus*
Emberizidae	
California towhee	*Pipilo crissalis* †
Rufous-crowned sparrow	*Aimophila ruficeps canescens*
Song sparrow	*Melospiza melodia*
Spotted towhee	*Pipilo maculates*
Fringillidae	
American goldfinch	*Carduelis tristis*
House finch	*Carpodacus mexicanus*
Lesser goldfinch	*Careuelis psaltria* †
Hirundinidae	
Cliff swallow	*Petrochelidon pyrrhonota*
Northern rough-wing swallow	*Stelgidopteryx serripennis*
Icteridae	
Bullock's oriole	*Icterus bullocki*
Red-winged blackbird	*Agelaius phoeniceus*
Western meadowlark	*Sturnella neglecta*
Mimidae	
California thrasher	*Toxostoma redivivum*
Northern mockingbird	*Mimus polyglottos*
Muscicapidae	
Western bluebird	*Sialia mexicana*
Wrentit	*Chamaea fasciata*
Parulidae	
Common yellowthroat	*Geothlypis trichas*
Orange-crowned warbler	*Oreothlypis celata*
Yellow-breasted chat	*Icteria virens* ±
Yellow warbler	*Setophaga petechia* ±
Wilson's warbler	*Wilsonia pusilla*
Phasianidae	
California quail	*Callipepla californica* †
Polioptilidae	
Coastal California gnatcatcher	*Polioptila californica californica* Ŧ†
Trochilidae	
Anna's hummingbird	*Calypte anna*
Costa's hummingbird	*Calypte costae*
Troglodytidae	
Bewick's wren	*Thryomanes bewickii*
Marsh wren	*Cistothorus palustris* †

BIRDS	
Tyrannidae	
Ash-throated flycatcher	*Myiarchus cinerascens*
Black phoebe	*Sayornis nigricans*
Cassin's kingbird	*Tyrannus vociferans*
Say's phoebe	*Sayornis saya*
Vireonidae	
Least Bell's vireo	*Vireo bellii pusillus* * ± †

MAMMALS	
Canidae	
Coyote	*Canis latrans*
Cervidae	
California mule deer	*Odocoileus hemionus californicus*
Geomyidae	
Botta's pocket gopher	*Thomomys bottae*
Leporidae	
Desert cottontail	*Sylvilagus auduboni*
Sciuridae	
California ground squirrel	*Spermophilus beecheyi*

Ŧ = Federally Listed as Threatened

* = Federally Listed as Endangered

± California Species of Special Concern

† = Observed evidence of nestingon-site

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November 11, 2014

Stacey Love
Recovery Permit Coordinator
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92011

RE: 2014 Least Bell's Vireo Survey Report for Salt Creek Substation and Power Line Project, Chula Vista, California

Dear Ms. Love:

This letter summarizes results of protocol surveys conducted during 2014 by GeomorphIS as a subconsultant to AECOM to determine the presence or absence of the federally endangered least Bell's vireo (*Vireo bellii pusillus*; LBV) within the proposed Salt Creek Substation and Power Line project site (project site) in San Diego County (Figure 1). Surveys were previously conducted for this project on behalf of San Diego Gas & Electric (SDG&E) in 2011 (Mulrooney 2011).

Project Location

The project site is situated approximately 15 miles southeast of downtown San Diego and 5 miles north of the international border with Mexico (Figure 1). The proposed Salt Creek Substation and the majority of the proposed power line are located in the eastern portion of the City of Chula Vista, California (Figure 2). The proposed Salt Creek Substation is located adjacent to and southeasterly of Hunte Parkway in the City of Chula Vista. Approximately 4,700 linear feet of the northernmost portion of the proposed power line is located in the unincorporated portion of San Diego County on SDG&E fee-owned land surrounding the Existing Miguel Substation (Existing Substation). The remaining portion of the proposed power line is located within the City of Chula Vista.

Project Description

The proposed project includes the installation of a new substation (proposed Salt Creek Substation), a new 69-kilovolt (kV) power tie-line (TL) from the Existing Substation to the proposed Salt Creek Substation (TL 6965), and modifications to the Existing Substation. The primary objectives of the proposed project are to provide additional capacity to serve existing area load and future customer-driven electrical load growth, and to provide the necessary distribution and transmission network to prevent long-term outages or disruptions of service to existing customers in the southeastern portion of SDG&E's service territory.

The proposed project includes four primary components:

- Construction and operation of a 120-megavolt ampere 69/12kV proposed Salt Creek Substation, including construction and operation of underground 12kV distribution circuits.
- Power lines, including construction and operation of a 5-mile-long overhead 69kV power line 6965 (TL 6965), from the Existing Substation to the proposed Salt Creek Substation, and construction and operation of a 69kV power line loop-in (TL 6910) to the proposed Salt Creek Substation.
- Modifications at the Existing Substation, including installation of a new 69kV power line position.
- Three temporary staging yards identified for the project: one at the Existing Substation (Existing Staging Yard); a second on the north side of Hunte Parkway between Discovery Falls, Eastlake Parkway, and Crossroads Street (Hunte Parkway Staging Yard); and a third within the transmission corridor between Eastlake Parkway and SR-125 (Eastlake Parkway Staging Yard). Alternate staging sites at the Olympic Training Center facility, south of Olympic Parkway, have also been identified. These alternate staging sites are not included in the project analysis provided herein.

Site Description

The project survey area includes the proposed Salt Creek Substation, the TL corridor, and three staging yards plus a 500-foot (150-meter) survey buffer around each of these areas (Figure 2). The project survey area occurs within the City of Chula Vista's Multiple Species Conservation Program Subarea Plan (Subarea Plan) Otay Ranch Planning Area, within areas planned for development (i.e., outside of the Otay Ranch Preserve) (Figure 2).

The project site is located on flat-to-gentle slopes along previously disturbed areas near the Existing Substation and within an existing SDG&E right-of-way. The power line corridor is located within urban developed, landscape/ornamental, disturbed, nonnative grassland, and coastal sage scrub habitats and cover types. The proposed Salt Creek Substation (Figure 2) is primarily flat with a gentle slope across the site. The site is composed primarily of nonnative grassland, Diegan coastal sage scrub, and ornamental/landscaped cover types. Commercial and residential developments are located adjacent to the power line alignment. Other development features present include major transportation corridors (SR-125), asphalt and compacted earthen roads, trails, fencing, ephemeral and intermittent stream features, culverts, and swales. Potential jurisdictional "waters of the U.S." (including wetlands) are also present on-site, including stream features and vegetated wetlands.

The LBV survey area includes three primary areas of habitat and a total of approximately 1.78 acres that are mapped as potentially suitable within the 500-foot survey buffer shown in Figures 3a, 3b, and 3c.

The northernmost survey area (Figure 3a) is located at the north end of the SDG&E transmission line alignment near the Existing Substation (Figure 2). It is in a moderately sloped canyon with Diegan coastal sage scrub habitat. The habitat mapped as riparian scrub in Figure 3a is arroyo willow. The trees are arborescent and the habitat patch lacks a stratified understory. The understory is open and lacks shrubs. There is a small runoff stream with cattails that flows adjacent to the habitat patch. The smaller runoff channel that runs through the patch is mapped as riparian scrub and was dry throughout the survey period.

On the same map, Figure 3a, at the bottom of the hill there is a 0.05-acre area of potential habitat that was not initially identified for survey, which brings the original total of 1.73 acres of potentially suitable habitat up to the current 1.78 acres. This area is riparian woodland with a stratified canopy of arborescent arroyo willow and dense arroyo willow understory adjacent to a small freshwater cattail marsh. It receives perennial flow of water from irrigation runoff from the recreational park on the hill above. This area has the habitat components that LBV require except that it is very small and disjunct from any other suitable or occupied LBV habitat.

The next survey (middle survey area) was conducted approximately 130 feet east of the corner of Eastlake Drive and Ridgewater Drive (Figure 3b). This area has flat-to-gentle slopes along previously disturbed areas with patches of riparian habitat. The habitat had seasonal flow of water in its drainage with groundwater close enough to the surface in places to support a string of patchy riparian habitat along the northern portion of its length. This northern section is mapped as riparian woodland and supports a dense canopy of arroyo willow near the road. Farther south are some palms and eucalyptus as well as mature arroyo willow. This northern portion of habitat, mapped as riparian woodland, is fragmented within the project survey area as well as disjunct from other suitable or occupied habitat and it lacks perennial flow of water. The southern portion of this habitat, across the road from the tennis courts, is mostly mulefat scrub. While it is dense, it lacks an arborescent canopy, willows, and stratification typical of highly suitable LBV habitat.

The southernmost survey area, (Figure 3c) is coincident with the proposed Salt Creek Substation at the end of the power line alignment displayed in Figure 2. It is primarily flat with a gentle slope across the site and composed of primarily nonnative grassland, Diegan coastal sage scrub, with some riparian and ornamental/landscaped cover types. The riparian scrub habitat is a narrow ribbon of mostly willow habitat. The stream channel that supports it is a tributary of Salt Creek (Figure 2) with flow that goes below ground and surfaces intermittently along its length.

Background Information

LBV was listed as endangered by the U.S. Fish and Wildlife Service (USFWS) on May 2, 1986 (Federal Register 51[85]:16474–16481), with designated critical habitat (Federal Register 59[22]:4845–4867). This listing status applies to the entire population of LBV. A draft recovery plan was written by USFWS and circulated for review in 1998 (USFWS 1998). No critical habitat occurs within the biological study area. The California Department of Fish and Wildlife (CDFW) listed this subspecies as endangered on October 2, 1980.

Historically, this subspecies was a common summer visitor to riparian habitat throughout much of California. Currently, LBV is found only in riparian woodlands in Southern California, with the majority of breeding pairs in San Diego, Santa Barbara, and Riverside Counties. Substantial LBV populations are currently found on five rivers in San Diego County (Tijuana, Sweetwater, San Diego, San Luis Rey, and Santa Margarita Rivers), with smaller populations on other drainages. During 1996, there were 1,423 territorial males recorded within San Diego County (Unitt 2004). From 2001 through 2005, there were 1,609 pairs recorded in San Diego County, which accounts for approximately 54% of the total LBV population within California (USFWS 2006).

LBV is migratory and arrives in San Diego County in late March through early April and leaves for its wintering grounds in September. LBV primarily occupies riparian woodlands that include dense to moderately open cover within 3 to 7 feet of the ground and a dense, stratified canopy. The subspecies inhabits low, dense riparian growth along water or along dry parts of intermittent streams. The understory is typically dominated by species of willow (*Salix* sp.) and mulefat (*Baccharis salicifolia*). Overstory species typically include cottonwood (*Populus* sp.), western sycamore (*Platanus racemosa*), and mature willows. The subspecies typically builds nests in vegetation 3 to 4 feet above the ground (Salata 1984) where moderately open mid-story cover occurs with an overstory of willows, cottonwoods, sycamores, or coast live oaks (*Quercus agrifolia*). Nests are also often placed along internal or external edges of riparian thickets at an average of 3.3 feet above the ground (Unitt 2004). Riparian plant succession is an important factor in maintaining vireo habitat.

Decline of LBV is attributed to loss, degradation, and fragmentation of riparian habitat, combined with brood and nest parasitism by the brown-headed cowbird (*Molothrus ater*; BHCO). LBV are known to be sensitive to many forms of disturbance, including noise, night-lighting, and consistent human presence. Due to concerted programs focused on preserving, enhancing, and creating suitable nesting habitat, the LBV population has steadily increased in size along several of its breeding drainages in Southern California. Significant increases in breeding populations have occurred along the Santa Ana River at Prado Basin and on the Santa Margarita River on Marine Corps Base Camp Pendleton, as well as at several other sites throughout the region.

Survey Methodology

Project biologists relied on prior (2012) habitat assessment and vegetation mapping of the project survey area for identification of suitable LBV habitat. This was limited to riparian habitat within the three distinct sections of the project area. During the 2014 LBV survey, a small additional area of riparian woodland habitat was identified in the northernmost survey area and added to the overall riparian woodland habitat. Suitable LBV habitat totaled approximately 1.78 acres, including approximately 0.22 acre of mulefat scrub, 1.12 acres of riparian scrub, and 0.43 acre of riparian woodland. The distribution of these habitat types is shown in Figures 3a through 3c.

Project biologist Debra Kinsinger conducted the protocol LBV surveys according to USFWS protocol (USFWS 2001). She gathered global positioning system (GPS) data, recorded

observations of additional wildlife species observed on-site, and took photographs of the survey areas (Figures 4a through 4d). The occupied territory was determined by combining track and waypoint data from the GPS on multiple days and by following the birds along their territory from the road and on a trail on the opposite side of the stream from the road.

Waypoints were recorded at the location of the first LBV observation in the morning. Those observations are displayed in Figure 3c. Additional observations during each survey visit were noted by time and marking the approximate location on a physical map and describing their behavior in the field notes. The extent of the track from the initial waypoint delineated the observed boundaries of the territory for each day. At the end of the survey period, the farthest extent of the GPS track east and west along the habitat was recorded as the total length of habitat.

Biologist Renee Owens also contributed a photograph of nesting LBV in the survey area, taken while she conducted protocol surveys for coastal California gnatcatcher (*Polioptila californica californica*; CAGN) in the same general area (Figure 4d). Photographs of the three sites are shown in the Figures Attachment.

The surveys consisted of walking through all potential LBV habitat. Qualified project biologists conducted passive surveillance (i.e., listening and looking for the species) in all areas of suitable habitat for LBV. Suitable habitat within the project survey area was surveyed eight times, each survey at least 10 calendar days apart, during the 2014 breeding season, on May 8, 19, and 29, 2014; June 8, 17, and 28, 2014; and July 8 and 17, 2014 (Table 1). Surveys were completed between dawn and 11 a.m. Codes for avian species observed during the surveys are located in Appendix A. All avian species detected were recorded on field datasheets (see Appendix B, Field Data Sheets and Appendix C, Avian Field Notes).

Results

A summary of LBV survey data is presented in Table 1, including date of survey, time, weather conditions, and LBV observations. A total of one pair of LBV was detected within the riparian scrub along the SDG&E alignment. The extent of the LBV territory, 1.07 acres, and the presumed location of its nest are displayed in Figure 3c along with several waypoints where the pair was first observed each morning. California Species of Special Concern waypoints for a Cooper's hawk nest, yellow warbler, and yellow-breasted chat are also displayed in Figure 3c.

LBV were first heard calling from off-site on the main branch of Salt Creek on the second site visit, May 19, 2014. The main branch of Salt Creek is between 750 and 1,000 feet east from the end of the project survey area and north of the dirt road. In a brief visit to verify their presence within that off-site habitat, three LBV were detected defending territory on the main branch of Salt Creek. They were not detected venturing out from that habitat to the unnamed tributary within the survey area during that site visit or on the third site visit on May 29, 2014.

A male LBV was first detected within the survey area habitat on the fourth site visit, June 8, 2014. The LBV sang consistently and moved throughout a territory that extended from the east end of the riparian scrub habitat that is east of the pond where the transmission towers cross

the road, and west about halfway to the western extent of the habitat (Figure 3c). On the fifth survey date, June 17, 2014, a pair was observed in this same territory.

On the same day (June 17, 2014), while on-site for a protocol California gnatcatcher survey, biologist Renee Owens photographed the pair building a nest in a somewhat open area (Figure 4d). On the following three visits (June 28, 2014, July 08, 2014, and July 17, 2014), the pair were periodically seen foraging together but alternated hiding in the presumed nest location under a dense cover of scrub willow (see Figure 3c). On the last two surveys (July 08, 2014 and July 17, 2014), the presumed female made whisper calls to the male. The male responded and then patrolled the territory and foraged before returning to the nest. The pair appeared to be incubating. Parents were not carrying fecal sacs out of the nest area or insects into the area. Later in the morning of July 17, 2014, both male and female were observed briefly foraging together before returning to the nest area.

Table 1
Least Bell's Vireo Survey
Dates, Time, Weather, and Observations*

Survey #	Date	Weather	Site 3a LBV	Start End	Site 3b LBV	Start End	Site 3c LBV	Start End	Pair LBV	# of Adults	# of Juv.
1	05/08/14	Start 60°, no wind, overcast End: 65°, 3–5 mph, 0% clouds	N	10:40 11:00	N	10:00 10:30	N	07:50 09:45	N	–	–
2	05/19/14	Start 60°, wind 0–3 mph, overcast End: 80°, wind 3–5 mph, 0% clouds	N	10:40 11:00	N	09:50 10:25	N	07:42 09:30	N	–	–
3	05/29/14	Start: 65°, no wind, 0% clouds End: 78°, wind 3–5 mph, 0% clouds	N	10:45 11:00	N	10:00 10:30	N	08:06 09:30	N	–	–
4	06/08/14	Start 60°, no wind , overcast End: 75°, 5–10, 0% clouds	N	10:49 11:00	N	09:40 10:25	Y	06:48 09:00	?	1	0
5	06/17/14	Start 63°, no wind , 30% clouds End: 75°, 5–8 mph, 0% clouds	N	10:25 10:58	N	09:17 09:55	Y	07:12 09:00	Y	1	0

Survey #	Date	Weather	Site 3a LBV	Start End	Site 3b LBV	Start End	Site 3c LBV	Start End	Pair LBV	# of Adults	# of Juv.
6	06/28/14	Start: 63°, no wind, overcast End: 78°, wind 5–10 mph , 0% clouds	N	10:50 11:00	N	10:03 10:35	Y	07:03 9:30	Y	2	0
7	07/08/14	Start: 68°, wind 3–8 mph, overcast End: 80°, wind 3–8 mph, 0% clouds	N	10:53 11:00	N	09:30 10:00	Y	06:00 09:00	Y	2	0
8	07/17/14	Start 68°, wind 3–5 mph, 40% clouds, End: 78°, wind 5–10 mph, 0% clouds,	N	10:45 11:00	N	10:30 10:00	Y	08:00 09:30	Y	2	0

Y = Yes, N = No, ? = Undetermined, " – " Not applicable

A complete list of fauna observed during protocol LBV surveys is included as Appendix D. No BHCO, a species known to parasitically nest in LBV nests, were observed. The following special-status species were observed on-site during LBV surveys.

- Cooper's hawk (*Accipiter cooperii*; CDFW Watch List)
- coastal California gnatcatcher (federally threatened)
- yellow warbler (*Setophaga petechia*; California Species of Special Concern)
- yellow-breasted chat (*Icteria virens*; California Species of Special Concern)

Discussion

In the 2014 survey year, one pair of LBV used the habitat within the southernmost project survey area (Figure 3c). In 2011, no LBV had been detected using this habitat; however, in 2011, one LBV was observed outside the project's southernmost survey area (Figure 3c), at the confluence of the survey area stream and the main branch of Salt Creek (Figure 2). The off-site LBV location was approximately 1,000 feet southeast of where the transmission tower lines cross the road and the pond and not within the boundaries of Figure 3c.

Typically, LBV will defend their territory to the edge of the next territory with males coming within visual distance of one another while defending their territory. The male within the project survey area defended his territory only to the willow riparian habitat west of the pond where the transmission lines cross the road as displayed in Figure 3c.

The three LBV that were heard off-site on the main branch of Salt Creek on the second site visit (May 19, 2014) during an incidental observation were not observed to share territory with the

on-site pair of LBV. The off-site LBV were singing and defending territory approximately 1,000 feet southeast of the project survey area. No LBV from south of the pond were observed to cross the road from the main branch of Salt Creek and fly north of the pond to challenge the LBV defending the southern extremity of the territory to the north.

Among species that use the habitats of all three survey sites, it was noted that the warbling vireo (*Vireo gilvus*; WAVI), which builds open cup nests like the LBV, was detected during the spring migration but disappeared in early June to nest elsewhere, which is typical for migrating WAVI in San Diego County. The *San Diego County* Bird Atlas (Unitt 2004) notes that "Of any California bird, the warbling vireo is perhaps the most susceptible to cowbird parasitism. Cowbird trapping intended to benefit Bell's vireo is likely responsible for bringing the warbling vireo back – just barely – from the brink of extirpation as a breeding species in San Diego County." The few breeding WAVI are known to mostly occur in the north county and in the mountains (Unitt 2004).

While no BHCO were observed during the surveys, female BHCO seeking nests generally scout at first light and could have been missed. A number of BHCO were incidentally observed in traps located off-site on the main branch of Salt Creek where the off-site pairs of LBV were first heard on May 19, 2014.

If you have any questions or require additional information, please feel free to contact me at (619) 233-1454.

Sincerely,

Erin Riley

Erin Riley
Senior Biologist
erin.riley@aecom.com

Attachments:

- Figure 1 – Regional Map
- Figure 2 – Project Components
- Figure 3a–c – Least Bell's Vireo Detections and Other Special-Status Species
- Figure 4 a–d – Photographs
- Appendix A – Codes for Avian Species Observed
- Appendix B – Field Data Sheets from Least Bell's Vireo Protocol Surveys
- Appendix C – Summary of Avian Field Notes
- Appendix D – Other Wildlife Species Observed during Least Bell's Vireo Surveys

cc: Pat Gower, U.S. Fish and Wildlife Service
Kyle Dutro, California Department of Fish and Wildlife
Leslie Nelson, San Diego Gas & Electric
Bruce Goff, GeoMorphis

Certification Statement

Ms. Debra Kinsinger is a qualified biologist who conducted LBV surveys for the Salt Creek project location. Ms. Kinsinger certifies that the information in this survey report fully and accurately represents the work performed. The results of protocol-level surveys for listed species are typically considered valid for 1 year by the resource agencies.

Debbie Kinsinger
Wildlife biologist
Debra@KECBiz.com

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Mulrooney, Brennan. 2011. 45-Day Summary Report of 2014 Protocol Surveys for Least Bell's Vireo for the Proposed Salt Creek Substation for SDG&E, Otay Mesa, San Diego County, California. Unpublished report. AECOM, San Diego, CA.

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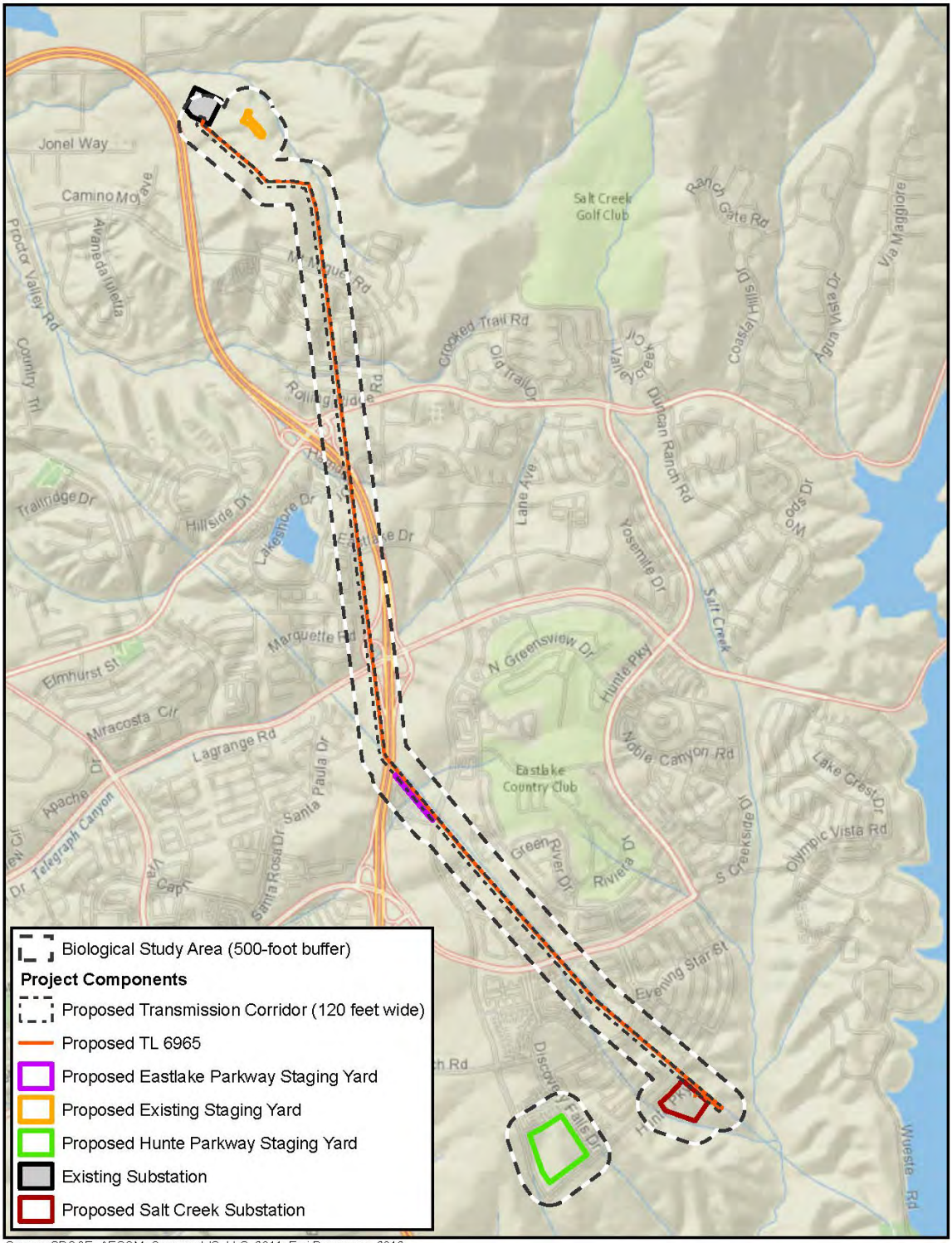
FIGURES

Source: GeomorphIS LLC, AECOM, SDG&E, 2014; Esri Basemaps, 2013

0 2 4 Miles

Scale: 1:250,000 1 inch = 4 miles

Figure 1
Regional Map



Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 1,600 3,200 Feet

Scale: 1:38,400 1 inch = 3,200 feet

Figure 2
Project Components

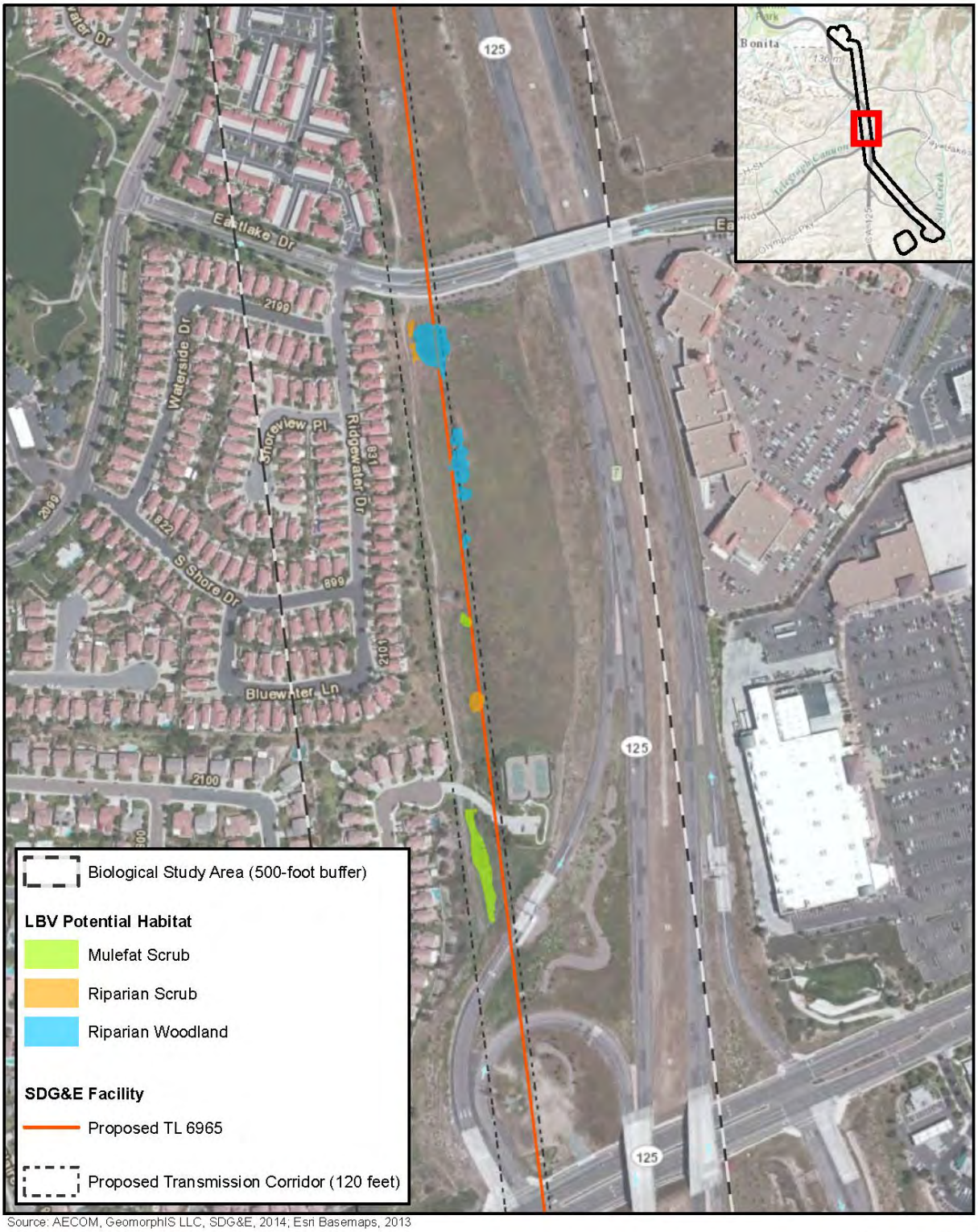
Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2014\LBVT\SaltCreek_LBV_Vicinity_Fig2.mxd, 9/29/2014, E D Goff,

Source: AECOM, GeomorphIS LLC, SDG&E, 2014; Esri Basemaps, 2013

0 200 400 Feet

Scale: 1:4,800 1 inch = 400 feet

Figure 3a
Least Bell's Vireo Detections and Other Special-Status Species



Source: AECOM, GeomorphIS LLC, SDG&E, 2014; Esri Basemaps, 2013

0 200 400 Feet

Scale: 1:4,800 1 inch = 400 feet

Figure 3b
Least Bell's Vireo Detections and Other Special-Status Species

Source: AECOM, GeomorphIS LLC, SDG&E, 2014; Esri Basemaps, 2013

0 200 400 Feet

Scale: 1:4,800 1 inch = 400 feet

Figure 3c
Least Bell's Vireo Detections and Other Special-Status Species

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2014\LBVI\SaltCreek_LBV_Species_Fig3.mxd, 9/30/2014, E D Goff

Figure 4a. North aspect of northernmost survey area at its south end looking at the patch of riparian scrub at the bottom of the concrete drive.

Figure 4b. North aspect of the middle survey area (Figure 3b in the main document) at its southern end looking at mulefat scrub on the east side of the dirt road, interspersed with coastal scrub species and ornamentals. This habitat was heavily used by house finch, lesser goldfinch, and song sparrow, probably nesting here. Ash-throated flycatcher visited this site in May and June 2014.

Figure 4c. Northwest aspect of the southernmost survey area at middle of the territory near the presumed nest location (left) in the foreground. Habitat along the road on the left and west of this point in the distant background was unoccupied (Figure 3c in the main document.

Figure 4d. Least Bell's vireo making a nest, 06/17/2014, in the southernmost survey area (Figure 3c in the main document). On the next visit to the site, the pair was not using this site.

APPENDIX A
CODES FOR AVIAN SPECIES OBSERVED

Codes for Avian Species Observed, All Sites

Code	English Name
ALHU	Allen's Hummingbird
AMCR	American Crow
AMGO	American Goldfinch
AMKE	American Kestrel
ANHU	Anna's Hummingbird
ATFL	Ash-throated Flycatcher
BCHU	Black-chinned Hummingbird
BEWR	Bewick's Wren
BHGR	Black-headed Grosbeak
BLGR	Blue Grosbeak
BLPH	Black Phoebe
BRBL	Brewer's Blackbird
BUSH	Bushtit
CAGN[Ŧ]	California Gnatcatcher
CAKI	Cassin's Kingbird
CALT	California Towhee
CAQU	California Quail
CATH	California Thrasher
CAVI	Cassin's Vireo
CLSW	Cliff Swallow
COHA	Cooper's Hawk
CORA	Common Raven
COYE	Common Yellowthroat
EUST	European Starling
GRRO	Greater Roadrunner
HETH	Hermit Thrush
HOFI	House Finch
HOOR	Hooded Oriole
HOSP	House Sparrow
HOWR	House Wren
KILL	Kill Deer
LBV[Ŧ]	Least Bell's Vireo
LEFL	Least Flycatcher
LEGO	Lesser Goldfinch
MODO	Mourning Dove
NOMO	Northern Mockingbird
NRWS	Northern Rough-winged Swallow
NUWO	Nuttall's Woodpecker

Code	English Name
OCWA	Orange-crowned Warbler
PHAI	Phainopepla
PSFL	Pacific-slope Flycatcher
RSHA	Red-shouldered Hawk
RTHA	Red-tailed Hawk
RTHA	Red-tailed Hawk
RWBL	Red-winged Blackbird
SAPH	Say's Phoebe
SOSP	Song Sparrow
SPTO	Spotted Towhee
WAVI	Warbling Vireo
WEKI	Western Kingbird
WEME	Western Meadowlark
WIWA	Wilson's Warbler
WREN	Wrentit
YBCH*	Yellow-breasted Chat
YEWA*	Yellow Warbler

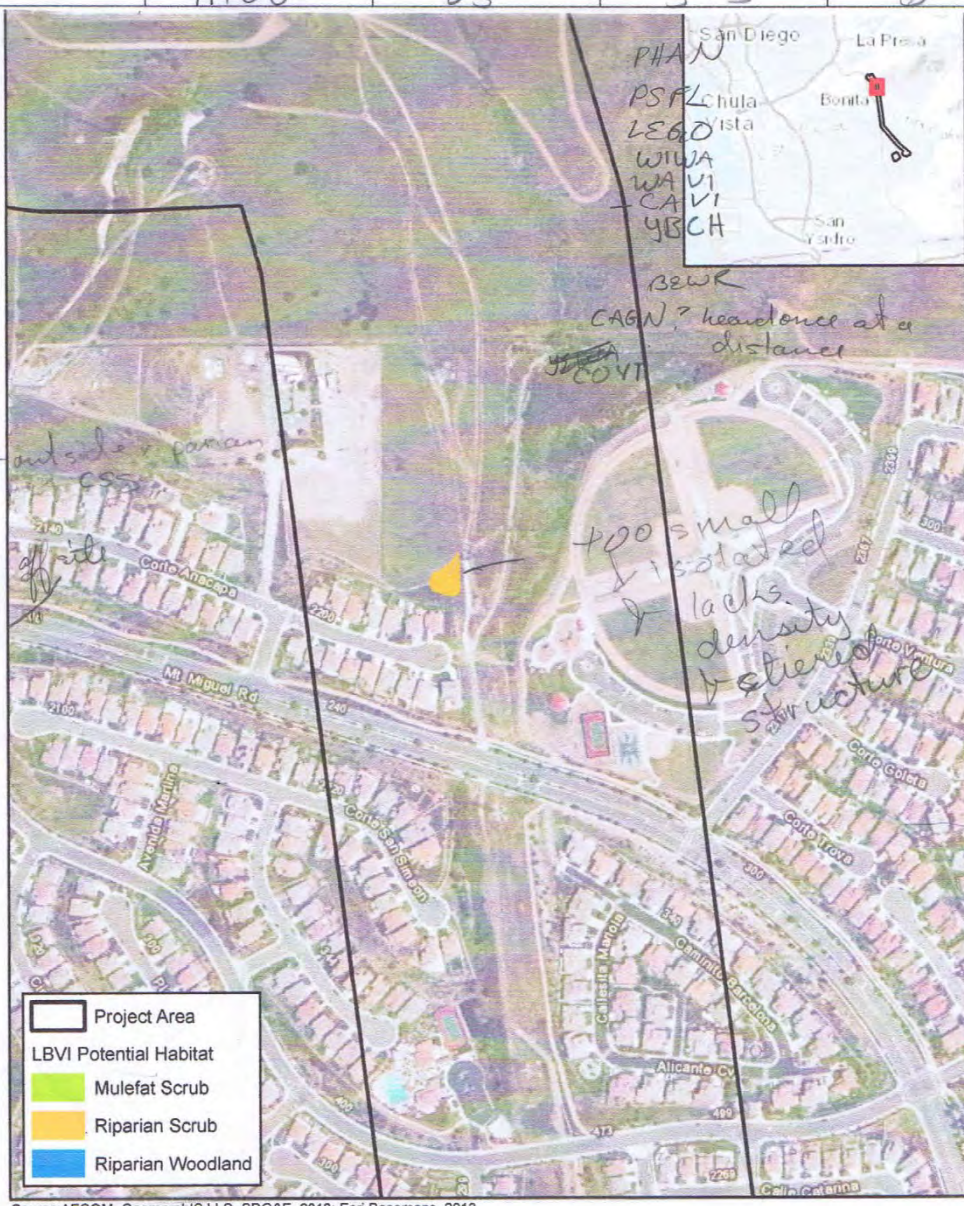
‡ = Federally Listed

* = California Species of Special Concern (nesting)

APPENDIX B
FIELD DATA SHEETS FROM
LEAST BELL'S VIREO PROTOCOL SURVEYS

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Northernmost	Debbie Kinsinger	LBV Protocol	5-8-14
	Time	Temperature°	Wind	Clouds
Begin	10:40	65°	3-5	0%
End	11:00	65°	3-5	0

SOSP
WEKI
HOFI
LEGO
SAPH
WIWA
ANHU
GRRD
WAVI
WRTI — outside riparian in CSS
CORA
HOWR — offsite
~~CATH~~
YBCH



SALAS
enothera
NL cattail
tamarisk
art. thistle
ARCA
VILA
ERFA

Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 200 400 Feet

Scale: 1:4,800 1 inch = 400 feet

Figure 2a
2014 Least Bell's Vireo Survey Area

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Middle	Debbie Kinsinger	LBV Protocol	5-8-14
	Time	Temperature	Wind	Clouds
Begin	10:00	65°	3-5	clear sunny
End	10:30	65°	3-5	no clouds

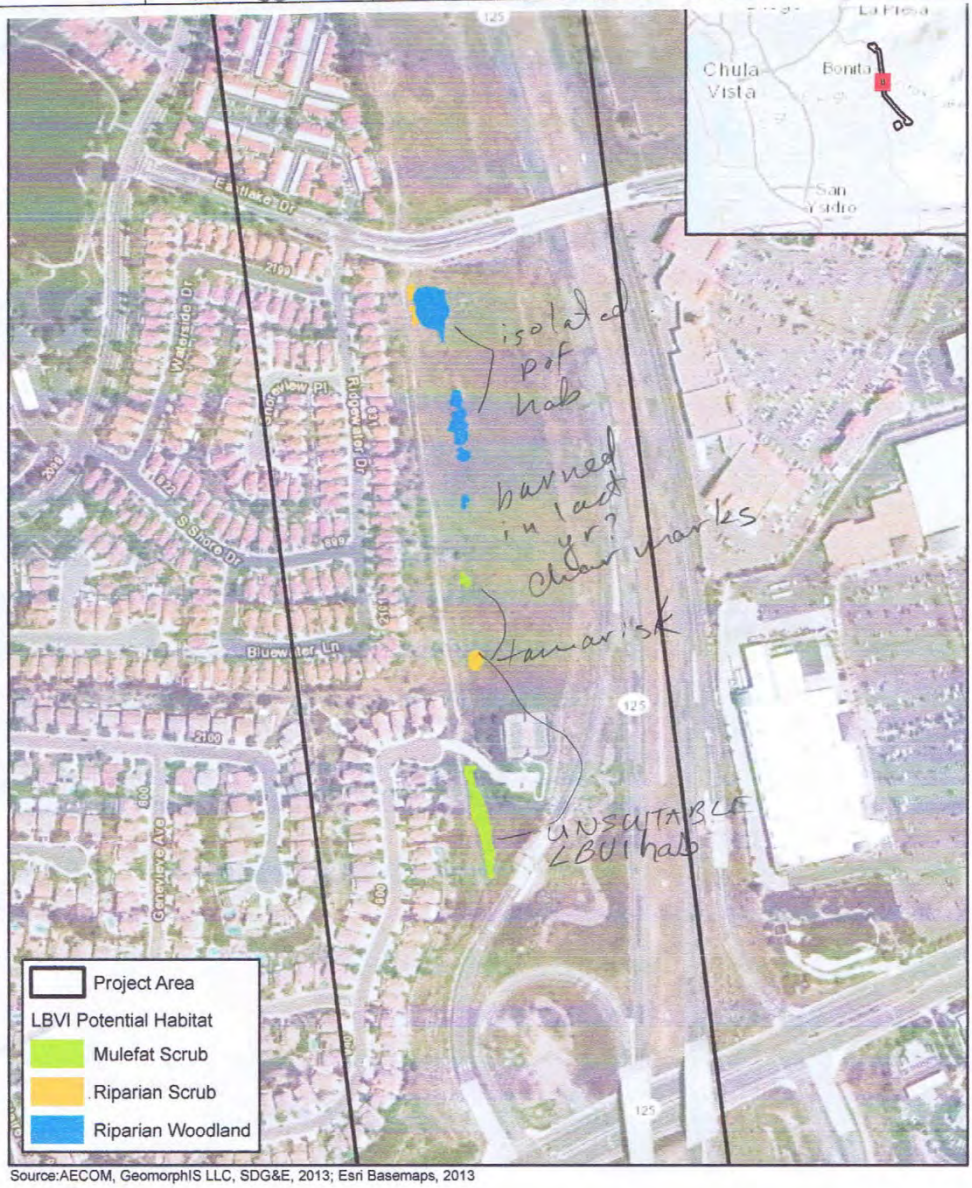


Figure 2b
2014 Least Bell's Vireo Survey Area

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Southernmost	Debbie Kinsinger	LBV Protocol	5-8-14
	Time	Temperature	Wind	Clouds
Begin	7:50	60°	no wind	overcast
End	9:45	64°	2-3	partly cldy

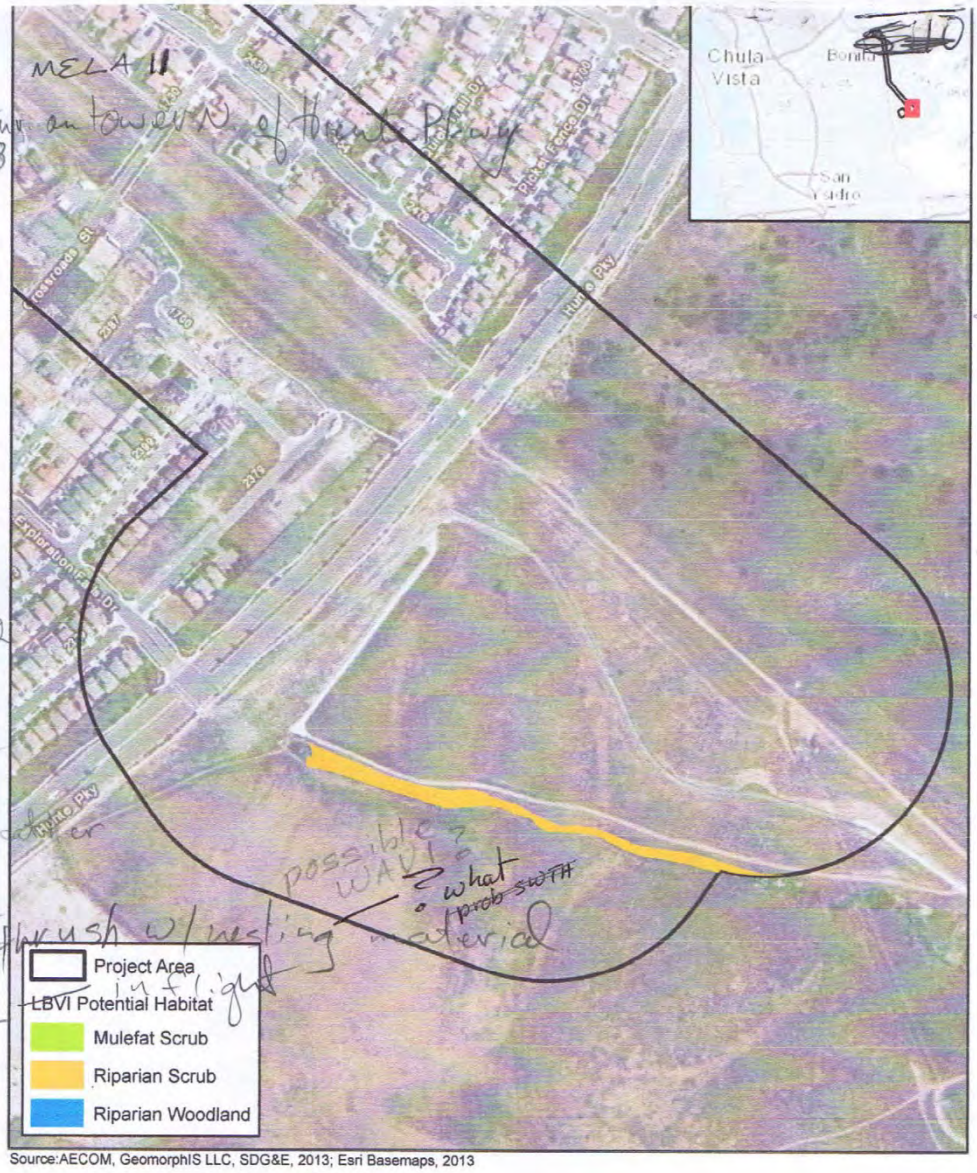
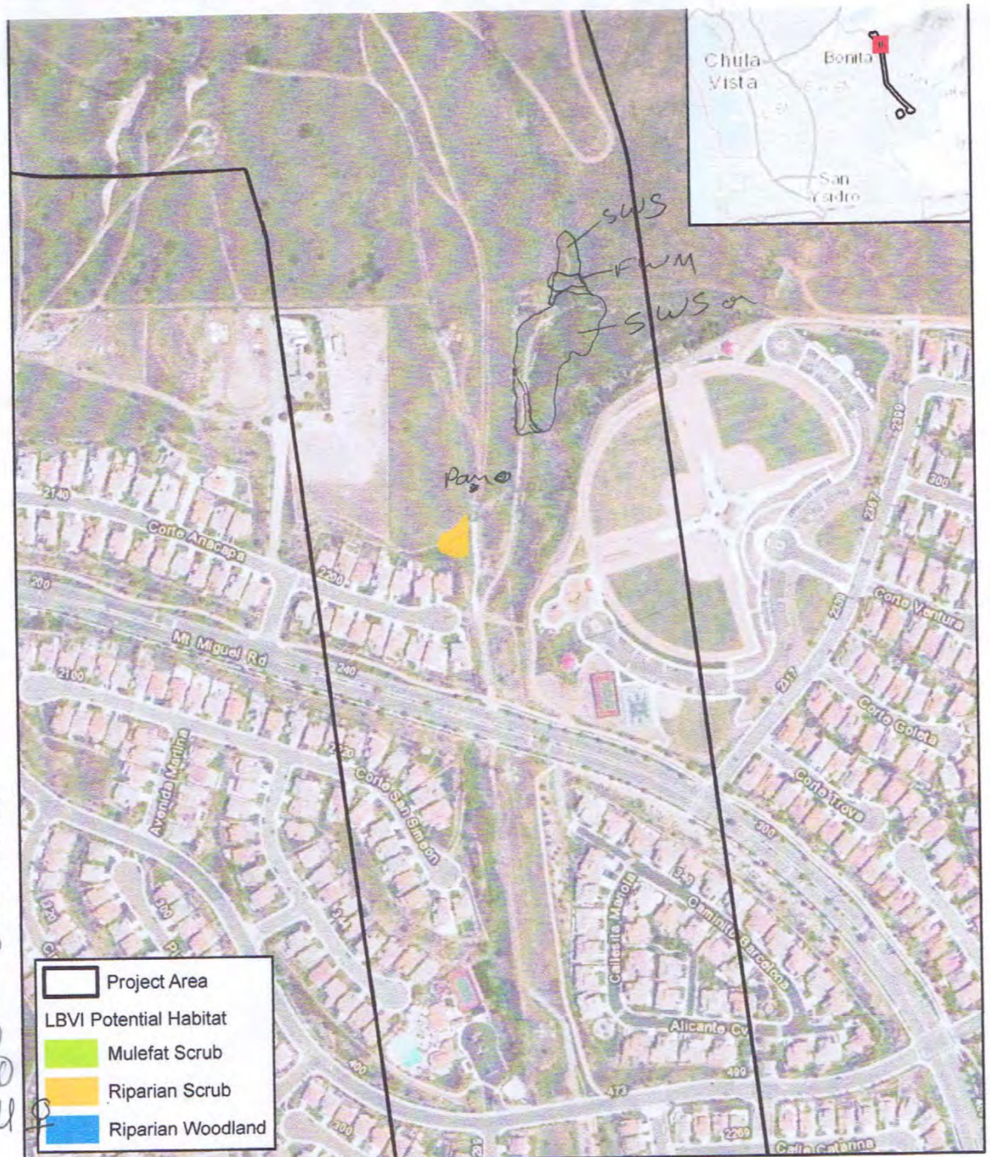


Figure 2c
2014 Least Bell's Vireo Survey Area

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Northernmost	Debbie Kinsinger	LBV Protocol	5/19/14
	Time	Temperature	Wind	Clouds
Begin	10:40	80°	3-5	clear sunny
End	11:00	80°	3-5	∅ clouds

CATO
LEGO
BUTI
HOFI
KIDE



2 ANHU
20 HOFI
20 BUTI
20 LEGO
1 COYE
4 SOSP
1 WRTI
6 CATO
1 NOMO
1 BCHU ♀

Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 200 400 Feet

Scale: 1:4,800 1 inch = 400 feet

Figure 2a
2014 Least Bell's Vireo Survey Area

Behr's metalmark

Least Bell's Vireo Notification Letter

Path: C:\Projects\AECOM\SaltCreek Substation\GIS\Survey2014\SaltCreek_LBVsurvey_May2014.mxd, 5/6/2014, E.D.Goff

HOMY

tamarix
SAGO

slender contour

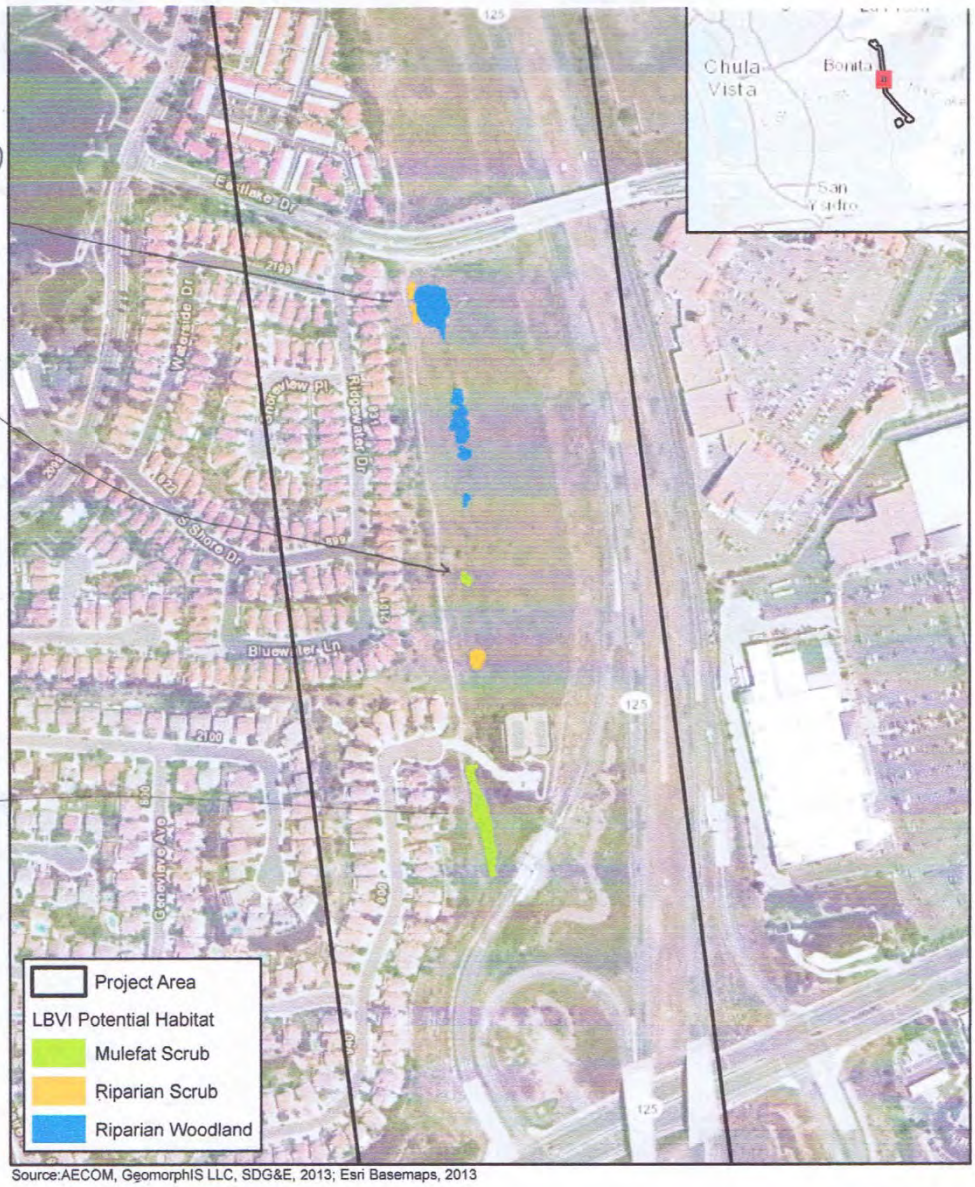
bur clover > chalochortus
copper mallow
bristley ox tongue

Alyssum
polygonum

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Middle	Debbie Kinsinger	LBV Protocol	5/19/14
	Time	Temperature	Wind	Clouds
Begin	9:50	70°	3-5	clear sunny no clouds
End	10:25	70°	3-5	

2WAVI
IPSFL
20NOFI
3RWSW
B
1 SPTO
1 ANHU
1 MODO
CORA
RSHA
SARH
AMCR
1 BUTI
1 CAT 0
WEKI

ANHU
HOFI
AMCR
CATO
BUTI



Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

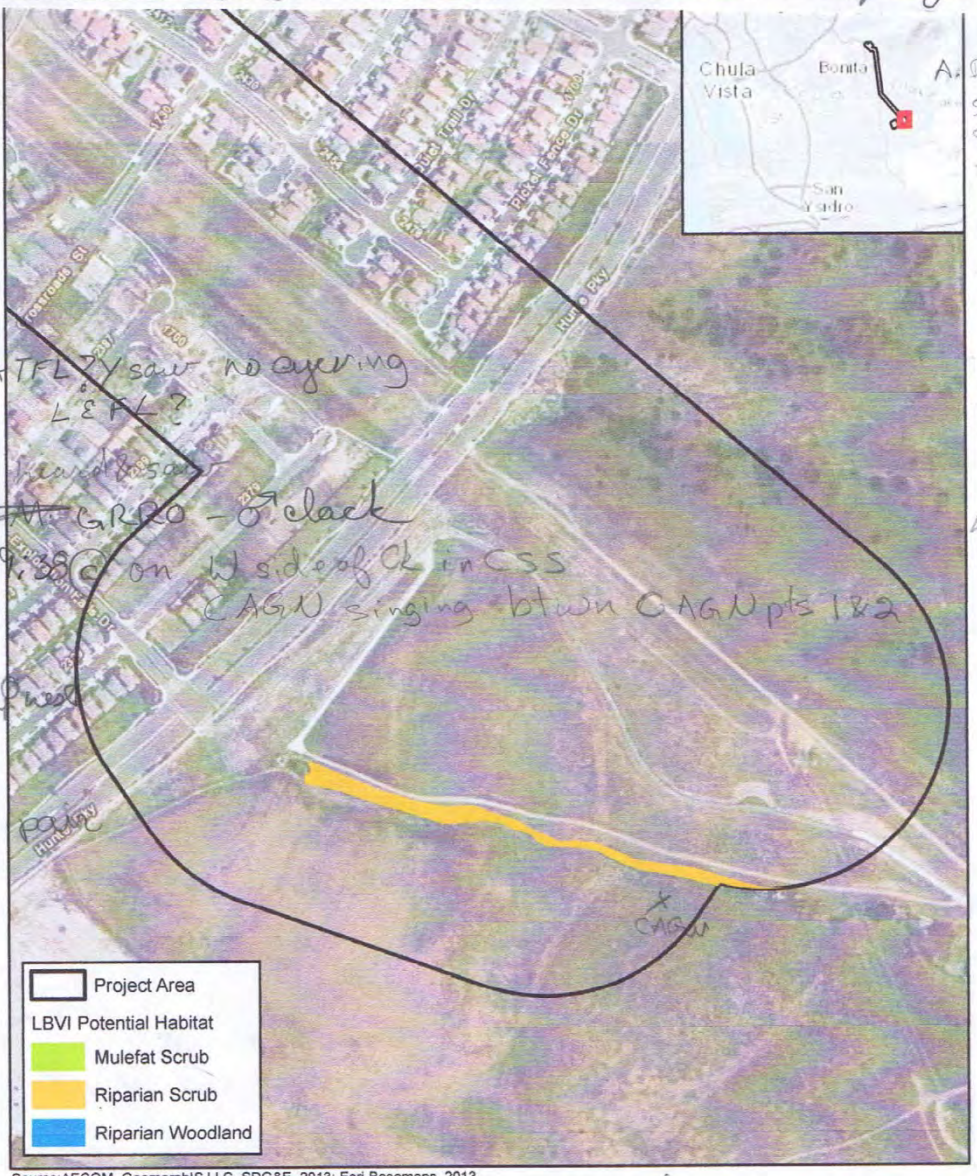
0 200 400 Feet

Scale: 1:4,800 1 inch = 400 feet

Figure 2b
2014 Least Bell's Vireo Survey Area

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Southernmost	Debbie Kinsinger	LBV Protocol	5/19/14
	Time	Temperature	Wind	Clouds
Begin	7:42	60°	0-3	overcast
End	9:30	68°	0-3	partly cloudy

BL PH
L:EGD
SHOF I
HMODO
MELA
KIDE
CATO
RANHU
NSOSP
~~BSFL~~ ATFL ?Y saw no oyuving
CAQU LEFL?
COVE
2PSFL
~~PHOEBU~~ M. GRRO - 8 clock
CAGN 9:38 on W side of Ck in CSS
AMKE CAGN singing btwn CAGN pts 1&2
CORA
BLHU? 2 wee
GP
2WAVI
BLGR
PHAN



Douglasi
SalLAS(AW)
SalLAU(RW)
Panavir
CEME
BROI
AVFA
BRHO
SAKA or AU
BASAR
HI IN
ERFA
cattail
Lepidium
Polypogon
monarche

CAGS
CALA
DECO

Figure 2c
2014 Least Bell's Vireo Survey Area

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Northernmost	Debbie Kinsinger	LBV Protocol	5/29/14
	Time	Temperature	Wind	Clouds
Begin	10:45	78°	3-5	clear
End	11:00	78°	3-5	no clouds

0+10 LEGD
20 1f 0F1
2 MODO — one on nest at bottom
1 SPTO
1 STBUTI
2 HOOR pair
1 WRTI YEWA ← omitted from notes addeded back
1 SOSP
1 BLGR
3 HOWR
CATO
1 COYE
1 NOMO
ANHU
2 NIWA ← YRWA
1 CAQU

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Middle	Debbie Kinsinger	LBV Protocol	5/29/14
	Time	Temperature	Wind	Clouds
Begin	10:00	75°	3-5	clear
End	10:30	78°	3-5	no clouds

1 NRWS
~~1 RWSW~~
CAKI
10+ IOWOFI
5 AMCR
1 CATO
1 NOMO
1 PSFL
6 LEGO
1 BCHU
1 ANHU
MODO
1 WEKI
1 ~~AMKE~~ COHA

6 HOSP on residential side
CAKI " both sides

lower
1 PSFL
8 LEGO
1 CATO
1 ANHU
10 HOFI
6 BUTI

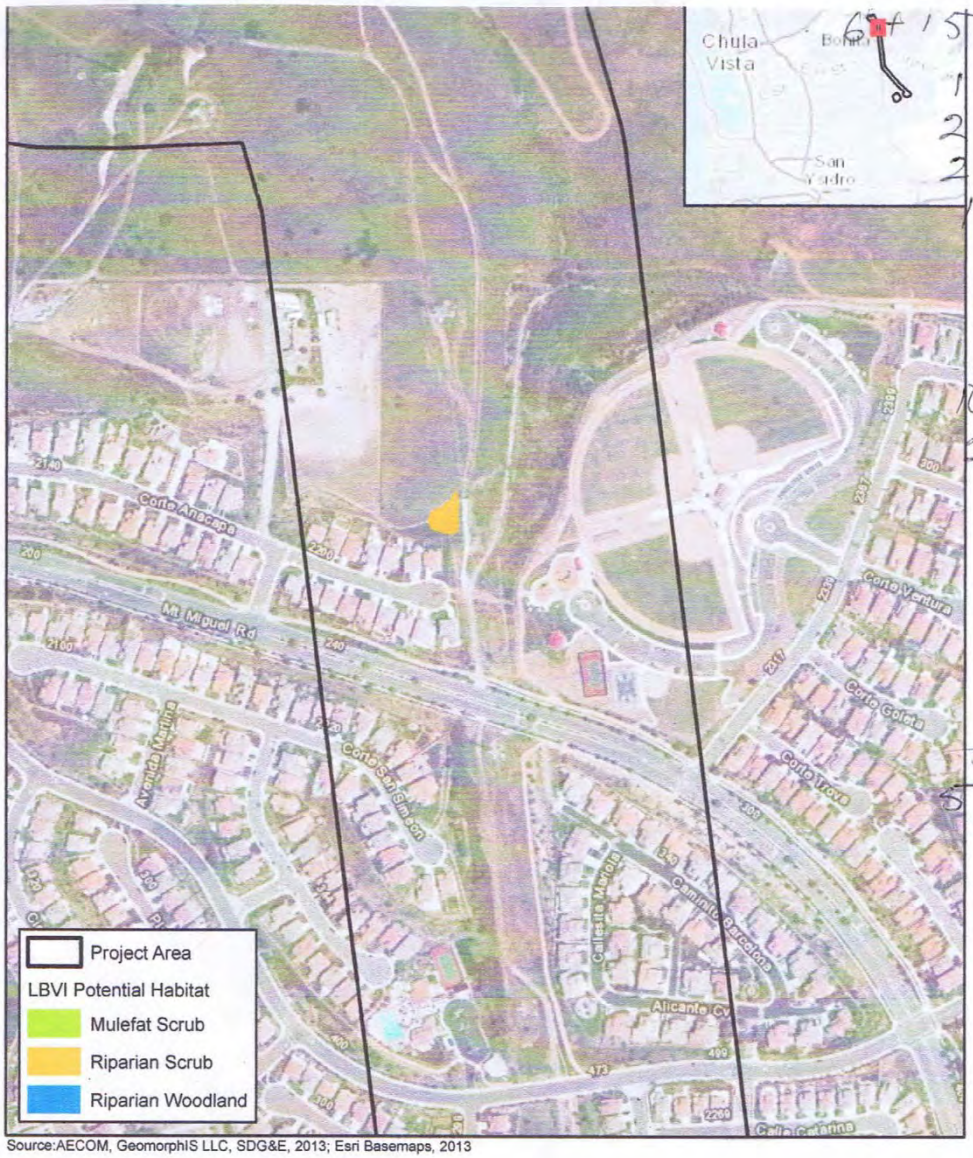
Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Southernmost	Debbie Kinsinger	LBV Protocol	5/29/14
	Time	Temperature	Wind	Clouds
Begin	8:06	65°	calm	no clouds
End	9:30	72°	0-3	sunny

5 LEGO
1 BRBL
2+2 ANHU
1 CLSW
4+6+4+5 HOFI
1 SOSP
~~SAS~~ 1 ATFL — or ~~DC~~FL no song weak wing bars lacks rufous ? dusky-capped?
2+2 MODO
~~3+0~~ WEKI
~~YBCH~~ ?; ~~call~~
WIWA
~~BHGR~~ CATO large birding flight from Tamarisk to low brush CATO?
~~ATFL~~
~~bo~~
1+1 CAGN
2 ATFL
1 BHGR — loud - offsite
1 CAQU
2 LEGO (AMGO?

At wetland
1 BHGR ~~6~~ HOFI
4 RWBL
~~7 SNEG~~ COYE — offsite at pond
KILL
4 ~~ORCW~~? OCWA too far away
1 MELA
2 ATFL
1 SOSP
YBCH
CAGN

5 ~~BUTI~~
1+1 SAPH heard in flight
2 BLPH at culvert
2 AMCR
RTHA over T.L.
2 CORA

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Northernmost	Debbie Kinsinger	LBV Protocol	6/8/14
	Time	Temperature	Wind	Clouds
Begin	10:49	75	5-10	clear
End	11:00	75	5-10	sunny



Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 200 400 Feet

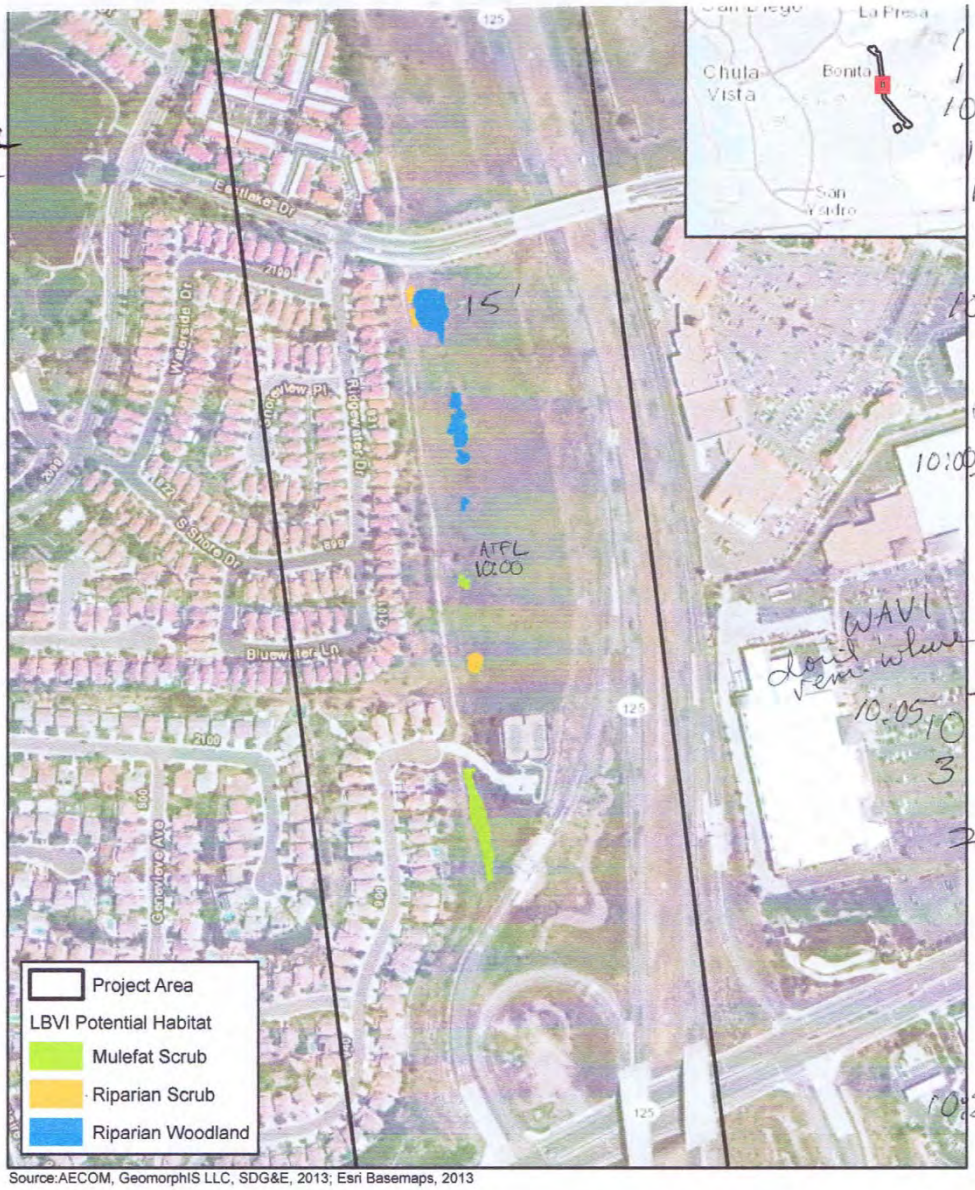
Scale: 1:4,800 1 inch = 400 feet

Figure 2a
2014 Least Bell's Vireo Survey Area

6:49 1 5 LEGO
1 SPTO
2 CORA
2 BCHU
1 CATO
1 HOWR
1 NOMO
1 HOOR
10 BUTI
2 COYE
ANHU
YBCH
LEFL
CAKI
WAVI
COYE
[redacted]R
5 WEKI
YEWA

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Middle	Debbie Kinsinger	LBV Protocol	6/8/14
	Time	Temperature	Wind	Clouds
Begin	9:40	72°	N5	clear
End	10:25	72°	3-5	no clouds

PSFL not in same clump by Rd instead in BASAL by fence



1 ANHU
1 CAKI
10 HOFI
1 AMCR
1 MODO
1 NRSW
1 PSFL
10 LEGO
NOMO
BLPH
~~WEKI~~
10:00 ATFL
MODO
HOFI
LEGO
CATO
ANHU
10:05 10 HOFI
3 ANHU
SOSP
2 CATO
LEGO
NOMO
BEWR
~~SCHU~~
~~BCH~~ BCHU
10:25

Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 200 400 Feet

Scale: 1:4,800 1 inch = 400 feet

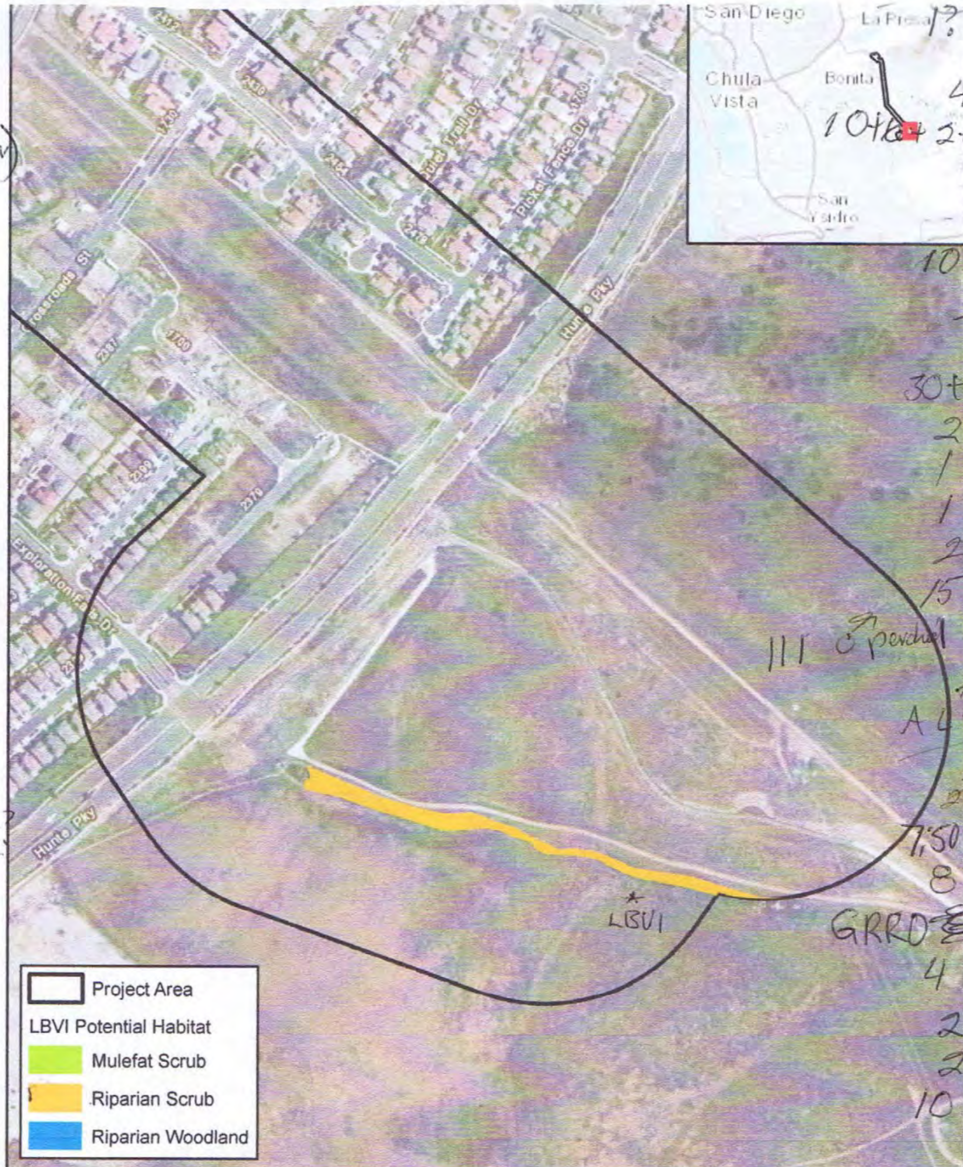
Figure 2b
2014 Least Bell's Vireo Survey Area

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2014\SaltCreek_LBVsurvey_May2014.mxd, 5/6/2014, E.D.Goff

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Southernmost	Debbie Kinsinger	LBV Protocol	6/8/14
	Time	Temperature	Wind	Clouds
Begin	6:48	60°	no wind	overcast
End	9:00	65°	" "	scattered clouds

SAGO ~~willows~~ are in cotton now (not SALA?)

Thrasher? shorter bill



1? ATFL
NRWS
WEME
4 AMCR
10 + 2 + 4 LEGO
CATO
BLPH
10 MODO
3 ANHU
CAKI
30+ HOFI
2 COYE
1 NOMO
1 KILL
2 CATO
15 BUTI
111 c perched 1 BLGR? flying out
A L ? HU
7 AMGO
2 CAGN
7:50 LBVI
8 SOSP
GRRO ~~CODO~~ collared dove
4 YEWA
2 CATH
2 CAQU
10 CLSW
2 CAGN @ far end
48 BCHU
SPTO
RTHA
♂? SAPH ?

Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 200 400 Feet

Scale: 1:4,800 1 inch = 400 feet

Figure 2c
2014 Least Bell's Vireo Survey Area

Least Bell's Vireo Notification Letter

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2014\SaltCreek_LBVsurvey_\[illegible].mxd 5.6.2014 E.D.Goff

WPT LBVI

7:50 move W toward break ~~tilt~~ at PP1 then heads E singing
8:03 back at 1st Wpt. 8:10 waiting to 8:25 before d[illegible] after no more singing this location or other
8 6. heard again @ 8:25 far W - [illegible] [illegible]

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Northernmost	Debbie Kinsinger	LBV Protocol	6/17/14
	Time	Temperature	Wind	Clouds
Begin	10:25	78°	5-8mph	Ø
End	10:58	"	"	"

COYE
MODO
ANHU
CLSWI

6 LEGO
~~3~~ SPTO
2 CATO
NOMO
~~BLGR~~
CAKI
ATFL
COYE
2 CORA
YBCH
1 WRTI
1 RSHA
6 HOFI
10:58

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Middle	Debbie Kinsinger	LBV Protocol	6/17/14
	Time	Temperature	Wind	Clouds
Begin	9:17	68	0-3	no clouds
End	9:55	70	0-3	clear

1 CORA
4 CAKI
2 ANHU
1 HOWR
1 MODO
1 NOMO
1 SPTO
1 AMCR
1 HOFI

4+ 2 HOFI + 6 BCHU
2+2 LEGO + 4 NUTTALS WOODPECKER ?
NOMO HOSP
1 MODO 6 BRBL
CATO 1 SUST

9:35 SOSP
6 HOFI
2 ANHU
2 MODO
2 LEGO
1 CATO
1 NOMO
9:55

(There is a NOMO that imitates ATFL here)

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Southernmost	Debbie Kinsinger	LBV Protocol	
	Time	Temperature	Wind	Clouds
Begin	7:12	63°	no	30%
End	9:00	68°	0 - 3	clear sunny

CAKI - SAPH on way out
1 COHA
LBVI
6 ANHU
2 BLPH
10 HOFI
16 LEGO
2 CORA
COYE
1 NRWS 5 MODO

open breast
LEGO
40 ~~20~~ ~~LBVI~~
2 BLGR
1 CORA
1 LBVI from wpt LBVI0617 to power lines then back N
when it returned to orig. site I thought I was watching it when I heard it at slightly different location & realized that may be a ♀
flew S. back to pond - no longer hear
8:17 sings again going back N, then south again
saw 2 birds 1 singing 1 quiet
Great s butterfly on BASAL & behind RHIN at pond
chat gets ♂LBVI singing again 8:24 still @ pond - I'm done going back 8:2
~~to~~ now hear it way up N. again!
watch 8:30 - returns to pond area!
20 YEO HOFI
~~BRCO~~ CATO juvenile
2 AMGO
2 YEWA
CAGN on E side of road
COYE

pond COYE
offsite KILL
but in BLGR
but LBVI territory RWBL
CLSW
CAGN
YBCH

ATFL

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Northernmost	Debbie Kinsinger	LBV Protocol	6/28/14
	Time	Temperature	Wind	Clouds
Begin	10:50	78°	5-10	0
End	11:00	"	"	"

HOOR ♀ CATO GRRO
~~SOSP~~ by top C
SOSP
SPTO
ANHU
CAGN - on west slope & east slope near ARWI jumpat top
LSGO
AMGO ♀ >
~~COYE~~ BHGR? ♀ - EUGR?
ANHU
CAGN - down here by FWM @ bottom

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Middle	Debbie Kinsinger	LBV Protocol	6/28/14
	Time	Temperature	Wind	Clouds
Begin	10:03	75°	3-5	Ø
End	10:35	78°	"	"

NOMO
ANHU
10:17 - ~~no b~~ BCHU ANHU CATO in clump of willows at start
pirucchkladedackled ?

LEGO

MODO
ATFL ash w/ yellow under brn crest 2 wingbars rust on 1° & tail brrt but not under tail

10:42 HOOR in palms by tower - flew off site X fwy don't see nest
HOFI (2)

10:49 ~~WRTI~~ Lower spot
NOMO
SPTO in pine - ~~CATO respond~~ (or SPTO call) ?
RSHA → flying x fwy white (patch) edges tipped w black dark head under
~~RTHA~~ → perched on light by toll gate
anise swallowtail
ANHU
/ BLGR
MODO
HOFI - just a few (4)
~~SOSP~~ ? - maybe nesting - hear calls low-in scrub but not typical SOSP chimp? - CATO
LEGO just a few (4)
CATO feeding juv.
11:15 .w.
30 HOFI
11:22 end survey

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Southernmost	Debbie Kinsinger	LBV Protocol	6/28/14
	Time	Temperature	Wind	Clouds
Begin	07:30	63°	no wind	overcast +
End	9:30	70°	0-3	scattered clds

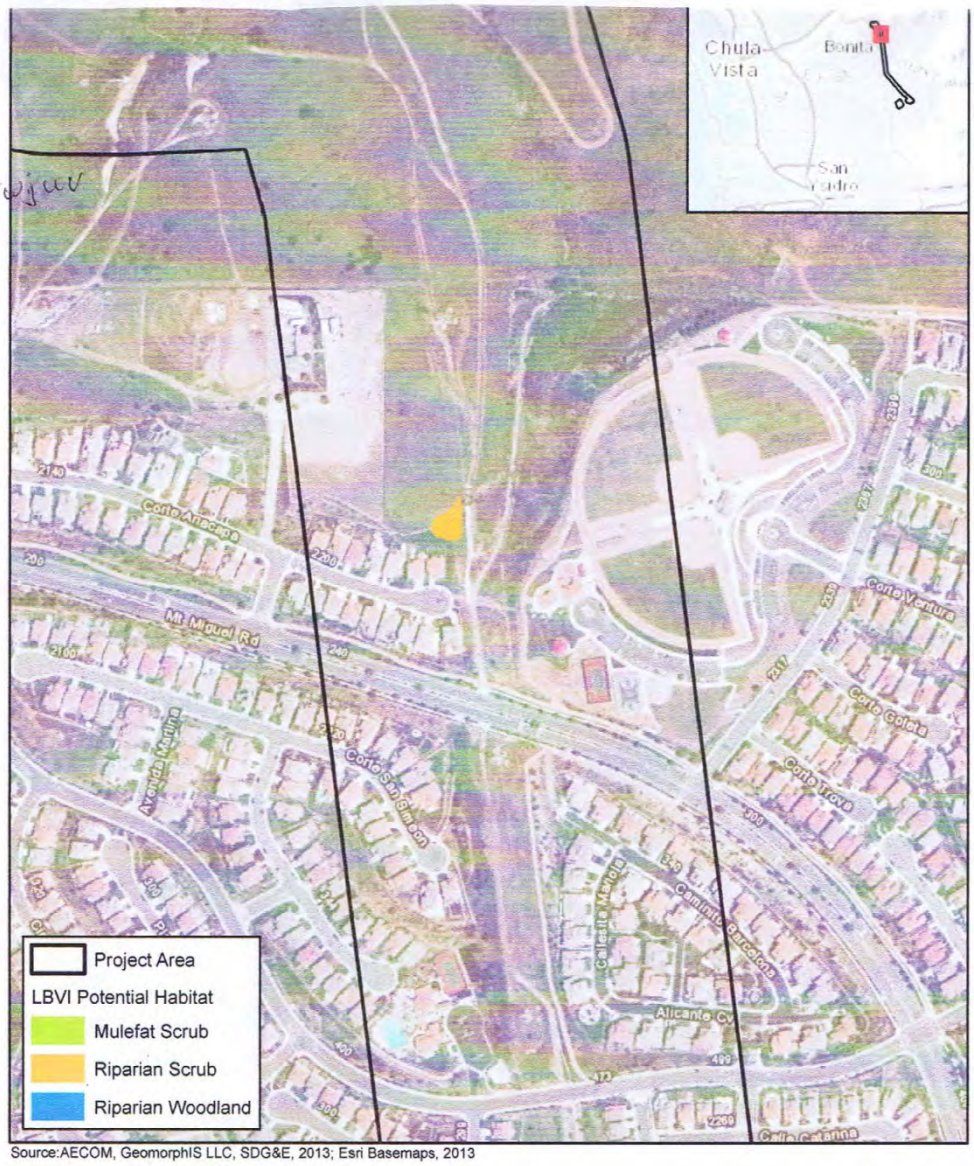
SAPH
AMCR 4BLPH LBVI heard from above
MODO
CLSW
BLGR

7:20 LBVI heard
SOSP
LEGO — same as usual
2ANHU
BLGR
CATH
WYPT 180 location of LBVI @ 7:29
COYE
HOFI
SPTO
CATO
181 7:59
LBVI 8:02 - responds to BLGR
same location
RTHA stayed 20 min this location
no more call - was deep w/in willow shrub - photos
~~poor will~~? pi-er - SAPH heard in grassland
ALHU
AMKE
CORA
AMGO feed juv.

8:30 182 LBVI - responding to BLGR?! 8:32 ♂ ♀ calling till 8:40
CAGN
~~SAPH~~ SAPH / ATFL / ~~HEOA~~ OAK ?) sawfly
9:40 near again farther south @ 183 close to 180
8:47 by old COHA nest
8:53 184
9:06 180 ♂
BUT
9:09 186 returned to end of territory
9:20 last heard again — end survey

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Northernmost	Debbie Kinsinger	LBV Protocol	7/8/14
	Time	Temperature	Wind	Clouds
Begin	10:53	80°	3-8	no clouds
End	11:00	"	"	sunny

SPTO
YBCH
MODO
BHOFL - ujuu
CORA
2RSHA
ATFL
2SOSP



Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 200 400 Feet

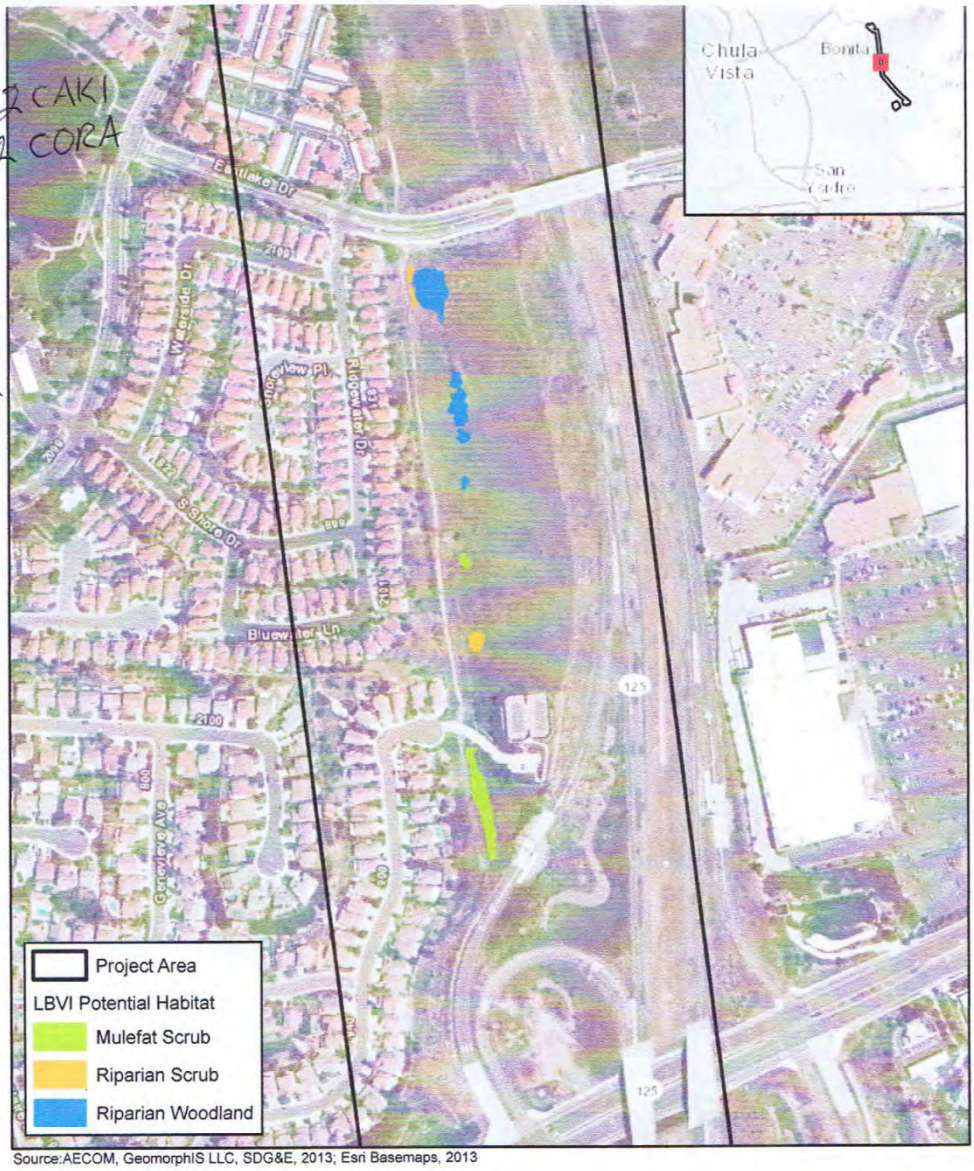
Scale: 1:4,800 1 inch = 400 feet

Figure 2a
2014 Least Bell's Vireo Survey Area

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Middle	Debbie Kinsinger	LBV Protocol	7/8/14
	Time	Temperature	Wind	Clouds
Begin	9:30	75°	3-8	no clouds
End	10:00	75°	3-8	clear

2ANHU
10MODO
1NOMO
2CAKI
2CORA
20HOFI
3 EUST
CATO
2HOOR?

5- portion
OL EGD
1ALHU
1BUSI
1 CATO
3HOFI
4HOOR
~~CAKI~~
~~OHOFI~~
10,00



Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 200 400 Feet

Scale: 1:4,800 1 inch = 400 feet

Figure 2b
2014 Least Bell's Vireo Survey Area

Path: C:\Projects\AECOM\SaltCreek Substation\GIS Survey2014\SaltCreek LBVsurvey May2014.mxd, 5/6/2014, E D Goff

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Southernmost	Debbie Kinsinger	LBV Protocol	7/8/14
	Time	Temperature	Wind	Clouds
Begin	6:00	68°	3-8	overcast
End	9:00	72°	3-8	few clouds

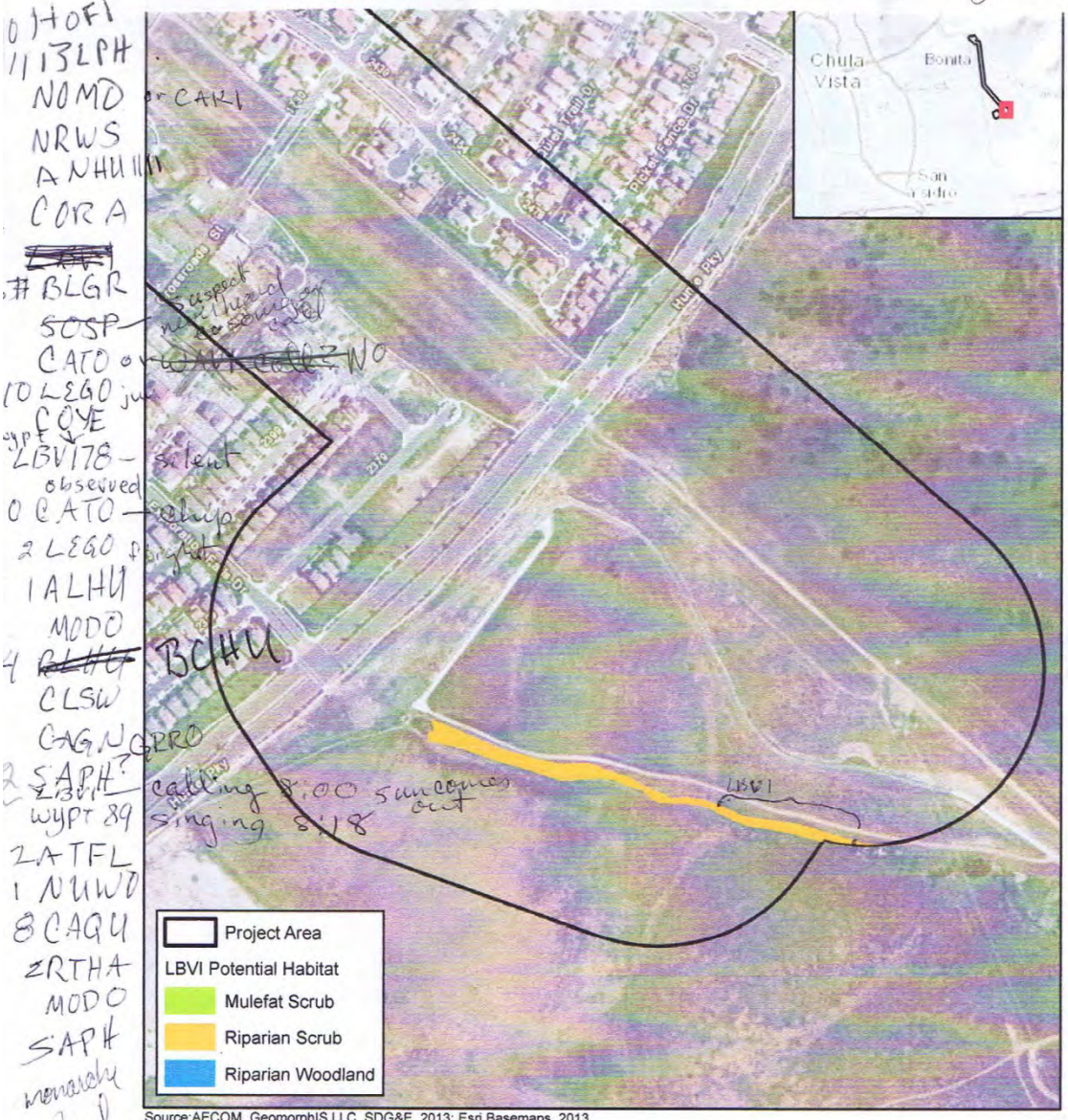


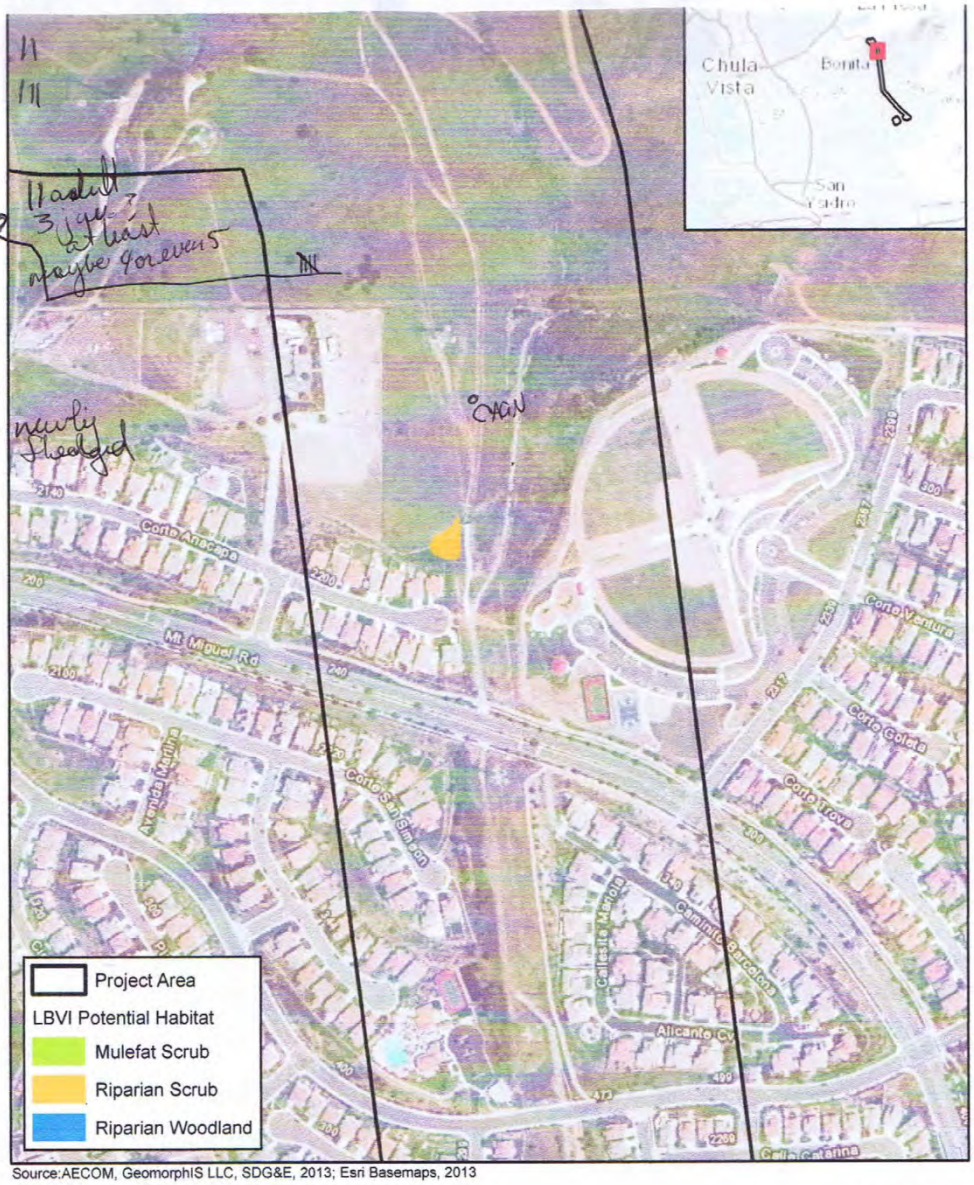
Figure 2c
2014 Least Bell's Vireo Survey Area

Path: C:\Projects\AECOM\Salt Creek Substation GIS\Survey2014\Salt Creek_LBVSurvey_May2014.mxd, 5/6/2014, ED Goff

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Northernmost	Debbie Kinsinger	LBV Protocol	7/17/14
	Time	Temperature	Wind	Clouds
Begin	10:45	78°	5-10	0%
End	11:00	"	"	"

CORA
LEGO
ANTI
CAGN
HOFI
CATO
WRTI
SPTO
ATFL 11
BCHU –

12:11
NOMO
ANHU



Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 200 400 Feet

Scale: 1:4,800 1 inch = 400 feet

Figure 2a
2014 Least Bell's Vireo Survey Area

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2014\SaltCreek_LBVsurvey_May2014.mxd, 5/6/2014, E.D.Goff

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Middle	Debbie Kinsinger	LBV Protocol	7/17/14
	Time	Temperature	Wind	Clouds
Begin	10:00	75°	3-5	0 %
End	10:30	78°	3-5	Clear 0%

2 HOFI
2 ANHU
SOSP
CATO

2 NOMO
AMKE
25 MODO

BUTI
HOFI
ANHU
2 CALT
AMCR
10:30

Site Name	ID	Surveyor	Survey Type	Date
Salt Creek	Southernmost	Debbie Kinsinger	LBV Protocol	7/17/14
	Time	Temperature	Wind	Clouds
Begin	8:00	68°	3-5	40 %
End	9:30	72°	3-5	Clear 0%

Smell of carrion
Coyote
SAPH
HOFI
MODO
LEGO
CALT
ANHU
BLGR
2 Adult CATH 1 juvenile
Raccoon tracks
GRRO runner tracks & saw
LBVI at nest loc. then flew south
CAGN very vocal
LBVI wypt 717 2nd song 8:03
CAQU
CLSW
NUWO
SOSP
8:35 LBVI calls from wypt 186
9:08 Wypt 191 nest loc heard female call to male observed male fly into nest area and answer call
9:11 Heard song from S and 2nd bird emerge to follow. No indication of feeding juveniles.
9:17 hear song from S
9:20 hear soft calling male flies out perches and preens while I try to find in view finder just before it flies.
9:24 Got video but no still.
Behavior indicates they are still incubating

APPENDIX C
SUMMARY OF AVIAN FIELD NOTES

Avian Field Note Summary for Salt Creek LBV Protocol Surveys
Northernmost Survey Site (Figure 3a)

Notes	Code	5/8/14	5/19/14	5/29/14	6/8/14	6/17/14	6/28/14	7/8/14	7/17/14
	AMGO						1		
	ANHU	4	2	4	1	1	1		1
	ATFL					1		1	2
One new fledge (there are pines nearby)	BCHU		1		2				2
	BEWR	1							
	BHGR						1		
	BLGR			1					
	BUSH		21	15	10				1
Two adults feeding 3 to 5 juveniles	CAGN	1					3		2
	CALT		7	4	1	2	1		1
	CAQU			1					
	CAKI				1	1			
Migrant	CAVI	1							
	CLSW					1			
	CORA	1			2	2		1	2
	COYE	1	1	1	3	2			
	GRRO	1					1		
HOFI w/ fledges 7/8/14	HOFI	10	21	20	15	6		3	1
Pair on 5/29/14 in fan palm	HOOR			2	1		1		
	HOWR	1		3	1				
	KILL		1						
	LEFL				1				
	LEGO	10	21	20	15	6	1		3
One on nest 2/29/14	MODO			2		1		1	
	NOMO		1	1	1	1			1
	PHAI	1							
Migrant	PSFL	1							
	RSHA							2	
	SAPH	1							
	SOSP	1	4	1			1	2	
	SPTO			1	1	3		1	1
Migrant	WAVI	1			1		1		
	WEKI	1			5				
Migrant	WIWA	2		2					
	WREN	1	1	1		1			1
	YBCH	1			1	1		1	
	YEWA			1					
	YRWA			1					

Avian Field Note Summary for Salt Creek LBV Protocol Surveys
Middle Survey Site (Figure 3b)

Notes	Code	5/8/14	5/19/14	5/29/14	6/8/14	6/17/14	6/28/14	7/8/14	7/17/14
	ALHU							1	
	AMCR	1	2	5	1	1			1
	AMKE								1
	ANHU		2	2	5	4	3	2	3
	ATFL				1		1		
	BCHU			1	1		1		
	BEWR				1				
	BLGR						1		
	BLPH				1				
	BRBL					6			
	BUSH		10	6				10	1
	CAKI			1	1	4	2	2	
	CALT	4	1	2	3	2	2	3	2
	COHA			1					
	CORA	2	1			1		2	
	EUST					1		8	
	HOFI	16	21	30	21	13	36	28	2
	HOOR							4	
	HOSP			6		1			
	HOWR	1				1			
	LEGO	4		14	12	10	4	10	
	MODO	1	1	1	2	3	2	10	25
	NOMO			1	2	3	2	1	2
Juveniles	NRWS	1	3	1	1				
Migrant, 1st 3 visits in riparian woodland by road, 6/8/14 in broom baccharis by fence	PSFL	1	1	2	2				
Number	RTHA	1							
	RSHA	1	1				1		
	SAPH		1						
	SOSP	2			1	1			1
	SPTO		1			1	1		
	WAVI		2						
	WEKI		1	1	1				

Avian Field Note Summary for Salt Creek LBV Protocol Surveys
Southernmost Survey Site (Figure 3c)

Notes	Code	5/8/14	5/19/14	5/29/14	6/8/14	6/17/14	6/28/14	7/8/14	7/17/14
	ALHU				1	6	1	1	
	AMCR			2	4		1		
6/29/14 feeding juv.	AMGO				7	2	6		
	AMKE		1				1		
	ANHU	8	2	4	3		2	4	1
	ATFL			5	1	1	1	2	
female incubating in nest 5/19/14	BCHU		1		4			4	
Paired 5/19/14	BLGR	1	2	2	3	2	2	6	1
	BLPH		2	2	1	2	4	3	
over-flight 5/8/14	BRBL	20		1					
	BUSH	20		5	15				
CAGN activity and singing slowed by 6/7/14 By 7/17/14 one CAGN is singing often	CAGN		3	3	4	1	1	1	1
	CAKI				1	1			
	CAQU	25	5	1	2			8	1
2 adult CATH w/ 1 juv 7/17/14	CATH				2		1		3
	CALT	8	4	1	3		2	11	1
	CLSW			1	10		6	1	1
	COHA	2				1			
	CORA	1	1	2		3	1	1	
	COYE	4	1	1	2	2	1	1	
female clack 5/19/14	GRRO		1		1			1	1
	HETH	6							
	HOFI	10	30	25	30	30	30	10	1
	HOWR	4							
LBV territorial singing males 1st seen/heard offsite below pond on 5/19/14, not onsite till 6/8/14, non-singing female present on 6/17/14, seen eating butterfly -may actually have been white nesting material, see photo; by 8th visit still incubating, no feeding, male made several returns to nest area where female called softly	LBV				1	2	2	2	2
Many juv. By 7/8/14	LEGO	40	30	7	22	56	30	12	1
	MODO	4	4	4	10	5	1	1	1
	NOMO				1			2	
	NRWS	10			6	1		1	
	NUWO							1	1
	OCWA			4					
	PHAI		1						
	PSFL	1	2						
	RTHA	3		1	1		1	2	

Notes	Code	5/8/14	5/19/14	5/29/14	6/8/14	6/17/14	6/28/14	7/8/14	7/17/14
Close to pond 5/29/14	RWBL			4					
	SAPH	1		2	1	1	1	2	1
	SOSP	6	6	2	8		1		
	SPTO				1		1		
Migrant, but saw one carrying nesting material 5/8/14. None remained to nest here.	WAVI	4	2						
	WEME	4	2	1	1				
	WEKI	1		1					
Migrant	WIWA	4		1					
	YBCH			1					
	YEWA				4	2			

APPENDIX D
OTHER WILDLIFE SPECIES OBSERVED DURING LEAST BELL'S VIREO SURVEYS

Northernmost Survey Area

Mammals

Latin Name	Common Name
Canis latrans	coyote
Sylvilagus audubonii	desert cottontail
Otospermophilus beecheyi	California ground-squirrel

Insects

Latin Name	Common Name
Behr's metalmark	*Apodemia virgult*i

Middle Survey Area

Mammals

Latin Name	Common Name
Canis latrans	coyote
Otospermophilus beecheyi	California ground-squirrel
Sylvilagus audubonii	desert cottontail

Insects

Latin Name	Common Name
Brephidium exilis	pygmy blue butterfly

Southernmost Survey Area

Mammals

Latin Name	Common Name
Canis latrans	coyote
Otospermophilus beecheyi	California ground-squirrel
Procyon lotor	raccoon
Sylvilagus audubonii	desert cottontail

Insects

Latin Name	Common Name
Danaus plexippus	monarch

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

619.233.1454 tel
619.233.0952 fax

November 7, 2014

Ms. Debbie Collins
San Diego Gas & Electric
8315 Century Park Court – CP21E
San Diego, California 92123

RE: Rare Plant Survey Report for the Proposed Salt Creek Substation and Power Line Project, Chula Vista, California

Dear Ms. Collins:

The purpose of this letter report is to present findings of the botanical resource surveys conducted during 2014 for the proposed Salt Creek Substation and Power Line Project in the City of Chula Vista, California. The purpose of the botanical surveys was to (1) compile a list of plant species that occur within the site, and (2) identify rare (special-status) plant species and map their distribution for the 2014 season. Surveys were conducted on behalf of San Diego Gas & Electric (SDG&E).

Project Location

The project site is situated approximately 15 miles southeast of downtown San Diego and 5 miles north of the international border with Mexico (Figure 1). The proposed Salt Creek Substation and the majority of the proposed power line are located in the eastern portion of the City of Chula Vista, California (Figure 2). The proposed Salt Creek Substation is located adjacent to and southeasterly of Hunte Parkway in the City of Chula Vista. Approximately 4,700 linear feet of the northernmost portion of the proposed power line is located in the unincorporated portion of San Diego County on SDG&E fee-owned land surrounding the Existing Miguel Substation (Existing Substation). The remaining portion of the proposed power line is located within the City of Chula Vista.

Project Description

The proposed project includes the installation of a new substation (proposed Salt Creek Substation), a new 69-kilovolt (kV) power tie-line (TL) from the Existing Substation to the proposed Salt Creek Substation (TL 6965), and modifications to the Existing Substation. The primary objectives of the proposed project are to provide additional capacity to serve existing area load and future customer-driven electrical load growth, and to provide the necessary distribution and transmission network to prevent long-term outages or disruptions of service to existing customers in the southeastern portion of SDG&E's service territory.

The proposed project includes four primary components:

- Construction and operation of a 120-megavolt ampere 69/12kV proposed Salt Creek Substation, including construction and operation of underground 12kV distribution circuits.

- Power lines, including construction and operation of a 5-mile-long overhead 69kV power line 6965 (TL 6965), from the Existing Substation to the proposed Salt Creek Substation, and construction and operation of a 69kV power line loop-in (TL 6910) to the proposed Salt Creek Substation.
- Modifications at the Existing Substation, including installation of a new 69kV power line position.

Three temporary staging yards were identified for the project: one at the Existing Substation (Existing Staging Yard); a second on the north side of Hunte Parkway between Discovery Falls, Eastlake Parkway, and Crossroads Street (Hunte Parkway Staging Yard); and a third within the transmission corridor between Eastlake Parkway and SR-125 (Eastlake Parkway Staging Yard). Alternate staging sites at the Olympic Training Center facility, south of Olympic Parkway, have also been identified. These alternate staging sites are not included in the project analysis provided herein.

Site Description

The project survey area includes the proposed Salt Creek Substation, the TL corridor, and three staging yards plus a 500-foot (150-meter) survey buffer around each of these areas (Figure 2). The project survey area occurs within the City of Chula Vista's Multiple Species Conservation Program Subarea Plan (Subarea Plan) Otay Ranch Planning Area, within areas planned for development (i.e., outside of the Otay Ranch Preserve) (Figure 2).

The project site is located on flat-to-gentle slopes along previously disturbed areas near the Existing Substation and within an existing SDG&E right-of-way. The transmission corridor is located within urban developed, landscape/ornamental, disturbed, nonnative grassland and coastal sage scrub habitats and cover types. The proposed Salt Creek Substation is primarily flat with a gentle slope across the site. The site is composed primarily of nonnative grassland, Diegan coastal sage scrub, and ornamental/landscaped cover types. Commercial and residential developments are located within and adjacent to the project site. Other development features present include major transportation corridors (SR-125), asphalt and compacted earthen roads, trails, fencing, ephemeral and intermittent stream features, culverts, and swales. Potential jurisdictional "waters of the U.S." (including wetlands) are also present onsite, including stream features and vegetated wetlands.

Survey Methodology

A search of the relevant regional databases for special-status plants in the vicinity of the project survey area was performed prior to conducting the field surveys. Special-status plants include those federally listed as endangered, threatened, or proposed for listing; and state-listed as endangered, threatened, rare, or proposed for listing, or having a California Rare Plant Rank (CRPR) (formerly California Native Plant Society [CNPS] List) of 1B, 2, 3, or 4. CRPR 1B plants are "plants rare, threatened, or endangered in California and elsewhere"; CRPR 2 plants are "plants rare, threatened, or endangered in California but more common elsewhere"; CRPR 3 plants are "plants about which we need more information – a review list"; and CRPR 4 plants are "plants of limited distribution – a watch list." The search included a review of the California Department of Fish and Game's (CDFG)

California Natural Diversity Database (CNDDB; CDFG 2012) and a nine-quad search of the CNPS Electronic Inventory for the Jamul Mountains Quadrangle (CNPS 2012).

Senior botanists Fred Sproul and Tom Oberbauer conducted two rounds of special-status plant surveys, on March 25 and 26 and June 2, 9, and 11, 2014, to maximize detection of special-status plants. Surveys in the transmission corridor and staging yards, and a 500-foot buffer around each of these areas were conducted in March, May, and July 2012 (AECOM 2012a), and within the footprint of the proposed Salt Creek Substation and a 500-foot buffer in March, April, and May 2011 (AECOM 2011). Vegetation mapping of the entire survey area was completed in 2012 (AECOM 2012b). The special-status plant surveys were conducted by walking meandering transects through the site and recording plant species observed.

The special-status plant locations were recorded with a Garmin 60 CSx (Global Positioning Unit [GPS]) unit. Subsequent to the field survey, data were downloaded from the GPS unit, post-processed, and brought into ArcGIS for analysis.

Results

Flora

A total of 167 plant species (59% native, 41% nonnative) were observed within the project survey area. A list of plant species observed is included as an attachment to this report.

Special-status Plants

Table 1 lists special-status species potentially occurring onsite with an analysis of potential occurrence. Included are only plant species with suitable habitat onsite or within reasonable range for occurrence.

Nine special-status plant species were observed onsite during the current survey. One listed species, Otay tarplant (*Deinandra conjugens*; federally listed threatened, state-listed endangered) was not reconfirmed as present onsite (was previously observed during 2012. Two species listed as CRPR 2B.1, two listed as CRPR 2B.2, and five listed as CRPR 4 were observed onsite. A discussion of each of these species is presented below.

California adolphia (*Adolphia californica;* CRPR 2B.1)

California adolphia (*Adolphia californica*) was found on the upper part of the northwest-facing slope on the hill located on the inside of the elbow, south of the southernmost outdoor storage pad. One population existed consisting of five plants, approximately 15 other individuals are outside the project boundary. Some of the plants appeared to be in ill health or were dead skeletons (Figure 3a). This perennial, deciduous shrub in the Rhamnaceae (Buckthorn Family) is often associated with clay soils on dry slopes in the foothill and coastal regions of San Diego County and Baja California, Mexico.

Table 1. Special-Status Plant Species with the Potential to Occur within the Salt Creek Substation and Power Line Project

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Abronia maritima	Red sand-verbena	None/ None	4.2	Coastal dunes/ perennial herb/ February–November	Appropriate habitat not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Acanthomintha ilicifolia	San Diego thornmint	FT/ SE	1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay/ annual herb/ April–June	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Adolphia californica	California adolphia	None/ None	2B.1	Chaparral, coastal scrub, valley and foothill grassland; clay/ shrub/ December–May	Appropriate habitat is present within the project survey area. Approximately five individuals observed onsite in coastal sage scrub in the northern portion of the project site.
Agave shawii	Shaw's agave	None/ None	2B.1	Coastal bluff scrub, coastal scrub/ shrub/ May–July	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Ambrosia chenopodiifolia	San Diego bur-sage	None/ None	2B.1	Coastal scrub/ shrub/ April–June	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this shrub would have been observed.
Ambrosia monogyra	Singlewhorl burrobrush	None/ None	2B.2	Chaparral/ shrub/ sandy/ August–November	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this subshrub would have been observed.
Ambrosia pumila	San Diego ambrosia	FE/ None	1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; often in disturbed areas/ perennial herb/ May–October	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Aphanisma blitoides	Aphanisma	None/ None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub; sandy/ annual herb/ March–June	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Arctostaphylos glandulosa ssp. *crassifolia*	Del Mar manzanita	FE/ None	1B.1	Maritime chaparral; sandy/ shrub/ December–April	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this shrub would have been observed.
Arctostaphylos otayensis	Otay manzanita	None/ None	1B.2	Chaparral, cismontane woodland; metavolcanic/ shrub/ January–March	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this shrub would have been observed.
Artemisia palmeri	San Diego sagewort	None/ None	4.2	Chaparral, coastal scrub, riparian forest and scrub; sandy/ shrub/ May–September	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Asplenium vespertinum	Western spleenwort	None/ None	4.2	Chaparral, cismontane woodland, coastal scrub/rocky/perennial rhizomatous herb/ February–June	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this species would have been observed.
Astragalus deanei	Dean's milk-vetch	None/ None	1B.1	Chaparral, coastal scrub, riparian forest/perennial herb/ February–May	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Astragalus oocarpus	San Diego milk-vetch	None/ None	1B.2	Chaparral (openings), cismontane woodland/perennial herb/May–August	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Atriplex coulteri	Coulter's saltbush	None/ None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland; alkaline or clay/ perennial herb/ March–October	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this perennial species would have been observed.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Atriplex pacifica	South Coast saltscale	None/ None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, playas/ annual herb/ March–October	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Baccharis vanessae	Encinitas baccharis	FT/ SE	1B.1	Chaparral, cismontane woodland; sandstone/ deciduous shrub/ August–November	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Bahiopsis [=*Viguiera*] *laciniata*	San Diego County viguiera	None/ None	4.2	Chaparral, coastal scrub/ shrub/ February–June	Appropriate habitat is present within the project survey area. This species was widespread throughout the project site in coastal sage scrub and grasslands. Approximately 15 plants also occur in landscaping on a slope of SR-125.
Bergerocactus emoryi	Golden-spined cereus	None/ None	2B.2	Closed-cone conifer forest, chaparral, coastal scrub; sandy/ shrub/ May–June	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Bloomeria clevelandii	San Diego goldenstar	None/ None	1B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools; clay/ bulbiferous herb/ May	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Brodiaea orcuttii	Orcutt's brodiaea	None/ None	1B.1	Closed-cone conifer forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools; mesic, clay, bulbiferous herb/ May–July	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Calandrinia breweri	Brewer's calindrinia	None/ None	4.2	Chaparral, coastal scrub, disturbed sites and burns/ annual herb/ March–June	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
California macrophylla	Round-leaved filaree	None/ None	1B.1	Cismontane woodland, valley and foothill grassland; clay/ annual herb/ March–May	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Calochortus dunnii	Dunn's mariposa lily	None/ SR	1B.2	Closed-cone conifer forest, chaparral; gabbroic or metavolcanic/ bulbiferous herb/ April–June	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Camissoniopsis lewisii	Lewis's evening primrose	None/ None	3	Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland; sandy or clay/ annual herb/ March–June	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Carex obispoensis	San Luis Obispo sedge	None/ None	1B.2	Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland; often serpentinite seeps or clay soils; sometimes gabbro/ perennial rhizomatous herb/ April–June	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this perennial species would have been observed.
Ceanothus cyaneus	Lakeside ceanothus	None/ None	1B.2	Closed-cone conifer forest, chaparral/ shrub/ April–June	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Ceanothus otayensis	Otay Mountain ceanothus	None/ None	1B.2	Chaparral (metavolcanic or gabbroic)/ perennial evergreen shrub/ January–April	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Ceanothus verrucosus	Wart-stemmed ceanothus	None/ None	2B.2	Chaparral/ shrub/ December–April	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Centromadia [Hemizonia] pungens ssp. *laevis*	Smooth tarplant	None/ None	1B.1	Chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland; alkaline/ annual herb/ April–September	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's pincushion	None/ None	1B.1	Coastal bluff scrub, coastal dunes/ annual herb/ January–August	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Chamaebatia australis	Southern mountain misery	None/ None	4.2	Chaparral; gabbroic or metavolcanic/ evergreen shrub/ November–May	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Chorizanthe polygonoides var. *longispina*	Long-spined spineflower	None/ None	1B.1	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland; often clay/ annual herb/ April–July	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Cistanthe maritima	Seaside cistanthe	None/ None	4.2	Coastal bluff scrub, coastal scrub, valley and foothill grassland/ sandy/ annual herb/ February–August	Appropriate habitat is present within the project survey area. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Clarkia delicata	Delicate clarkia	None/ None	1B.2	Chaparral, cismontane woodland/ annual herb/ April–June	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Clinopodium chandleri	San Miguel savory	None/ None	1B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland; rocky, gabbroic or metavolcanic/ perennial herb/ March–May	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this perennial species would have been observed.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Comarostaphylis diversifolia ssp. *diversifolia*	Summer-holly	None/ None	1B.2	Chaparral, cismontane woodland/ shrub/ April–June	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Convolvulus simulans	Small-flowered morning-glory	None/ None	4.2	Chaparral (openings), coastal scrub, valley and foothill grassland; clay, serpentinite seeps/ annual herb/ March–July	Numerous individuals were mapped onsite in grasslands on clay soils.
Corethrogyne filaginifolia var. *incana*	San Diego sand aster	None/ None	1B.1	Chaparral, coastal bluff scrub, coastal scrub/ perennial herb/ June–September	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Cylindropuntia californica var. *californica*	Snake cholla	None/ None	1B.1	Chaparral, coastal scrub/ stem succulent/ April–May	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Deinandra [=*Hemizonia*] *conjugens*	Otay tarplant	FT/ SE	1B.1	Coastal scrub, valley and foothill grassland; clay/ annual herb/ May–June	Appropriate habitat is present within the project survey area. Not observed onsite this year. Previous locations for the species in 2012 only had a few fascicled tarplants but no Otay tarplants.
Deinandra [=*Hemizonia*] *paniculata*	Paniculate tarplant	None/ None	4.2	Valley and foothill grassland, vernal pools, coastal scrub/ usually vernally mesic/ annual herb/ April–November	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Dichondra occidentalis	Western dichondra	None/ None	4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland/ rhizomatous herb/ March–May	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Dicranostegia orcuttiana	Orcutt's bird's-beak	None/ None	2B.1	Coastal scrub/ annual herb (hemiparasitic)/ March–September	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Dudleya attenuata ssp. *attenuata*	Orcutt's dudleya	None/ None	2B.1	Coastal bluff scrub, chaparral, coastal scrub; rocky or gravelly/ perennial herb/ May–July	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this perennial species would have been observed.
Dudleya blochmaniae ssp. *blochmaniae*	Blochman's dudleya	None/ None	1B.1	Chaparral, coastal bluff scrub, coastal scrub, valley and foothill grassland, rocky; often clay or serpentinite/ perennial herb/ April–June	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Dudleya variegata	Variegated dudleya	None/ None	1B.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland, vernal pools/ perennial herb/ May–June	Appropriate habitat is present within the project survey area. This species was not observed onsite though surveys were conducted at the appropriate time to allow detection of this species.
Ericameria palmeri ssp. *palmeri*	Palmer's goldenbush	None/ None	1B.1	Chaparral, coastal scrub/ shrub/ (July)–November	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Eryngium aristulatum var. *parishii*	San Diego button-celery	FE/ SE	1B.1	Coastal scrub, valley and foothill grassland, vernal pools; mesic/ annual-perennial herb/ April–June	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Euphorbia misera	Cliff spurge	None/ None	2.2	Coastal bluff scrub, coastal scrub; rocky/ shrub/ December–August	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Chamaesyce abramsiana	Abrams' spurge	None/ None	2B.2	Mojavean desert scrub, Sonoran desert scrub/ sandy/ annual herb/ September–November	Appropriate habitat is not present within the project survey area. Not observed onsite. Not expected onsite due to lack of suitable habitat.
Ferocactus viridescens	San Diego barrel cactus	None/ None	2B.1	Chaparral, coastal scrub, valley and foothill grassland, vernal pools/ shrub/ May–June	Observed within the project survey area. The cactus remains relatively abundant especially in the southern portion of the project survey area.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Fraxinus parryi	Chaparral ash	None/ None	2B.2	Chaparral/ perennial shrub/ March–May	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Fremontodendron mexicanum	Mexican flannelbush	FE/ SR	1B.1	Closed-cone conifer forest, chaparral, cismontane woodland; gabbroic, metavolcanic, or serpentinite/evergreen shrub/ March–June	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Galium proliferum	Desert bedstraw	None/ None	2B.2	Mojavean desert scrub, pinyon-juniper woodland/rockty, carbonate (limestone)/ annual herb/ March–June	Appropriate habitat is not present within the project survey area. Not observed onsite. Not expected due to lack of suitable habitat.
Githopsis diffusa ssp. *filicaulis*	Mission Canyon bluecup	None/ None	3.1	Chaparral (mesic, disturbed areas)/ annual herb/ April–June	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Grindelia hallii	San Diego gumplant	None/ None	1B.2	Chaparral, lower montane conifer forest, meadows and seeps, valley and foothill grassland/ perennial herb/ July–October	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed. If present onsite, this perennial species would have been observed.
Harpagonella palmeri	Palmer's grapplinghook	None/ None	4.2	Chaparral, coastal scrub, valley and foothill grassland; clay/ annual herb/ March–May	This species was observed in scattered colonies at the southern end of the project survey area.
Hesperocyparis forbesii	Tecate cypress	None/ None	1B.1	Chaparral, closed-cone coniferous forest/clay, gabbroic or metavolcanic/perennial evergreen tree	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Heterotheca sessiliflora ssp. *sessiliflora*	Beach goldenaster	None/ None	1B.1	Chaparral (coastal), coastal dunes, coastal scrub/ perennial herb/ March–December	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Holocarpha virgata ssp. *elongata*	Graceful tarplant	None/ None	4.2	Coastal scrub, cismontane woodland, chaparral, valley and foothill grassland/ annual herb/ August–November	Appropriate habitat is present within the project survey area. This tarplant species was not observed during the current survey although surveys were conducted at the appropriate time to allow for its detection.
Horkelia truncata	Ramona horkelia	None/ None	1B.3	Chaparral, cismontane woodland/ clay/ perennial herb/ May–June	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Hosackia crassifooloia var. *otayensis*	Otay Mountain lotus	None/ None	1B.1	Chaparral (metavolcanic, often in disturbed areas)/ perennial herb/ May–August	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Isocoma menziesii var. *decumbens*	Decumbent goldenbush	None/ None	1B.2	Chaparral, coastal scrub (sandy, often disturbed areas)/ shrub/ April–November	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Iva hayesiana	San Diego marsh-elder	None/ None	2B.2	Marshes and swamps, playas/ perennial herb/ April–September	This species was observed as abundant in the riparian stream channels at the northern portion of the project survey area.
Juncus acutus spp. *leopoldii*	Southwestern spiny rush	None/ None	4.2	Coastal dunes, meadows and seeps (alkaline), saltwater marsh and swamp/ rhizomatous herb/ May–June	Appropriate habitat is present within the project survey area. This species was observed as abundant in the riparian stream channels at the northern portion of the project survey area.
Lasthenia glabrata ssp. *coulteri*	Coulter's goldfields	None/ None	1B.1	Saltwater marsh and swamps, playas, vernal pools/ annual herb/ February–June	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Lepechinia ganderi	Gander's pitcher sage	None/ None	1B.3	Closed-cone conifer forest, chaparral, coastal scrub, valley and foothill grassland; gabbroic and metavolcanic/ shrub/ June–July	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this perennial species would have been observed.
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	None/ None	4.3	Chaparral, coastal scrub/ annual herb/ January–July	Appropriate habitat is present within the project survey area. This species was not detected within the project survey area although surveys were conducted at the appropriate time to allow for detection of this species.
Acmispon prostratus	Nuttall's lotus	None/ None	1B.1	Coastal dunes, coastal scrub/ annual herb/ March–June	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Lycium californicum	California box-thorn	None/ None	4.2	Coastal bluff scrub, coastal scrub/ perennial shrub/ December–August	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Mimulus clevelandii	Cleveland's bush monkeyflower	None/ None	4.2	Chaparral, lower montane conifer forest; often in disturbed areas, openings/ perennial herb/ May–July	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Monardella hypoleuca ssp. *lanata*	Felt-leaved monardella	None/ None	1B.2	Chaparral, cismontane woodland/ rhizomatous herb/ May–August	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Monardella stoneana	Jennifer's monardella	None/ None	1B.2	Closed-cone coniferous forest, chaparral, coastal scrub, riparian scrub/ usually rocky intermittent streambeds/ Perennial herb/ June–September	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this perennial species would have been observed.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Monardella viminea	Willowy monardella	FE/ SE	1B.1	Closed-cone conifer forest, chaparral, coastal scrub, riparian forest, woodland, and scrub/ perennial herb/ June–August	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this perennial species would have been observed.
Myosurus minimus ssp. *apus*	Little mousetail	None/ None	3.1	Vernal pools, valley and foothill grassland; alkaline/ annual herb/ March–June	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Nama stenocarpa	mud nama	None/ None	2B.2	Marsh and swamps, lake margins and riverbanks/annual-perennial herb/January–July	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Navarretia fossalis	Spreading navarretia	FT/ None	1B.1	Chenopod scrub, shallow freshwater marsh and swamps, vernal pools/annual herb/ April–June	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Navarretia prostrata	Prostrate navarretia	None/ None	1B.1	Coastal scrub, valley and foothill grassland (alkaline), vernal pools; mesic/annual herb/ April–July	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Nolina interrata	Dehesa nolina	None/ SE	1B.1	Chaparral; gabbroic, metavolcanic or serpentinite/ perennial herb/ June–July	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Orcuttia californica	California Orcutt grass	FE/ SE	1B.1	Vernal pools/ annual herb/ April–August	Appropriate habitat is not present within the project survey area. Not observed onsite. Not expected onsite due to lack of suitable habitat.
Ornithostaphylos oppositifolia	Baja California birdbrush	None/ SE	2B.1	Chaparral/ evergreen shrub/ January–April	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Orobranche parishii ssp. *brachyloba*	Short-lobed broom-rape	None/ None	4.2	Coastal bluff scrub, coastal dunes, coastal scrub; sandy/ perennial herb parasitic/ April–October	Appropriate habitat is present within the project survey area. Not observed onsite. Not expected onsite due to lack of suitable habitat.
Pickeringia montana var. *tomentosa*	Woolly chaparral-pea	None/ None	4.3	Chaparral (gabbroic, granitic, clay)/ evergreen shrub/ May–August	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Piperia cooperi	Chaparral rein-orchid	None/ None	4.2	Chaparral, Cismontane woodland, valley and foothill grassland/ perennial herb/ March–June	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Pogogyne abramsii	San Diego mesa mint	FE/ SE	1B.1	Vernal pools/ annual herb/ April–July	Appropriate habitat is not present within the project survey area. Not observed onsite. Not expected onsite due to lack of suitable habitat.
Pogogyne nudiuscula	Otay Mesa mint	FE/ SE	1B.1	Vernal pools/ annual herb/ May–July	Appropriate habitat is not present within the project survey area. Not observed onsite. Not expected onsite due to lack of suitable habitat.
Rhinotropis cornuta var. *fishiae*	Fish's milkwort	None/ None	4.3	Chaparral, cismontane woodland, riparian woodland/ deciduous shrub/ May–August	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this perennial species would have been observed.
Quercus cedrocensis	Cedros Island oak	None/ None	2B.2	Closed-cone coniferous forest, chaparral, coastal scrub/ perennial evergreen tree/ April–May	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Quercus dumosa	Nuttall's scrub oak	None/ None	1B.1	Chaparral, coastal scrub, closed-cone coniferous forest; sandy and clay loam/ evergreen shrub/ February–March	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Quercus engelmannii X Q. cornelius-mulleri	Torrey's scrub oak	None/ None	No status	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland/ deciduous tree/ March–June	Six individuals of an Engelmann oak X desert scrub oak hybrid were mapped in the northern portion of the project survey area in coastal sage scrub.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Ribes canthariforme	Moreno currant	None/ None	1B.3	Chaparral, riparian scrub/ perennial deciduous shrub/ February–April	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Ribes viburnifolium	Santa Catalina Island currant	None/ None	1B.2	Chaparral, cismontane woodland/ perennial evergreen shrub/ February–April	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Rosa minutifolia	Small-leaved rose	None/ SE	2B.1	Chaparral, coastal scrub/ deciduous shrub/ January–June	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this perennial species would have been observed.
Salvia munzii	Munz's sage	None/ None	2B.2	Chaparral, coastal scrub/ perennial evergreen shrub/ February–April	Appropriate habitat is present within the project survey area. This species was observed in 2012 but not relocated within the project survey area in 2014.
Selaginella cinerascens	Ashy spike-moss	None/ None	4.1	Chaparral, coastal scrub (in openings)/perennial herb/ March	Occasionally observed within coastal sage scrub in the northern region of the project survey area.
Senecio aphanactis	Rayless ragwort	None/ None	2B.2	Chaparral, cismontane woodland, coastal scrub; alkaline/ annual herb/ January–April	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Stemodia durantifolia	Purple stemodia	None/ None	2B.1	Sonoran desert scrub (often mesic, sandy) / perennial herb / January–December	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.
Stipa diegoensis	San Diego County needlegrass	None/ None	4.2	Chaparral, coastal scrub/ rocky, often mesic/ perennial herb/ February–June	Appropriate habitat is present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Streptanthus bernardinus	Laguna Mountains jewel-flower	None/ None	4.3	Chaparral, lower montane coniferous forest/ perennial herb/ May–August	Appropriate habitat is not present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.

Scientific Name	Common Name	Status Federal/ State	California Rare Plant Rank	Primary Habitat Associations/ Life Form/ Blooming Period	Status Onsite or Potential to Occur
Suaeda esteroa	Estuary seablite	None/ None	1B.2	Coastal salt marshes and swamps/ perennial herb/ May–(January)	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Tetracoccus dioicus	Parry's tetracoccus	None/ None	1B.2	Chaparral, coastal scrub/ deciduous shrub/ April–May	Appropriate habitat is not present within the project survey area. Not observed onsite. If present onsite, this large perennial species would have been observed.
Xanthisma [=*Macharantha juncea*] *juncea*	Rush-like bristleweed	None/ None	4.3	Chaparral, coastal scrub/ perennial herb/ June–January	Appropriate habitat is present within the project survey area. Not observed onsite. Surveys were conducted at the appropriate time to allow for detection of this species, and the species was not observed.

Legend

Status (Federal/State):
FE: Federally listed as endangered
FT: Federally listed as threatened
SCE: State candidate for listing as endangered
SE: State-listed as endangered
ST: State-listed as threatened
SR: State rare

California Rare Plant Ranks:
1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
2: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3: Plants About Which We Need More Information – A Review List
4: Plants of Limited Distribution – A Watch List

California Rare Plant Threat Ranks:
0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2-Fairly threatened in California (20–80% occurrences threatened / moderate degree and immediacy of threat)
0.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

San Diego sunflower (*Bahiopsis* [=*Viguiera*] *laciniata*; CRPR 4.2)

San Diego sunflower (*Bahiopsis laciniata*) was found to be quite widespread throughout the project survey area but not in high concentrations. Several of its locations were relatively sparse. It is known to grow from seed rapidly following fires and gradually decline as other scrub and chaparral vegetation recovers from the burn. Locations that were identified as dense patches of *Bahiopsis* in 2012 appeared not as dense when surveyed this season. Approximately 15 individuals of this plant were also present in landscaping on a slope of SR-125 with other coastal sage scrub (Figures 3a, b, c, e). This small-to-medium-sized shrub in the Asteraceae (Sunflower Family) occurs in Orange and San Diego Counties in the United States and in Baja California and Sonora, Mexico.

Small-flowered morning-glory (*Convolvulus simulans*; CRPR 4.2)

Several small occurrences of small-flowered morning glory were mapped onsite, generally in the northern portion of the project survey area (Figure 3a). A number of individuals were mapped, generally in points of one to a few individuals, on clay soils in grasslands. This diminutive annual in the Convolvulaceae (Morning-Glory Family) blooms between February and July with tiny lavender flowers and occurs in central and southern California and in Baja California, Mexico.

Otay tarplant (*Deinandra* [=*Hemizonia*] *conjugens*; Federally-listed Threatened and State-listed Endangered, CRPR 1B.1)

Within the project survey area, 934 individuals of Otay tarplant were mapped in 2012. The majority of individuals were concentrated in the northern region, from the San Miguel Substation area south until the Mountain Ridge Road crossing (just south of Proctor Valley Road). Several additional individuals were mapped in a small area in the southernmost region of the project site just south of Hunte Parkway in 2012. Plants were observed within grasslands and in large grassy openings in coastal sage scrub. This annual in the Asteraceae is found only in southern San Diego County and in Baja California, Mexico.

Otay tarplant was not observed though extensive surveys were conducted during the 2014 season in an attempt to redocument its presence. It was found in flower at a reference site on Otay Mesa near Alta Road as an indication of the surveys being conducted during the appropriate time period during the 2014 season. The rainfall season of 2013–2014 was very dry. Only one small group of *Deinandra fasciculata* (fascicled tarplant) was observed in the northern area in the general vicinity of locations where *Deinandra conjugens* was found in 2012. In the southern portion, *Deinandra fasciculata* was found in a few locations but very stunted (only 2 inches tall), indicating an unfavorable rainfall season.

Variegated dudleya (*Dudleya variegata*; CRPR 1B.2)

Variegated dudleya was not redocumented during 2014. It was sought throughout the project survey area and especially where it had previously been mapped, though it may not have persisted long enough in this drought year to have bloomed. It is most likely extant where it was mapped during the 2012 survey. This species is known only from San Diego

County and Baja California, Mexico. It belongs to the Crassulaceae (Stonecrop Family) and blooms in the late spring with small, yellow, star-shaped flowers.

San Diego barrel cactus (*Ferocactus viridescens*; CRPR 2B.1)

San Diego barrel cactus was redocumented in the northern and southern areas of the project site (Figures 3a, e), generally in coastal sage scrub south of Hunte Parkway, although many cacti have died apparently from prolonged drought since the last survey in 2012. Some scattered individuals are extant in the northern terminus of the project survey area. Seventeen cacti that had been reported in 2012 (Figure 3e) remained in plastic pots from an abandoned restoration project at the southern end of the project survey area. Fourteen of these cacti remain extant (Figure 3e). San Diego barrel cactus, a perennial in the Cactaceae (Cactus Family), occurs only in coastal and foothill areas of San Diego County and Baja California, Mexico.

Palmer's grapplinghook (*Harpagonella palmeri*; CRPR 4.2)

In spite of the low rainfall season, hundreds of individuals of Palmer's grapplinghook (*Harpagonella palmeri*) were found on the southwest-facing slopes of the southern portion of the project survey area, south of Hunte Parkway. This species grows in soil that has a low cover of vegetation and significant bare patches. The formerly larger 2012 population seems to have been reduced due to the current drought rather than any disturbance factors (Figure 3e).

Palmer's grapplinghook occurs onsite on heavy clay soils in areas mapped as wildflower field, nonnative grassland, and coastal sage scrub. This tiny annual plant in the Boraginaceae (Borage Family) blooms in early spring and is present in scattered locations throughout southern California and Baja California, Mexico, though it is most concentrated in western Riverside County and coastal and foothill regions of San Diego County.

Graceful tarplant (*Holocarpha virgata* ssp. *elongata*); CRPR 4.2)

Graceful tarplant was not redocumented during 2014. It was sought throughout the project survey area and especially where it had previously been mapped in 2012. Annual wildflowers such as this species are frequently scarce or do not even germinate during extreme drought years (such as 2014), but persist in the soil seed bank. The species occurs generally in grasslands with clay soils but also may be found in openings in coastal sage scrub, chaparral, and woodlands. This annual plant in the Asteraceae generally blooms in the summer.

San Diego marsh elder (*Iva hayesiana*; CRPR 2.2)

San Diego marsh elder remains extant along the perennial stream in the northern portion of the project survey area. It is a spring-to-summer-blooming shrub in the Asteraceae. It occurs in marshes and swamps, on playas, and along stream channels in San Diego County and Baja California, Mexico. Within the project survey area, it grows in nearly uninterrupted thickets along the perennial stream traversing the eastern edge of the site in the north, and

along Salt Creek in the south (Figure 3a). It was apparently planted as a landscape plant along a slope at the junction of SR-125 and Proctor Valley Road (Figure 3b). Since it often grows in clumps, counts of individuals are difficult to determine.

Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*; CRPR 4.2)

Southwestern spiny rush remains extant in the same locations it was mapped during the 2012 survey. With one exception, all individuals are associated with the perennial stream channels and marshes traversing the north and south portions of the site (Figures 3a, b, e). Two individuals were also observed in an ephemeral channel on the north end of the site just south of the San Miguel Substation (see Figure 3a). In the United States, it is most common in San Diego County, but it also may be found as far north as San Luis Obispo County, west into Nevada and Arizona, and south into Baja California, Mexico and South America.

Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*; CRPR 4.3)

Although Robinson's pepper-grass is now thought by some authorities to be a synonym of the nonsensitive *Lepidium virginicum* ssp. *menziesii* (Baldwin et al. 2012), it is retained as a sensitive plant by the CNPS and is maintained as valid in the current San Diego County checklist (Rebman and Simpson 2014). No species of *Lepidium* were observed within the project survey area this year. This is a small, annual plant in the Brassicaceae (Mustard Family). The plant is restricted to openings in coastal sage scrub, generally on south- or west-facing slopes. It occurs in southern California and in Baja California, Mexico.

Torrey's scrub oak hybrid (*Quercus xacutidens*; no sensitivity status – correction from 2012 project data)

One small group (six individuals) of Torrey's scrub oak hybrid were documented in 2014 in the northern portion of the project survey area southeast of the San Miguel Substation. This stand of Torrey's scrub oaks were previously incorrectly mapped as special-status CRPR List 4.2 species Engelman oak (*Q. engelmannii*) in 2012. These trees are in fact a hybrid product of *Q. Cornelius-mulleri* and *Q. engelmannii.* It was previously reported as a special-status species because it is a hybrid with Engelmann oak, however it was not mapped in 2014 since Torrey's scrub oak is not considered a special-status species. Hybridization is very common in oaks, and the individuals showed characteristics intermediate between the two parent species.

Munz's sage (*Salvia munzii*; CRPR 2B.2)

A previously mapped location of Munz's sage from 2012 near the northern end of the corridor within the project survey area was not relocated in 2014.

Ashy spike-moss (*Selaginella cinerascens*; CRPR 4.1)

Ashy spike-moss was mapped in the easternmost portions of the northern end of the site, in coastal sage scrub (Figures 3a, b). It is found in Orange and San Diego Counties and Baja California and also may be found in chaparral. This perennial, rhizomatous herb in the Selaginellaceae (Spike-Moss Family) grows as a flat groundcover on the soil surface. As such, it is difficult to estimate the number of plants at a particular location, so estimates of area occupied were instead made for the purposes of this study. A total of 1.75 acres (76,275 square feet) of ashy spike-moss was mapped onsite.

Discussion

Rainfall during the winter of 2013–2014 was roughly half normal, the third consecutive year below normal (Robbins 2014). This resulted in fewer than normal annual and herbaceous perennial plants and the absence of several of the sensitive plants formerly documented in the project survey area.

If you have any questions or comments regarding this letter report, please contact me at (619) 764.6889.

Sincerely,

Erin Riley
Senior Biologist
erin.riley@aecom.com

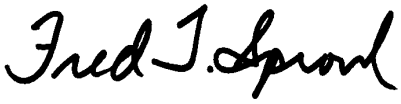
Attachments:

- Figure 1 – Regional Map
- Figure 2 – Project Components
- Figure 3a–e – Rare Plant Locations
- Attachment – List of Plants Observed Onsite in 2014

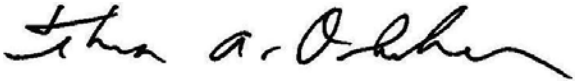
cc: Pat Gower, U.S. Fish and Wildlife Service
Stephanie Ponce, California Department of Fish and Wildlife
Kyle Dutro, California Department of Fish and Wildlife

Certification Statement

The qualified botanists who conducted rare plant surveys for SDG&E's proposed Salt Creek 69-kV Transmission Line Installation project survey area certify that the information in this survey report fully and accurately represents the work performed. The signatures of the botanists who conducted surveys (March 25 through June 11, 2014) are included below.



Fred Sproul
Senior Botanist



Tom Oberbauer
Scientist III, Biology

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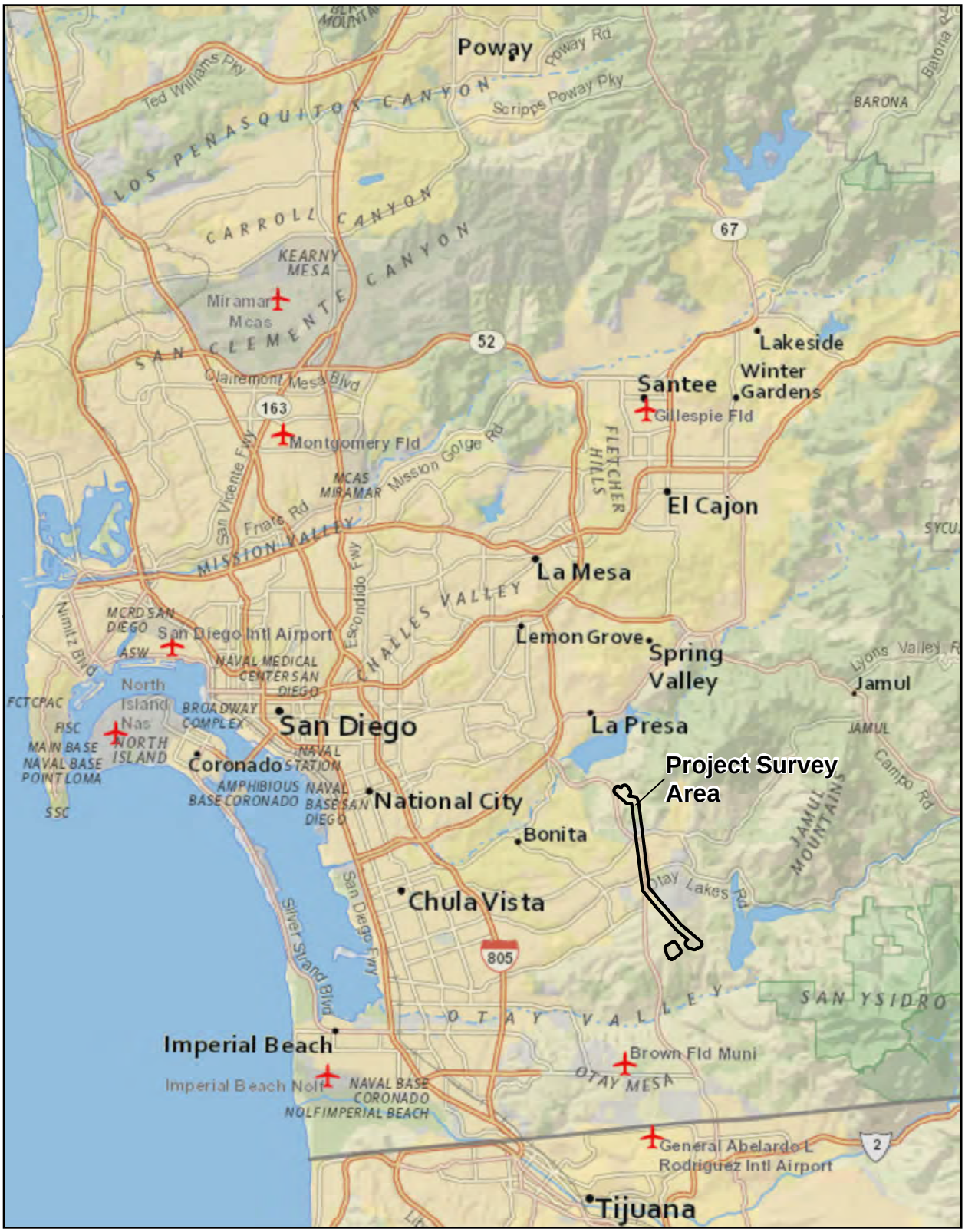
FIGURES

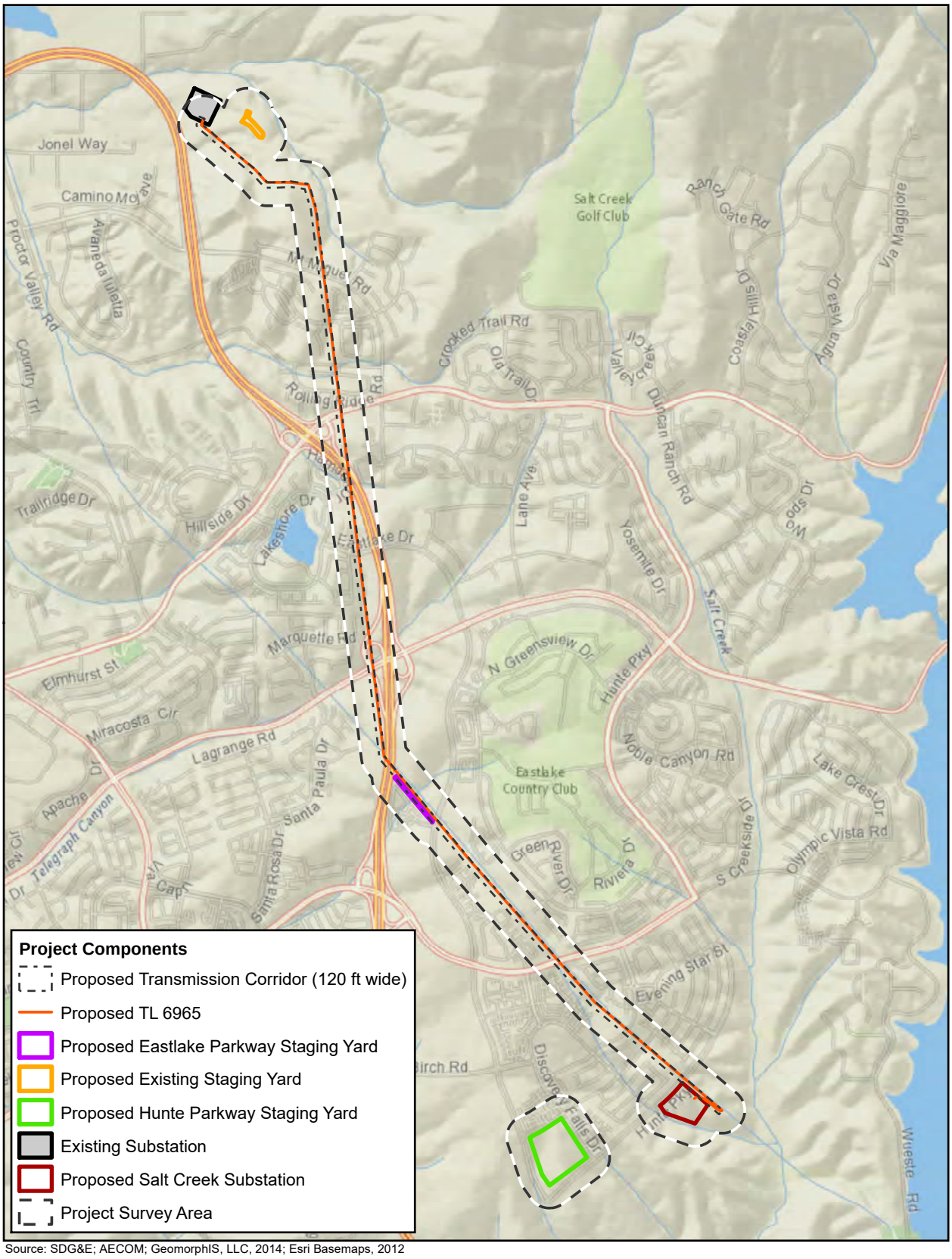


Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 2 4 Miles

Scale: 1:250,000 1 inch = 4 miles

Figure 1
Regional Map

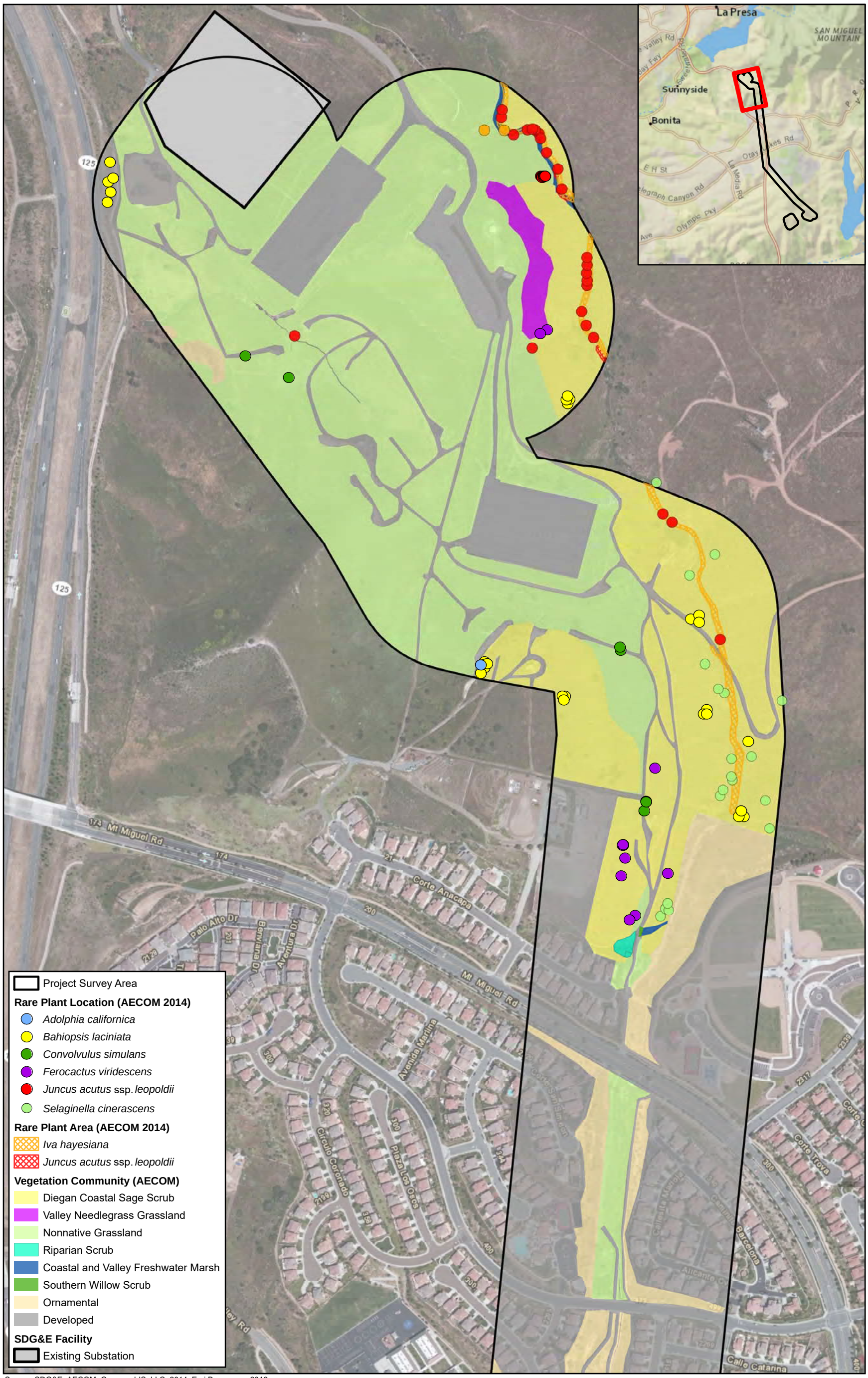


Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 1,600 3,200 Feet

Scale: 1:38,400 1 inch = 3,200 feet

Figure 2
Project Components



Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 210 420 Feet

Scale: 1:5,040 1 inch = 420 feet

Figure 3a
Rare Plant Locations

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2014\Veg_Survey\SaltCreek_PlantSurvey2014_Fig3.mxd, 9/9/2014, E D Goff

Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 210 420 Feet

Scale: 1:5,040 1 inch = 420 feet

Figure 3b
Rare Plant Locations

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2014\Veg_Survey\SaltCreek_PlantSurvey2014_Fig3.mxd, 9/9/2014, E D Goff

Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 210 420 Feet

Scale: 1:5,040 1 inch = 420 feet

Figure 3c
Rare Plant Locations

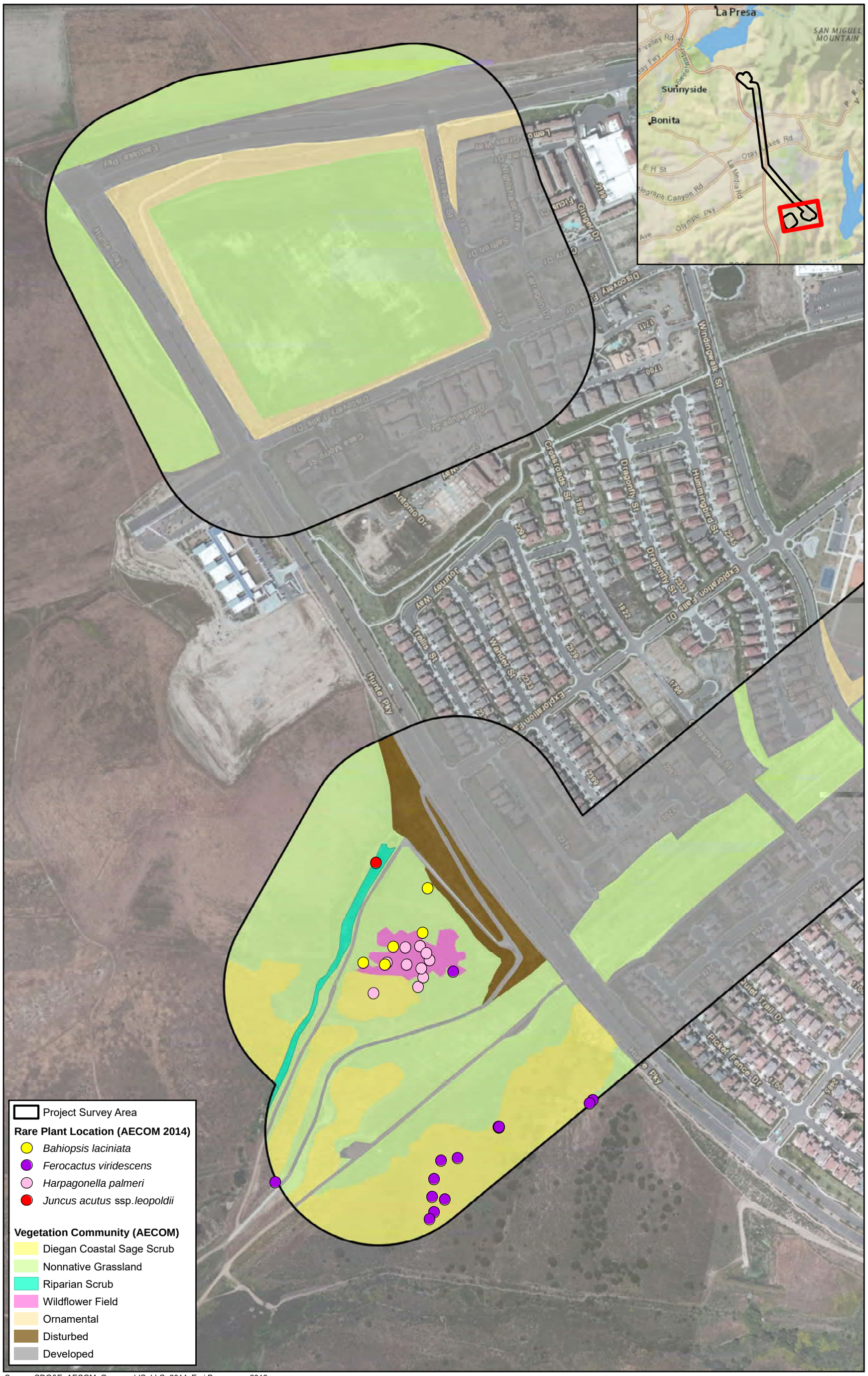
Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2014\Veg_Survey\SaltCreek_PlantSurvey2014_Fig3.mxd, 9/9/2014, E D Goff

Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 210 420 Feet

Scale: 1:5,040 1 inch = 420 feet

Figure 3d
Rare Plant Locations



Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 210 420 Feet

Scale: 1:5,040 1 inch = 420 feet

Figure 3e
Rare Plant Locations

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2014\Veg_Survey\SaltCreek_PlantSurvey2014_Fig3.mxd, 9/9/2014, E D Goff

ATTACHMENT

LIST OF PLANTS OBSERVED ONSITE IN 2014

List of Plants Observed Onsite in 2014

Latin Name	Common Name	Status
LYCOPHYTES		
Selaginellaceae – Spike-moss Family		
Selaginella bigelovii	bushy spike-moss	
Selaginella cinerascens	ashy spike-moss	CRPR 4.1
FERNS		
Pteridaceae – Brake Family		
Pellaea andromedifolia	coffee fern	
EUDICOTS		
Adoxaceae – Muskroot Family		
Sambucus nigra ssp. *caerulea*	blue elderberry	
Aizoaceae – Fig-marigold Family		
* *Carpobrotus edulis*	freeway iceplant	
* *Mesembryanthemum crystallinum*	crystalline iceplant	
Anacardiaceae – Sumac or Cashew Family		
Malosma laurina	laurel sumac	
Rhus integrifolia	lemonade berry	
* *Schinus molle*	Peruvian pepper tree	
Apiaceae – Carrot Family		
* *Foeniculum vulgare*	fennel	
Sanicula bipinnatifida	purple sanicle, shoe buttons	
Apocynaceae – Dogbane Family		
* *Nerium oleander*	common oleander	
Asteraceae – Sunflower Family		
Achillea millefolium	common yarrow	
Acourtia microcephala	sacapellote	
Ambrosia psilostachya	western ragweed	
* *Anthemis cotula*	mayweed	
Artemisia californica	California sagebrush	
Artemisia douglasiana	mugwort	
Baccharis pilularis	coyote brush	
Baccharis salicifolia ssp. *salicifolia*	mule fat	
Baccharis sarothroides	broom baccharis	
Bahiopsis laciniata	San Diego sunflower	CRPR 4.2
**Baileya multiradiata*	desert marigold	
Brickellia californica	California brickellbush	
* *Carduus pycnocephalus* ssp. *pycnocephalus*	Italian thistle	

Latin Name	Common Name	Status
* *Centaurea melitensis*	tocalote	
* *Cirsium vulgare*	bull thistle	
Corethrogyne filaginifolia	common sand aster	
* *Cotula australis*	Australian cotula	
* *Cynara cardunculus* ssp. *cardunculus*	artichoke	
Deinandra fasciculata	fascicled tarweed	
Encelia californica	California brittlebush	
Encelia farinosa	brittlebush	
Erigeron canadensis	horseweed	
Eriophyllum confertiflorum	golden-yarrow, yellow-yarrow	
* *Gazania linearis*	treasureflower	
Grindelia camporum	great valley gumweed	
Gutierrezia californica	California matchweed	
Hazardia squarrosa	saw-toothed goldenbush	
* *Hedypnois cretica*	Crete weed	
Helianthus gracilentus	slender sunflower	
* *Helminthotheca echioides*	bristly ox-tongue	
Heterotheca grandiflora	telegraph weed	
* *Hypochaeris glabra*	smooth cat's-ear	
Isocoma menziesii var. *vernonoides*	Menzies' goldenbush	
Iva hayesiana	San Diego marsh-elder	CRPR 2B.2
* *Lactuca serriola*	prickly lettuce	
Laennecia coulteri	Coulter's horseweed	
Lasthenia californica ssp. *californica*	California goldfields	
* *Logfia gallica*	narrow-leaf cottonrose	
Osmadenia tenella	osmadenia	
Pseudognaphalium biolettii	two-color rabbit-tobacco	
Pseudognaphalium californicum	ladies' tobacco	
* *Pseudognaphalium luteoalbum*	Jersey cudweed	
* *Senecio vulgaris*	common groundsel	
* *Silybum marianum*	blessed milkthistle	
* *Sonchus asper* ssp. *asper*	prickly sow thistle	
* *Sonchus asper* ssp. *asper*	prickly sow thistle	
Boraginaceae – Borage Family		
Harpagonella palmeri	Palmer's grapplinghook	CRPR 4.2
Heliotropium curassavicum var. *oculatum*	seaside heliotrope, alkali heliotrope	

Latin Name	Common Name	Status
Pectocarya linearis ssp. *ferocula*	narrow-toothed pectocarya	
Brassicaceae – Mustard Family		
* *Brassica nigra*	black mustard	
Cactaceae – Cactus Family		
Cylindropuntia prolifera	coast cholla	
Ferocactus viridescens	San Diego barrel cactus	CRPR 2B.1
Opuntia littoralis	coastal prickly-pear	
Caryophyllaceae – Pink Family		
* *Silene gallica*	small-flower catchfly, windmill pink	
Spergularia sp.	sand-spurry	
Chenopodiaceae – Goosefoot Family		
* *Atriplex lindleyi*	Lindley's saltbush	
* *Atriplex semibaccata*	Australian saltbush	
* *Bassia hyssopifolia*	fivehorn smotherweed	
* *Chenopodium murale*	nettleleaf goosefoot	
* *Salsola tragus*	Russian thistle, tumbleweed	
Cleomaceae – Spiderflower Family		
Peritoma arborea var. *arborea*	bladderpod	
Convolvulaceae – Morning-glory Family		
* *Convolvulus arvensis*	bindweed, orchard morning-glory	
Convolvulus simulans	small-flowered morning-glory	CRPR 4.2
Cressa truxillensis	alkali weed	
Crassulaceae – Stonecrop Family		
Crassula connata	pygmy-weed	
Dudleya pulverulenta	chalk dudleya	
Cucurbitaceae – Gourd Family		
Marah macrocarpa	chilicothe	
Euphorbiaceae – Spurge Family		
Chamaesyce albomarginata	rattlesnake weed	
* *Chamaesyce maculata*	spotted spurge	
Croton setigerus	turkey-mullein	
Euphorbia polycarpa	small-seed sandmat	
* *Ricinus communis*	castorbean	
Fabaceae – Legume Family		
* *Acacia cyclops*	western coastal wattle	
Acmispon glaber	deerweed, California broom	
Acmispon micranthus	San Diego bird's-foot trefoil	

Latin Name	Common Name	Status
Astragalus trichopodus var. *lonchus*	Santa Barbara milkvetch	
Lupinus succulentus	arroyo lupine	
* *Medicago polymorpha*	California burclover	
* *Melilotus albus*	white sweetclover	
* *Melilotus indicus*	sourclover	
Fagaceae – Oak Family		
Quercus acutidens	Torrey's scrub oak	
Gentianaceae – Gentian Family		
Zeltnera venusta	California centaury, charming centaury	
Geraniaceae – Geranium Family		
* *Erodium botrys*	longbeak stork's bill	
* *Erodium cicutarium*	redstem filaree	
* *Erodium moschatum*	greenstem filaree	
Lamiaceae – Mint Family		
* *Marrubium vulgare*	horehound	
Salvia apiana	white sage	
Salvia columbariae	chia	
Salvia mellifera	black sage	
Malvaceae – Mallow Family		
Malacothamnus fasciculatus	chaparral mallow	
* *Malva parviflora*	cheeseweed, little mallow	
Malvella leprosa	alkali mallow	
Myrsinaceae – Myrsine Family		
* *Anagallis arvensis*	scarlet pimpernel	
Myrtaceae – Myrtle Family		
* *Eucalyptus camaldulensis*	red gum, river red gum	
Nyctaginaceae – Four O'clock Family		
Mirabilis laevis var. *crassifolia*	wishbone bush	
Oleaceae – Olive Family		
* *Olea europaea*	olive	
Onagraceae – Evening Primrose Family		
Epilobium canum	California fuchsia, zauschneria	
Oxalidaceae – Oxalis Family		
Oxalis californica	California wood-sorrel	
* *Oxalis pes-caprae*	Bermuda buttercup	
Papaveraceae – Poppy Family		
Eschscholzia californica	California poppy	

Latin Name	Common Name	Status
Phrymaceae – Lopseed Family		
Diplacus aurantiacus	sticky monkeyflower	
Plumbaginaceae – Leadwort Family		
* *Limonium perezii*	Perez's sea lavender	
Polygonaceae – Buckwheat Family		
Chorizanthe fimbriata	fringed spineflower	
Eriogonum fasciculatum var. *fasciculatum*	coast California buckwheat	
* *Rumex crispus*	curly dock	
Proteaceae – Protea Family		
* *Grevillea robusta*	silk oak	
Rhamnaceae – Buckthorn Family		
Adolphia californica	California adolphia	CRPR 2B.1
Rhamnus crocea	spiny redberry	
Rosaceae – Rose Family		
Heteromeles arbutifolia	toyon	
Rubiaceae – Madder Family		
Galium angustifolium	narrow-leaved bedstraw	
Galium aparine	goose grass	
Salicaceae – Willow Family		
Salix gooddingii	Goodding's black willow	
Salix laevigata	red willow	
Salix lasiolepis	arroyo willow	
Scrophulariaceae – Figwort Family		
* *Myoporum laetum*	myoporum, ngaio tree	
Scrophularia californica	California figwort	
Simmondsiaceae – Jojoba Family		
Simmondsia chinensis	jojoba	
Solanaceae – Nightshade Family		
Datura wrightii	sacred thorn-apple	
* *Nicotiana glauca*	tree tobacco	
Tamaricaceae – Tamarisk Family		
* *Tamarix ramosissima*	saltcedar	
Urticaceae – Nettle Family		
Parietaria hespera	rillita pellitory	
Urtica dioica	stinging nettle	
Verbenaceae – Vervain Family		
Verbena lasiostachys	western vervain	

Latin Name	Common Name	Status
MONOCOTS		
Agavaceae – Century Plant Family		
Chlorogalum parviflorum	smallflower soap plant	
Yucca schidigera	Mojave yucca	
Arecaceae – Palm Family		
* *Phoenix canariensis*	Canary Island palm	
* *Washingtonia robusta*	Mexican fan palm	
Cyperaceae – Sedge Family		
Cyperus eragrostis	tall flatsedge	
Schoenoplectus americanus	Olney's three-square bulrush	
Iridaceae – Iris Family		
Sisyrinchium bellum	western blue-eyed-grass	
Juncaceae – Rush Family		
Juncus acutus ssp. *leopoldii*	southwestern spiny rush	CRPR 4.2
Liliaceae – Lily Family		
Calochortus splendens	splendid mariposa lily	
Poaceae – Grass Family		
* *Avena barbata*	slender wild oat	
Avena fatua	wild oat	
Bothriochloa barbinodis	cane bluestem	
* *Brachypodium distachyon*	purple false brome	
* *Bromus diandrus*	ripgut grass	
* *Bromus hordeaceus*	soft chess	
* *Bromus madritensis*	compact brome	
* *Cortaderia selloana*	pampas grass	
* *Cynodon dactylon*	Bermuda grass	
* *Festuca perennis*	rye grass	
* *Lamarckia aurea*	goldentop grass	
Melica frutescens	woody melic	
Melica imperfecta	little California melica	
Muhlenbergia rigens	deer grass	
* *Paspalum dilatatum*	dallis grass	
* *Pennisetum setaceum*	crimson fountain grass	
* *Phalaris minor*	little-seed canary grass	
* *Polypogon monspeliensis*	annual beard grass, rabbitfoot grass	
* *Schismus barbatus*	common mediterranean grass	
Stipa lepida	foothill needle grass	

Latin Name	Common Name	Status
Themidaceae – Brodiaea Family		
Dichelostemma capitatum	blue dicks	
Typhaceae – Cattail Family		
Typha sp.	cattail	

Legend

* = Nonnative or invasive species

Status (Federal/State):
FT: Federally listed as threatened
SE: State-listed as endangered

California Rare Plant Rank:
1B: Plants Rare, Threatened, or Endangered in California and Elsewhere
2: Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
4: Plants of Limited Distribution – A Watch List

California Rare Plant Threat Ranks:
0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2-Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3-Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known

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October 23, 2014

Stephanie Ponce
California Department of Fish and Wildlife
3883 Ruffin Road
San Diego, CA 92123

RE: 2014 Western Burrowing Owl Summary Report for Salt Creek Substation and Power Line Project, Chula Vista, California

Dear Ms. Ponce:

AECOM submits this letter report to summarize the results of focused surveys conducted in 2014 for the California Department of Fish and Wildlife's (CDFW; formerly California Department of Fish and Game [CDFG]) Species of Special Concern (SSC) western burrowing owl (*Athene cunicularia hypugaea;* WBO). Focused surveys were conducted for the proposed Salt Creek Substation and Power Line Project (project) in Chula Vista, California, for San Diego Gas & Electric (SDG&E). AECOM complied with all guiding principles in the current CDFW protocol for 2012, Staff Report on Burrowing Owl Mitigation (CDFG 2012). AECOM biologists meet all qualifications to perform burrowing owl habitat assessments and surveys.

Project Location

The project site is situated approximately 15 miles southeast of downtown San Diego and 5 miles north of the international border with Mexico (Figure 1). The proposed Salt Creek Substation and the majority of the proposed power line are located in the eastern portion of the City of Chula Vista, California (Figure 2). The proposed Salt Creek Substation is located adjacent to and southeasterly of Hunte Parkway in the City of Chula Vista. Approximately 4,700 linear feet of the northernmost portion of the proposed power line is located in the unincorporated portion of San Diego County on SDG&E fee-owned land surrounding the Existing Miguel Substation (Existing Substation). The remaining portion of the proposed power line is located within the City of Chula Vista.

Project Description

The proposed project includes the installation of a new substation (proposed Salt Creek Substation), a new 69-kilovolt (kV) power tie-line (TL) from the Existing Substation to the proposed Salt Creek Substation (TL 6965), and modifications to the Existing Substation. The primary objectives of the proposed project are to provide additional capacity to serve existing area load and future customer-driven electrical load growth, and to provide the necessary distribution and transmission network to prevent long-term outages or disruptions of service to existing customers in the southeastern portion of SDG&E's service territory.

The proposed project includes four primary components:

- Construction and operation of a 120-megavolt ampere 69/12kV proposed Salt Creek Substation, including construction and operation of underground 12kV distribution circuits.
- Power lines, including construction and operation of a 5-mile-long overhead 69kV power line 6965 (TL 6965), from the Existing Substation to the proposed Salt Creek Substation, and construction and operation of a 69kV power line loop-in (TL 6910) to the proposed Salt Creek Substation.
- Modifications at the Existing Substation, including installation of a new 69kV power line position.
- Three temporary staging yards identified for the project; one at the Existing Substation (Existing Staging Yard), a second on the north side of Hunte Parkway between Discovery Falls, Eastlake Parkway, and Crossroads Street (Hunte Parkway Staging Yard), and a third within the transmission corridor between Eastlake Parkway and SR-125 (Eastlake Parkway Staging Yard). Alternate staging sites at the Olympic Training Center facility, south of Olympic Parkway, have also been identified. These alternate staging sites are not included in the project analysis provided herein.

Site Description

The project survey area includes the proposed Salt Creek Substation, the TL corridor, and three staging yards plus a 500-foot (150-meter) survey buffer around each of these areas (Figure 2). The project survey area occurs within the City of Chula Vista's Multiple Species Conservation Program Subarea Plan (Subarea Plan) Otay Ranch Planning Area, within areas planned for development (i.e., outside of the Otay Ranch Preserve) (Figure 2).

The project site is located on flat-to-gentle slopes along previously disturbed areas near the Existing Substation and within an existing SDG&E right-of-way. The transmission corridor is located within urban developed, landscape/ornamental, disturbed, nonnative grassland and coastal sage scrub habitats and cover types. The proposed Salt Creek Substation is primarily flat with a gentle slope across the site. The site is composed primarily of nonnative grassland, Diegan coastal sage scrub, and ornamental/landscaped cover types. Commercial and residential developments are located within and adjacent to the project site. Other development features present include major transportation corridors (SR-125), asphalt and compacted earthen roads, trails, fencing, ephemeral and intermittent stream features, culverts, and swales. Potential jurisdictional "waters of the U.S." (including wetlands) are also present on-site, including stream features and vegetated wetlands.

Western Burrowing Owl Background Information

Regulatory Status

The WBO is protected under the Migratory Bird Treaty Act (MBTA) of 1918 (16 United States Code 703–712). The MBTA makes it unlawful to take this species, its eggs, or its nests. Sections 3505, 3503.5, and 3800 of the California Fish and Game Code prohibit the take or destruction of the bird, its nests, or eggs. The WBO is also an SSC to California (CDFW 2013) and, as such, the California Environmental Quality Act requires mandatory findings of significance (i.e., significant or not significant) if impacts are likely to occur to this species. It is a CDFW designated SSC in California because its population has suffered precipitous declines due to habitat loss, degradation and modification, and loss of suitable burrows (CDFG 2012).

Habitat Status

WBO habitat consists of annual and perennial grasslands, deserts, agricultural areas, disturbed habitat, and scrublands characterized by low-growing vegetation (CBOC 1993; Zarn 1974). Suitable WBO habitat may also include trees and shrubs if the canopy covers less than 30% of the ground surface (DeSante et al. 1996). Burrows are an essential component of burrowing owl habitat, and both natural and artificial burrows provide protection, shelter, and nests. WBO often use burrows made by mammals such as California ground squirrels (*Spermophilus beecheyi)* in southern California, but may also use human-made structures such as cement culverts; riprap; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. WBO may use a particular site for migratory stopovers, or for breeding and foraging year-round. Suitable habitat is considered occupied if there is an observation of at least one burrowing owl occupying a burrow within the last 3 years, or burrowing owl sign around a burrow such as molted feathers, cast pellets, prey remains, eggshell fragments, or feces (CDFG 2012). Burrowing owls tend to exhibit high site fidelity, reusing the same site year after year (Feeney 1992; Rich 1984).

Population Status

WBO is found sparsely distributed in southern California; including San Diego County (DeSante et al. 1997; Klute et al. 2003; Lincer and Bloom 2007). The vast majority of the California breeding population of WBO occurs in the Central and Imperial Valleys, primarily in agricultural areas, often associated with canals and drainages (and their berms). Small, scattered populations occur in the Mojave Desert. Population density seems to be correlated with prey availability, particularly small mammals (Klute et al. 2003). WBO may change burrows many times during the breeding season after nestlings reach 3 weeks old. This can

be dependent on predation or disturbance. For more detail on the timing of the breeding season, see the Visits and Timing section below.

Burrowing owls have disappeared or declined in several southern California counties and in coastal areas, including San Diego County (DeSante et al. 1997; Klute et al. 2003; Lincer and Bloom 2007). This trend is not, however, limited to California; in 1992, 16 (67%) of 24 states and provinces polled reported burrowing owl population declines and no states reported an increase (James and Espie 1997).

Survey Methodology

Survey methods were conducted for the proposed project in accordance with the CDFG's Staff Report on Burrowing Owl Mitigation (CDFG 2012). WBO surveys were conducted to determine the presence or absence, abundance, and breeding status of the species within suitable habitat within the larger project survey area.

CDFW (2012) protocol requires that the project footprint and a 500-foot (150-meter) buffer surrounding the project footprint be surveyed for the presence/absence of WBO. The proposed project footprint and a 500-foot (150-meter) buffer are collectively referred to as the biological survey area (BSA) herein (Figure 2). The BSA encompasses approximately 775 acres (313.6 hectares) (AECOM 2013). The BSA was surveyed to assess suitable burrowing owl habitat that may be directly or indirectly affected by project activities.

An initial habitat assessment for WBO was conducted in 2012 prior to WBO focused surveys. Again in 2013, a habitat assessment preceded WBO focused surveys. Conditions in the survey area have not changed significantly since 2013; thus, the 2014 survey area is the same as in 2013. Suitable WBO habitat on-site includes native and nonnative/disturbed habitats. The total acreage of suitable burrowing owl habitat within the BSA is 228.36 acres (92.41 hectares) (Figure 3).

Suitable burrowing owl habitat characteristics within the BSA include open, native and nonnative annual grassland, numerous fossorial mammal burrows, and several adequate perch sites. Vegetation communities within the BSA that are suitable for burrowing owls include open coastal sage scrub, native and nonnative annual grassland, landscape/ ornamental, and disturbed habitats (Figure 3). Natural burrows and perch sites (fence posts, fencing, dirt mounds, berms, and debris piles) occur in each vegetation community.

Visits and Timing

Burrowing owls are more detectable during the breeding season with detection probabilities being highest during the nestling stage (Conway et al. 2008). In California, the WBO breeding season extends generally from February 1 through August 31 (Haug et al. 1993) with some variances by geographic location and climatic conditions. As indicated by CDFG

(2012), several researchers suggest three or more survey visits during daylight hours (Haug and Didiuk 1993; Conway and Simon 2003) and recommend each visit occur at least 3 weeks apart during the peak of the breeding season, commonly accepted in California as between April 15 and July 15 (CBOC 1993.

Per CDFG 2012 requirements, where suitable WBO habitat exists, WBO breeding season surveys should consist of four survey visits based on the following timing:

- One survey visit between February 1 and April 15
- Two survey visits, at least 3 weeks apart, between April 15 and July 15
- One survey visit after June 15 but prior to the end of the breeding season (August 31), at least 3 weeks after previous survey

Because the total acreage of suitable habitat was more than could be surveyed in a single day, each survey was completed over multiple days. The first survey was conducted on March 31, April 1, 2, and 3, 2014. The second survey was conducted on May 5, 6, and 9, 2014. The third survey was conducted on June 9, 11, and 13, 2014. The fourth WBO survey was conducted on July 8, 9, and 10, 2014. All surveys were conducted according to current CDFW (CDFG 2012) guidelines and all surveys were at least 3 weeks apart. To ensure the greatest detection probability, surveys were conducted at times of high burrowing owl activity: between morning civil twilight and 10:00 a.m. and 2 hours before sunset until evening civil twilight. Biologists timed surveys to coincide with the burrowing owl laying and incubation period, nesting period, and the late nestling period when owls are most present above ground. Surveys were not conducted when wind speeds exceeded 12.4 miles per hour (20 kilometers per hour) or when it was raining or during the presence of dense fog. Breeding season survey dates, observers, weather data, and times are presented in Table 1.

Survey Method

Surveys were conducted by walking through all suitable habitats within the BSA using 100% visual coverage, focusing on visual signs of burrowing owl (burrows, pellets, white wash, etc.). Distance between transects was no greater than 65 feet (20 meters) during each survey. While walking transects, the biologists would continuously scan the BSA to detect owls. At each suitable burrow, presence of any WBO sign (e.g., pellets, prey remains, whitewash, decorations, tracks) and number of WBO present at that burrow were recorded for each survey visit. After a burrow was marked, it was revisited during all follow-up surveys; biologists also continued to survey for new burrows during follow-up surveys.

Table 1
Survey Dates, Personnel, and Weather Conditions

Survey Number	Date	Survey Personnel	Time	Weather Conditions
1	3/31/2014	James McMorran, Brennan Mulrooney	0629–1015	Start: 52°F, wind 3 mph, 10% cover End: 65°F, wind 3 mph, 10% cover
1	4/1/2014	James McMorran, Brennan Mulrooney	1709–1917	Start: 62°F, wind 8 mph, 20% cover End: 59°F, wind 8 mph, 10% cover
1	4/2/2014	Brennan Mulrooney	0642–0958	Start: 50°F, wind 1 mph, 100% cover End: 53°F, wind 5 mph, 80% cover
1	4/3/2014	Michael Anguiano, James McMorran, Brennan Mulrooney, Brynne Mulrooney	0634–1005	Start: 47°F, wind 1 mph, 0% cover End: 53°F, wind 2 mph, 0% cover
1	4/3/2014	Brennan Mulrooney	1659–1905	Start: 70°F, wind 3 mph, 5% cover End: 65°F, wind 3 mph, 50% cover
2	5/5/2014	Michael Anguiano, Mark Roll	0548–1003	Start: 60°F, wind 0 mph, 100% cover End: 65°F, wind 5 mph, 0% cover
2	5/6/2014	James McMorran, Brennan Mulrooney	0601–0956	Start: 50°F, wind 10 mph, 80% cover End: 63°F, wind 10 mph, 50% cover
2	5/9/2014	Michael Anguiano, James McMorran, Brennan Mulrooney	0545–0941	Start: 51°F, wind 0 mph, 70% cover End: 63°F, wind 3 mph, 0% cover
3	6/9/2014	James McMorran, Brennan Mulrooney	1813–1947	Start: 65°F, wind 4 mph, 0% cover End: 62°F, wind 2 mph, 0% cover
3	6/11/2014	James McMorran, Brennan Mulrooney	0533–1015	Start: 62°F, wind 4 mph, 100% cover End: 76°F, wind 5 mph, 0% cover
3	6/11/2014	Brennan Mulrooney	1807–2005	Start: 69°F, wind 3 mph, 0% cover End: 60°F, wind 2 mph, 5% cover
3	6/13/2014	James McMorran, Brennan Mulrooney	0531–0957	Start: 63°F, wind 3 mph, 100% cover End: 69°F, wind 4 mph, 50% cover
4	7/8/2014	Brennan Mulrooney	0603–1010	Start: 64°F, wind 1 mph, 100% cover End: 77°F, wind 3 mph, 0% cover
4	7/9/2014	James McMorran, Brennan Mulrooney	0557–0945	Start: 67°F, wind 0 mph, 100% cover End: 75°F, wind 4 mph, 0% cover
4	7/9/2014	Michael Anguiano, Brennan Mulrooney	1805–1917	Start: 71°F, wind 4 mph, 0% cover End: 69°F, wind 1 mph, 0% cover
4	7/10/2014	Michael Anguiano, James McMorran, Brennan Mulrooney	0557–0940	Start: 68°F, wind 0 mph, 100% cover End: 74°F, wind 0 mph, 0% cover

During each visit, the survey status of a burrow for the given survey period was classified as follows:

- Occupied – a WBO individual was observed to be present at the burrow;
- Active – a WBO burrow with fresh WBO sign but no WBO individual was present;
- Inactive – suitable for WBO but no WBO individuals or sign was observed; or
- No longer suitable – previously suitable burrow that was no longer suitable due to erosion, a natural burrow collapse, or inadvertent damage from anthropogenic activities.

Following the completion of surveys, the cumulative visits to each burrow resulted in a survey history for each burrow detected within in the survey area. As a result, a cumulative burrow status was assigned to each burrow for impact analysis purposes. Burrows were classified as occupied due to the presence of owls directly at the burrow during at least one survey. Burrows were classified as active due to the presence of fresh or recent sign during at least one survey (no owls observed at the burrows). Burrows were classified as inactive due to the absence of an owl, or fresh or recent sign, during all four surveys.

All data were recorded using electronic data forms installed on HP iPAQ Travel Companions (Attachment A). Electronic data forms included built-in data validation procedures for quality assurance and control purposes.

Results

A total of 169 potentially suitable burrows, or burrow clusters, were documented within the BSA (Attachment A and Figures 4a and 4b). This number is not reflected in Table 2 because the total in the table is the total per survey and not the cumulative total. Some burrows marked in previous surveys were not recorded in subsequent surveys because they could not be located. This could have been because they were filled in by fossorial mammals or altered by human activity. Each known burrow was visited on each survey during burrowing owl protocol surveys by AECOM biologists. Table 2 summarizes the progression of cumulative burrow status by survey number.

Table 2
Progression of Cumulative Burrow Status by Survey Number

Cumulative Burrow Status	Count of Burrows by Survey Number			
	1	2	3	4
Burrows				
Occupied	0	0	0	0
Active	0	0	0	0
Inactive (including no longer suitable)	146	154	167	165
Total	**146**	**154**	**167**	**165**

All of the suitable burrows found within the project survey area were inactive during the 2014 survey effort. No WBO sign was found at any burrow and no WBO were encountered. Other sensitive wildlife species detected during burrowing owl surveys are included in Appendix B (Figures 5a and 5b).

Discussion

In 4 years of WBO surveys within the BSA (year 1 being limited to the Salt Creek Substation), this is the first year that no WBO were found. In all previous survey years, at least one WBO was found. The one burrow occupied in 2013 has since been destroyed by development on the property to the west of the Hunte Parkway Staging Yard. The burrows occupied in 2011 and 2012 (both in the vicinity of the proposed Salt Creek Substation) are still suitable but were not occupied this year. As 2014 has been a year of extremely low rainfall, this may had an influence on prey availability and thus WBO status in the area. The majority of burrows in 2014, as in previous years, were concentrated in the central portion of the TL corridor, and in the southern portion of the project near the proposed Salt Creek Substation.

If you have any questions or comments regarding this letter report, please contact me at 619.233.1454.

Sincerely,

Brennan Mulrooney
AECOM Biologist

cc: Kyle Dutro, California Department of Fish and Wildlife
Leslie Nelson, San Diego Gas & Electric

Attachments:

Figure 1 – Regional Map
Figure 2 – Project Components and Vicinity Map
Figure 3 – Suitable Western Burrowing Owl Habitat
Figures 4a and 4b – Western Burrowing Owl Burrow Locations
Figures 5a and 5b – Other Sensitive Species Observations
Appendix A – Burrow Data Summary for Burrowing Owl Surveys
Appendix B – Wildlife Species Detected during 2014 Western Burrowing Owl Surveys

Certification

Qualified biologists who conducted burrowing owl surveys within the burrowing owl BSA for the proposed project certify that the information in this survey report fully and accurately represents the work performed. Signatures of permitted biologists who conducted protocol surveys are included below. The results of focused surveys for listed species are typically considered valid for 1 year by the resource agencies.

Brennan Mulrooney
AECOM Biologist

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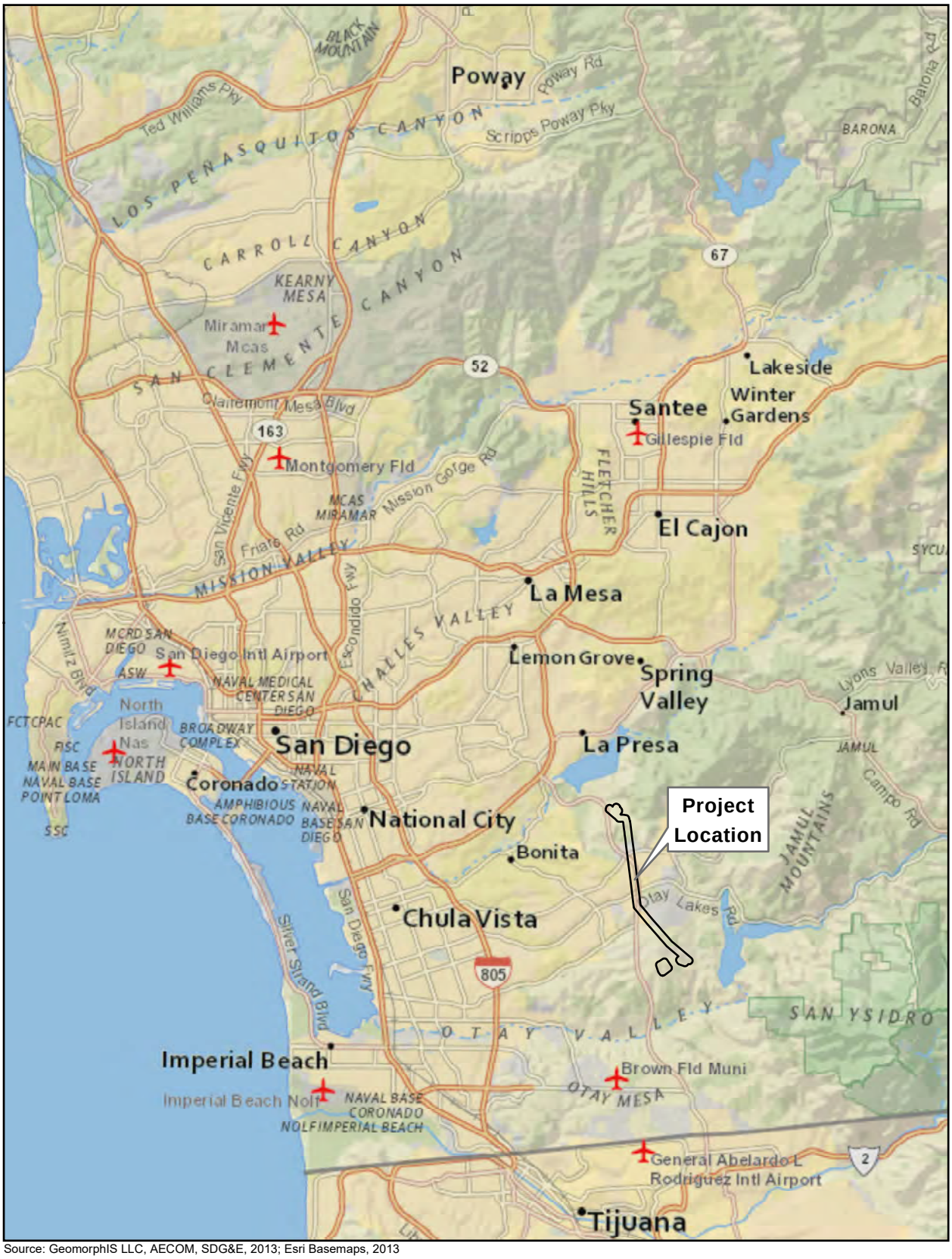
FIGURES

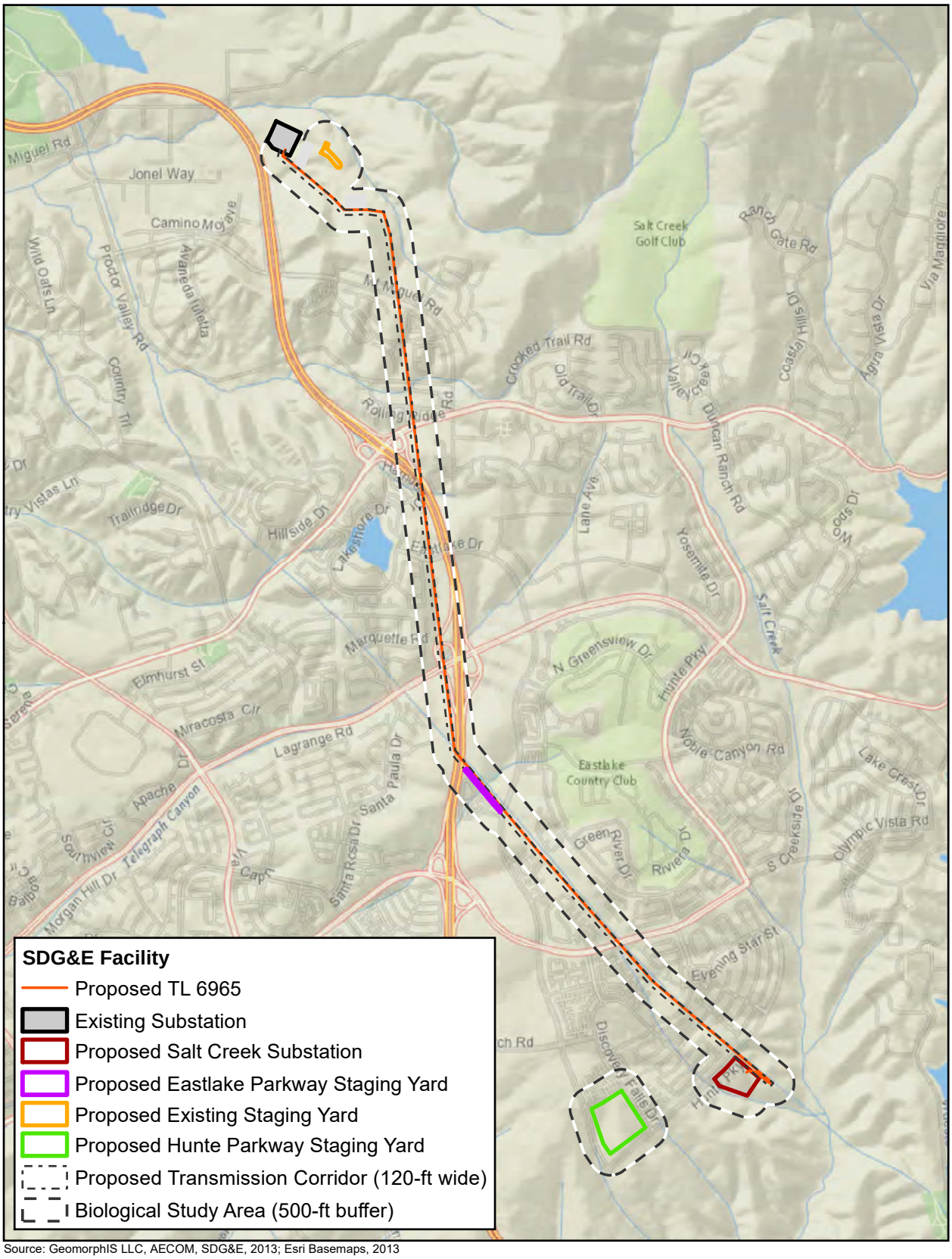


Source: GeomorphIS LLC, AECOM, SDG&E, 2013; Esri Basemaps, 2013

0 2 4 Miles

Scale: 1:250,000 1 inch = 4 miles

Figure 1
Regional Map



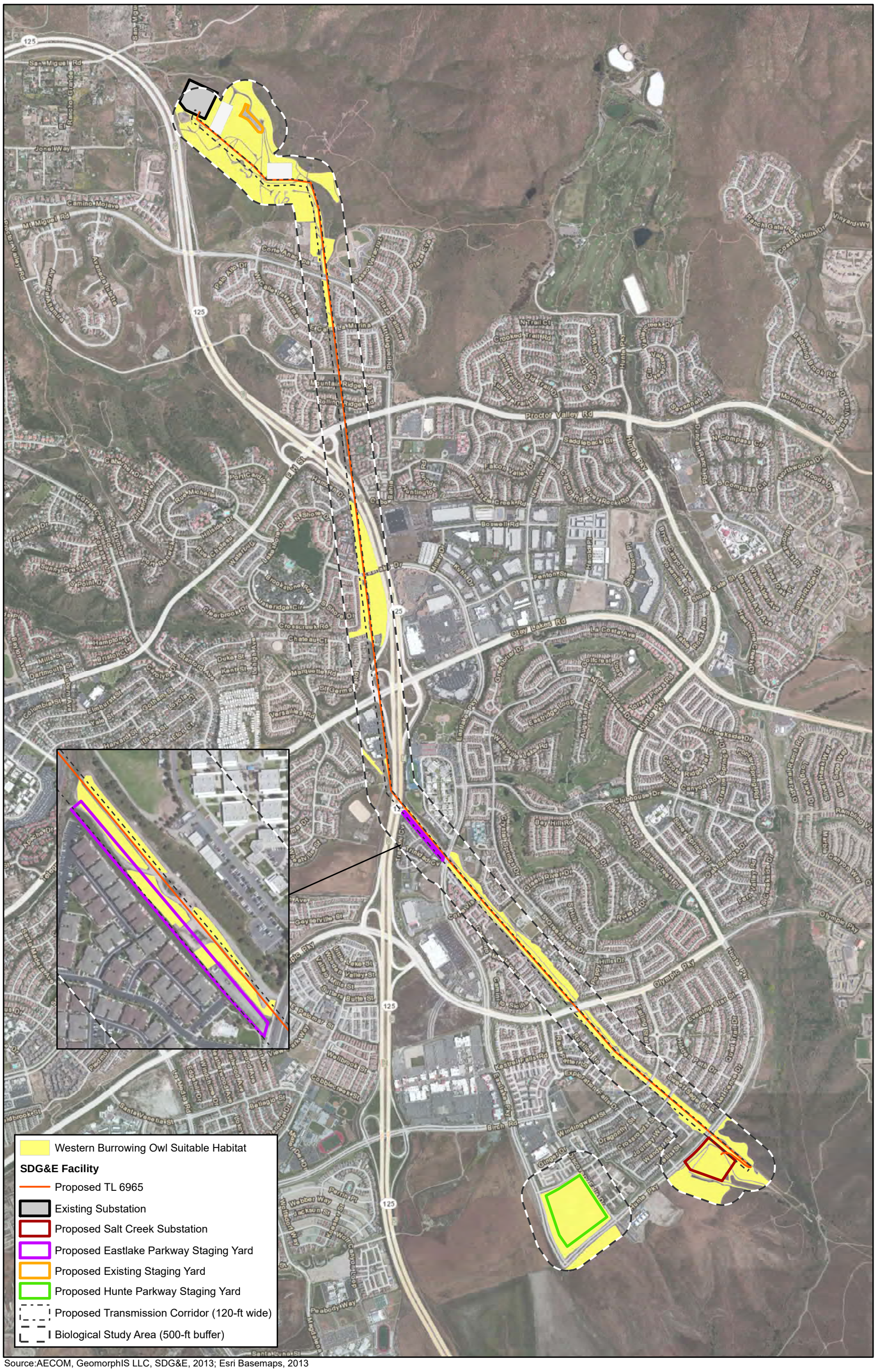
Source: GeomorphIS LLC, AECOM, SDG&E, 2013; Esri Basemaps, 2013

0 0.5 1 Mile

Scale: 1:40,800 1 inch = 1 mile

Figure 2
Project Components and Vicnity Map

SDG&E is providing this map with the understanding that the map is not survey grade.

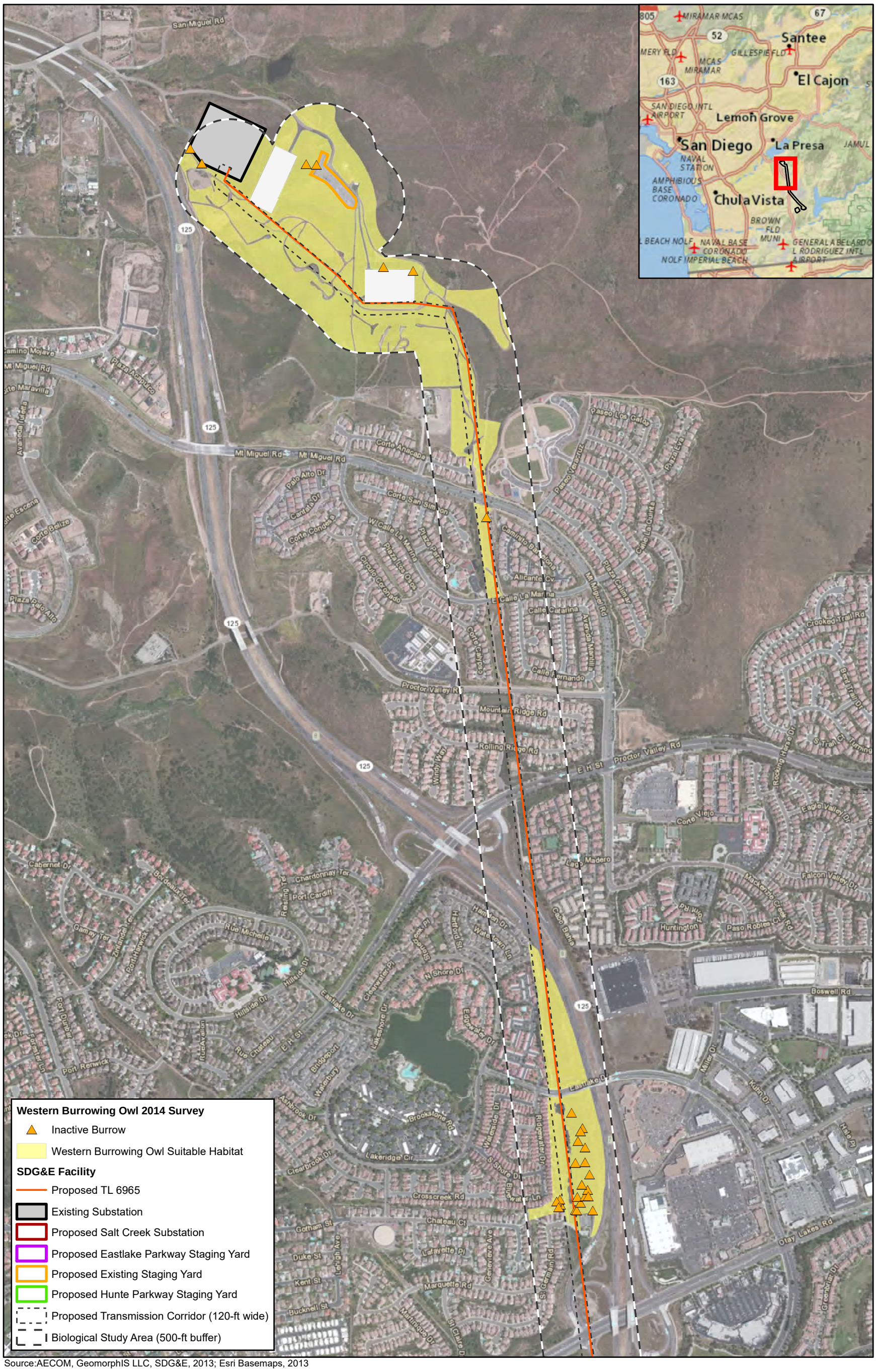


Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 1,000 2,000 Feet

Scale: 1:24,000 1 inch = 2,000 feet

Figure 3
Suitable Western Burrowing Owl Habitat



Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

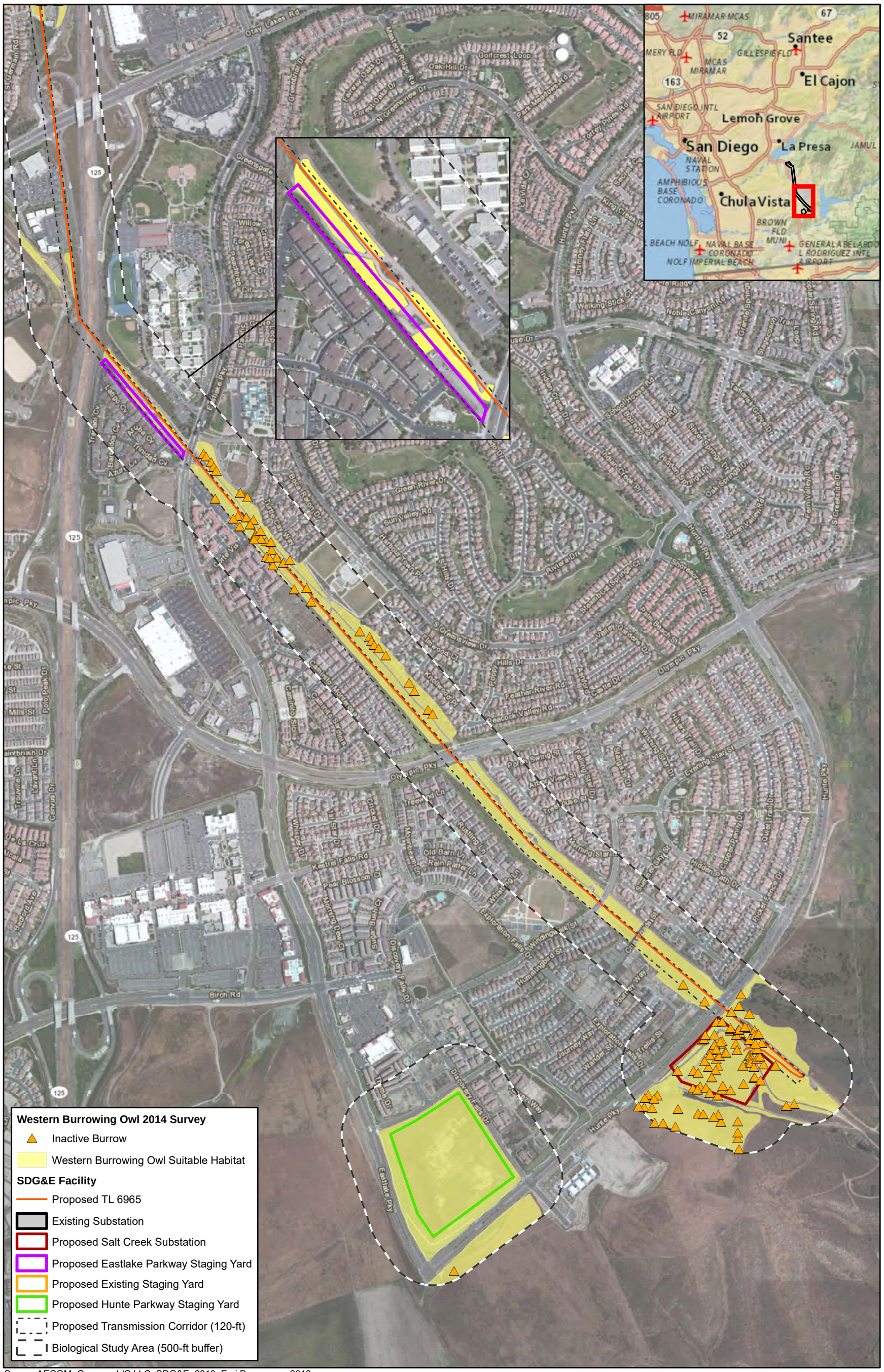
0 500 1,000 Feet

Scale: 1:12,000 1 inch = 1,000 feet

Figure 4a
Western Burrowing Owl Burrow Locations

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\WBO2014\Fig4_WBO_Burrows2014.mxd, 8/8/2014, E D Goff

SDG&E is providing this map with the understanding that the map is not survey grade.



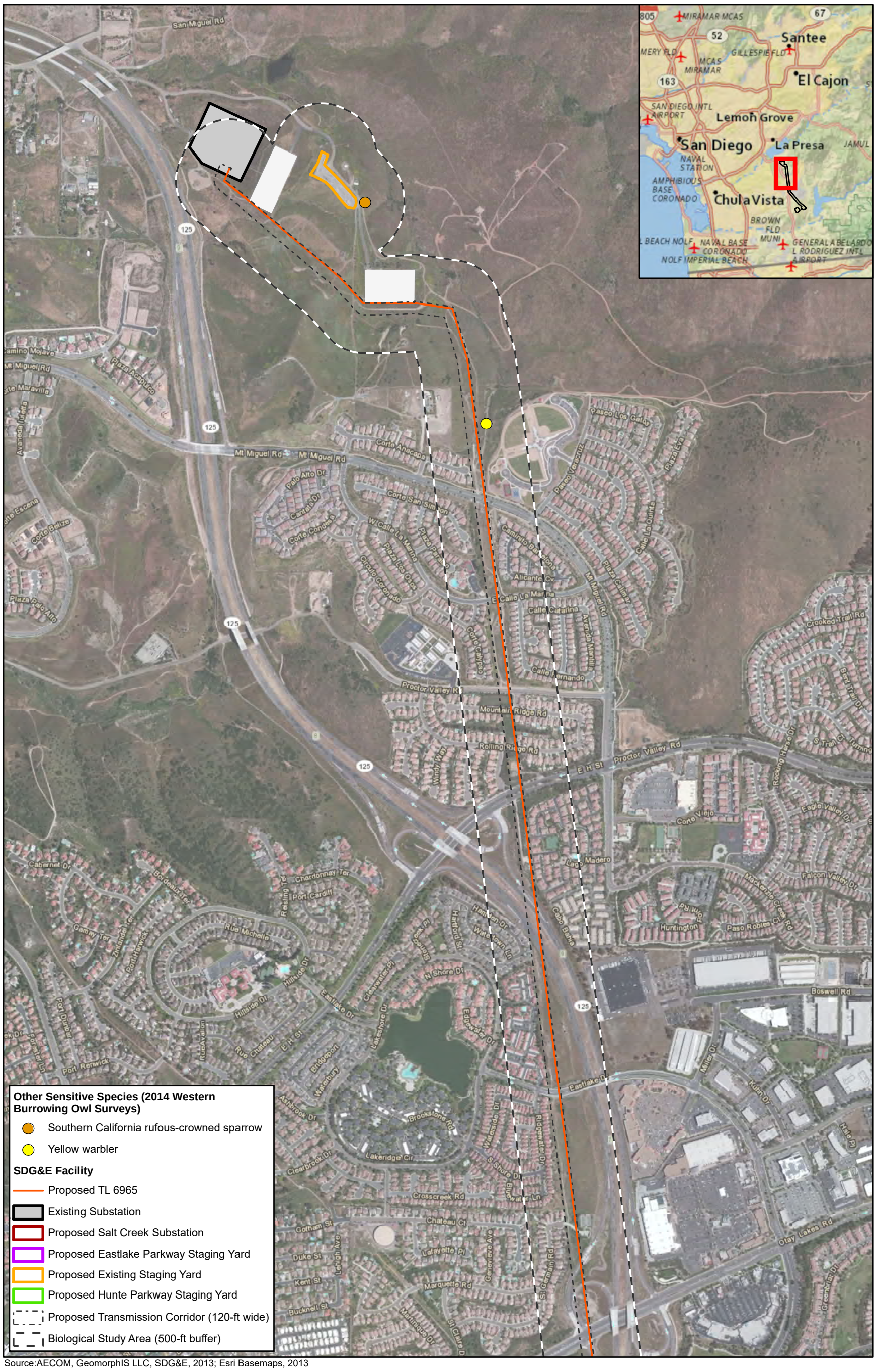
Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 500 1,000 Feet

Scale: 1:12,000 1 inch = 1,000 feet

Figure 4b
Western Burrowing Owl Burrow Locations

SDG&E is providing this map with the understanding that the map is not survey grade.



Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 500 1,000 Feet

Scale: 1:12,000 1 inch = 1,000 feet

Figure 5a
Other Sensitive Species Observations

Other Sensitive Species (2014 Western Burrowing Owl Surveys)

- American peregrine falcon
- California horned lark
- Grasshopper sparrow
- Northern harrier
- Yellow warbler
- San Diego black-tailed jackrabbit

SDG&E Facility

- Proposed TL 6965
- Existing Substation
- Proposed Salt Creek Substation
- Proposed Eastlake Parkway Staging Yard
- Proposed Existing Staging Yard
- Proposed Hunte Parkway Staging Yard
- Proposed Transmission Corridor (120-ft wide)
- Biological Study Area (500-ft buffer)

Source:AECOM, GeomorphIS LLC, SDG&E, 2013; Esri Basemaps, 2013

0 500 1,000 Feet

Scale: 1:12,000 1 inch = 1,000 feet

Figure 5b
Other Sensitive Species Observations

ATTACHMENT A

BURROW DATA SUMMARY FOR BURROWING OWL SURVEYS

Appendix A
Burrow Data Summary for Burrowing Owl Surveys

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
1	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
1	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
1	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
1	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
2	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
2	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
2	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
2	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
3	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
3	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
3	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
3	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
4	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
4	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
4	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
4	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
5	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
5	2	5/5/2014	Inactive	Inactive	-	-	-	none	cobwebs over entrance
5	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
5	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
6	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
6	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
7	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
7	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
7	3	6/11/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
7	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
8	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
8	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
8	3	6/11/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
8	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
9	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
9	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
9	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
9	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
10	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
10	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
10	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
10	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
12	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
12	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
12	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
12	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
15	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
15	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
15	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
15	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
16	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
16	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
16	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
16	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
17	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
17	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
17	3	6/11/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
17	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
18	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
18	2	5/5/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
18	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
18	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
19	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
19	2	5/5/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
19	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
19	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
20	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
20	2	5/5/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
20	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
20	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
21	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
21	2	5/5/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	-
21	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
21	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
22	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
22	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
22	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
22	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
23	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
23	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
23	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
23	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
24	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
24	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
24	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
24	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
25	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
25	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
25	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
25	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
26	1	3/31/2014	Inactive	Inactive	-	-	-	None	multiple burrow entrances
26	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
26	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
26	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
27	1	3/31/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
27	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
27	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
27	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
28	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
28	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
28	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
28	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
29	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
29	2	5/5/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	-
29	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
29	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
30	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
30	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
30	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
30	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
31	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
31	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
31	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
31	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
32	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
32	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
32	3	6/11/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
32	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
33	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
33	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
33	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
33	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
34	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
34	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
34	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
34	4	7/9/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
35	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
35	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
35	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
35	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
36	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
36	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
36	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
36	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
37	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
37	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
37	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
37	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
38	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
38	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
38	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
38	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
39	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
39	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
40	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
40	2	5/5/2014	Inactive	Inactive	-	-	-	none	cobwebs over entrance
40	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
40	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
41	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
41	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
41	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
41	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
42	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
42	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
42	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
42	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
43	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
43	2	5/5/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
43	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
43	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
44	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
44	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
44	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
44	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
45	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
45	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
45	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
45	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
46	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
46	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
46	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
46	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
47	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
47	2	5/5/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
47	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
47	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
48	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
48	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
48	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
48	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
49	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
49	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
49	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
49	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
50	1	3/31/2014	Inactive	Inactive	-	-	-	none	Multiple burrow entrances
50	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
50	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
50	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
51	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
51	2	5/5/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
51	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
51	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
52	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
52	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
52	3	6/11/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
52	4	7/9/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
53	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
53	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
53	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
53	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
54	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
54	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
54	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
54	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
55	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
55	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
55	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
55	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
56	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
56	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
57	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
57	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
57	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
57	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
58	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
58	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
58	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
58	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
59	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
59	2	5/5/2014	Inactive	Inactive	-	-	-	none	cobwebs over entrance
59	3	6/11/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
59	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
60	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
60	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
60	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
60	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
61	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
61	2	5/5/2014	Inactive	Inactive	-	-	-	none	cobwebs over entrance
61	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
61	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
62	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
62	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
62	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
62	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
63	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
63	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
63	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
63	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
64	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
64	2	5/5/2014	Inactive	Inactive	-	-	-	none	cobwebs over entrance
64	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
64	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
65	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
65	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
65	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
65	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
66	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
66	2	5/5/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
66	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
66	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
67	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
67	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
67	4	7/9/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
68	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
68	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
69	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
69	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
69	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
69	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
70	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
70	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
70	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
70	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
71	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
71	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
71	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
71	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
72	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
72	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
72	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
72	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
73	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
73	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
73	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
73	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
74	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
74	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
74	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
74	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
75	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
75	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
75	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
75	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
76	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
76	2	5/5/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
76	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
76	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
77	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
77	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
77	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
77	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
78	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
78	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
78	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
78	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
79	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
79	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
79	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
79	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
80	1	3/31/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
80	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
80	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
80	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
81	1	3/31/2014	Inactive	Inactive	-	-	-	none	-
81	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
81	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
81	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
82	1	4/1/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
82	2	5/5/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	-
82	3	6/9/2014	Inactive	Inactive	-	-	-	none	-
82	4	7/8/2014	Inactive	Inactive	-	-	-	none	-
83	1	4/1/2014	Inactive	Inactive	-	-	-	none	-
83	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
83	3	6/9/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
83	4	7/8/2014	Inactive	Inactive	-	-	-	none	-
84	1	4/1/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
84	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
84	3	6/9/2014	Inactive	Inactive	-	-	-	none	-
84	4	7/8/2014	Inactive	Inactive	-	-	-	none	-
85	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
85	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
85	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
85	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
86	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
86	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
86	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
86	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
87	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
87	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
87	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
87	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
88	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
88	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
88	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
88	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
89	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
89	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
89	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
89	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
90	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
90	2	5/6/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
90	3	6/11/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
90	4	7/9/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
91	1	4/2/2014	Inactive	Inactive	-	-	-	none	Large complex, multiple burrow entrances
91	2	5/6/2014	Inactive	Inactive	-	-	-	none	Large complex, multiple burrow entrances

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
91	3	6/11/2014	Inactive	Inactive	-	-	-	none	Large complex, multiple burrow entrances
91	4	7/9/2014	Inactive	Inactive	-	-	-	none	Large complex, multiple burrow entrances
97	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
97	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
97	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
97	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
98	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
98	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
98	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
98	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
99	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
99	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
99	3	6/11/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
99	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
100	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
100	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
100	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
100	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
101	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
101	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
101	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
101	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
102	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
102	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
102	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
102	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
103	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
103	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
103	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
103	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
104	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
104	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
104	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
104	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
105	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
105	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
105	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
105	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
106	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
106	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
106	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
106	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
107	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
107	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
107	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
107	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
108	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
108	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
108	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
108	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
109	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
109	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
109	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
109	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
110	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
110	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
110	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
110	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
111	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
111	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
111	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
111	4	7/9/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	cobwebs over entrance

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
112	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
112	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
112	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
112	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
113	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
113	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
113	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
113	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
114	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
114	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
114	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
114	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
115	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
115	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
115	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
115	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
116	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
116	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
116	3	6/11/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
116	4	7/9/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
117	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
117	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
117	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
117	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
118	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
118	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
118	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
118	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
119	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
119	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
119	3	6/11/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
119	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
120	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
120	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
120	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
120	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
121	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
121	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
121	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
121	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
122	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
122	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
122	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
122	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
123	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
123	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
123	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
123	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
124	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
124	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
124	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
124	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
125	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
125	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
125	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
125	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
126	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
126	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
126	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
126	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
127	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
127	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
127	4	7/9/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
128	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
128	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
128	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
128	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
129	1	4/2/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
129	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
129	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
129	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
130	1	4/2/2014	Inactive	Inactive	-	-	-	none	-
130	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
130	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
130	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
131	1	4/3/2014	Inactive	Inactive	-	-	-	none	2 burrows by drain
131	2	5/9/2014	Inactive	Inactive	-	-	-	none	-
131	3	6/13/2014	Inactive	Inactive	-	-	-	none	On culvert
131	4	7/10/2014	Inactive	Inactive	-	-	-	none	-
132	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
132	2	5/9/2014	Inactive	Inactive	-	-	-	none	-
132	3	6/13/2014	Inactive	Inactive	-	-	-	none	-
132	4	7/10/2014	Inactive	Inactive	-	-	-	none	-
133	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
133	2	5/9/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
133	3	6/13/2014	Inactive	Inactive	-	-	-	none	-
133	4	7/10/2014	Inactive	Inactive	-	-	-	none	-
134	1	4/3/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
134	2	5/6/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Rock shoved in hole
134	3	6/11/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Rock stuffed in hole
134	4	7/10/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	-
135	1	4/3/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
135	2	5/6/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
135	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
135	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
136	1	4/3/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
136	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
136	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
136	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
137	1	4/3/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
137	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
137	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
137	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
138	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
138	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
138	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
138	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
139	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
139	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
139	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
139	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
140	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
140	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
140	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
140	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
141	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
141	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
141	3	6/11/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
141	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
142	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
142	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
142	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
142	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
143	1	4/3/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
143	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
143	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
143	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
144	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
144	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
144	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
144	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
145	1	4/3/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
145	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
145	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
145	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
146	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
146	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
146	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
146	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
147	1	4/3/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
147	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
147	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
147	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
148	1	4/3/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
148	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
148	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
148	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
149	1	4/3/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
149	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
149	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
149	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
151	1	4/3/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
151	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
151	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
151	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
152	1	4/3/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
152	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
152	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
152	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
153	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
153	2	5/6/2014	Inactive	Inactive	-	-	-	none	-
153	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
153	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
155	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
155	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
155	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
155	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
156	1	4/3/2014	Inactive	Inactive	-	-	-	none	-
156	2	5/6/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
156	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
156	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
157	2	5/9/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances along culvert
157	3	6/13/2014	Inactive	Inactive	-	-	-	none	-
157	4	7/10/2014	Inactive	Inactive	-	-	-	none	-
158	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
158	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
158	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
159	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
159	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
159	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
160	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
160	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
160	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
161	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
161	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
161	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
162	2	5/5/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
162	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
162	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
163	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
163	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
163	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
166	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
166	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
167	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
167	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
167	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
168	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
168	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
168	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
169	2	5/5/2014	Inactive	Inactive	-	-	-	none	cobwebs over entrance
169	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
169	4	7/9/2014	No Longer Suitable	No Longer Suitable	-	-	-	none	Filled in
170	2	5/5/2014	Inactive	Inactive	-	-	-	none	cobwebs over entrance
170	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
170	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
171	2	5/5/2014	Inactive	Inactive	-	-	-	none	-
171	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
171	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
172	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
172	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
173	3	6/13/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances on culvert
173	4	7/10/2014	Inactive	Inactive	-	-	-	none	-
174	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
174	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
175	3	6/13/2014	Inactive	Inactive	-	-	-	none	On culvert
175	4	7/10/2014	Inactive	Inactive	-	-	-	none	-
176	3	6/11/2014	Inactive	Inactive	-	-	-	none	-

Burrow ID[1]	Survey Number[2]	Date	Cumulative Burrow Status[3]	Field Burrow Status[4]	Number of Adult Owls Present	Number of Juvenile Owls Present	Number of Owls Age Unknown	Sign Present	Notes
176	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
177	3	6/11/2014	Inactive	Inactive	-	-	-	none	multiple burrow entrances
177	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
178	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
178	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
179	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
179	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
180	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
180	4	7/9/2014	Inactive	Inactive	-	-	-	none	-
181	3	6/11/2014	Inactive	Inactive	-	-	-	none	-
181	4	7/9/2014	Inactive	Inactive	-	-	-	none	-

[1] Burrow IDs are not sequential due to burrows in close proximity being lumped together as a burrow complex in follow-up surveys.

[2] Note that not all burrows will have four surveys as a result of cumulatively adding burrows (i.e., new burrows were found throughout the survey season).

[3] Burrows were classified as inactive due to the absence of fresh or recent sign during either the habitat assessment or Surveys 1 - 4. Burrows were classified as no longer suitable due to a previously suitable burrow that was no longer suitable due to erosion, a natural burrow collapse, or inadvertent damage from anthropogenic activities.

[4] Classification status of the burrow for the given survey period.

ATTACHMENT B

WILDLIFE SPECIES DETECTED DURING 2014 WESTERN BURROWING OWL SURVEYS

APPENDIX B
WILDLIFE SPECIES DETECTED DURING 2014 WESTERN BURROWING OWL SURVEYS

Common Name	Scientific Name	Order	Family	Federal Status (Endangered/Threatened)	California Status (Endangered/Threatened)
Invertebrates					
White Checkered Skipper	*Pyrgus albescens*	Lepidoptera	Hesperiidae	None	None
Pygmy Blue	*Brephidium exilis*	Lepidoptera	Lycaenidae	None	None
Painted Lady	*Vanessa cardui*	Lepidoptera	Nymphalidae	None	None
Reptiles & Amphibians					
Western Fence Lizard	*Sceloporus occidentalis*	Squamata	Phrynosomatidae	None	None
Side-Blotched Lizard	*Uta stansburiana*	Squamata	Phrynosomatidae	None	None
California Kingsnake	*Lampropeltis californiae*	Squamata	Colubridae	None	None
Avian					
Red-tailed Hawk	*Buteo jamaicensis*	Accipitriformes	Accipitridae	None	None
Northern Harrier[1,2]	*Circus cyaneus*	Accipitriformes	Accipitridae	None	None
Mallard	*Anas platyrhynchos*	Anseriformes	Anatidae	None	None
White-throated Swift	*Aeronautes saxatalis*	Apodiformes	Apodidae	None	None
Anna's Hummingbird	*Calypte anna*	Apodiformes	Trochilidae	None	None
Costa's Hummingbird	*Calypte costae*	Apodiformes	Trochilidae	None	None
Allen's Hummingbird	*Selasphorus sasin*	Apodiformes	Trochilidae	None	None
Caspian Tern	*Hydroprogne caspia*	Charadriiformes	Laridae	None	None
Western Gull	*Larus occidentalis*	Charadriiformes	Laridae	None	None
Forster's Tern	*Sterna forsteri*	Charadriiformes	Laridae	None	None
Wilson's Snipe	*Gallinago delicata*	Charadriiformes	Scolopacidae	None	None
Rock Pigeon	*Columba livia*	Columbiformes	Columbidae	None	None
Eurasian Collared-Dove	*Streptopelia decaocto*	Columbiformes	Columbidae	None	None
Mourning Dove	*Zenaida macroura*	Columbiformes	Columbidae	None	None
Greater Roadrunner	*Geococcyx californianus*	Cuculiformes	Cuculidae	None	None
American Peregrine Falcon	*Falco peregrinus anatum*	Falconiformes	Falconidae	Delisted	Delisted
American Kestrel	*Falco sparverius*	Falconiformes	Falconidae	None	None

Common Name	Scientific Name	Order	Family	Federal Status (Endangered/Threatened)	California Status (Endangered/Threatened)
California Quail	*Callipepla californica*	Galliformes	Odontophoridae	None	None
Bushtit	*Psaltriparus minimus*	Passeriformes	Aegithalidae	None	None
California Horned Lark[3]	*Eremophila alpestris actia*	Passeriformes	Alaudidae	None	None
Lazuli Bunting	*Passerina amoena*	Passeriformes	Cardinalidae	None	None
Blue Grosbeak	*Passerina caerulea*	Passeriformes	Cardinalidae	None	None
American Crow	*Corvus brachyrhynchos*	Passeriformes	Corvidae	None	None
Common Raven	*Corvus corax*	Passeriformes	Corvidae	None	None
Southern California Rufous-crowned Sparrow[1,3]	*Aimophila ruficeps canescens*	Passeriformes	Emberizidae	None	None
Grasshopper Sparrow[1,2]	*Ammodramus savannarum*	Passeriformes	Emberizidae	None	None
Lincoln's Sparrow	*Melospiza lincolnii*	Passeriformes	Emberizidae	None	None
Song Sparrow	*Melospiza melodia*	Passeriformes	Emberizidae	None	None
California Towhee	*Melozone crissalis*	Passeriformes	Emberizidae	None	None
Savannah Sparrow	*Passerculus sandwichensis*	Passeriformes	Emberizidae	None	None
Spotted Towhee	*Pipilo maculatus*	Passeriformes	Emberizidae	None	None
Chipping Sparrow	*Spizella passerina*	Passeriformes	Emberizidae	None	None
White-crowned Sparrow	*Zonotrichia leucophrys*	Passeriformes	Emberizidae	None	None
House Finch	*Haemorhous mexicanus*	Passeriformes	Fringillidae	None	None
Lawrence's Goldfinch	*Spinus lawrencei*	Passeriformes	Fringillidae	None	None
Lesser Goldfinch	*Spinus psaltria*	Passeriformes	Fringillidae	None	None
American Goldfinch	*Spinus tristis*	Passeriformes	Fringillidae	None	None
Cliff Swallow	*Petrochelidon pyrrhonota*	Passeriformes	Hirundinidae	None	None
Red-winged Blackbird	*Agelaius phoeniceus*	Passeriformes	Icteridae	None	None
Bullock's Oriole	*Icterus bullockii*	Passeriformes	Icteridae	None	None
Hooded Oriole	*Icterus cucullatus*	Passeriformes	Icteridae	None	None
Brown-headed Cowbird	*Molothrus ater*	Passeriformes	Icteridae	None	None
Western Meadowlark	*Sturnella neglecta*	Passeriformes	Icteridae	None	None
Northern Mockingbird	*Mimus polyglottos*	Passeriformes	Mimidae	None	None
California Thrasher	*Toxostoma redivivum*	Passeriformes	Mimidae	None	None

Common Name	Scientific Name	Order	Family	Federal Status (Endangered/Threatened)	California Status (Endangered/Threatened)
American Pipit	*Anthus rubrescens*	Passeriformes	Motacillidae	None	None
Wilson's Warbler	*Cardellina pusilla*	Passeriformes	Parulidae	None	None
Common Yellowthroat	*Geothlypis trichas*	Passeriformes	Parulidae	None	None
Orange-crowned Warbler	*Oreothlypis celata*	Passeriformes	Parulidae	None	None
Yellow-rumped Warbler	*Setophaga coronata*	Passeriformes	Parulidae	None	None
Black-throated Gray Warbler	*Setophaga nigrescens*	Passeriformes	Parulidae	None	None
Yellow Warbler[2]	*Setophaga petechia brewsteri*	Passeriformes	Parulidae	None	None
Coastal California Gnatcatcher[1,2]	*Polioptila californica californica*	Passeriformes	Polioptilidae	Threatened	None
European Starling	*Sturnus vulgaris*	Passeriformes	Sturnidae	None	None
Wrentit	*Chamaea fasciata*	Passeriformes	Sylviidae	None	None
Bewick's Wren	*Thryomanes bewickii*	Passeriformes	Troglodytidae	None	None
House Wren	*Troglodytes aedon*	Passeriformes	Troglodytidae	None	None
Western Bluebird	*Sialia mexicana*	Passeriformes	Turdidae	None	None
Pacific-slope Flycatcher	*Empidonax difficilis*	Passeriformes	Tyrannidae	None	None
Ash-throated Flycatcher	*Myiarchus cinerascens*	Passeriformes	Tyrannidae	None	None
Black Phoebe	*Sayornis nigricans*	Passeriformes	Tyrannidae	None	None
Say's Phoebe	*Sayornis saya*	Passeriformes	Tyrannidae	None	None
Western Kingbird	*Tyrannus verticalis*	Passeriformes	Tyrannidae	None	None
Cassin's Kingbird	*Tyrannus vociferans*	Passeriformes	Tyrannidae	None	None
Warbling Vireo	*Vireo gilvus*	Passeriformes	Vireonidae	None	None
Barn Owl	*Tyto alba*	Strigiformes	Tytonidae	None	None
Mammals					
San Diego Black-Tailed Jackrabbit[1,2]	*Lepus californicus bennettii*	Lagomorpha	Leporidae	None	None
Desert Cottontail	*Sylvilagus audubonii*	Lagomorpha	Leporidae	None	None
California Ground Squirrel	*Spermophilus beecheyi*	Rodentia	Sciuridae	None	None

[1] SDG&E Natural Community Conservation Plan Species
[2] CDFW Species of Special Concern
[3] CDFW Watch List

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October 20, 2015

Ms. Debbie Collins
San Diego Gas & Electric
8315 Century Park Court – CP21E
San Diego, California 92123

RE: Weed Survey Report for the Proposed Salt Creek Substation and Power Line Project, Chula Vista, California

Dear Ms. Collins:

The purpose of this letter report is to present findings of a focused weed survey conducted during 2015 for San Diego Gas & Electric's (SDG&E) proposed Salt Creek Substation and Power Line Project in the City of Chula Vista, California. The purpose of the weed survey was to comply with a request from the California Public Utilities Commission and map distribution of weed species during the 2015 season. Surveys were conducted on behalf of SDG&E.

Project Location

The project site is situated approximately 15 miles southeast of downtown San Diego and 5 miles north of the international border with Mexico (Figure 1). The proposed Salt Creek Substation and the majority of the proposed power line are located in the eastern portion of the City of Chula Vista, California (Figure 2). The proposed Salt Creek Substation is located adjacent to and southeasterly of Hunte Parkway, where SDG&E's Existing Miguel Substation (Existing Substation)-Mexico transmission corridor crosses Hunte Parkway. Approximately 4,700 linear feet of the northernmost portion of the proposed power line is located in the unincorporated portion of San Diego County on SDG&E fee-owned land surrounding the Existing Substation. The remaining portion of the proposed power line is located within the City of Chula Vista. The Existing Substation is located east of State Route (SR) 125 in the unincorporated portion of San Diego County, bounded by San Miguel Road on the north and the City of Chula Vista to the south.

Project Description

The proposed project includes installation of a new substation (proposed Salt Creek Substation), a new 69-kilovolt (kV) power tie-line (TL) from the Existing Substation to the proposed Salt Creek Substation (TL 6965), and modifications to the Existing Substation. The primary objectives of the proposed project are to provide additional capacity to serve existing area load and future customer-driven electrical load growth, and to provide the necessary distribution and transmission network to prevent long-term outages or disruptions of service to existing customers in the southeastern portion of SDG&E's service territory.

The proposed project includes four primary components:

- Construction and operation of a 120-megavolt ampere 69/12kV proposed Salt Creek Substation, including construction and operation of underground 12kV distribution circuits.
- Power lines, including construction and operation of a 5-mile-long overhead 69kV power line 6965 (TL 6965), from the Existing Substation to the proposed Salt Creek Substation, and construction and operation of a 69kV power line loop-in (TL 6910) to the proposed Salt Creek Substation. TL 6965 would use approximately 48 pole structures (49 poles), including eight existing poles (seven associated with TL 643 and one associated with TL 6910). Approximately 40 new structures (41 poles) would be erected on the new 69kV power line, including 29 galvanized steel pole structures (30 poles) (one H-frame double-pole structure), 10 galvanized engineered foundation poles, and one engineered foundation cable pole.
- Modifications at the Existing Substation, including installation of a new 69kV power line position.
- Three temporary staging yards identified for the project—one at the Existing Substation (Existing Staging Yard), a second on the north side of Hunte Parkway between Discovery Falls, Eastlake Parkway, and Crossroads Street (Hunte Parkway Staging Yard), and a third within the transmission corridor between Eastlake Parkway and SR-125 (Eastlake Parkway Staging Yard). Five alternate staging sites at the Olympic Training Center facility, south of Olympic Parkway, have also been identified. These five alternate staging sites are not included in the project analysis provided herein.

Site Description

The project survey area includes the proposed Salt Creek Substation, the TL corridor, and three staging yards plus a 500-foot (150-meter) survey buffer around each of these areas (Figure 2). The project survey area occurs within the City of Chula Vista's Multiple Species Conservation Program Subarea Plan (Subarea Plan) Otay Ranch Planning Area, within areas planned for development (i.e., outside of the Otay Ranch Preserve) (Figure 2).

The project site is located on flat-to-gentle slopes along previously disturbed areas near the Existing Substation and within an existing SDG&E right-of-way. The transmission corridor is located within urban developed, landscape/ornamental, disturbed, nonnative grassland and coastal sage scrub habitats and cover types. The proposed Salt Creek Substation is primarily flat with a gentle slope across the site. The site is composed primarily of nonnative grassland, Diegan coastal sage scrub, and ornamental/landscaped cover types. Commercial and residential developments are located within and adjacent to the project site. Other development features present include major transportation corridors (SR-125), asphalt and compacted earthen roads, trails, fencing, ephemeral and intermittent stream features,

culverts, and swales. Potential jurisdictional "waters of the U.S." (including wetlands) are also present on-site, including stream features and vegetated wetlands.

Survey Methodology

The focused weed survey was completed along a 120-foot-wide survey buffer centered on the TL corridor, within the proposed Salt Creek Substation footprint, and within the proposed Hunte Parkway Staging Yard. These areas are collectively referred to hereafter as the "survey area." For the purposes of calculating relative abundance, the survey area was divided into two subunits: (1) the 120-foot-wide survey buffer centered on TL corridor, and (2) the footprint of the proposed Salt Creek substation and Hunte Parkway Staging Yard.

Senior botanists Fred Sproul and Keir Morse conducted weed surveys throughout the survey area on June 11 and 12, 2015. The weed surveys were conducted by walking meandering transects through the site and recording the species of all nonnative plants observed on paper data sheets. For localized occurrences of High or Moderate rated weed species such as saltcedar (*Tamarix ramosissima*), these locations were recorded as points with a Global Positioning System (GPS) unit. Weed locations were recorded using a Garmin 60 CSx GPS unit. Subsequent to the field survey, data were downloaded from the GPS unit, post-processed, and brought into ArcGIS for analysis. Other weed species that occur with relative uniformity throughout the survey area were documented as to their relative abundance according to the subunit in which they were observed.

A list of all weed species observed within the study area was compiled. The California Invasive Plant Council (Cal-IPC) maintains an inventory of weeds of California and has established a ranking system of **High**, **Moderate,** and **Limited** for each species to indicate factors such as economic impact or difficulty of management (Cal-IPC 2015). This ranking system is described below and rankings of each species detected are reported in the compiled weed list (see Results section below and Attachment).

- **High** – These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.
- **Moderate** – These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.
- **Limited** – These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Relative abundance of each weed species was calculated per subunit. Relative abundance within each of the two subunits was estimated as:

Dense –	any species with relative cover > 25%
Intermediate –	any species with relative cover > 5% and < 25%
Sparse –	any species with relative cover < 5%

In addition to weed ratings, specific combinations of distribution and invasiveness indicate significant potential for invading new ecosystems to trigger an "Alert" designation so that land managers may watch for range expansions.

Results

A total of 60 weed species from the CaI-IPC list that were observed within the project survey area are presented as an attachment to this report (see Attachment). An additional 16 weedy plant species that are not listed with CaI-IPC that were observed within the survey area are listed as a second table within the Attachment. Relative abundances of all weed species detected on-site are noted within the Attachment and detections are broken out by subunit. Of those detected, no species were found to have dense relative cover on-site.

Most weed species are represented as points although three plant species, purple fountain grass (currently *Cenchrus setaceus,* previously *Pennisetum setaceus*), saltcedar, and pampas grass (*Cortaderia selloana*), are mapped as polygons in Figures 3a, 3b, and 3c.

Generally, the most invasive and most easily controlled weed species of this project area are pampas grass, Hottentot fig (*Carpobrotus edulis*), artichoke thistle (*Cynara cardunculus*), sea lavender (*Limonium* spp.), and saltcedar. Other weed species are widespread and too numerous or extensive for complete eradication to be possible.

If you have any questions or comments regarding this letter report, please contact me at (619) 610-7643.

Sincerely,

Erin Riley

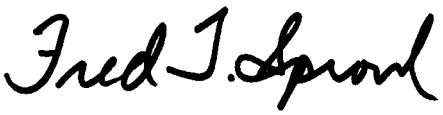
Erin Riley
Senior Biologist
erin.riley@aecom.com

Attachments:

- Figure 1 – Regional Map
- Figure 2 – Project Components
- Figure 3a–c – Weed Locations
- Attachment – List of Weed Species Observed On-site in 2015

Certification Statement

The qualified botanists who conducted rare plant surveys for SDG&E's proposed Salt Creek 69-kilovolt Transmission Line Installation project survey area certify that the information in this survey report fully and accurately represents the work performed. The signatures of the botanists who conducted surveys (June 11 and 12, 2014) are included below.



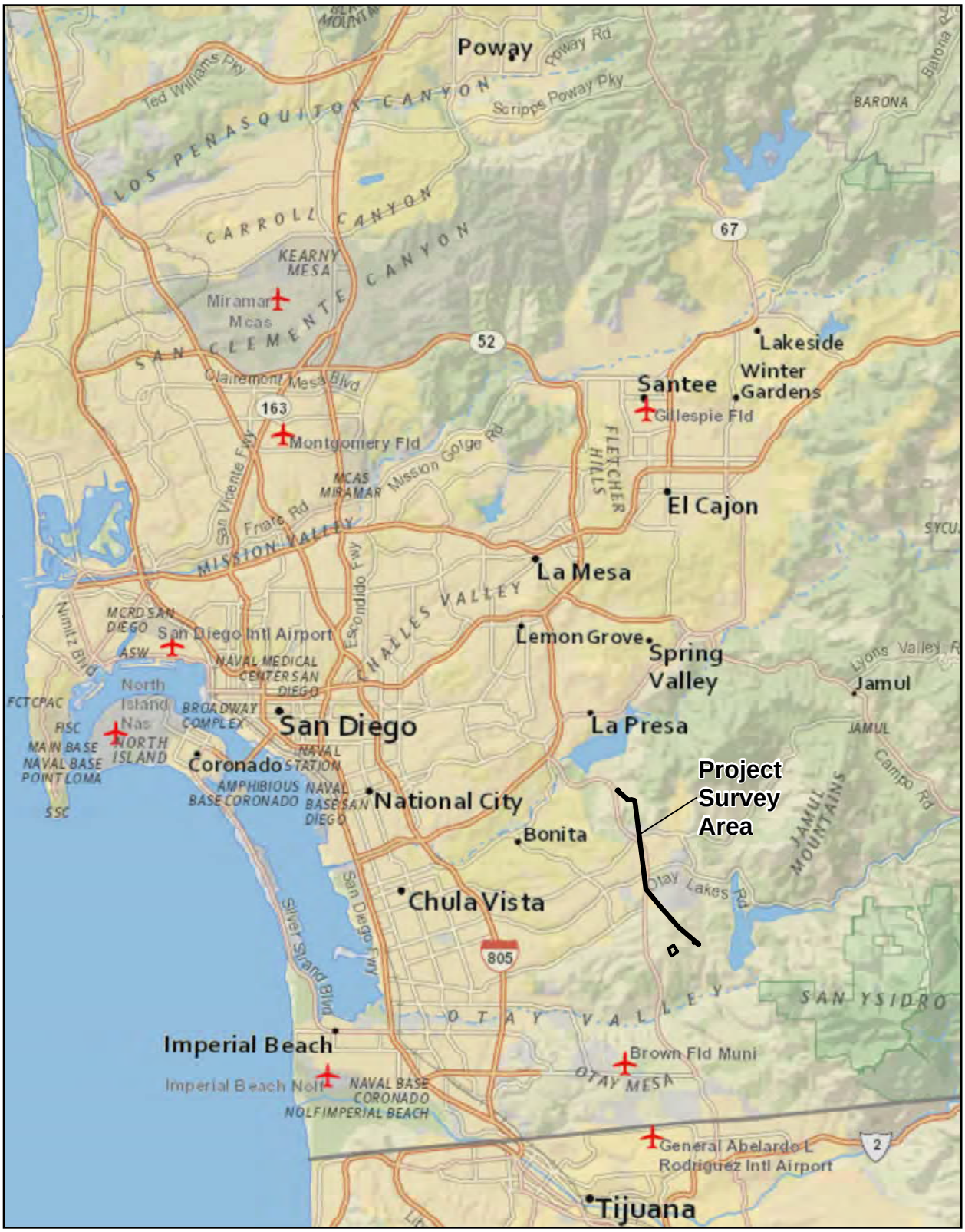
Fred Sproul
Senior Botanist

Keir Morse
Senior Botanist

Literature Cited

California Invasive Plant Council (Cal-IPC). 2015. Available at http://www.cal-ipc.org/ip/inventory/index.php#inventory. Accessed June 30, 2015.

FIGURES



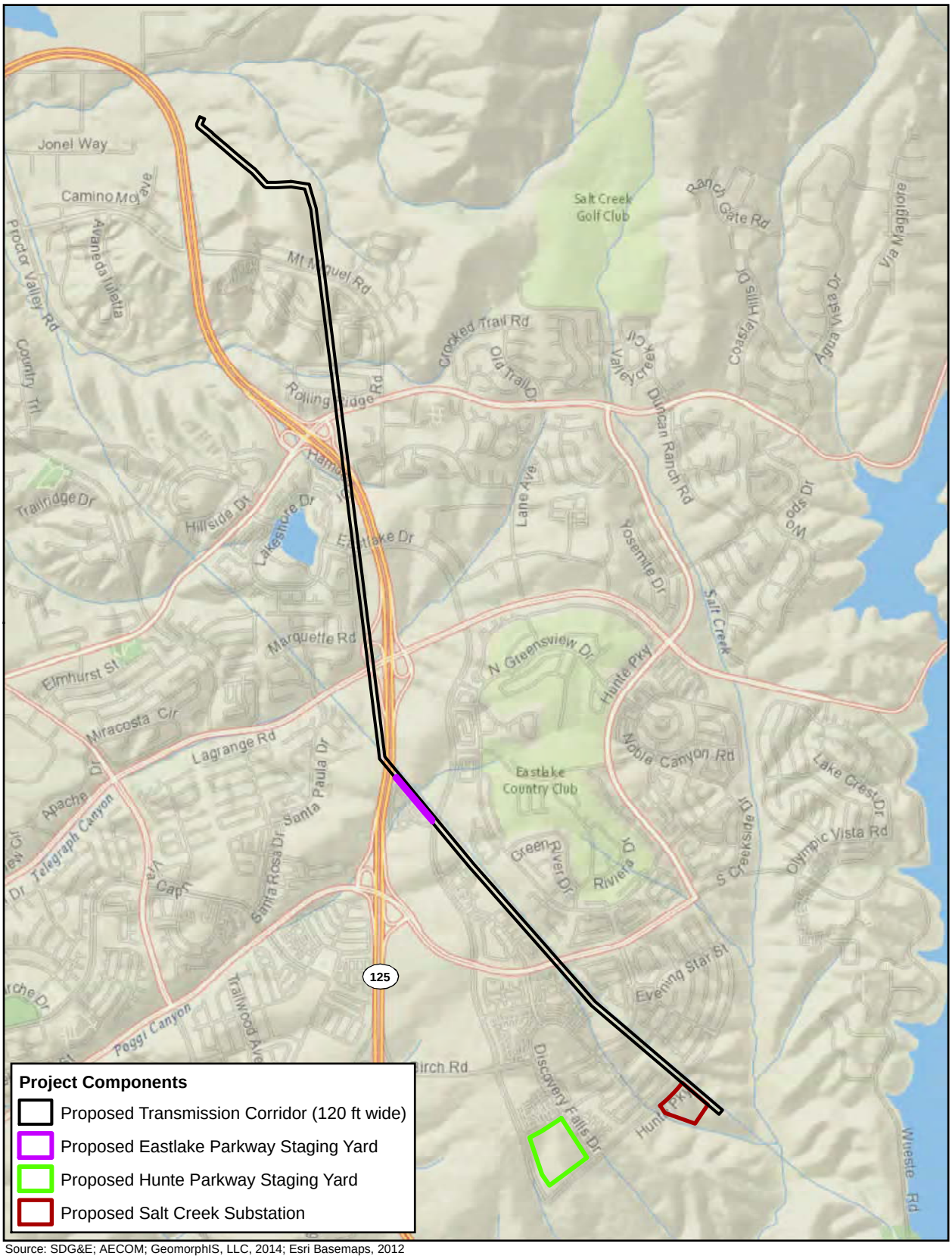
Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 2 4 Miles

Scale: 1:250,000 1 inch = 4 miles

Figure 1
Regional Map

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2015\SaltCreek_Weed2015_Fig1.mxd, 9/1/2015, E D Goff

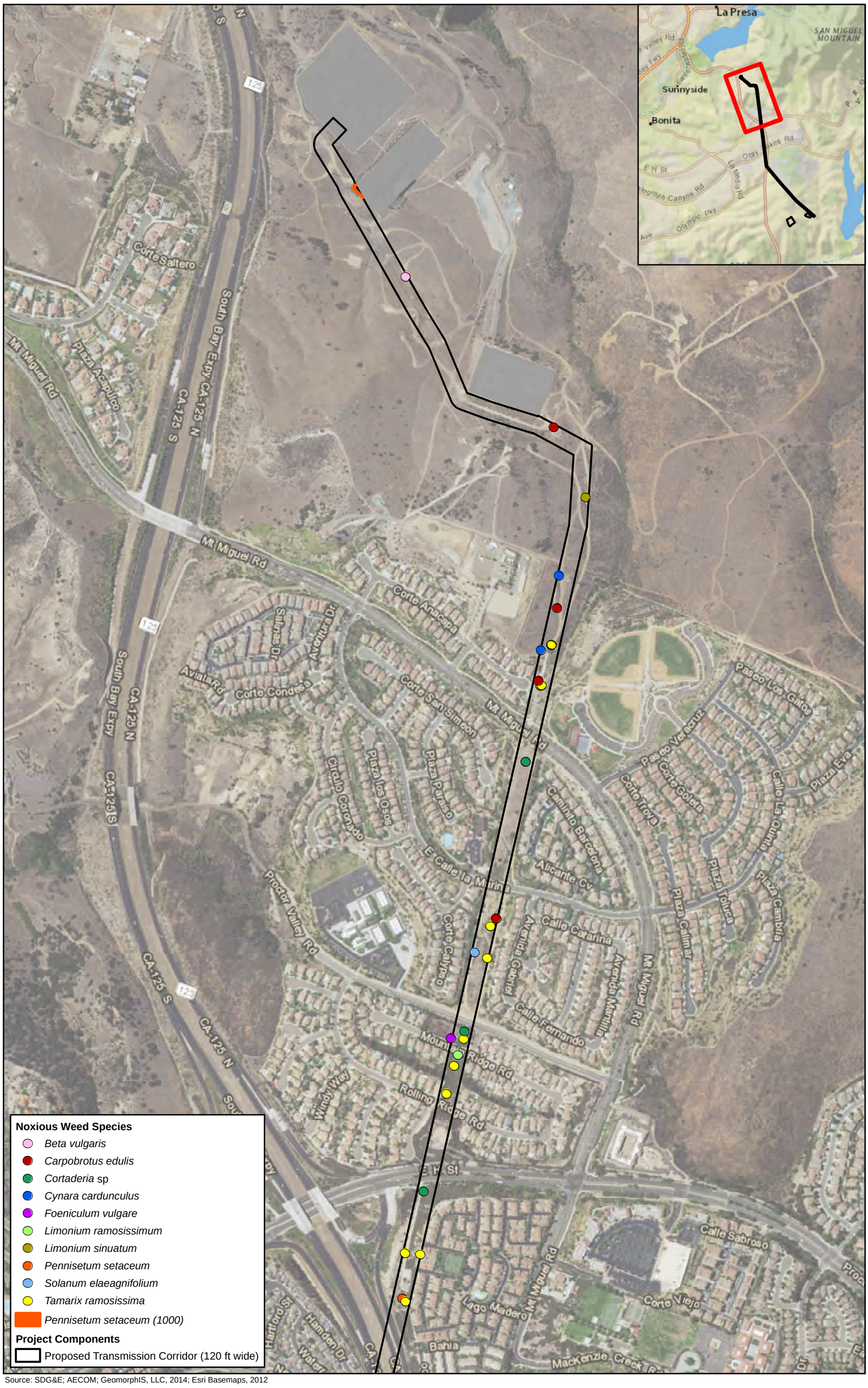


Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 1,600 3,200 Feet

Scale: 1:38,400 1 inch = 3,200 feet

Figure 2
Project Components



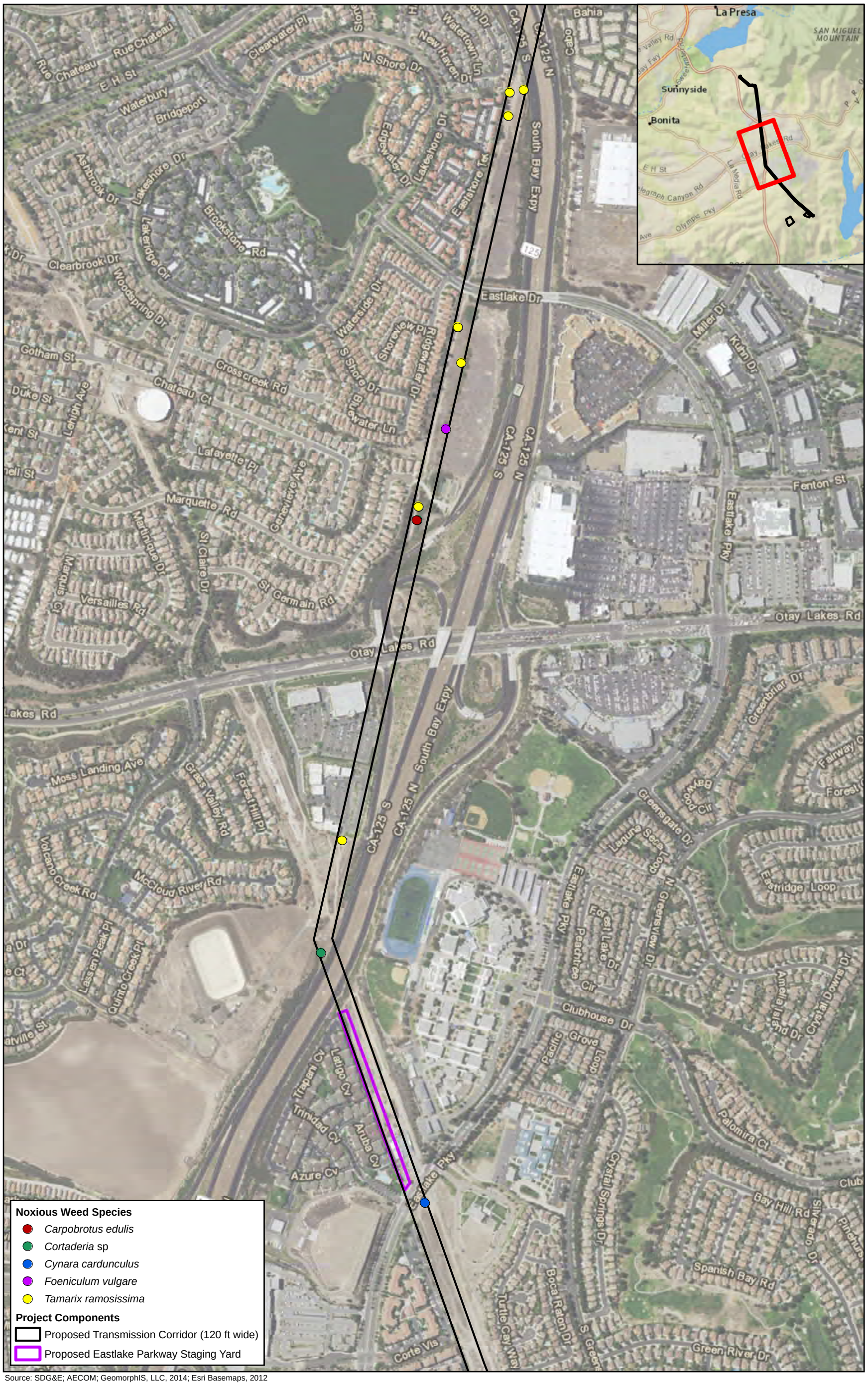
Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 325 650 Feet

Scale: 1:7,800 1 inch = 650 feet

Figure 3a
Weed Locations

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2015\SaltCreek_Weed2015_Fig3a.mxd, 9/3/2015, E D Goff



Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 325 650 Feet

Scale: 1:7,800 1 inch = 650 feet

Figure 3b
Weed Locations

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2015\SaltCreek_Weed2015_Fig3b.mxd, 9/3/2015, E D Goff

Source: SDG&E; AECOM; GeomorphIS, LLC, 2014; Esri Basemaps, 2012

0 325 650 Feet

Scale: 1:7,800 1 inch = 650 feet

Figure 3c
Weed Locations

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Survey2015\SaltCreek_Weed2015_Fig3c.mxd, 9/3/2015, E D Goff

ATTACHMENT

LIST OF WEED SPECIES OBSERVED ON-SITE IN 2015

IPC Listed Weeds and Relative Abundances at Salt Creek Substation and Power Line Project

Latin Binomial Name	Common Name	Cal-IPC		Relative Abundance	
		Rating	Alert	Subunit 1. Proposed Transmission Corridor and Eastlake Parkway Staging Yard	Subunit 2. Proposed Salt Creek Substation and Hunte Parkway Staging Yard
Anagallis arvensis	scarlet pimpernel	Watchlist	No Alert	Sparse	Not Detected
Aptenia cordifolia	heartleaf iceplant, baby sun rose	Watchlist	No Alert	Sparse	Sparse
Atriplex semibaccata	Australian saltbush; berry saltbush; creeping saltbush; scrambling berry saltbush	Moderate	No Alert	Sparse	Sparse
Avena barbata	slender oat	Moderate	No Alert	Not Detected	Intermediate
Avena fatua	wild oats	Moderate	No Alert	Intermediate	Intermediate
Bassia hyssopifolia	five-horn smotherweed; five-hook bassia; five horn bassia; hyssop-leaved echinopsilon; smotherweed; thorn orache;	Limited	No Alert	Not Detected	Sparse
Brachypodium distachyon	annual false-brome; false brome; purple false brome; stiff brome	Moderate	No Alert	Intermediate	Sparse
Brassica nigra	black mustard	Moderate	No Alert	Sparse	Sparse
Brassica rapa	turnip; field mustard	Limited	No Alert	Sparse	Sparse
Bromus diandrus	ripgut brome; great brome; ripgut grass	Moderate	No Alert	Sparse	Sparse
Bromus hordaceus	soft brome; soft chess; lopgrass	Limited	No Alert	Not Detected	Sparse
Bromus madritensis ssp. rubens	red brome; foxtail chess	High	No Alert	Sparse	Sparse
Carduus pycnocephalus	Italian thistle	Moderate	No Alert	Sparse	Not Detected
Carpobrotus edulis	highway iceplant	High	No Alert	Sparse	Not Detected
Centaurea melitensis	Malta starthistle; tocalote	Moderate	No Alert	Sparse	Sparse
Cirsium vulgare	bull thistle	Moderate	No Alert	Sparse	Not Detected
Convolvulus arvensis	field bindweed	Watchlist	No Alert	Sparse	Sparse
Cortaderia selloana	Selloa pampasgrass	High	No Alert	Sparse	Sparse
Cynara cardunculus	artichoke thistle; cardoon; wild artichoke	Moderate	No Alert	Sparse	Not Detected
Cynodon dactylon	Bermuda grass; couch grass; devil grass; wire grass; vine grass	Moderate	No Alert	Sparse	Not Detected
Dimorphotheca sp.	African daisy	Watchlist	No Alert	Sparse	Not Detected
Ehrharta erecta	panic veldtgrass; Ehrharta; Lamarck's ehrharta; panic veld grass; Stebbin's grass	Moderate	No Alert	Not Detected	Sparse
Erodium brachycarpum	short-fruited filaree	Watchlist	No Alert	Not Detected	Sparse
Erodium cicutarium	filaree, redstem filaree	Limited	No Alert	Sparse	Sparse
Eucalyptus sp.	Gum	Limited	No Alert	Sparse	Not Detected
Festuca bromoides	squirreltail fescue	Watchlist	No Alert	Not Detected	Sparse

Latin Binomial Name	Common Name	Cal-IPC		Relative Abundance	
		Rating	Alert	Subunit 1. Proposed Transmission Corridor and Eastlake Parkway Staging Yard	Subunit 2. Proposed Salt Creek Substation and Hunte Parkway Staging Yard
Festuca myuros	rat-tail fescue; red-tailed fescue; sixweeksgrass; zorro annual fescue	Moderate	No Alert	Sparse	Not Detected
Festuca perennis	Italian ryegrass	Moderate	No Alert	Not Detected	Sparse
Foeniculum vulgare	fennel; sweet fennel; sweet anise	High	No Alert	Sparse	Sparse
Gazania linearis	gazania; treasure flower	Moderate	Alert	Not Detected	Sparse
Glebionis coronaria	garland chrysanthemum; crown daisy	Moderate	No Alert	Sparse	Not Detected
Hedypnois cretica	cretanweed	Watchlist	No Alert	Not Detected	Sparse
Helminthotheca echioides	bristly ox-tongue; bugloss; bugloss-picris	Limited	No Alert	Sparse	Sparse
Hirschfeldia incana	Mediterranean mustard; short-pod mustard; summer mustard; Greek mustard	Moderate	No Alert	Sparse	Sparse
Hordeum marinum, H. murinum	Mediterranean barley; hare barley; barleygrass; foxtail; leporinum barley; mouse barley; wild barley	Moderate	No Alert	Sparse	Sparse
Lactuca serriola	prickly lettuce	Watchlist	No Alert	Sparse	Sparse
Limonium perezii	Perez's sealavender	Watchlist	No Alert	Sparse	Not Detected
Limonium ramosissimum	Algerian sea lavender	Limited	No Alert	Sparse	Not Detected
Lobularia maritima	sweet alyssum, sweet alison	Limited	No Alert	Sparse	Not Detected
Marrubium vulgare	horehound; white horehound	Limited	No Alert	Not Detected	Sparse
Melilotus albus	white sweetclover	Watchlist	No Alert	Sparse	Sparse
Melilotus indicus	Indian sweetclover	Watchlist	No Alert	Not Detected	Sparse
Mesembryanthemum crystallinum	crystalline iceplant; common iceplant	Moderate	Alert	Sparse	Sparse
Mesembryanthemum nodiflorum	slenderleaf iceplant	Watchlist	No Alert	Not Detected	Sparse
Myoporum laetum	ngaio tree; false sandalwood; mousehole tree	Moderate	No Alert	Sparse	Not Detected
Nicotiana glauca	tree tobacco	Moderate	No Alert	Not Detected	Sparse
Paspalum dilatatum	dallis grass	Watchlist	No Alert	Sparse	Not Detected
Cenchrus setaceus	crimson fountain grass; purple fountain grass; tender fountain grass	Moderate	No Alert	Sparse	Not Detected
Phoenix canariensis	Canary Island date palm	Limited	No Alert	Sparse	Not Detected
Polypogon monspeliensis	rabbitfoot polypogon, annual beardgrass	Limited	No Alert	Not Detected	Sparse
Salsola tragus	Russian thistle; common saltwort; prickly Russian thistle; Russian tumbleweed; tumbleweed; tumbling weed; windwitch; witchweed; prickly glasswort	Limited	No Alert	Intermediate	Intermediate
Schinus molle	Peruvian pepper tree; California pepper tree	Limited	No Alert	Sparse	Not Detected

Latin Binomial Name	Common Name	Cal-IPC		Relative Abundance	
		Rating	Alert	Subunit 1. Proposed Transmission Corridor and Eastlake Parkway Staging Yard	Subunit 2. Proposed Salt Creek Substation and Hunte Parkway Staging Yard
Schismus arabicus, S. barbatus	Mediterranean grass; split-grass; schismus; Arabian Mediterranean grass	Limited	No Alert	Sparse	Sparse
Sisymbrium irio	London rocket	Moderate	No Alert	Not Detected	Sparse
Solanum elaeagnifolium	silverleaf nightshade	Watchlist	No Alert	Sparse	Not Detected
Sonchus oleraceus	common sowthistle	Watchlist	No Alert	Sparse	Sparse
Stipa miliacea var. miliacea	smilo grass; bamboo grass; milo; ricegrass; rice millet; millet mountain-rice; San Diego grass	Limited	No Alert	Sparse	Not Detected
Tamarix ramosissima	saltcedar; tamarisk; French tamarisk; Chinese tamarisk	High	No Alert	Sparse	Sparse
Washingtonia robusta	Washington palm; Mexican fan palm; skyduster; thread palm	Moderate	Alert	Sparse	Not Detected

Additional Weeds and Relative Abundances at Salt Creek Substation and Power Line Project

Latin Binomial Names	Common Name	Subunit 2. Propose Salt Creek Substation and Hunte Parkway Staging Yard	Subunit 1. Proposed Transmission Corridor and Eastlake Parkway Staging Yard
Acacia sp.	wattle	Not Detected	Sparse
Atriplex sp.	saltbush	Sparse	Not Detected
Beta vulgaris ssp. maritima	sea beet	Not Detected	Sparse
Bromus catharticus	rescue grass	Not Detected	Sparse
Chenopodium murale	pig weed	Sparse	Sparse
Diplotaxis muralis	wall rocket	Sparse	Not Detected
Limonium sinuatum	notch-leaf marsh rosemary	Not Detected	Sparse
Malva parviflora	malva	Sparse	Not Detected
Melinis repens	natal grass	Not Detected	Sparse
Myoporum 'pacifica'	myoporum	Not Detected	Sparse
Myoporum parvifolium	slender myoporum	Not Detected	Sparse
Oenothera speciosa	beautiful evening primrose	Not Detected	Sparse
Opuntia ficus-indica	Indian fig	Sparse	Not Detected
Phalaris sp.	canary grass	Sparse	Not Detected
Raphanus raphanistrum	wild radish	Sparse	Not Detected
Tecoma capensis	Cape honeysuckle	Not Detected	Sparse

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January 27, 2016

Eric Hollenbeck
California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Subject: Salt Creek Substation Project Western Burrowing Owl Take Avoidance Survey

Dear Mr. Hollenbeck:

A western burrowing owl (*Athene cunicularia)* (WBO) take avoidance survey was conducted on January 25, 2016 for the proposed Salt Creek Substation Project (Project) to determine presence or absence of WBO prior to initiating construction activities. The take avoidance survey was completed per the requirement in the applicant proposed mitigation measure Biology – 1 detailed in the Project's Mitigation, Monitoring, and Reporting Program (CPUC 2015)[1] which requires implementation of the California Department of Fish and Wildlife (CDFW) -approved "Burrowing Owl Monitoring and Mitigation Plan" developed for the Project (AECOM 2014)[2].

The proposed Project includes the installation of a new 120-megavolt ampere 69/12-kilovolt (kV) substation (proposed Salt Creek Substation) and an underground 69-kV power line loop-in (TL 6910) to the Salt Creek Substation. The proposed Project site is located approximately 15 miles southeast of downtown San Diego and 5 miles north of the international border with Mexico (Attachment A: Figure 1-1). The proposed Project is located in the eastern portion of the City of Chula Vista, California, adjacent to and southeasterly of Hunte Parkway, where San Diego Gas & Electric's (SDG&E) existing transmission corridor crosses Hunte Parkway (Attachment A: Figure 1-2).

TAKE AVOIDANCE SURVEY METHODOLOGY

Ron Walker (AECOM) conducted the take avoidance survey per CDFW protocol guidance (CDFG 2012)[3], with the exception of the number of survey visits. Only one visit was conducted for the take avoidance survey. Mr. Walker has extensive experience with WBO, including behavioral monitoring, protocol surveys, and/or eviction (also referred to as "passive relocation" or "burrow exclusion") (Attachment B).

The survey area consisted of WBO suitable habitat in the proposed Salt Creek Substation and disturbance area associated with the underground 69-kV power line loop-in and a surrounding 100-foot (30-meter) buffer (Attachment A: Figure 1-2). Areas that were deemed suitable WBO habitat included diegan coastal sage scrub, wild flower field, nonnative grassland, landscape/ornamental, and disturbed habitat. Generally the soils along roads that had been previously disturbed provided easier access for burrowing fossorial mammals that create suitable burrows for WBO. In addition, any

[1] California Public Utilities Commission (CPUC). 2015. *Salt Creek Substation Project Final Environmental Impact Report.* State Clearinghouse No. 2014081032. Prepared by Panorama Environmental, Inc. September.

[2] AECOM. 2014. Salt Creek Substation and Power Line Project Burrowing Owl Monitoring And Mitigation Plan. Prepared for Debbie Collins, San Diego Gas & Electric. September 2014.

[3] California Department of Fish and Game (CDFG). 2012. *Staff Report on Burrowing Owl Mitigation*. 34 pages.

structures such as manmade objects (i.e., rip rap rock, water authority manholes) were surveyed because they provide cover for WBO. The riparian habitat situated in the southern portion of the survey area and dense (approximately 20 meter by 35 meter area) Russian thistle (*Salsola tragus*) situated in the southwest corner of the survey area were not considered suitable breeding habitat.

The survey was conducting by walking 10-15 meter meandering transects to provide 100 percent coverage of the survey area. Biologist searched for WBO or WBO sign and WBO suitable burrows. Nikon 10X40 handheld binoculars were used to scan areas for individual WBO. WBO individuals and suitable WBO burrows were recorded using a Global Positioning System (GPS). Suitable burrows were defined as burrows greater than approximately 4 inches (10 centimeters) in diameter (height and width) and greater than approximately 60 inches (150 centimeters) in depth. If a burrow was of adequate diameter and the end of the burrow could not be seen, it was considered suitable. It was not feasible to measure the depth of each burrow. At each suitable WBO burrow, presence of WBO sign (e.g., pellets, prey remains, whitewash, decorations, tracks) and number of WBO present at the burrow were recorded.

The survey began at 0700 on January 25, 2016, the outside temperature was 50 degrees Fahrenheit, sunny with no cloud cover and there was no measurable wind. The survey was completed at 1330; temperature was 68 degrees Fahrenheit, there was no cloud cover and no measurable wind at the end of the survey. The weather conditions were optimal for detecting the presence or absence of WBO.

TAKE AVOIDANCE SURVEY RESULTS

Two individual WBO were detected at two separate burrows (i.e., burrows 44 and 3 on Figure 1-2, Attachment A), separated by approximately 300 feet (Attachment C: Photos 1 and 2). Both individuals appeared to be adults as indicated by the faded plumage of the birds. When approached by foot, each individual WBO flew a short distance (30-40 meters) away, landed on the ground, and did not exhibit an agitated behavior. At each burrow there were signs of bones, feathers, whitewash and pellets. It was noted, at a later time during the survey, that both WBO individuals had returned to their respective burrows, both WBO could be seen through binoculars simultaneously standing in front of the burrows, at no time were both WBO seen together. Neither WBO seemed agitated after getting flushed from their burrows; they flew a short distance and perched on ground and after a short period of time returned to their burrows. There was no breeding behavior observed by either WBO. At each occupied burrow there were three to four satellite burrows, within 4 meters, that had some sign of WBO, such as whitewash. Most of the satellite burrow entrances were similar in size to the occupied burrows. These satellite burrows were not recorded with GPS since they were in close proximity to the occupied burrows.

In addition, two active burrows (i.e., burrows 45 and 47 on Figure 1-2, Attachment A) and 68 inactive suitable burrows were recorded in the survey area (Attachment C: Photos 3 and 4). This included burrows both inside and outside of the impact footprint. Most of the inactive suitable burrows were occupied by California ground squirrels (Attachment A: Figure 1-2; California ground squirrels were seen entering burrows and/or their tracks were detected outside burrows.

PASSIVE RELOCATION

After the detection of WBO during the take avoidance survey, Mr. Walker assessed the feasibility of passive relocation at the Project site. Areas outside the Project site were investigated to determine if there was an acceptable area within a reasonable distance that provided the necessary subsidies to support the evicted WBO. WBO suitable habitat occurs both to the west and east of the Project site (Attachment C: Photos 5 and 6). WBO habitat outside the Project area also contains suitable WBO burrows that are not occupied by other WBO. These areas will provide adjacent, suitable refuges for the WBO individuals that will be evicted from their burrows.

Based on the assessment of the site, it is practical to implement the passive relocation protocols described in the CDFW-approved "Burrowing Owl Monitoring and Mitigation Plan." Passive relocation will be conducted prior to February 1 (i.e., prior to the start of the breeding season). Prior to implementing the relocation procedure focused monitoring of the WBO present in the Project will be conducted to ensure egg-laying has not begun. The focused surveys will consist of an evening and a morning survey. Ornithologists will observe and record the behavior of WBO present on site to determine if any activities are occurring (e.g., pair of WBO at the same burrow, carrying food items into the burrow, etc.) that would indicate breeding has begun at the occupied burrow.

Following the focused monitoring and confirmation that egg-laying has not begun, one-way doors will be installed at the entrance to the active burrows and other potential burrow surrogates within 164 feet (50 meters) of the active burrow. Suitable burrows that are present beyond 164 feet (50 meters) of the active burrow and are confirmed to be ground squirrel burrows will be collapsed using hand tools. These burrows will be collapsed prior to installation of the one-way doors on active burrows and other potential burrow surrogates within 164 feet (50 meters) of the active burrow to ensure WBO cannot enter them after they are evicted from their active burrow. One-way doors will be left in place for 48 hours and monitored twice daily to ensure they are functioning properly. After passive relocation has been completed and the burrows are no longer occupied, burrows with one-way doors will be excavated using hand tools and refilled to prevent reoccupation. Burrows will only be hand excavated after monitoring and examination with a scope camera confirm they are vacant.

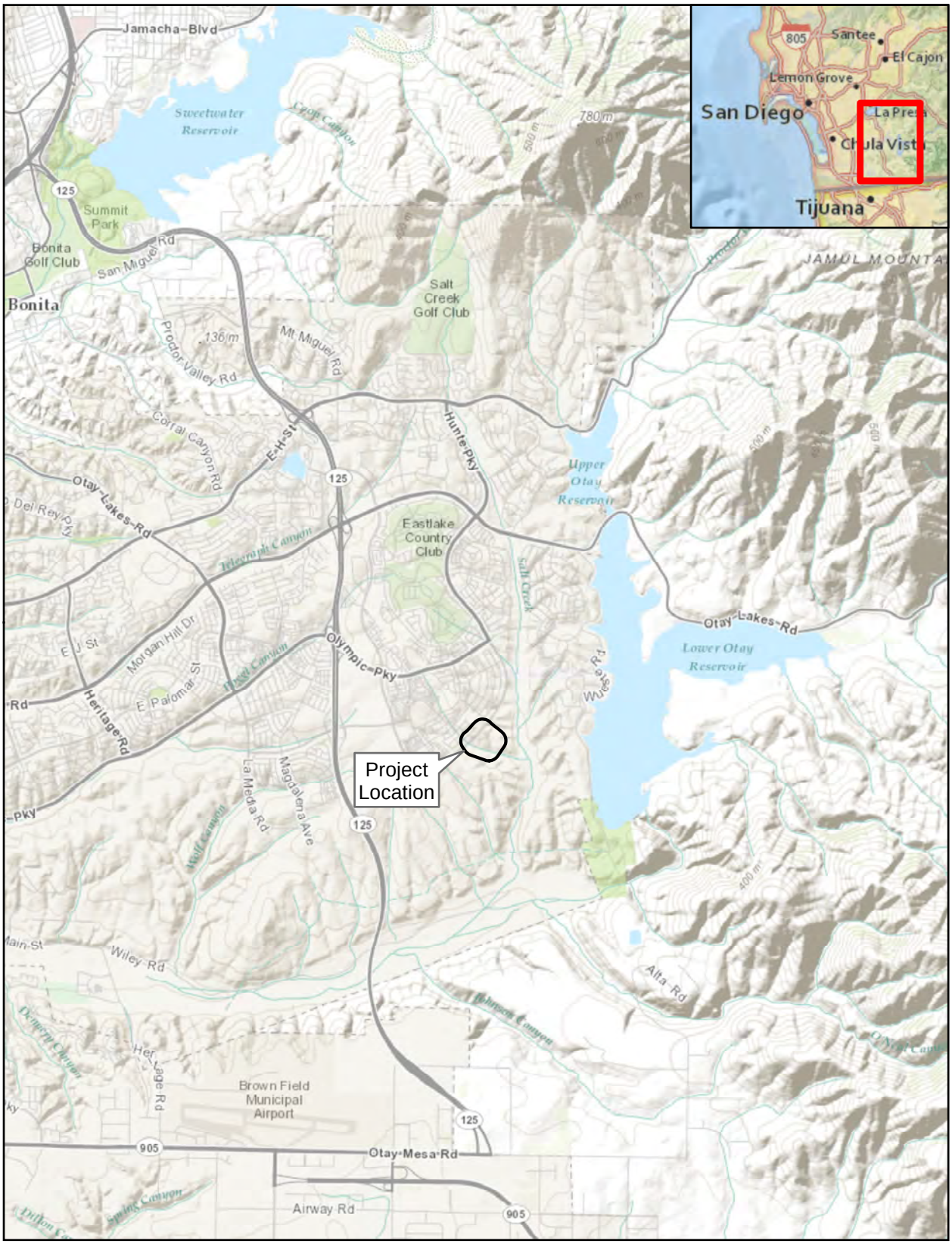
A follow-up letter report will be provided at the completion of passive relocation. If you have any questions or comments, please contact me at 619.610.7654.

Sincerely,

Michael Anguiano
Senior Biologist

Attachment A: Figures
Attachment B: Ron Walker's Resume
Attachment C: Photos

ATTACHMENT A
FIGURES



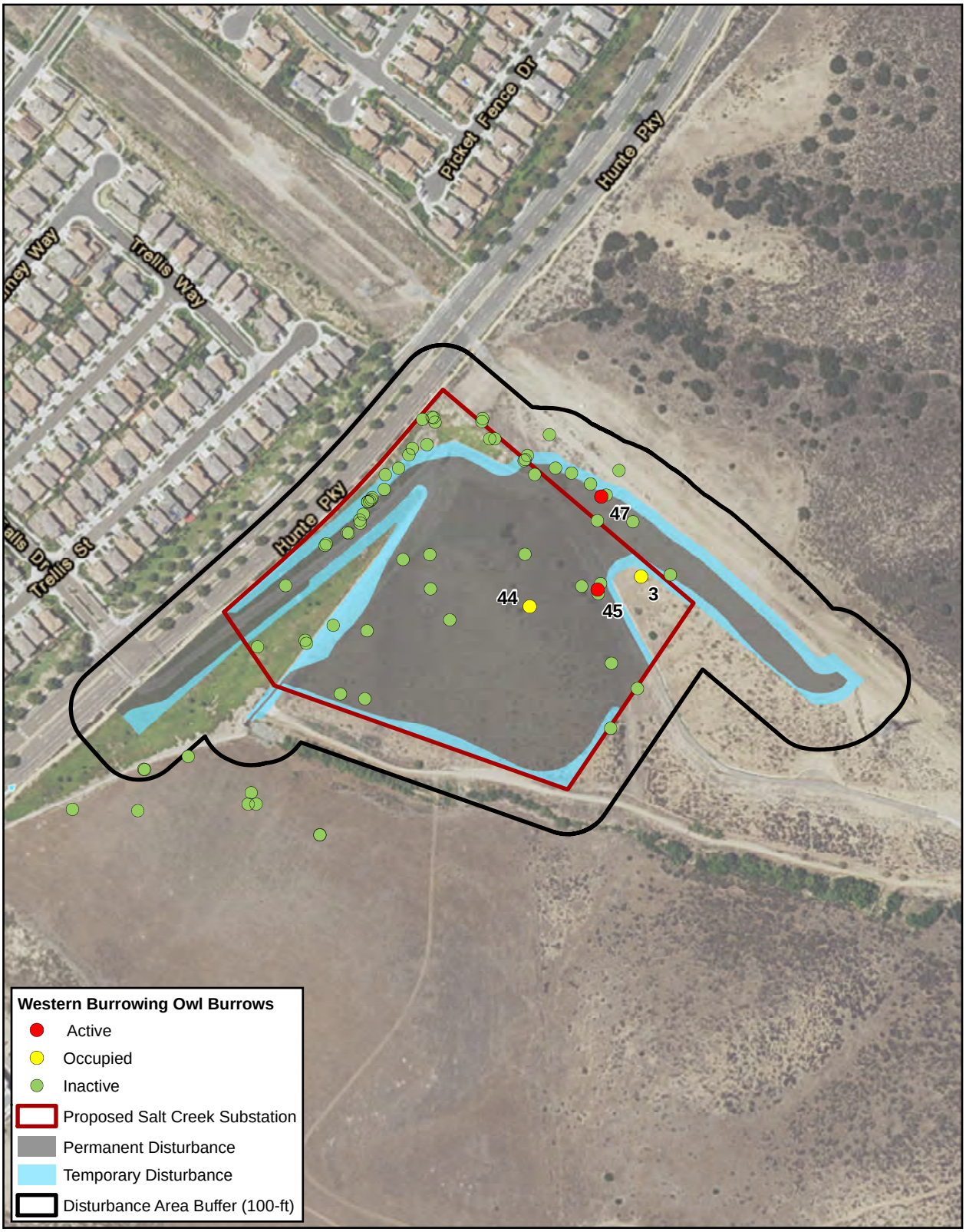
Source:AECOM, GeomorphIS LLC, SDG&E, 2015; Esri Basemaps, 2015

0 1.25 2.5 Miles

Scale: 1:79,200 1 inch = 1.25 miles

Figure 1-1
Regional and Vicinity Map

SDG&E is providing this map with the understanding that the map is not survey grade.



Source: GeomorphIS LLC, AECOM, SDG&E, 2015; Esri Basemaps, 2014

0 165 330 Feet

Scale: 1:3,960 1 inch = 330 feet

Figure 1-2
Take Avoidance Survey Results

SDG&E is providing this map with the understanding that the map is not survey grade.

ATTACHMENT B
RON WALKER'S RESUME

Ron Walker
Senior Compliance Specialist
Permitting/Wildlife Biologist

Education
BS, Environmental Sciences, Madison University, 2004

Certifications/Permits
US Fish and Wildlife Service Permit to conduct California tiger salamander surveys (TE-795938-7)
California Department of Fish and Wildlife Scientific Collecting Permit

Trainings
40 Hour OSHA Hazwoper Certificate (8 Hour Refresher 2014)
Desert Tortoise Surveying, Monitoring and Handling Techniques Workshop, 2012
Wetland Delineation Training, Emphasis on Soils and Hydrology, Wetland Training Institute, 2007
Applied Hydric Soils, Wetland Training Institute, 2002
Wetland Delineation Training, Wetland Training Institute, 2002
Denton Belk Fairy Shrimp Identification Course, 1998

Affiliations
Raptor Research Foundation
Research Associate, Western Foundation of Vertebrate Zoology

Publication
Walker, Ron. Minimal Impact, Maximum Outcome. *Underground Construction Magazine*, November 2010, pp. 22–25.

Additional Languages
Spanish

Ron Walker has 27 years of professional experience, including 20 years of experience as an environmental consultant and an additional 7 years of experience as a biological technician with the California Department of Fish and Wildlife, US Department of Agriculture Forest Service, and US Fish and Wildlife Service. Mr. Walker routinely conducts environmental compliance and manages all biological resource issues on large-scale, complex projects, and conducts interagency coordination for final project review and approval. Mr. Walker has extensive knowledge of environmental compliance relating to biology, cultural resources, paleontological resources, hazardous materials, and soil and water resources. He has evaluated numerous construction and post-construction BMP implementations on construction sites and has evaluated numerous projects relative to compliance with CWA Section 404 permits (USACE), CDFW 1601/1603 Streambed Alteration Agreements, U.S Fish and Wildlife Service Biological Opinions, industrial and construction SWPPP regulations, and CEQA/NEPA impact evaluation requirements. Mr. Walker is responsible for preparing monthly and annual compliance reports and provides technical review for environmental documents during the construction of a project. Mr. Walker is well versed in implementation of California Energy Commission's Conditions of Certification and has been selected as an Alternate Designated Biologist on large scale solar projects.

Much of Mr. Walker's extensive experience with sensitive habitat issues has been in wetland systems and endangered species. He has evaluated wetlands using state and federal indicators, assessed habitat functions, and developed compensatory mitigation plans. His additional areas of expertise include raptor surveys and monitoring plans, and avian mortality monitoring. His project experience spans a variety of biological issues, although his technical strengths are associated with environmental compliance monitoring, wetlands, and raptors. He has held Federal Migratory Bird Treaty Act (MBTA) and Nevada Department of Wildlife permits, and a memorandum of understanding from the California Department of Fish and Wildlife for burrowing owl relocation. He currently holds a federal scientific take permit for the listed California tiger salamander (permit PRT-795938-7) and has conducted salamander and vernal pool crustacean surveys throughout the Sacramento and Central Valley. Mr. Walker currently holds a California Department of Fish and Wildlife Scientific Collecting Permit. For telecommunications and gas pipeline projects, Mr. Walker has served as an environmental inspector for numerous horizontal directional drilling projects.

Project Experience

Solar Projects

Abengoa, Mojave Solar Energy Project,
San Bernardino County, CA

For Mojave Solar Project, Mr. Walker acted as Technical Field Lead and biological compliance manager. In addition, he served as an Alternate Designated Biologist. AECOM is working with Abengoa to develop an Application for Certification (AFC) for the California Energy Commission to permit the development of a 500-megawatt (MW) solar thermal power plant on more than 1,700 acres. The solar project is proposed to include 1,600 acres of parabolic trough arrays, with the rest of the site reserved for future plant expansion upon finalization of power purchase agreements. AECOM is the overall manager of the development of the AFC and is providing all of the environmental technical studies, including biological services (permitting and wildlife and plant surveys), environmental compliance, cultural resource services (oversight of archaeological and architectural surveys), land use planning, and socioeconomic and visual analysis. AECOM prepared the corresponding sections of the AFC application. AECOM staff also prepare various permit applications, including a Habitat Conservation Plan, a Fish and Game Code 2081 Incidental Take permit application, and multiple mitigation monitoring plans. Major project species of concern are the desert tortoise (Mojave population), Mohave ground squirrel, and western burrowing owl. [05/2011 – 03/2013].

NextEra, Genesis Solar Energy Project,
Riverside County, CA

For Genesis Solar Project, Mr. Walker acted as biological compliance manager. AECOM worked with NextEra and the California Energy Commission to implement the conditions of certification during construction of the site. The solar project is proposed to include 1,800 acres of parabolic trough arrays. AECOM is the overall manager of the compliance monitoring and is providing all of the environmental technical studies, including biological services (permitting and wildlife surveys), environmental compliance, and cultural resource services (oversight of archaeological and paleontology surveys). For this project Mr. Walker routinely conducted avian mortality searches within the parabolic mirror arrays and was instructed by US Fish and Wildlife (enforcement division) in the proper collection and preservation of avian mortalities for the US Fish and Wildlife

Service. Major project species of concern are the desert tortoise (Mojave population), fringe toed lizard, Desert kit fox, and western burrowing owl. [01/2013 – 03/2014].

Los Angeles Department of Water and Power, Beacon Solar Energy Project, Kern County, CA

For Beacon Solar, Mr. Walker acted as a biological compliance manager. Mr. Walker implemented and tracked the terms and conditions of the state and federal permits issued to the project. He routinely conducted avian surveys and assisted in desert tortoise clearance surveys. Mr. Walker participated in daily construction meetings and provided worker environmental training to construction workers. [02/2014-09/2014].

Energy and Transmission Projects

Imperial Irrigation District (IID), Transmission Lines, Imperial County, CA

AECOM is providing California Environmental Policy Act (CEQA) and National Environmental Policy Act (NEPA) compliance, biological survey, and archaeological survey services for this proposed transmission line upgrade project. The proposed project would replace or upgrade existing steel transmission line poles in 41 locations along an existing 55-mile-long transmission line. The project is located on IID right-of-way through Bureau of Land Management (BLM) land and other (nonfederal) land. AECOM is managing the development of a joint Mitigated Negative Declaration (MND)/ Environmental Assessment (EA) document, with IID as the lead CEQA agency and the BLM El Centro Field Office as the lead NEPA agency. Mr. Walker assisted the AECOM biology staff in conducting protocol survey for Mojave desert tortoise. [05/2011 – Ongoing]

Pacific Gas & Electric, Project Line 108 CEQA and Biological and Cultural Permitting and Monitoring, Sacramento and San Joaquin Counties, CA

Mr. Walker acted as the project manager for the preparation of an environmental analysis for Pacific Gas & Electric's (PG&E) Line 108 gas line project. Line 108 is an 11-mile-long pipeline. The environmental analysis document was submitted to the California State Lands Commission as part of the application process for its use in producing the CEQA document. Mr. Walker also assisted with the biological tasks for this project, which included raptor and MBTA surveys, agency consultation, special-status plant surveys, habitat mapping, and wetland permitting. Following receipt of the necessary permits and project approvals, Mr. Walker coordinated the environmental construction monitoring services. Monitors included cultural resource specialists, biologists, and paleontologists. This project came in under budget and ahead of schedule. [Prior to AECOM]

PG&E, Line 57C Biological Permitting and Monitoring, San Joaquin and Contra Costa Counties, CA

Mr. Walker lead the natural resources team that performed natural resource permitting and mitigation/construction monitoring. Mr. Walker and his staff conducted biological and botanical surveys, and performed a wetland delineation for the 5.4-mile-long pipeline alignment. They prepared and obtained the Clean Water Act, Section 401 and 404 permits, the Streambed Alteration Agreement, and a Biological Assessment. The team also created a Worker Environmental Awareness Program (WEAP), instructed workers on the biological protocols and requirements contained in the WEAP, performed pre- and post-construction surveys for sensitive and listed species, and monitored the construction process to ensure compliance with CEQA biological mitigation measures and compliance with the terms and conditions of all state and federal permits. [Prior to AECOM]

PG&E, San Mateo–Martin 4 Reconductoring Mitigated Negative Declaration, California Public Utilities Commission, San Mateo County, CA
PG&E constructed a new single-circuit 230-kilovolt (kV) electric transmission line that consisted of underground and overhead designs. The project was built in compliance with all environmental mitigation conditions described and explained in the California Public Utilities Commission's Final Decision for the project, as well as all other state and federal permits and authorizations. As a sub-consultant, Mr. Walker assisted in the implementation of an environmental compliance inspection program that included delivery of an environmental training program, and environmental inspection and reporting during construction. Species of concern were the California red-legged frog, Riparian woodrat, and San Francisco garter snake. [Prior to AECOM]

Transportation Projects

California Department of Transportation (Caltrans), State Route 905 Compliance Monitoring, San Diego County, CA
AECOM is supporting Caltrans to verify implementation of biological mitigation measures identified in the Final Environmental Impact Report/Final Environmental Impact Statement (EIR/EIS) and pertinent regulatory permits and approvals. Mr. Walker is assisting AECOM's project manager, and is responsible for coordinating with management at Caltrans, supervising the biological compliance monitoring team, preparing invoices, assembling and reviewing all deliverables, and ensuring implementation of the quality control/quality assurance program. As a biological monitor, Mr. Walker is on-site during active construction to verify that mitigation measures are implemented, attends all pre-construction and pre-grading meetings, and is on-site when construction activities occur within or adjacent to sensitive habitat. [05/2011 – Ongoing]

California High-Speed Train, San Francisco to San Jose, San Francisco County, CA
Biology task manager for preparation of an EIS. Conducted reconnaissance surveys of 48 miles of the proposed right-of-way within 12 cities on the San Francisco Bay Peninsula. Managed focused studies that included surveys for raptors (burrowing owl, black rail and clapper rail) and rare plants. Managed all impact analyses and document preparation related to biological resources. Associated studies included a wetland delineation for the 48 mile-long corridor. [Prior to AECOM; 2009 – 2011]

State Route 65 Outside Widening, Placer County, CA
Senior biologist for studies supporting a Natural Environment Study and Jurisdictional Delineation Report for proposed widening into the undeveloped land outside of State Route 65. Tasks included vernal pool crustacean surveys, vegetation mapping, surveys for burrowing owl, and wetland delineations. The Natural Environment Study identified potential impacts and avoidance, minimization, and mitigation measures. The Jurisdictional Delineation Report summarized findings at more than 30 waters coincident with the right-of-way. [Prior to AECOM; 2002 – 2004]

Solano Transportation Authority, Jepson Parkway Project, Solano County, CA
As senior biologist, oversaw the preparation of the biological resources section of the EIR/EIS and updated the Natural Environment Study. Organized burrowing owl and California red-legged frog habitat assessments for the site. Assisted in the preparation of the mitigation plans for Contra Costa goldfields. [Prior to AECOM]

Resource Management Projects

University of California Merced, University Community Planning Area Wet Season Vernal Pool Crustacean Studies, Merced, CA
Field surveys of 713 vernal pools were conducted within the 11,000-acre project site. As biology task leader, Mr. Walker led field crews equipped with GPS units to obtain the accurate locations of vernal pools and report the various attributes discovered within each pool, including the presence and population of endangered fairy shrimp species. GIS was used to analyze vernal pool attributes (temperature, turbidity, pool area, and depth); spatial distribution (watershed subbasins/hydrologic connectivity); and population locations, diversity, and lifespan. [Prior to AECOM]

University of California Merced, University Community Concept Plan San Joaquin Kit Fox and Fresno Kanagroo Rat Surveys, University of California, Merced, CA
As project biologist, conducted surveys for San Joaquin kit fox and Fresno kangaroo rat in collaboration with US Fish and Wildlife Service. These surveys consisted of night spotlighting, trap transects, and hair traps (kit fox). These studies were conducted to support CEQA analyses and mitigation development, as well as habitat conservation planning for the planning area. [Prior to AECOM]

University of California Merced, University Community Concept Plan California Tiger Salamander Surveys, Merced, CA
As project biologist, Mr. Walker assisted in the preparation of a report summarizing current management techniques for bullfrog eradication and control. Surveys for California tiger salamander were conducted within the stock ponds of the planning area. These surveys were conducted in accordance with the standard aquatic survey guidelines established by the California Department of Fish and Wildlife. Bullfrog surveys, a California tiger salamander predator, were also conducted. These studies were conducted to support CEQA analyses and mitigation development, as well as habitat conservation planning. [Prior to AECOM]

Land Development Projects

Castle Oaks Development, JTS Communities, Amador County, CA
Senior biologist and task manager for biological studies for a proposed residential area along a 2-mile-long stretch. Technical reports prepared were wetland delineation, vernal pool crustacean surveys, rare plants, California red-legged frog, and a Mitigation Monitoring Plan. Site-specific surveys were wetland delineations, vegetation mapping, general floral and faunal inventories, and habitat assessments for sensitive species. Potential impacts to biological resources were analyzed and anticipated permits and required mitigation were identified. Required permits were obtained for Clean Water Act and California Department of Fish and Wildlife Streambed Alteration Agreement. [Prior to AECOM]

Water Resources

San Diego County Water Authority, Pipelines 3, 4, & 5 Relining at the San Luis Rey River, Bonsall, CA
Compliance monitor for the relining of pipelines 3, 4, & 5 at the San Luis Rey River. Conducted biological/compliance monitoring and prepared weekly reports for the water authority. In addition, conducted the environmental awareness training for the construction workers. [09/01/14-Present]

Sacramento County Water Agency, Vineyard Springs Flooding Improvement Biological Services, Sacramento, CA

To improve flood protection in Sacramento County, worked with the biological resources team and assisted with a formal wetland delineation for Section 404 of the Clean Water Act compliance and a biological assessment for Section 7 consultation and obtaining a 401 Water Quality waiver to permit two new detention basins. Conducted tree and raptor surveys and completed reports for each. [Prior to AECOM]

Permitting Projects

Sacramento Area Flood Control Agency, Long-Term Permits, Sacramento County, CA
Senior biologist for several long-term permits negotiated with and obtained from the resource agencies to authorize periodic and routine flood control maintenance activities and levee improvements over 23 sites. The permits were from the US Army Corps of Engineers (USACE), a Streambed Alteration Agreement, a biological opinion and Section 7 incidental take statement from the US Fish and Wildlife Service, and a Section 401 water quality certification from the California Regional Water Quality Control Board. In addition to the permitting effort, Mr. Walker conducted surveys for giant garter snake, western burrowing owl, and Valley elderberry longhorn beetle. [Prior to AECOM; 1996 – 1998]

Wetland and Watershed Projects

Barrick Gold Mine, Wetland Delineations, Elko County, NV
Biologist for preparing wetland delineations for new exploration areas and obtaining USACE permits. Approximately 38 miles of ephemeral and intermittent drainages were documented as part of the wetland delineation report. [Prior to AECOM]

Habitat Restoration and Mitigation Projects

Castle Oaks Golf Course Development, Amador County, CA
Senior biologist and project manager for the preparation and implementation of a detailed restoration and enhancement plan for 18 vernal pool and seasonal wetland basins. Assisted in the preparation of the restoration and enhancement plan that was approved by the resource agencies. Primary goal was to restore or enhance habitat for the loss of wetland habitat. The plan included measures to monitor hydrology and flora and fauna for the restored areas, and to identify control pools and sources of seed. [Prior to AECOM; 2002 – 2005]

Technical Studies

Pegasus Gold Mining Company, Golconda, Humboldt County, NV
Mr. Walker conducted small mammal trapping on contaminated soil sites to evaluate the uptake of heavy metals into the small mammal population. In addition, he collected various small bird species to be analyzed along with the small mammals. Specimens were prepared in accordance with laboratory guidelines and shipped to labs for analysis. [Prior to AECOM]

County of Merced, Natural Communities Conservation Plan/Habitat Conservation Plan, Merced, CA
Member of the biological resources team. The Natural Communities Conservation Plan/Habitat Conservation Plan was intended to facilitate incidental take permits from the US Fish and Wildlife Service and the California Department of Fish and Wildlife for development and other activities that would adversely affect habitat and species. Other goals included protection of the region's important natural habitats, wetlands, and endangered and other species while

also accommodating future planned development necessary for the economic health of the region; preservation and support of agricultural activities; and development of a locally established process for federal and state permitting for planned development within a defined regional planning area. This process was coordinated and streamlined, and provided all parties and landowners with long-term regulatory certainty and predictability. [Prior to AECOM; 2004 – 2006]

Environmental Training and Mitigation Monitoring

Mr. Walker managed the development and presentation of the environmental training and mitigation/compliance monitoring programs for the following projects:

- San Diego County Water Authority, Pipelines 3, 4, & 5 Relining at the San Luis Rey River
- Mojave Solar Project, Worker Environmental Awareness Program (WEAP) training California
- Genesis Solar Project, Worker Environmental Awareness Program (WEAP) training California
- WilTel Communications, Marysville–Beale Fiber Optic Installation, Environmental Training and Biological Monitoring for Horizontal Directional Drilling operations
- PG&E, Line 108 Bridge Removal Project, California
- Bear River North Levee Rehabilitation Project, Worker Environmental Awareness Program (WEAP) training
- Sacramento Area Flood Control Agency, Sacramento Area Flood Control Projects, Environmental Training Program conducted in English and Spanish
- San Joaquin Area Flood Control Agency, San Joaquin Area Flood Control Projects, Environmental Training Program conducted in English and Spanish

ATTACHMENT C
PHOTOS

Photo 1: Burrow 44 (See Figure 1-2). Occupied burrow with WBO individual observed at the burrow

Photo 2: Burrow 003 (See Figure 1-2). Occupied burrow with WBO individual observed at the burrow

Photo 3. Active burrow 44 (See Figure 1-2)

Photo 4. Active burrow 47 (See Figure 1-2)

Photo 5. Suitable WBO habitat to the northeast of the Project

Photo 6. Suitable WBO habitat and burrows to the west of the Project

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February 24, 2016

Eric Hollenbeck
California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Subject: Salt Creek Substation Project Western Burrowing Owl Passive Relocation

Dear Mr. Hollenbeck:

This is a follow up letter report, for the January 27, 2016 Salt Creek Substation Western Burrowing Owl Take Avoidance Survey letter report that was sent to your attention. A western burrowing owl (*Athene cunicularia)* (WBO) passive relocation effort was conducted from January 27 through January 30, 2016 for the proposed Salt Creek Substation Project (Project). The purpose of the passive relocation effort was to relocate two individual WBO that were detected on the Project during the Take Avoidance Survey conducted January 25, 2016, prior to February 1 (i.e., prior to the start of the breeding season). The passive relocation effort followed the protocols from the CDFW-approved "Burrowing Owl Monitoring and Mitigation Plan" developed for the Project (AECOM 2014)[1].

The proposed Project includes the installation of a new 120-megavolt ampere 69/12-kilovolt (kV) substation (proposed Salt Creek Substation) and an underground 69-kV power line loop-in (TL 6910) to the Salt Creek Substation. The proposed Project site is located approximately 15 miles southeast of downtown San Diego and 5 miles north of the international border with Mexico (Attachment A: Figure 1-1). The proposed Project is located in the eastern portion of the City of Chula Vista, California, adjacent to and southeasterly of Hunte Parkway, where San Diego Gas & Electric's (SDG&E) existing transmission corridor crosses Hunte Parkway (Attachment A: Figure 1-2).

PASSIVE RELOCATION METHODOLOGY AND RESULTS

Prior to implementing the passive relocation effort, focused surveys were conducted to ensure egg-laying had not begun. The focused surveys consisted of an evening and a morning survey. Ornithologists observed and recorded the behavior of WBO present on site to determine if any activities occurred such as, a pair of WBO at the same burrow, copulation, or carrying food items into the burrow, which could indicate breeding has begun at the occupied burrow. No breeding behavior was detected by either owl: therefore, the passive relocation effort was implemented.

Ron Walker (AECOM) led the passive relocation effort along with Emma Frasier, Eric Bailey, Jenna Hartsook, Lauren Trimble, and Michael Anguiano of AECOM. One-way doors were placed at the entrance to the occupied burrows, active burrows, and other potential burrow surrogates within 164 feet (50 meters) of the active/occupied burrows to passively exclude WBO from the Project site. A total of 18 one-way doors were installed on January 27, 2016, including one at each occupied burrow (i.e., 44 and 3) (Figure 1-2), one at each active burrow (i.e., 45 and 47) (Figure 1-2), and 14 at surrogate burrows within 164 feet (50 meters) of active or occupied burrows. Suitable burrows that were identified beyond

[1] AECOM. 2014. Salt Creek Substation and Power Line Project Burrowing Owl Monitoring And Mitigation Plan. Prepared for Debbie Collins, San Diego Gas & Electric. September 2014.

164 feet (50 meters) of the active or occupied burrows, and confirmed to be California ground squirrel (*Otospermophilus beecheyi*) burrows, were collapsed using hand tools. These burrows beyond 164 feet (50 meters) of the active or occupied burrows were collapsed prior to installation of the one-way doors on the two occupied, two active burrows, and other potential burrow surrogates within 164 feet (50 meters) of the active burrows to ensure WBO could not enter them after they were evicted from burrows with one-way doors.

The one-way doors consisted of a 4 inch diameter, approximately 24 inch long black, corrugated irrigation pipe with a free swinging clear plexiglas door over one end. Prior to installation of the one-way doors, a 24 inch pipe was placed in the burrow. Once the pipe was in place, the soil around burrow entrance was excavated to accommodate insertion of a one-way door. After the one-way doors were inserted, excess soil was placed on the top and sides of the one-way doors to prevent WBO from attempting to going around the door to enter the burrow. The area around the doors was brushed clean of debris and small rocks to improve site conditions for observation of WBO sign during subsequent one-way door checks. Before leaving a burrow with a door, the one-way doors were checked to ensure that they were moving freely and were not obstructed (Attachment B: Photos 1 through 8)

The one-way doors were left in place for 48 hours and monitored twice daily to ensure that they were functioning properly and to determine if there was fresh WBO sign around the one-way doors. Subsequent site visits were conducted on January 28 and 29, 2016. On January 28, one WBO was observed near the one-way door installed on burrow 44. The WBO was observed flying and landing throughout the general vicinity of burrow 44. On January 29, no WBO were observed on the Project. In addition, while checking all of the one-way doors there was no WBO sign (i.e., bones, whitewash, pellets or feathers) found at any of the one-way doors nor was there any sign immediately inside of the doors.

On January 30, 2016 a preliminary survey was conducted prior to removal of the 18 one-way doors and collapsing of the burrows to determine if any WBO or their sign was on the Project. The results of this survey were negative. Prior to removing a one-way door, an EMS2012 Gopher Tortoise Camera System with a 7 inch diagonal color LCD screen was used to clear the burrow (Attachment B: Photos 9 through 12). This enabled the camera viewer to observe if there were any indications of wildlife occupying the burrow (i.e., WBO, snake, squirrel, gopher, etc.). None of the 18 burrows with one-way doors had wildlife occupying the burrow. Once the burrow was cleared, the one-way door was removed, and the burrow collapsed. To collapse the burrow a 3 or 4 inch diameter plastic pipe was inserted into the burrow, this allowed the biologists excavating the burrow a path to follow while digging out the burrow and a maintain an escape route for any wildlife that may have been missed while scoping the burrow. All of the 18 burrows with one-way doors were excavated using hand tools. The burrows were excavated to the end of the burrow. In most cases, the burrows were approximately 3 to 5 feet in length while others were approximately 5 to 7 feet in length.

NEXT STEPS

Follow-up surveys will be conducted to ensure the site remains inhospitable for WBO. These surveys will consist of walking 10 to 15 meter meandering transects throughout the site to search for newly

created California ground squirrel burrows. California ground squirrel burrows will be hand collapsed with a shovel to prevent them from becoming suitable for WBO. Monthly monitoring reports will be provided summarizing the results of monitoring.

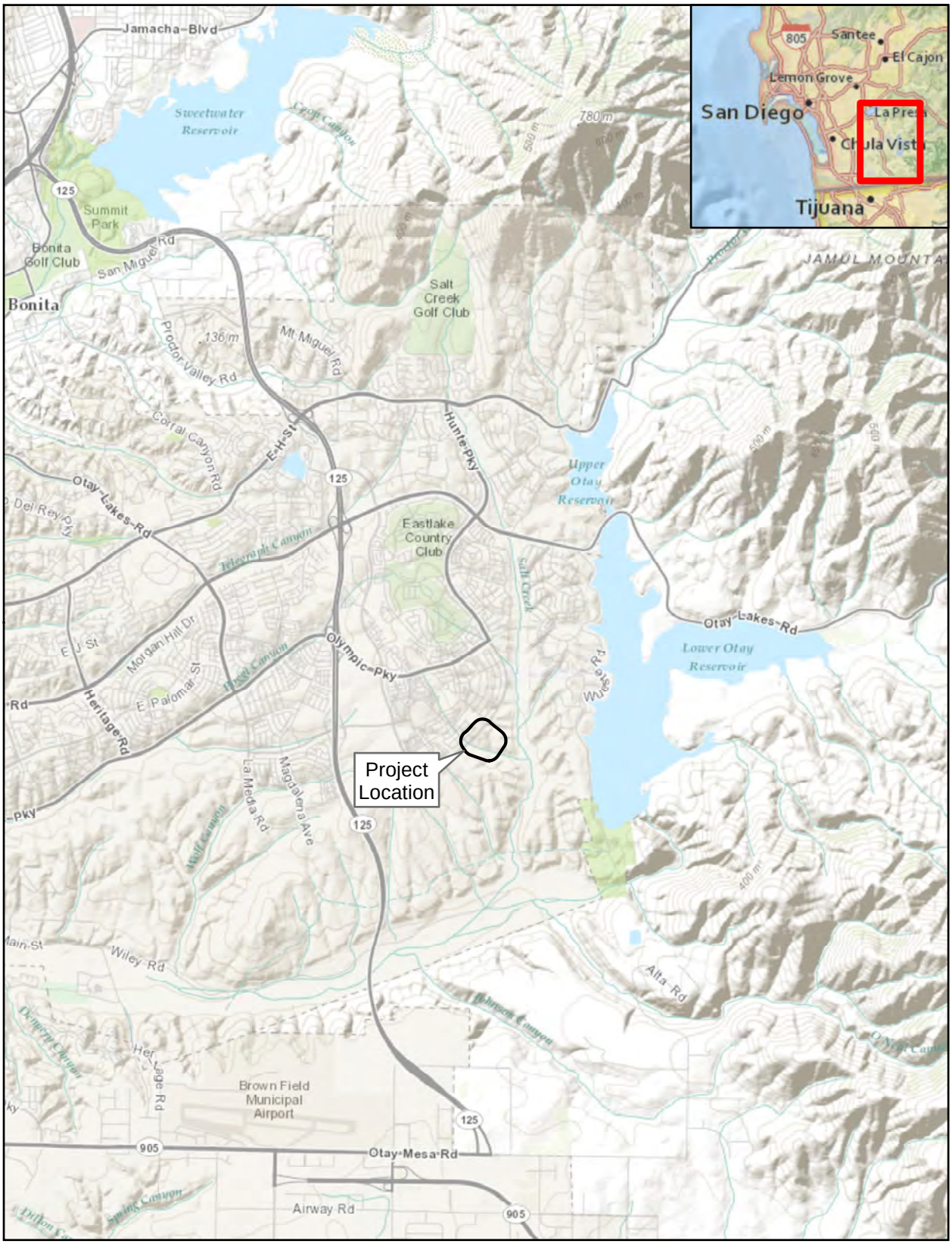
If you have any questions or comments, please contact me at 619.610.7654.

Sincerely,

Michael Anguiano
Senior Biologist

Attachment A: Figures
Attachment B: Photos

ATTACHMENT A
FIGURES



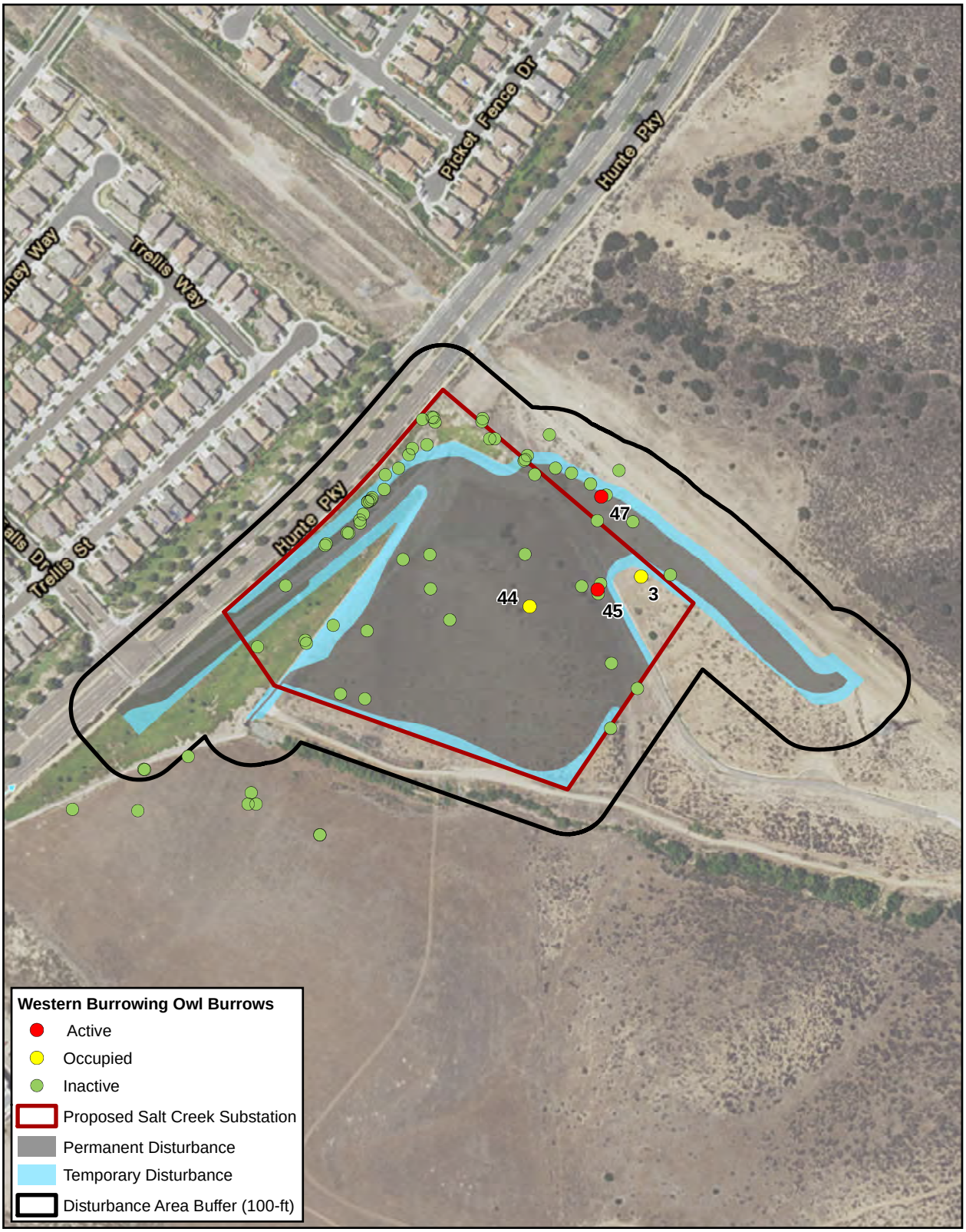
Source:AECOM, GeomorphIS LLC, SDG&E, 2015; Esri Basemaps, 2015

0 1.25 2.5 Miles

Scale: 1:79,200 1 inch = 1.25 miles

Figure 1-1
Regional and Vicinity Map

SDG&E is providing this map with the understanding that the map is not survey grade.



Source: GeomorphIS LLC, AECOM, SDG&E, 2015; Esri Basemaps, 2014

0 165 330 Feet

Scale: 1:3,960 1 inch = 330 feet

Figure 1-2
Suitable Western Burrowing Owl Burrows

SDG&E is providing this map with the understanding that the map is not survey grade.

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Plan_Report2016\BurrowingOwl.mxd, 1/27/2016, E D Goff

ATTACHMENT B
PHOTOS

Attachment B - Photos

Photo 1. Insertion of 4 inch pipe prior to installation of one way door.

Photo 2. Burrow prior to installation of one way door.

Photo 3. One way door installed at occupied burrow 3.

Photo 4. One way door installed at occupied burrow 44.

Photo 5. One way door installed at potential burrow surrogate.

Photo 6. One way door installed at potential burrow surrogate.

Photo 7. One way door installed at potential burrow surrogate.

Photo 8. One way door installed at potential burrow surrogate.

	
Photo 9. Using scope on one way door burrow prior to collapsing burrow.	Photo 10. Preparing to use scope on burrow with a one way door.
	
Photo 11. Using scope on one way door burrow prior to collapsing burrow.	Photo 12. Collapsing burrow after it was cleared using the scope; burrow was collapsed to the end.

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April 20, 2016

Eric Hollenbeck
California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Subject: Salt Creek Substation Project Western Burrowing Owl February Monitoring Report

Dear Mr. Hollenbeck:

This letter report summarizes western burrowing owl (*Athene cunicularia)* (WBO) monitoring conducted during the month of February for the proposed Salt Creek Substation Project (Project) site. A passive relocation effort was conducted from January 27 through January 30, 2016 to exclude two individual WBO from the Project site and collapse suitable WBO burrows on site. A passive relocation report summarizing the results of that effort was submitted to your attention on February 24, 2016. Following the completion of the passive relocation effort, WBO monitoring has been on-going to ensure the Project site remains absent of suitable burrows for WBO and that WBO do not move into burrows for nesting prior to initiation of construction activities.

MONITORING METHODOLOGY

WBO site monitoring consisted of a single biologist walking 10 to 15 meter meandering transects throughout the site to search for newly created California ground squirrel (*Otospermophilus beecheyi*), burrows or other wildlife burrows that may become suitable WBO burrows. California ground squirrel or other wildlife burrows were hand collapsed with a shovel to prevent them from becoming suitable for WBO. Focus was placed on exclusion locations where WBO may show site fidelity. Binoculars were also used to scan areas for individual WBO that may be on site. Presence of WBO sign (e.g., pellets, prey remains, whitewash, decorations, tracks) was also recorded.

Monitoring was initially conducted at a frequency of twice per week, but was increased to daily due to high burrow activity from California ground squirrels and the presence of an individual WBO. Surveys were conducted at any time of day since observers were searching for burrows.

RESULTS

During the initial week of monitoring, there were several freshly dug California ground squirrel burrows that were collapsed during surveys. No WBO were detected during this first week of monitoring. On Monday, February 8, an individual WBO was detected at a California ground squirrel burrow that was created between survey visits. Initially, it was thought this a burrow was an active burrow because of the WBO standing near the burrow and the presence of sign by the burrow. However, a subsequent visit was conducted for several hours on February 9 to observe this burrow and the WBO was never seen entering the burrow. When startled, the WBO did not retreat to this burrow or show any territoriality behavior around the burrow. Pellets were noted outside the burrow, but it appeared the WBO was perching in this area and not using the burrow. The burrow was on the border of suitability for WBO because burrow was on the small side in terms of size.

On Tuesday morning, February 10, the biologist was on site for about 3.5 hours and did not see the WBO. The biologist walked the site and periphery for sign of the owl. Another non-suitable burrow (i.e., burrow only a foot deep) was detected outside the project footprint east of the transmission line road. There were pellets and whitewash (i.e., WBO scat) by this burrow where a WBO had been perching; however, an owl would not be able to use this burrow for breeding.

On Tuesday afternoon, February 10, Michael Anguiano (AECOM), and Leslie Nelson (SDG&E) spoke with Mr. Hollenbeck of California Department of Fish and Wildlife to discuss the circumstances of the WBO detected at the site. One more visit was suggested to observe the WBO's behavior. Should no WBO be detected, the burrow would be scoped and collapsed (provided no owl be detected inside). Should a WBO be detected using the burrow, it would not be scoped or collapsed. Mr. Hollenbeck agreed with this approach for handling the WBO and noted that AECOM should use this method moving forward should a questionable burrow be detected with a WBO near it. Scoping the burrow would be done to be extra precautionary and conservative in the slight chance a WBO could be inside.

On February 11, the biologist returned to the site to observe the burrow and detected the WBO at the burrow. The WBO was observed for several hours, but was never seen using the burrow. The burrow was eventually scoped when the WBO was clear from the burrow. No WBO or any sign was found in the burrow that indicated it had been occupied by WBO. After scoping the burrow, it was collapsed.

Following this encounter with the WBO, visits were conducted every day to monitor the site and stay on top of collapsing ground squirrel burrows. Additional, individual owl sightings occurred on February 15, 18, 19, 20, 27, and 28, 2016. These sightings were of individual WBO, there was never a sighting of two owls on site. No breeding behavior was ever documented nor was there ever any use a burrow detected on site. On two occasions burrows large enough to be inhabited by WBO were detected. As discussed and agreed to with CDFW, these burrow locations were observed to investigate if they were being used for breeding purposes. After passive observations of WBO at burrows, it was determined that there was no indication of any breeding behavior by the individual WBO. After this determination was made, the burrows were scoped and showed no indication of WBO in the burrow. At this point the burrows were dug up, using a hand shovel, and were collapsed.

Table 1 summarizes results of the WBO site monitoring for each day of monitoring in February. Daily monitoring data was collected and recorded on monitoring forms. Data forms include survey information, weather data, and wildlife observations (Attachment A).

Table 1
Western Burrowing Owl February Monitoring Summary

Date	Biologist	Time	WBO observed (yes/no)	Summary of Activities
2/1/16	Ron Walker	0720-1020	No	Collapsed squirrel burrows.
2/3/16	Ron Walker	1640-1806	No	Collapsed squirrel burrows.
2/8/16	Emma Fraser	1430-1630	Yes	One individual WBO observed on SW slope within impact area next to a burrow. This burrow was not collapsed. Collapsed other squirrel burrows.
2/9/16	Brennan Mulrooney	1300-1500	Yes	Observed WBO to investigate if breeding behavior was occurring or if the burrow detected on 2/8 was active. None detected. Collapsed other squirrel burrows.
2/10/16	Brennan Mulrooney	0630-1100	No	Observed burrow detected on 2/8 to investigate signs of breeding behavior. No WBO were detected. Collapsed other squirrel burrows. Unsuitable burrow with WBO sign noted offsite.
2/11/16	Brennan Mulrooney	1200-1600	Yes	Observed burrow detected on 2/8 to investigate signs of breeding behavior. Burrow was not used by WBO. The burrow was scoped and did not contain any WBO or WBO sign. This burrow was collapsed. Collapsed other squirrel burrows.
2/12/16	Brennan Mulrooney	0630-1100	No	Collapsed squirrel burrows.
2/13/16	Emma Fraser	0930-1125	No	Collapsed squirrel burrows.
2/14/16	Ron Walker	0830-1100	No	Collapsed squirrel burrows.
2/15/16	Brennan Mulrooney	0630-1100	Yes	One individual WBO observed. Fresh sign was detected outside a burrow; however, the burrow was too small for a WBO to inhabit. This burrow was collapsed. Collapsed other squirrel burrows.
2/16/16	Emma Fraser	0730-0915	No	Collapsed squirrel burrows.
2/17/16	Ron Walker	1100-1330	No	Collapsed squirrel burrows.
2/18/16	Emma Fraser	0930-1115	Yes	One individual WBO observed. Fresh sign was detected outside a burrow; however, the burrow was not suitable for WBO to inhabit because it was too shallow. This burrow was collapsed. Collapsed other squirrel burrows.
2/19/16	Brennan Mulrooney	0800-1100	Yes	One individual WBO observed. The WBO was located at a burrow large enough to be suitable. The WBO was not detected using the burrow. This burrow was not collapsed. Collapsed other squirrel burrows.
2/20/16	Jimmy McMorran	0630-1000	Yes	One individual WBO observed at the previous location on 2/19. Investigated burrow detected on 2/19. WBO was not detected using any burrow or exhibiting breeding behavior. Collapsed squirrel burrows.

2/21/16	Ron Walker	0730-1100	No	Investigated burrow and area where WBO was detected on 2/19 and 2/20. No WBO was detected. Collapsed squirrel burrows.
2/22/16	Brennan Mulrooney	0700-1100	No	Investigated burrow and area where WBO was detected on 2/19 and 2/20. No WBO was detected. The burrow was scoped and collapsed. Collapsed squirrel burrows.
2/23/16	Ron Walker	1500-1800	No	Collapsed squirrel burrows.
2/24/16	Ron Walker	1100-1440	No	Collapsed squirrel burrows.
2/25/16	Ron Walker	1500-1815	No	Collapsed squirrel burrows.
2/26/16	Ron Walker	1500-1800	No	Collapsed squirrel burrows.
2/27/16	Brennan Mulrooney	0630-1030	Yes	One individual WBO observed on ornamental slope. Two burrows were detected where the WBO was located. The burrows were suitable for WBO and not collapsed. Collapsed squirrel burrows.
2/28/16	Ron Walker	0810-1230	Yes	One individual WBO observed at the previous location on 2/27. WBO was not detected using any burrow or exhibiting breeding behavior. This burrow was scoped and collapsed. Collapsed squirrel burrows.
2/29/16	Ron Walker	1230-1610	No	Collapsed squirrel burrows.

NEXT STEPS

Daily monitoring will continue into March to ensure, to the extent feasible, the site remains inhospitable for WBO. These surveys this will consist of continuing to survey the site for WBO or their sign; and hand collapse newly dug California ground squirrel burrows to prevent them from becoming suitable for WBO. Monthly monitoring reports will be provided summarizing the results of monitoring.

If you have any questions or comments, please contact me at 619.610.7654.

Sincerely,

Michael Anguiano
Senior Biologist

Attachment A: Daily Monitoring Forms

ATTACHMENT A
Daily Monitoring Forms

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	February 1, 2016: Time 0720 through 1020
Weather Conditions	Overcast, 80% cloud cover, no wind, 54 degrees Fahrenheit

Monitoring Notes

Arrived on site at the Salt Creek Substation site to check on previously excavated burrow areas for potential returning burrowing owls and investigate whether there was any fresh Western burrowing owl (WBO) sign at any of the previously excavated burrows. In addition, looked for any new ground squirrel burrows that have been recently dug. No WBO were observed on the site or at the excavated burrows; nor was here any fresh WBO sign. There were two new freshly excavated ground squirrel burrows approximately 5 feet away and 10 feet away from burrow #44, one hole was situated to the south of burrow#44 and the other was to the west of burrow#44, both of these holes were dug up and filled in.

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log

Monitor:	Ron Walker
Date and Time:	February 3, 2016: Time 1640 through 1806
Weather Conditions	Clear, no wind, 64 degrees Fahrenheit

Monitoring Notes

Arrived on site at the Salt Creek Substation site to check on previously excavated burrow areas for potential returning burrowing owls and investigate whether there was any fresh Western burrowing owl (WBO) sign at any of the previously excavated burrows. In addition, looked for any new ground squirrel burrows that have been recently dug. No WBO were observed on the site or at the excavated burrows; nor was here any fresh WBO sign. There was one new freshly excavated ground squirrel burrow approximately 3 feet away from burrow #44, this hole was dug up and filled in.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Emma Fraser
Date and Time:	02/08/2016; 1430-1630
Weather Conditions	84 F, 1 mph wind, 0 cc

Monitoring Notes

The biologist arrived on-site at 1430 and surveyed the entire site by walking 20-foot wide transects throughout the impact area in order to monitor for colonizing and/or returning BUOW. Any new burrows dug by mammals the could become suitable for BUOW's were collapsed in order to keep the site inhospitable to BUOW and to prevent future use. Five freshly dug burrows conducive to California ground squirrel were collapsed throughout the site. One active BUOW burrow was located on the southwest side of the slope and within the impact area. A BUOW flushed from the burrow entrance as the biologist approached. There was fresh white wash outside of the burrow entrance but no signs of long term use. This burrow was not collapsed. The burrow was located at UTM coordinates: Easting 0504673; Northing 3609060. The owl inhabiting this particular burrow could be the individual from a previous burrow (#44) that was passively relocated via the use of a one-way door system. The biologist was offsite at 1630.

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Brennan Mulrooney
Date and Time:	2/9/16 1300 - 1600
Weather Conditions	Sunny, hot 89° light wind
Monitoring Notes	

arrived at 1300 and saw no owls on site. I visited the marked burrow and found fresh sign (scat/pellets). At 1400 ~~the~~ one BUOW was spotted about 10 m from the marked burrow standing next to a sprinkler. When spooked the ~~se~~ owl would hunker down next to the sprinkler rather than retreat to a burrow. The bird never returned to the marked burrow during the duration of my stay.

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	BRENNAN MULROONEY
Date and Time:	2/10/16 0630 - 1100
Weather Conditions	Sunny, hot 65-85°

Monitoring Notes

arrived at 0630 to find a man walking an offleash dog on site. I did not see the owl. There was no new sign at the burrow, but I did locate a burrow off site to the east that had quite a bit of sign. 32.62093 N 116.94888 W

I never saw an owl all morning.

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	BRENNAN MULROONEY
Date and Time:	2/11/16 0630 – 1100
Weather Conditions	Sunny, hot 65 – 82
Monitoring Notes	

Arrived at 0630 to find an owl back at the marked burrow. I observed the bird as it sat at the entrance to the burrow, but never entered. At 0810 maintenance crews started weed whackers and appeared to spook the owl. Instead of going into the burrow it ran into a bare ~~[illegible]~~ patch of ground. After a few minutes in the open it went and hid under an Encelia bush. The owl remained there until I began collapsing squirrel burrows on site. When I was sure the owl was out and away from the burrow, I scoped the marked burrow. I found nothing in the burrow that would indicate it had ever been occupied by an owl. After scoping it, I collapsed it. and left the site.

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Brennan Mulrooney
Date and Time:	2/12/16 Sunny, hot 0630 - 1000
Weather Conditions	0630 - 1000
Monitoring Notes	

I arrived at 0630 and found no owls on site. I walked the site and found no new owl sign. I collapsed a couple of squirrel burrows that had reopened. I never saw an owl on site.

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Emma Fraser
Date and Time:	02/13/2016 START: 0930; END: 1125
Weather Conditions	START: 62 F, 0-1 mph wind, 10% cc END: 70 F, 1-2 wind, 5% cc

Monitoring Notes

The biologist arrived on site at 0930 and spent 15 minutes passively (standing at a high vantage point and watching and listening) surveying for western burrowing owl (WBO) sign. No WBO were observed. The biologist then proceeded to walk transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent future use. Eleven burrows were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
San Diego black-tailed jackrabbit (*Lepus californicus bennettii)*, southern pacific rattlesnake (*Crotalus oreganus helleri)*, California ground squirrel (*Otospermophilus beecheyi)*, coastal California gnatcatcher (*Polioptila californica*), western meadowlark (*Sturnella neglecta*), Say's phoebe (*Sayornis saya*), Cassin's kingbird (*Tyrannus vociferans*), Anna's hummingbird (*Calypte anna*), California towhee (*Melozone crissalis*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), bushtit (*Psaltriparus minimus*), song sparrow (*Melospiza melodia*), rock wren (*Salpinctes obsoletus*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), white-crowned sparrow (*Zonotrichia leucophrys*), greater roadrunner (*Geococcyx californianus*)

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	02/14/2016 START: 0830; END: 1100
Weather Conditions	START: 56 F, 0 wind, 0% cc END: 68 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 0830 and spent 20 minutes passively surveying for western burrowing owl (WBO) at previously known active (collapsed) burrows, no WBO were observed. Walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 17) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
California ground squirrel (*Otospermophilus beecheyi),* Botta's pocket gopher (*Thomomys bottae*), western meadowlark (*Sturnella neglecta*), Cassin's kingbird (*Tyrannus vociferans*), Anna's hummingbird (*Calypte anna*), California towhee (*Melozone crissalis*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), red-tailed hawk (*Buteo jamaicensis*), song sparrow (*Melospiza melodia*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), white-crowned sparrow (*Zonotrichia leucophrys*), and raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	BRENNAN MULROONEY
Date and Time:	2/15/16 0630 - 1100
Weather Conditions	SUNNY, WARM, 66 - 84
Monitoring Notes	

upon arrival I saw no owls at the locations where they had previously been detected. After driving the perimeter of the project boundary I flushed an owl off the ~~North~~ ~~Slop~~ Slope below Hunt Parkway. I was unable to see where the bird landed when it flew toward the project footprint. While searching for burrows in the area I ~~fl~~ again flushed an owl and this time found a burrow with fresh sign (2 pellets). I was unable to say if this was a second owl or if the original owl had returned while I wasn't looking. I collapsed the burrow where the sign was as it was to small for an owl to be inside, but was obviously still attractive. I found no other sign ~~of~~ of activity on site.

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Emma Fraser
Date and Time:	02/16/2016 START: 0730; END: 0915
Weather Conditions	START: 65 F, 2-3 mph wind, 0 cc END: 70 F, 3-5 wind, 0 cc

Monitoring Notes

-The biologist arrived on site at 0730 and spent 15 minutes passively (standing at a high vantage point and watching and listening) surveying for western burrowing owl (WBO) sign. No WBO were observed.
-The biologist then proceeded to walk transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent future use. Six burrows were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
western meadowlark (*Sturnella neglecta*), Say's phoebe (*Sayornis saya*), Cassin's kingbird (*Tyrannus vociferans*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), song sparrow (*Melospiza melodia*), American crow (*Corvus brachyrhynchos*), greater roadrunner (*Geococcyx californianus*), yellow-rumped warbler (*Setophaga coronata*), house wren (*Troglodytes aedon*), Lawrence's goldfinch (*Spinus lawrencei*), coyote (*Canis latrans*)

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	02/17/2016 START: 1100; END: 1330
Weather Conditions	START: 81 F, 5-7 wind from West, 0% cc END: 82 F, 6-8 wind from West, 0% cc

Monitoring Notes

Arrived on site at 1100 and spent 25 minutes passively surveying for western burrowing owl (WBO) at previously known active (collapsed) burrows, no WBO were observed. Walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 15) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Coyote (*Canis latrans*; fresh scat), California ground squirrel (*Otospermophilus beecheyi)*, Botta's pocket gopher (*Thomomys bottae*), western meadowlark (*Sturnella neglecta*), Cassin's kingbird (*Tyrannus vociferans*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), red-tailed hawk (*Buteo jamaicensis*), song sparrow (*Melospiza melodia*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), raven (*Corvus corax*), and western fence lizard (*Sceloporus occidentalis*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Emma Fraser
Date and Time:	02/18/2016 START: 0930; END: 1115
Weather Conditions	START: 62 F, 0 wind, 100% cc, light mist END: 64 F, 3 wind, 100% cc, dry

Monitoring Notes

The biologist arrived on site at 0930 and spent 15 minutes passively (standing at a high vantage point and watching and listening) surveying for western burrowing owl (WBO) sign. The biologist then proceeded to walk transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent future use. Nine burrows were collapsed throughout the site.

-One WBO individual was observed flushing from the entrance of a new California ground squirrel burrow as the biologist approached the area. The bird flushed off site to the south where the biologist lost sight of owl. Minimal white-wash and one very fresh pellet were found at the entrance to the burrow. The burrow was located on the northern slope between the road switch-back, approximately 8-feet east of burrow number 041 (flagged). The biologist confirmed that the burrow was unsuitable due to the narrowing and eventual dead-end of the tunnel. The biologist then proceeded to collapse the burrow after the owl flushed to prevent further use. The owl was not seen again during the second half of the survey.

Wildlife Observed:

California ground squirrel (*Otospermophilus beecheyi),* western meadowlark (*Sturnella neglecta*), Say's phoebe (*Sayornis saya*), Anna's hummingbird (*Calypte anna*), California towhee (*Melozone crissalis*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), bushtit (*Psaltriparus minimus*), song sparrow (*Melospiza melodia*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), white-crowned sparrow (*Zonotrichia leucophrys*), lesser goldfinch (*Spinus psaltria*), northern harrier (pair) (*Circus cyaneus*), Lawrence's goldfinch (*Spinus lawrencei*), house wren (*Troglodytes aedon*), northern mockingbird (*Mimus polyglottos*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	BRENNAN MULROONEY
Date and Time:	2/19/16 0500-1100
Weather Conditions	Sunny, warm

Monitoring Notes

Upon arrival at the site I did not see any ~~fiber~~ owls at any of the burrows it has previously occupied. I later flushed the owl from a previously unmarked burrow on the north slope. This burrow was large enough to be suitable and therefore could not be collapsed without being scoped. The owl spent the remainder of the morning sheltering under a tree on the north slope. I collapsed approximately six ground squirrel burrows that had been newly opened, but were not yet of suitable diameter.

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Jimmy McMorran
Date and Time:	February 20, 2016 0630-1000
Weather Conditions	START: 48 F, 0 mph wind, 0% cc END: 63 F, 1-2 wind, 0% cc

Monitoring Notes

I arrived at approximately 0630 and drove past the burrow that Brennan had marked previously. I then walked to the back of the slope on the south side of the lower road, and observed the burrow and owl from this location for approximately 45 minutes in hopes of seeing two owls. Only one owl was ever seen. About 45 minutes into observing the owl and the burrow, the owl flew to the eastern-most pepper tree down the south facing slope. It stayed hunkered down under the tree and then flew to the western edge of the survey area and perched on the rip-rap in the creek for about 10 minutes. It then flew back under the pepper tree is had flown from previously.

I then walked transects and collapsed only a few squirrel burrows. Upon leaving the site, I noticed the owl was still under the pepper tree. I walked up to the burrow it was initially at and did not see any owl sign.

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	02/21/2016 START: 0730; END: 1100
Weather Conditions	START: 52 F, 0 wind, 0% cc END: 65 F, 5-7 wind from West, 0% cc

Monitoring Notes

Arrived on site at 0730 and spent 30 minutes passively surveying for western burrowing owl (WBO) at SALTCREEK003, last burrow where WBO was observed, no WBO were observed. Walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 20) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
California ground squirrel (*Otospermophilus beecheyi),* Botta's pocket gopher (*Thomomys bottae*), western meadowlark (*Sturnella neglecta*), Cassin's kingbird (*Tyrannus vociferans*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), red-tailed hawk (*Buteo jamaicensis*), song sparrow (*Melospiza melodia*), white-crowned sparrow (*Zonotrichia leucophrys*), roadrunner (*Geococcys californianus*), American kestrel (*Falco sparverius*), raven (*Corvus corax*), and western fence lizard (*Sceloporus occidentalis*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	BRENNAN MULROONEY
Date and Time:	2/22/16 0700-1100
Weather Conditions	Sunny, warm.

Monitoring Notes

I arrived to find ~~to~~ no owls at any of the known burrows. I walked transects across the site and collapsed several squirrel burrows that had been reopened. One burrow had a bird dropping at the entrance that may have been from a burrowing owl, that burrow was not large enough to be suitable for BUOW and I collapsed it. I left the site without seeing any BUOW or any fresh sign at any known burrows.

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	02/23/2016 START: 1500; END: 1800
Weather Conditions	START: 72 F, 0 wind, 0% cc END: 64 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 1500 and spent 60 minutes passively surveying for western burrowing owl (WBO) at SALTCREEK003, last burrow where WBO was observed, no WBO or WBO sign were observed. Scoped burrow, no WBO present and no other wildlife present in burrow. Collapsed burrow till the end, burrow was approximately 4 feet long and 3 feet deep. Walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 13) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), house finch (*Haemorhous mexicanus*), red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), song sparrow (*Melospiza melodia*), white-crowned sparrow (*Zonotrichia leucophrys*), raven (*Corvus corax*), and western fence lizard (*Sceloporus occidentalis*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	02/24/2016 START: 1100; END: 1440
Weather Conditions	START: 79 F, 2-3 wind from West, 0% cc END: 81 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 1100 and spent 35 minutes passively surveying for western burrowing owl (WBO) at previously known active (collapsed) burrows, no WBO were observed. Walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 12) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Coyote (*Canis latrans*; fresh scat), Botta's pocket gopher (*Thomomys bottae*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), song sparrow (*Melospiza melodia*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), raven (*Corvus corax*), and western fence lizard (*Sceloporus occidentalis*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	02/25/2016 START: 1500; END: 1815
Weather Conditions	START: 76 F, 3-5 wind from West, 0% cc END: 68 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 1500 and spent 40 minutes passively surveying for western burrowing owl (WBO) at previously known active (collapsed) burrows, no WBO were observed. Walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 10) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), song sparrow (*Melospiza melodia*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), peregrine falcon (*Falco peregrinus*), raven (*Corvus corax*), gopher snake (*Pituophis catenifer*), and western fence lizard (*Sceloporus occidentalis*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	02/26/2016 START: 1500; END: 1800
Weather Conditions	START: 72 F, 5-7 wind from West, 70% cc END: 67 F, 5-7 0 wind from West, 70% cc

Monitoring Notes

Arrived on site at 1500 and spent 30 minutes passively surveying for western burrowing owl (WBO) at previously known active (collapsed) burrows, no WBO were observed. Walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 16) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), raven (*Corvus corax*), great blue heron (*Ardea herodias*), northern harrier (*Circus cyaneus*) and western fence lizard (*Sceloporus occidentalis*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Brennan Mulrooney
Date and Time:	27 Feb 2016; 0630-10:30
Weather Conditions	Sunny, warm

Monitoring Notes

When I arrived onsite I found no BUOW at the recently occupied burrows. I proceeded to walk transects clearing the site, collapsing burrows. While walking the north slope I flushed an owl from a burrow near the bottom of the slope. I found two burrow entrances in the area the bird flushed from. Both were too big to be sure that there wasn't an owl inside, so I did not collapse them. I finished clearing the site and when I was done the owl had returned to the burrow entrance.

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	02/28/2016 START: 0810; END: 1230
Weather Conditions	START: 57 F, 0 wind, 0% cc END: 74 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 0810 and spent 90 minutes passively surveying for a western burrowing owl (WBO) at a squirrel burrow that was identified on 2/27/16. One WBO was observed at this burrow, it stayed stationary in front of burrow for 90 minutes then flew down to large rip rap rock at cement drainage outlet. This individual owl did not exhibit any breeding behavior or show any territorial behavior at the burrow. Only one WBO was observed, during this time. At this location where the WBO was observed, there were two burrows, one was not suitable (too shallow), and the other was suitable. The suitable burrow was scoped and it was determined that there was no wildlife in the burrow and it was dug up and collapsed. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 20) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), raven (*Corvus corax*), American kestrel (*Falco sparverious*), northern harrier (*Circus cyaneus*) and western fence lizard (*Sceloporus occidentalis*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	02/29/2016 START: 1230; END: 1610
Weather Conditions	START: 71 F, 3-5 from SW, 0% cc END: 70 F, 3-5 from SW, 0% cc

Monitoring Notes

Arrived on site at 1230 and spent 35 minutes passively surveying for a western burrowing owl (WBO) at a squirrel burrow (burrow collapsed on 2/28/16) and the adjacent area. There were no WBO observed at this collapsed burrow or the adjacent area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals the could become suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 11) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), raven (*Corvus corax*), American kestrel (*Falco sparverious*), and northern harrier (*Circus cyaneus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

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May 2, 2016

Eric Hollenbeck
California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Subject: Salt Creek Substation Project Western Burrowing Owl March Monitoring Report

Dear Mr. Hollenbeck:

This letter report summarizes western burrowing owl (*Athene cunicularia)* (WBO) monitoring conducted during the month of March for the proposed Salt Creek Substation Project (Project) site. A passive relocation effort was conducted from January 27 through January 30, 2016 to exclude two individual WBO from the Project site and collapse suitable WBO burrows on site. A passive relocation report summarizing the results of that effort was submitted to your attention on February 24, 2016. Following the completion of the passive relocation effort, WBO monitoring has been on-going to ensure the Project site remains absent of suitable burrows for WBO and that WBO do not move into burrows for nesting prior to initiation of construction activities.

MONITORING METHODOLOGY

WBO site monitoring consisted of a single biologist walking 10 to 15 meter meandering transects throughout the site to search for newly created California ground squirrel (*Otospermophilus beecheyi*), burrows or other wildlife burrows that could become suitable WBO burrows. California ground squirrel or other wildlife burrows were hand collapsed with a shovel to prevent them from becoming suitable for WBO. Focus was placed on exclusion locations where WBO could show site fidelity. Binoculars were also used to scan areas for individual WBO that could be on site. Presence of WBO sign (e.g., pellets, prey remains, feathers, whitewash, decorations, tracks) was also recorded.

Monitoring was initially conducted at a frequency of twice per week, but was increased to daily in February due to high burrow activity from California ground squirrels and the presence of an individual WBO. In early March (March 11), the frequency of surveys was reduced back to twice weekly; this reduction of survey days was based on the lack of WBO sightings on the site. The last WBO sighting onsite was February 28, 2016. Surveys were conducted at any time of day since observers were searching for burrows.

RESULTS

During the month of March there were no observations of WBO or their sign in the Project area. Numerous freshly dug California ground squirrel burrows were hand collapsed with a shovel to prevent them from becoming suitable for WBO. On March 4, a single WBO was detected at burrow complex approximately 75 meters (246 feet) offsite to the southwest of the access road that will be upgraded to access the substation from Hunte Parkway. This WBO was detected at the same

location on March 7, 8, 9, 11, and 14. The WBO was not detected at this location or in the vicinity after March 14.

Table 1 summarizes results of the WBO site monitoring for each day of monitoring in March. Daily monitoring data was collected and recorded on monitoring forms. Data forms include survey information, weather data, and wildlife observations (Attachment A).

Table 1
Western Burrowing Owl March Monitoring Summary

Date	Biologist	Time	WBO observed (yes/no)	Summary of Activities
3/1/16	Ron Walker	1400-1700	No	Collapsed 09 squirrel burrows
3/2/16	Ron Walker	0700-1120	No	Collapsed 07 squirrel burrows
3/3/16	Ron Walker	0600-1045	No	Collapsed 04 squirrel burrows
3/4/16	Ron Walker	0600-1130	Yes	Collapsed 07 squirrel burrows. WBO detected offsite.
3/7/16	Ron Walker	1600-1810	Yes	Collapsed 09 squirrel burrows. WBO detected offsite.
3/8/16	Ron Walker	1230-1530	Yes	Collapsed 13 squirrel burrows. WBO detected offsite.
3/9/16	Ron Walker	1045-1400	Yes	Collapsed 10 squirrel burrows. WBO detected offsite.
3/11/16	Ron Walker	0730-1045	Yes	Collapsed 12 squirrel burrows. WBO detected offsite.
3/14/16	Ron Walker	0700-1000	Yes	Collapsed 14 squirrel burrows. WBO detected offsite
3/16/16	Ron Walker	0645-1000	No	Collapsed 12 squirrel burrows
3/18/16	Brennan Mulrooney	1200-1600	No	Collapsed squirrel burrows
3/21/16	Ron Walker	1600-1900	No	Collapsed 15 squirrel burrows
3/23/16	Ron Walker	1135-1400	No	Collapsed 12 squirrel burrows
3/26/16	Ron Walker	0700-1045	No	Collapsed 09 squirrel burrows
3/29/16	Ron Walker	1600-1910	No	Collapsed 06 squirrel burrows
3/31/16	Ron Walker	0700-1100	No	Collapsed 06 squirrel burrows

NEXT STEPS

Twice a week monitoring will continue into April to ensure, to the extent feasible, the site remains inhospitable for WBO. These surveys will consist of continuing to survey the site for WBO or their sign; and hand collapse newly dug California ground squirrel burrows to prevent them from becoming suitable for WBO. Monthly monitoring reports will be provided summarizing the results of monitoring.

If you have any questions or comments, please contact me at 619.610.7654.

Sincerely,

Michael Anguiano
Senior Biologist

Attachment A: Daily Monitoring Forms

ATTACHMENT A
Daily Monitoring Forms

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/01/2016 START: 1400; END: 1700
Weather Conditions	START: 70 F, 0 wind, 10% cc END: 68 F, 2-4 from W, 10% cc

Monitoring Notes

Arrived on site at 1400 and spent 50 minutes passively surveying for a western burrowing owl (WBO) at a squirrel burrow (burrow collapsed on 2/28/16) and the adjacent area. There were no WBO observed at this collapsed burrow or the adjacent area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 9) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), California towhee (*Melozone crissalis*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), roadrunner (*Geococcyx californianus*)raven (*Corvus corax*), American kestrel (*Falco sparverious*), and northern harrier (*Circus cyaneus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/02/2016 START: 0700; END: 1120
Weather Conditions	START: 52 F, 0 wind, 0% cc END: 71 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 0700 and spent 50 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. There were no WBO observed at previously collapsed burrows or the adjacent areas. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 7) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), raven (*Corvus corax*), American kestrel (*Falco sparverious*), and northern harrier (*Circus cyaneus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/03/2016 START: 0600; END: 1045
Weather Conditions	START: 50 F, 0 wind, 80% cc END: 65 F, 0 wind, 85% cc

Monitoring Notes

Arrived on site at 0600 and spent 60 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. There were no WBO observed at previously collapsed burrows or the adjacent areas. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 4) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*),western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), raven (*Corvus corax*), American kestrel (*Falco sparverious*), and northern harrier (*Circus cyaneus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/04/2016 START: 0600; END: 1130
Weather Conditions	START: 54 F, 0 wind, 100% cc END: 64 F, 0 wind, 50% cc

Monitoring Notes

Arrived on site at 0600 and spent 60 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a potential owl sighting occurred; at this location, flushed a single WBO out of burrow complex (four suitable burrows close together). Overlaying this location with project impact area it was determined that this is out of the impact area and that these burrows would not be scoped and collapsed. Note; there was a landscaping crew that was conducting weed removal, the crew was working within 100 feet of the WBO burrow for hours. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 7) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*),western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), raven (*Corvus corax*), American kestrel (*Falco sparverious*), and northern harrier (*Circus cyaneus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/07/2016 START: 1600; END: 1810
Weather Conditions	START: 48 F, 0 wind, 100% cc END: 48 F, 0 wind, 50% cc

Monitoring Notes

Arrived on site at 1600 and spent 40 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where one WBO was observed. This is a burrow complex with four suitable burrows close together. Overlaying this location with project impact area it was determined that this is occupied burrow is out of the impact area and these burrows would not be scoped and collapsed. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 9) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*),western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), Cassin's kingbird (Tyrannus vociferans), raven (*Corvus corax*), and northern harrier (*Circus cyaneus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/08/2016 START: 1230; END: 1530
Weather Conditions	START: 63 F, 3-6 wind from west, 0% cc END: 64 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 1230 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where one WBO was observed. This is a burrow complex with four suitable burrows close together. Overlaying this location with project impact area it was determined that this is occupied burrow is out of the impact area and these burrows would not be scoped and collapsed. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 13) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), and Cassin's kingbird (Tyrannus vociferans).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/09/2016 START: 1045; END: 1400
Weather Conditions	START: 66 F, 0 wind, 0% cc END: 67 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 1045 and spent 35 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where one WBO was observed. This is a burrow complex with four suitable burrows close together. Overlaying this location with project impact area it was determined that this is occupied burrow is out of the impact area and these burrows would not be scoped and collapsed. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 10) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), northern harrier (*Circus cyaneus*), red-tailed hawk (*Buteo jamaicensis*) mourning dove (*Zenaida macroura*), American kestrel (*Falco sparverius*), and Cassin's kingbird (Tyrannus vociferans).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/11/2016 START: 0730; END: 1045
Weather Conditions	START: 55 F, 0 wind, 80% cc END: 66 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 0730 and spent 40 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where one WBO was observed. This is a burrow complex with four suitable burrows close together. Overlaying this location with project impact area it was determined that this is occupied burrow is out of the impact area and these burrows would not be scoped and collapsed. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 12) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), northern harrier (*Circus cyaneus*), red-tailed hawk (*Buteo jamaicensis*) mourning dove (*Zenaida macroura*), American kestrel (*Falco sparverius*), and Cassin's kingbird (Tyrannus vociferans).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/14/2016 START: 0700; END: 1000
Weather Conditions	START: 55 F, 0 wind, 100% cc END: 57 F, 0 wind, 100% cc

Monitoring Notes

Arrived on site at 0700 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where one WBO was observed. This is a burrow complex with four suitable burrows close together. Overlaying this location with project impact area it was determined that this is occupied burrow is out of the impact area and these burrows would not be scoped and collapsed. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 14) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), red-tailed hawk (*Buteo jamaicensis*) mourning dove (*Zenaida macroura*), American kestrel (*Falco sparverius*), and Cassin's kingbird (Tyrannus vociferans).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/16/2016 START: 0645; END: 1000
Weather Conditions	START: 54 F, 0 wind, 0% cc END: 62 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 0645 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where one WBO was observed on previous site visit, could not locate WBO at this burrow complex. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 12) were collapsed throughout the site. No other WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), northern harrier (*Circus cyaneus*), red-tailed hawk (*Buteo jamaicensis*) mourning dove (*Zenaida macroura*), Common raven (*Corvus corax*), American kestrel (*Falco sparverius*), and Cassin's kingbird (Tyrannus vociferans).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Brennan Mulrooney
Date and Time:	03/18/2016 START: 1200; END: 1600
Weather Conditions	START: 76 F, 5 wind, 0% cc END: 78 F, 7 wind, 0% cc

Monitoring Notes

Arrived on site at 1200 and passively surveyed for a western burrowing owl (WBO) at previously excavated burrows for approximately an hour. I spent the remaining time walking transects throughout the site searching for and collapsing burrows. A few of the previously collapsed burrows had been re-excavated and I collapsed them again. I found no sign at any of the burrows and none of them were of suitable size for WBO. I saw no WBO anywhere on site ore in the surrounding area. Maintenance crews were working on the north slope and around the dumpster.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*),western meadowlark (*Sturnella neglecta*), Say's phoebe (*Sayornis saya*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), white-crowned sparrow (*Zonotrichia leucophrys*), savannah sparrow (*Passerculus sandwichensis*), house finch (*Haemorhous mexicanus*), raven (*Corvus corax*), American kestrel (*Falco sparverious*), and northern harrier (*Circus cyaneus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/21/2016 START: 1600; END: 1900
Weather Conditions	START: 66 F, 3-5 mph from west, 30% cc END: 61 F, 0 wind, 80% cc

Monitoring Notes

Arrived on site at 1600 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 15) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), Common raven (*Corvus corax*), and northern harrier (*Circus cyaneus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/23/2016 START: 1135; END: 1400
Weather Conditions	START: 70 F, 0 wind, 0% cc END: 72 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 1135 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 12) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), raven (*Corvus corax*), red tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), and California quail (*Callipepla californica*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/26/2016 START: 0700; END: 1045
Weather Conditions	START: 56 F, 0 wind, 0% cc END: 68 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 0700 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 09) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Western rattlesnake (*Crotalus viridis*), Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), raven (*Corvus corax*), red tailed hawk (*Buteo jamaicensis*), house finch (*Haemorphus mexicanus*), northern harrier (*Circus cyaneus*), European starling (*Sturnis vulgaris*), and California quail (*Callipepla californica*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/29/2016 START: 1600; END: 1910
Weather Conditions	START: 64 F, 8-10 wind, 50% cc END: 61 F, 8-10 wind, 50% cc

Monitoring Notes

Arrived on site at 1600 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 06) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), raven (*Corvus corax*), and American crow (*Corvus brachyrhynchos*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	03/31/2016 START: 0700; END: 1100
Weather Conditions	START: 54 F, 0 wind, 0% cc END: 61 F, 0 wind, 0% cc

Monitoring Notes

Arrived on site at 0700 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. The ground cover succulent that is around the burrow has grown significantly around the burrow entrance, almost covering it up. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 06) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), roadrunner (*Geococcyx californ*ians), mourning dove (*Zenaida macroura*), American kestrel (*Falco sparverius*) American robin (*Turdis migratorius*), northern mockingbird (*Mimus polyglottos*), common raven (*Corvus corax*), and American crow (*Corvus brachyrhynchos*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

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May 17, 2016

Eric Hollenbeck
California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Subject: Salt Creek Substation Project Western Burrowing Owl April Monitoring Report

Dear Mr. Hollenbeck:

This letter report summarizes western burrowing owl (*Athene cunicularia)* (WBO) monitoring conducted during the month of April for the proposed Salt Creek Substation Project (Project) site. A passive relocation effort was conducted from January 27 through January 30, 2016 to exclude two individual WBO from the Project site and collapse suitable WBO burrows on site. A passive relocation report summarizing the results of that effort was submitted to your attention on February 24, 2016. Following the completion of the passive relocation effort, WBO monitoring has been on-going to ensure the Project site remains absent of suitable burrows for WBO and that WBO do not move into burrows for nesting prior to initiation of construction activities.

MONITORING METHODOLOGY

WBO site monitoring consisted of a single biologist walking 10 to 15 meter meandering transects throughout the site to search for newly created California ground squirrel (*Otospermophilus beecheyi*), burrows or other wildlife burrows that could become suitable WBO burrows. California ground squirrel or other wildlife burrows were hand collapsed with a shovel to prevent them from becoming suitable for WBO. Focus was placed on exclusion locations where WBO could show site fidelity. Binoculars were also used to scan areas for individual WBO that could be on site. Presence of WBO sign (e.g., pellets, prey remains, feathers, whitewash, decorations, tracks) was also recorded.

Monitoring was initially conducted at a frequency of twice per week, but was increased to daily in February due to high burrow activity from California ground squirrels and the presence of an individual WBO. In early March (March 11), the frequency of surveys was reduced back to twice weekly; this reduction of survey days was based on the lack of WBO sightings on the site. The last WBO sighting was February 28, 2016. Surveys were conducted at any time of day since observers were searching for burrows.

RESULTS

During the month of April there were no observations of WBO or their sign in the Project area. Numerous freshly dug California ground squirrel burrows were hand collapsed with a shovel to prevent them from becoming suitable for WBO. Table 1 summarizes results of the WBO site monitoring for each day of monitoring in April. Daily monitoring data was collected and recorded on monitoring forms. Data forms include survey information, weather data, and wildlife observations (Attachment A).

Table 1
Western Burrowing Owl April Monitoring Summary

Date	Biologist	Time	WBO observed (yes/no)	Summary of Activities
4/05/16	Ron Walker	1530-1845	No	Collapsed 13 squirrel burrows
4/07/16	Ron Walker	1430-1725	No	Collapsed 14 squirrel burrows
4/12/16	Ron Walker	1530-1925	No	Collapsed 10 squirrel burrows
4/14/16	Ron Walker	1200-1520	No	Collapsed 16 squirrel burrows.
4/19/16	Ron Walker	1600-1940	No	Collapsed 14 squirrel burrows.
4/21/16	Ron Walker	1400-1700	No	Collapsed 16 squirrel burrows.
4/26/16	Ron Walker	1645-1945	No	Collapsed 12 squirrel burrows.

NEXT STEPS

Twice a week monitoring will continue into May to ensure, to the extent feasible, the site remains inhospitable for WBO. These surveys will consist of continuing to survey the site for WBO or their sign; and hand collapse newly dug California ground squirrel burrows to prevent them from becoming suitable for WBO. Monthly monitoring reports will be provided summarizing the results of monitoring.

If you have any questions or comments, please contact me at 619.610.7654.

Sincerely,

Michael Anguiano
Senior Biologist

Attachment A: Daily Monitoring Forms

ATTACHMENT A
Daily Monitoring Forms

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	04/05/2016 START: 1530; END: 1845
Weather Conditions	START: 72 F, 0 wind, 100% cc END: 64 F, 0 wind, 100% cc

Monitoring Notes

Arrived on site at 1530 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. The ground cover succulent that is around the burrow has grown significantly around the burrow entrance, almost covering it up. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 13) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black phoebe (*Sayornis nigricans*), roadrunner (*Geococcyx californ*ians), mourning dove (*Zenaida macroura*), American kestrel (*Falco sparverius*), northern mockingbird (*Mimus polyglottos*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	04/07/2016 START: 1430; END: 1725
Weather Conditions	START: 64 F, 0 wind, 100% cc, light rain END: 61 F, 0 wind, 100% cc, light rain

Monitoring Notes

Arrived on site at 1430 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. The ground cover succulent that is around the burrow has grown significantly around the burrow entrance, almost covering it up. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 14) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), black-tailed jackrabbit (*Lepus californicus*), black phoebe (*Sayornis nigricans*), roadrunner (*Geococcyx californ*ians), mourning dove (*Zenaida macroura*), American kestrel (*Falco sparverius*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	04/12/2016 START: 1530; END: 1925
Weather Conditions	START: 66 F, 0 wind, 0% cc, no rain END: 60 F, 0 wind, 0% cc, light rain

Monitoring Notes

Arrived on site at 1530 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. The ground cover succulent that is around the burrow has grown significantly around the burrow entrance, almost covering it up. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 10) were collapsed throughout the site. No WBO sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), roadrunner (*Geococcyx californ*ians), mourning dove (*Zenaida macroura*), Northern harrier (*Circus cyanus*), American kestrel (*Falco sparverius*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	04/14/2016 START: 1200; END: 1520
Weather Conditions	START: 70 F, 3-4 mph wind from the west, 15% cc, no rain END: 71 F, 5-6 mph wind from the west, 15% cc, no rain

Monitoring Notes

Arrived on site at 1200 and spent 40 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. The ground cover succulent that is around the burrow has grown significantly around the burrow entrance, almost covering it up. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 16) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), western meadowlark (*Sturnella neglecta*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), roadrunner (*Geococcyx californ*ians), mourning dove (*Zenaida macroura*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	04/19/2016 START: 1600; END: 1940
Weather Conditions	START: 86 F, 5-7 mph wind from the west, 0% cc, no rain END: 81 F, 5-6 mph wind from the west, 0% cc, no rain

Monitoring Notes

Arrived on site at 1600 and spent 40 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. The ground cover succulent that is around the burrow has grown significantly around the burrow entrance, almost covering it up. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 14) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), roadrunner (*Geococcyx californ*ians), song sparrow (Melospiza melodia), mourning dove (*Zenaida macroura*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	04/21/2016 START: 1400; END: 1700
Weather Conditions	START: 77 F, 0 mph wind, 10% cc, no rain END: 75 F, 0 mph wind, 10% cc, no rain

Monitoring Notes

Arrived on site at 1400 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 16) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), Anna's hummingbird (*Calypte anna*), black phoebe (*Sayornis nigricans*), American kestrel (*Falco sparverius*), song sparrow (*Melospiza melodia*), mourning dove (*Zenaida macroura*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	04/26/2016 START: 1645; END: 1945
Weather Conditions	START: 64 F, 2-3 mph wind from the west, 0% cc, no rain END: 62 F, 0 mph wind, 0% cc, no rain

Monitoring Notes

Arrived on site at 1645 and spent 35 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 12) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), American kestrel (*Falco sparverius*), western meadowlark (*Sturnella neglecta*), song sparrow (*Melospiza melodia*), mourning dove (*Zenaida macroura*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

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June 20, 2016

Eric Hollenbeck
California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Subject: Salt Creek Substation Project Western Burrowing Owl May Monitoring Report

Dear Mr. Hollenbeck:

This letter report summarizes western burrowing owl (*Athene cunicularia)* (WBO) monitoring conducted during the month of May for the proposed Salt Creek Substation Project (Project) site. A passive relocation effort was conducted from January 27 through January 30, 2016 to exclude two individual WBO from the Project site and collapse suitable WBO burrows on site. A passive relocation report summarizing the results of that effort was submitted to your attention on February 24, 2016. Following the completion of the passive relocation effort, WBO monitoring has been on-going to ensure the Project site remains absent of suitable burrows for WBO and that WBO do not move into burrows for nesting prior to initiation of construction activities.

MONITORING METHODOLOGY

WBO site monitoring consisted of a single biologist walking 10 to 15 meter meandering transects throughout the site to search for newly created California ground squirrel (*Otospermophilus beecheyi*), burrows or other wildlife burrows that could become suitable WBO burrows. California ground squirrel or other wildlife burrows were hand collapsed with a shovel to prevent them from becoming suitable for WBO. Focus was placed on exclusion locations where WBO could show site fidelity. Binoculars were also used to scan areas for individual WBO that could be on site. Presence of WBO sign (e.g., pellets, prey remains, feathers, whitewash, decorations, tracks) was also recorded.

Monitoring was initially conducted at a frequency of twice per week, but was increased to daily in February due to high burrow activity from California ground squirrels and the presence of an individual WBO. In early March (March 11), the frequency of surveys was reduced back to twice weekly; this reduction of survey days was based on the lack of WBO sightings on the site. The last WBO sighting was February 28, 2016. Surveys were conducted at any time of day since observers were searching for burrows.

RESULTS

During the month of May there were no observations of WBO or their sign in the Project area. Numerous freshly dug California ground squirrel burrows were hand collapsed with a shovel to prevent them from becoming suitable for WBO. Table 1 summarizes results of the WBO site monitoring for each day of monitoring in May. Daily monitoring data was collected and recorded on monitoring forms. Data forms include survey information, weather data, and wildlife observations (Attachment A).

Table 1
Western Burrowing Owl May Monitoring Summary

Date	Biologist	Time	WBO observed (yes/no)	Summary of Activities
5/03/16	Ron Walker	0930-1200	No	Collapsed 14 squirrel burrows
5/05/16	Ron Walker	1630-1930	No	Collapsed 18 squirrel burrows
5/10/16	Ron Walker	0930-1244	No	Collapsed 16 squirrel burrows
5/12/16	Ron Walker	1600-1930	No	Collapsed 18 squirrel burrows.
5/17/16	Ron Walker	1600-1935	No	Collapsed 14 squirrel burrows.
5/19/16	Ron Walker	1500-1750	No	Collapsed 16 squirrel burrows.
5/23/16	Ron Walker	1530-1730	No	Collapsed 13 squirrel burrows.
5/26/16	Ron Walker	1600-1930	No	Collapsed 19 squirrel burrows.
5/31/16	Ron Walker	1600-1910	No	Collapsed 22 squirrel burrows.

NEXT STEPS

Twice a week monitoring will continue into June to ensure, to the extent feasible, the site remains inhospitable for WBO. These surveys will consist of continuing to survey the site for WBO or their sign; and hand collapse newly dug California ground squirrel burrows to prevent them from becoming suitable for WBO. Monthly monitoring reports will be provided summarizing the results of monitoring.

If you have any questions or comments, please contact me at 619.610.7654.

Sincerely,

Michael Anguiano
Senior Biologist

Attachment A: Daily Monitoring Forms

ATTACHMENT A
Daily Monitoring Forms

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	05/03/2016 START: 0930; END: 1200
Weather Conditions	START: 64 F, 0 mph wind, 0% cc, no rain END: 67 F, 0 mph wind, 0% cc, no rain

Monitoring Notes

Arrived on site at 0930 and spent 30 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 14) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), American kestrel (*Falco sparverius*), western meadowlark (*Sturnella neglecta*), song sparrow (*Melospiza melodia*),black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	05/05/2016 START: 1630; END: 1930
Weather Conditions	START: 66 F, 0 mph wind, 100% cc, no rain END: 64 F, 4-6 mph wind from the west, 90% cc, no rain

Monitoring Notes

Arrived on site at 1630 and spent 40 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 18) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), Cooper's hawk (*Accipiter cooperii*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	05/10/2016 START: 0930; END: 1244
Weather Conditions	START: 64 F, 0 mph wind, 10% cc, no rain END: 70 F, 0 mph, 5% cc, no rain

Monitoring Notes

Arrived on site at 0930 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 16) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), red tailed hawk (*Buteo jamaicensis)*, black phoebe (*Sayornis nigricans*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), and greater roadrunner (*Geococcyx californianus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	05/12/2016 START: 1600; END: 1930
Weather Conditions	START: 67 F, 0 mph wind, 0% cc, no rain END: 64 F, 0 mph, 0% cc, no rain

Monitoring Notes

Arrived on site at 1600 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 18) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), red tailed hawk (*Buteo jamaicensis)*, black phoebe (*Sayornis nigricans*), Anna's hummingbird (*Calypte anna*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), greater roadrunner (*Geococcyx californianus*), and western rattlesnake (*Crotalus viridis*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	05/17/2016 START: 1600; END: 1935
Weather Conditions	START: 65 F, 0 mph wind, 100% cc, no rain END: 63 F, 0 mph, 100% cc, no rain

Monitoring Notes

Arrived on site at 1600 and spent 35 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 14) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), California ground squirrel (*Otospermophilus beecheyi*), red tailed hawk (*Buteo jamaicensis)*, American goldfinch (*Spinus tristis*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), greater roadrunner (*Geococcyx californianus*), and western rattlesnake (*Crotalus viridis*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	05/19/2016 START: 1500; END: 1750
Weather Conditions	START: 68 F, 0 mph wind, 0% cc, no rain END: 65 F, 0 mph, 100% cc, no rain

Monitoring Notes

Arrived on site at 1500 and spent 45 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 16) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), red tailed hawk (*Buteo jamaicensis)*, American goldfinch (*Spinus tristis*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), western meadowlark (*Sturnella neglecta*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), and greater roadrunner (*Geococcyx californianus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	05/23/2016 START: 1530; END: 1730
Weather Conditions	START: 64 F, 0 mph wind, 15% cc, no rain END: 63 F, 0 mph, 25% cc, no rain

Monitoring Notes

Arrived on site at 1530 and spent 35 minutes passively surveying for a western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 13) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), red tailed hawk (*Buteo jamaicensis)*, black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	05/26/2016 START: 1600; END: 1930
Weather Conditions	START: 68 F, 0 mph wind, 15% cc, no rain END: 66 F, 0 mph, 20% cc, no rain

Monitoring Notes

Arrived on site at 1600 and spent 45 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 19) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), red tailed hawk (*Buteo jamaicensis)*, American goldfinch (*Spinus tristis*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	05/31/2016 START: 1600; END: 1910
Weather Conditions	START: 64 F, 0 mph wind, 100% cc, no rain END: 62 F, 0 mph, 100% cc, no rain

Monitoring Notes

Arrived on site at 1600 and spent 35 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 22) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), mourning dove (*Zenaida macroura*), and common raven (*Corvus corax*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

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July 15, 2016

Eric Hollenbeck
California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Subject: Salt Creek Substation Project Western Burrowing Owl June Monitoring Report

Dear Mr. Hollenbeck:

This letter report summarizes western burrowing owl (*Athene cunicularia)* (WBO) monitoring conducted during the month of June for the proposed Salt Creek Substation Project (Project) site. A passive relocation effort was conducted from January 27 through January 30, 2016 to exclude two individual WBO from the Project site and collapse suitable WBO burrows on site. A passive relocation report summarizing the results of that effort was submitted to your attention on February 24, 2016. Following the completion of the passive relocation effort, WBO monitoring has been on-going to ensure the Project site remains absent of suitable burrows for WBO and that WBO do not move into burrows for nesting prior to initiation of construction activities.

MONITORING METHODOLOGY

WBO site monitoring consisted of a single biologist walking 10 to 15 meter meandering transects throughout the site to search for newly created California ground squirrel (*Otospermophilus beecheyi*), burrows or other wildlife burrows that could become suitable WBO burrows. California ground squirrel or other wildlife burrows were hand collapsed with a shovel to prevent them from becoming suitable for WBO. Focus was placed on exclusion locations where WBO could show site fidelity. Binoculars were also used to scan areas for individual WBO that could be on site. Presence of WBO sign (e.g., pellets, prey remains, feathers, whitewash, decorations, tracks) was also recorded.

Monitoring was initially conducted at a frequency of twice per week, but was increased to daily in February due to high burrow activity from California ground squirrels and the presence of an individual WBO. In early March (March 11), the frequency of surveys was reduced back to twice weekly; this reduction of survey days was based on the lack of WBO sightings on the site. The last WBO sighting was February 28, 2016. Surveys were conducted at any time of day since observers were searching for burrows.

RESULTS

During the month of June there were no observations of WBO or their sign in the Project area. Numerous freshly dug California ground squirrel burrows were hand collapsed with a shovel to prevent them from becoming suitable for WBO. Table 1 summarizes results of the WBO site monitoring for each day of monitoring in June. Daily monitoring data was collected and recorded on monitoring forms. Data forms include survey information, weather data, and wildlife observations (Attachment A).

Table 1
Western Burrowing Owl June Monitoring Summary

Date	Biologist	Time	WBO observed (yes/no)	Summary of Activities
6/02/16	Ron Walker	1620-1930	No	Collapsed 20 squirrel burrows
6/07/16	Ron Walker	1030-1400	No	Collapsed 30 squirrel burrows
6/09/16	Ron Walker	1430-1730	No	Collapsed 25 squirrel burrows
6/14/16	Ron Walker	1200-1530	No	Collapsed 20 squirrel burrows.
6/22/16	Ron Walker	1600-2000	No	Collapsed 17 squirrel burrows.
6/29/16	Ron Walker	1600-1950	No	Collapsed 20 squirrel burrows.

NEXT STEPS

Twice a week monitoring will continue into July to ensure, to the extent feasible, the site remains inhospitable for WBO. These surveys will consist of continuing to survey the site for WBO or their sign; and hand collapse newly dug California ground squirrel burrows to prevent them from becoming suitable for WBO. Monthly monitoring reports will be provided summarizing the results of monitoring.

If you have any questions or comments, please contact me at 619.610.7654.

Sincerely,

Michael Anguiano
Senior Biologist

Attachment A: Daily Monitoring Forms

ATTACHMENT A
Daily Monitoring Forms

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	06/02/2016 START: 1620; END: 1930
Weather Conditions	START: 78 F, 0 mph wind, 0% cc, no rain END: 68 F, 0 mph, 0% cc, no rain

Monitoring Notes

Arrived on site at 1620 and spent 35 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 20) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), mourning dove (*Zenaida macroura*), Bullock's oriole (*Icterus bullockii*), common raven (*Corvus corax*), and western diamondback rattlesnake (*Crotalus atrox*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	06/07/2016 START: 1030; END: 1400
Weather Conditions	START: 72 F, 0 mph wind, 50% cc, no rain END: 77 F, 0 mph, 10% cc, no rain

Monitoring Notes

Arrived on site at 1030 and spent 40 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 30) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), and Cooper's hawk (*Accipiter cooperii*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	06/09/2016 START: 1430; END: 1730
Weather Conditions	START: 71 F, 0 mph wind, 0% cc, no rain END: 70 F, 0 mph, 0% cc, no rain

Monitoring Notes

Arrived on site at 1430 and spent 45 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 25) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Gopher snake (*Pituophis catenifer*), Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), mourning dove (*Zenaida macroura*), northern roadrunner (*Geococcyx californianus*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), and Say's phoebe (*Sayornis saya*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	06/14/2016 START: 1200; END: 1530
Weather Conditions	START: 68 F, 0 mph wind, 50% cc, no rain END: 70 F, 0 mph, 60% cc, no rain

Monitoring Notes

Arrived on site at 1200 and spent 40 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 20) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), American goldfinch (*Spinus tristis*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), mourning dove (*Zenaida macroura*), northern roadrunner (*Geococcyx californianus*), common raven (*Corvus corax*), and house finch (*Haemorhous mexicanus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	06/22/2016 START: 1600; END: 2000
Weather Conditions	START: 73 F, 0 mph wind, 0% cc, no rain END: 70 F, 2-30 mph from west, 0% cc, no rain

Monitoring Notes

Arrived on site at 1600 and spent 40 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 17) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), Cassin's kingbird (*Tyrannus vociferans*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), and house finch (*Haemorhous mexicanus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	06/29/2016 START: 1600; END: 1950
Weather Conditions	START: 76 F, 0 mph wind, 0% cc, no rain END: 72 F, 0 mph wind, 0% cc, no rain

Monitoring Notes

Arrived on site at 1600 and spent 45 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 20) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), and greater roadrunner (*Geococcyx californianus*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

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619.610.7600 tel
619.610.7601 fax

July 15, 2016

Eric Hollenbeck
California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Subject: Salt Creek Substation Project Western Burrowing Owl July Monitoring Report

Dear Mr. Hollenbeck:

This letter report summarizes western burrowing owl (*Athene cunicularia)* (WBO) monitoring conducted during the month of July for the proposed Salt Creek Substation Project (Project) site. A passive relocation effort was conducted from January 27 through January 30, 2016 to exclude two individual WBO from the Project site and collapse suitable WBO burrows on site. A passive relocation report summarizing the results of that effort was submitted to your attention on February 24, 2016. Following the completion of the passive relocation effort, WBO monitoring has been on-going to ensure the Project site remains absent of suitable burrows for WBO and that WBO do not move into burrows for nesting prior to initiation of construction activities.

MONITORING METHODOLOGY

WBO site monitoring consisted of a single biologist walking 10 to 15 meter meandering transects throughout the site to search for newly created California ground squirrel (*Otospermophilus beecheyi*), burrows or other wildlife burrows that could become suitable WBO burrows. California ground squirrel or other wildlife burrows were hand collapsed with a shovel to prevent them from becoming suitable for WBO. Focus was placed on exclusion locations where WBO could show site fidelity. Binoculars were also used to scan areas for individual WBO that could be on site. Presence of WBO sign (e.g., pellets, prey remains, feathers, whitewash, decorations, tracks) was also recorded.

Monitoring was initially conducted at a frequency of twice per week, but was increased to daily in February due to high burrow activity from California ground squirrels and the presence of an individual WBO. In early March (March 11), the frequency of surveys was reduced back to twice weekly; this reduction of survey days was based on the lack of WBO sightings on the site. The last WBO sighting was February 28, 2016. Surveys were conducted at any time of day since observers were searching for burrows.

RESULTS

During the month of July there were no observations of WBO or their sign in the Project area. Numerous freshly dug California ground squirrel burrows were hand collapsed with a shovel to prevent them from becoming suitable for WBO. Table 1 summarizes results of the WBO site monitoring for each day of monitoring in July. Daily monitoring data was collected and recorded on monitoring forms. Data forms include survey information, weather data, and wildlife observations (Attachment A).

Table 1
Western Burrowing Owl July Monitoring Summary

Date	Biologist	Time	WBO observed (yes/no)	Summary of Activities
7/01/16	Ron Walker	1530-1915	No	Collapsed 18 squirrel burrows
7/05/16	Ron Walker	1600-1950	No	Collapsed 16 squirrel burrows
7/08/16	Ron Walker	1200-1545	No	Collapsed 18 squirrel burrows
7/12/16	Ron Walker	1200-1545	No	Collapsed 15 squirrel burrows.
7/14/16	Ron Walker	1115-1515	No	Collapsed 17 squirrel burrows.

SUMMARY

Construction at the SDG&E Salt Creek Substation Project site is scheduled to begin on July 18, 2016; therefore, this July report is the last report for the 2016 weekly WBO monitoring effort at the Project site. The last sighting of WBO near the site was on February 28, 2016, since then there have been no WBO observations or their sign at the project site.

If you have any questions or comments, please contact me at 619.610.7654.

Sincerely,

Michael Anguiano
Senior Biologist

Attachment A: Daily Monitoring Forms

ATTACHMENT A
Daily Monitoring Forms

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	07/01/2016 START: 1530; END: 1915
Weather Conditions	START: 78 F, 0 mph wind, 10% cc, no rain END: 71 F, 0 mph wind, 5% cc, no rain

Monitoring Notes

Arrived on site at 1530 and spent 35 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 18) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), and American kestrel (*Falco sparverius*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	07/05/2016 START: 1600; END: 1950
Weather Conditions	START: 72 F, 0 mph wind, 0% cc, no rain END: 72 F, 0 mph wind, 0% cc, no rain

Monitoring Notes

Arrived on site at 1600 and spent 45 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 16) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), and northern mockingbird (*Mimus polyglottos*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	07/08/2016 START: 1200; END: 1545
Weather Conditions	START: 75 F, 3-4 mph wind from west, 0% cc, no rain END: 75 F, 0 mph wind, 0% cc, no rain

Monitoring Notes

Arrived on site at 1200 and spent 45 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 18) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), and red-tailed hawk (*Buteo jamaicensis*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	07/12/2016 START: 1200; END: 1545
Weather Conditions	START: 73 F, 0 mph wind, 0% cc, no rain END: 76 F, 0 mph wind, 0% cc, no rain

Monitoring Notes

Arrived on site at 1200 and spent 45 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 15) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), and American kestrel (*Falco sparverius*), and red-tailed hawk (*Buteo jamaicensis*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

AECOM

Salt Creek Substation Project
Burrowing Owl Post-Passive Relocation Monitoring Log[1]

Monitor:	Ron Walker
Date and Time:	07/14/2016 START: 1115; END: 1515
Weather Conditions	START: 73 F, 0 mph wind, 0% cc, no rain END: 76 F, 0 mph wind, 0% cc, no rain

Monitoring Notes

Arrived on site at 1115 and spent 40 minutes passively surveying for western burrowing owl (WBO) at previously excavated burrows for potential returning burrowing owls and investigate whether there was any fresh western burrowing owl (WBO) sign. Moved to the far west area on ornamental slope where a previous WBO sighting occurred; at this location there was not a WBO present. There were no WBO observed at other previously collapsed burrows or the adjacent areas in the impact area. Afterwards, walked transects throughout the entire site (impact area) in order to monitor for colonizing and/or returning WBO. Any new burrows dug by mammals that could potentially be suitable for WBO's were collapsed in order to keep the site inhospitable to WBO and to prevent reoccupation. Numerous burrows (approximately 17) were collapsed throughout the site. No WBO or their sign was observed during the survey.

Wildlife Observed:
Botta's pocket gopher (*Thomomys bottae*), cottontail rabbit (*Sylvilagus* sp.), California ground squirrel (*Otospermophilus beecheyi*), black phoebe (*Sayornis nigricans*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), and American kestrel (*Falco sparverius*).

[1] Monitoring for colonizing and/or returning burrowing owl prior to construction. Monitoring also includes disturbing ground squirrel burrows to keep the site inhospitable to burrowing owl until the start of construction.

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February 9, 2016

Ms. Debbie Collins
San Diego Gas & Electric Company
8315 Century Park Court
San Diego, California 92123-1548

Subject: Salt Creek Substation Pre-Project Trail Condition Report

Dear Ms. Collins:

This Pre-Project Trail Condition Report documents the condition of designated and unofficial trails located within the San Diego Gas & Electric Company's (SDG&E) Salt Creek Substation Project (Project) work area. This letter report serves to document pre-construction trail conditions for comparison to post-construction trail conditions. A Post-Project Trail Condition Report that documents the post-construction state of trails within the Project work area will be completed following completion of the Project.

This letter report was prepared to meet the requirements of Mitigation Measure Recreation-1 in the Mitigation, Monitoring, and Reporting Plan provided in the Final Environmental Impact Report (EIR) for the Project approved by the California Public Utilities Commission:

Mitigation Measure RECREATION-1: SDG&E shall prepare a Pre-Project Trail Condition Report that documents the condition of designated and unofficial trails located within the project work area, prior to construction. The Pre-Project Trail Condition Report shall be submitted to CPUC 30 days prior to construction. SDG&E shall repair all damage to trails (e.g., rutting) caused by construction vehicles by the completion of construction. SDG&E shall prepare a Post-Project Trail Condition Report documenting the final state of all trails within the project work area and access roads. The Post-Project Trail Condition Report shall be submitted to the CPUC within 90 days of construction completion. SDG&E shall complete all trail repairs to the approval of CPUC.

This letter report includes a description of trails and access within the vicinity of the Project work area, including a map and photographs of trails and access per the requirements of Mitigation Measure Recreation-1.

A trail assessment was completed on January 8, 2016, by Brennan Mulrooney.
Mr. Mulrooney walked the Salt Creek Substation site and vicinity to investigate and photograph the condition of trails. Mr. Mulrooney also verified access roads mapped during vegetation mapping for the final EIR.

Project Background

The proposed Project includes the construction and operation of a new 120-megavolt ampere 69/12-kilovolt (kV) substation (proposed Salt Creek Substation) and an underground 69-kV power line loop-in (TL 6910) to the Salt Creek Substation. The primary objectives of the proposed Project are to provide additional capacity to serve existing area load and future customer-driven electrical load growth, and to provide the necessary distribution and

transmission network to prevent long-term outages or disruptions of service to existing customers in the southeastern portion of SDG&E's service territory.

The proposed Project site is located approximately 15 miles southeast of downtown San Diego and 5 miles north of the international border with Mexico (Attachment A: Figure 1). The proposed Project is located in the eastern portion of the City of Chula Vista, California, adjacent to and southeasterly of Hunte Parkway, where SDG&E's existing transmission corridor crosses Hunte Parkway (Attachment A: Figure 2).

Existing Trails and Access Roads

Existing trails and access roads present within the Project area are depicted in Figure 3 of Attachment A and described below.

Trails

The Hunte Parkway Trail runs adjacent to the Salt Creek Substation site and an approximately 600-foot section of that trail is within the permanent and temporary impact area for the Project (Attachment B: Photos 1 through 3). This earthen/gravel trail is in excellent condition (i.e., no ruts, washouts, or other damage to the trail) and well maintained. This trail is regularly used by pedestrians and bicyclists. There are no other designated trails within the permanent and temporary impact area for the Project.

Access Roads

- A gated paved access road, in excellent condition, is present within the Project permanent and temporary impact area (Attachment B: Photos 4 through 6). This paved access road, which is also used by the City for utilities access, provides access to the substation site and will be reconstructed as part of the Project.

- An SDG&E dirt access road is located northeast of the Salt Creek Substation in the transmission corridor south of Hunte Parkway that will be temporarily impacted (Attachment B: Photos 7 through 9). This road is in good condition and is used to access SDG&E's existing transmission line and San Diego County Water Authority's underground facilities.

- A second dirt road at this location runs parallel to this road but has not had recent use and is growing over with non-native vegetation (Attachment B: Photo 10).

- Another dirt access road is located adjacent to the southern boundary of the Project area, but is outside the impact area (Attachment B: Photo 11). This dirt access road is in good condintion, with minimal erosional features. These roads are currently used for vehicle access and are also used by walkers, hikers, and bicyclists to access the unofficial trails located in the Chula Vista Open Space Preserve and Otay Valley Regional Park.

Due to the fact that this report was prepared mid-winter, trail conditions will be verified within one week of the start of construction. This report may be updated, if conditions have changed. As previously noted, a Post-Project Trail Condition Report that documents the post-construction state of trails, and demonstrates that SDG&E has repaired any damage to trails (e.g., rutting) caused by construction vehicles, will be prepared following completion of the Project. The post-construction state of trails will be compared to the pre-construction trail conditions described herein.

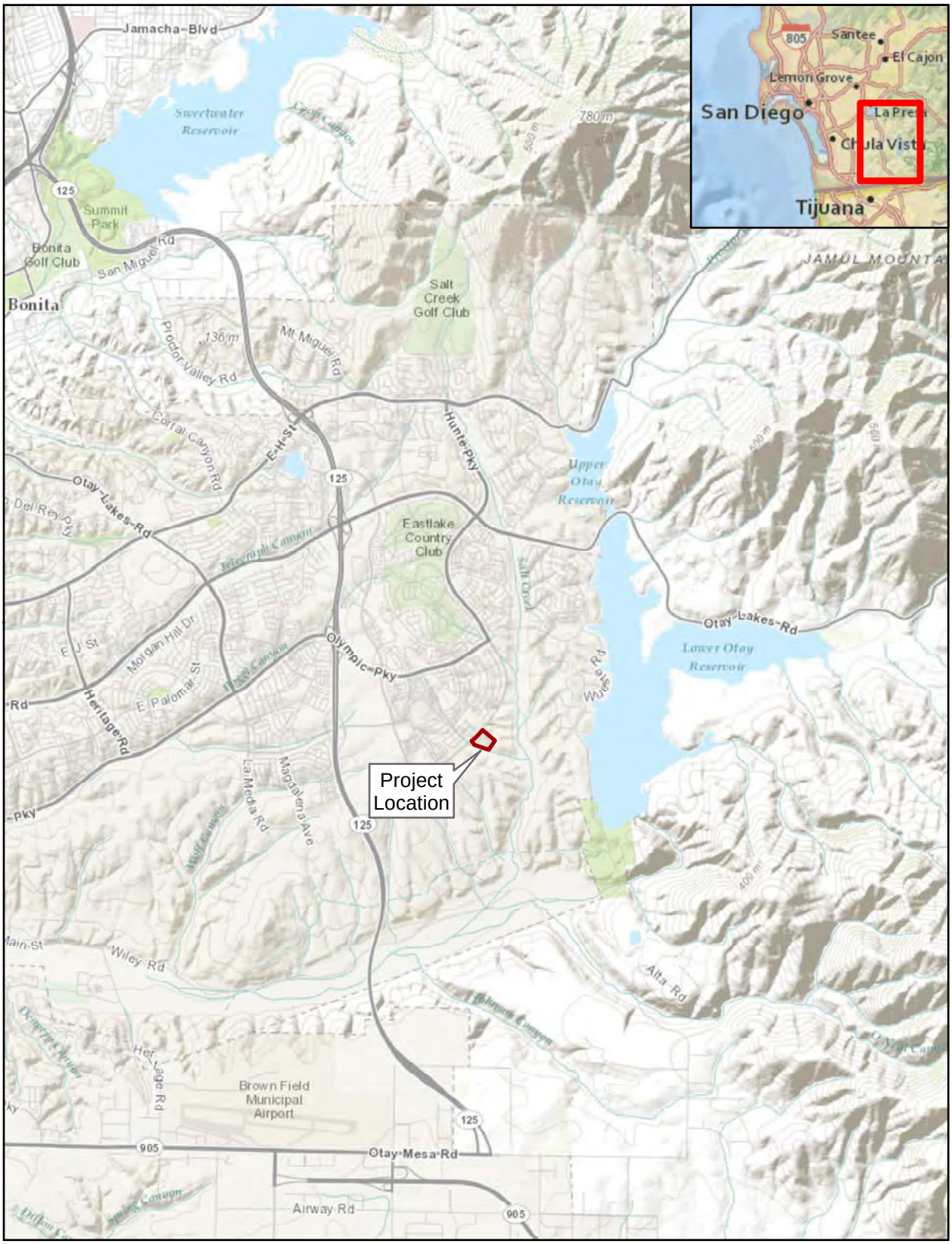
We look forward to continuing work on this Project. If you have any questions or comments, please contact me at 619.610.7654.

Sincerely,

Michael Anguiano
Senior Biologist

Attachment A: Figures
Attachment B: Photos

ATTACHMENT A
FIGURES



Source:AECOM, GeomorphIS LLC, SDG&E, 2015; Esri Basemaps, 2015

0 1.25 2.5 Miles

Scale: 1:79,200 1 inch = 1.25 miles

Figure 1
Regional and Vicinity Map

SDG&E is providing this map with the understanding that the map is not survey grade.

Source:AECOM, GeomorphIS LLC, SDG&E, 2015; Esri Basemaps, 2015

0 800 1,600 Feet

Scale1:9,600 1 inch = 800 feet

Figure 2

Proposed Project Location

SDG&E is providing this map with the understanding that the map is not survey grade.

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Plan_Report2016\ProjectLocation_Report.mxd, 1/6/2016, E D Goff

Source: GeomorphIS LLC, AECOM, SDG&E, 2016; Esri Basemaps, 2015

0 150 300 Feet

Scale: 1:3,600 1 inch = 300 feet

Figure 3
Designated Trails

SDG&E is providing this map with the understanding that the map is not survey grade.

Path: C:\Projects\AECOM\SaltCreek_Substation\GIS\Plan_Report2016\Trail_Access.mxd, 2/9/2016, E D Goff

ATTACHMENT B
PHOTOS

Photo 1: Northeast-facing view of Hunte Parkway Trail taken from west gate

Photo 2: Northeast-facing view of Hunte Parkway Trail from east side of the west gate

Photo 3: southwest-facing view of Hunte Parkway Trail at entrance to east gate

Photo 4: Southwest-facing view of paved road from switchback

Photo 5: Northeast-facing paved road taken from switchback

Photo 6: Southeast-facing view of paved road north of substation

Photo 7: Southeast-facing view of dirt road northeast of substation taken from east gate

Photo 8: Southeast-facing view of dirt road northeast of substation

Photo 9: Southeast-facing view of dirt road northeast of substation

Photo 10: Southeast-facing view of old dirt road northeast of substation

Photo 11: Southeast-facing view of dirt road south of substation

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619.610.7600 tel
619.233.7601 fax

Date: June 28, 2016

To: Leslie Nelson, SDG&E

From: Brynne Mulrooney, AECOM

cc: Michelle Fehrensen, AECOM

Subject: Verification Survey for Salt Creek Substation, Chula Vista, CA

AECOM biologist Brynne Mulrooney conducted a verification survey on behalf of San Diego Gas and Electric (SDG&E) for the proposed Salt Creek Substation. The proposed Salt Creek Substation site is located adjacent to the southeasterly side of Hunte Parkway, near the southern terminus of Exploration Falls Drive, and adjacent to SDG&E's Existing Substation to Mexico transmission corridor in Chula Vista, San Diego County, California. The survey was conducted on June 24, 2016 between the hours of 0930 and 1200. Weather conditions consisted of clear skies, winds approximately 2-4 miles per hour, and a temperature of approximately 75 degrees Fahrenheit. AECOM biologists Art Popp and Brynne Mulrooney conducted the original preactivity surveys on September 12 and 13, 2012, October 22, 2012, July 8, 2013, and May 21, 2014.

The verification survey was conducted according to Appendix A of the SDG&E Subregional Natural Community Conservation Plan (NCCP). This section of the NCCP states, "If surface disturbance has not commenced within 30 days, the Environmental Surveyor will conduct a verification study." The purpose of this verification study was to document any significant changes that may have occurred to the project areas and project design since the date of the original preactivity survey.

The original PSR included a five mile long transmission line (TL) 6965. TL 6965 is no longer proposed to be constructed as part of this project. Project impacts are limited to the substation area, and associated TL 6910 loop-in.

The vegetation communities within and surrounding the substation footprint remain consistent with the descriptions provided in the original Preactivity Survey Report (PSR), and are composed of nonnative grassland, coastal sage scrub, wildlflower field, disturbed habitat, and development (Figures 1 – 6). Due to the time of the year of the verification survey, the wildlflower field comprised of annual plants, such as Palmer's grapplinghook (*Harpagonella palmeri*), consists primarily of senesced plants; although, some individuals could be identified in this condition indicating that the wildlflower field was still present within the substation footprint. An additional 0.55 acre not included in the original scope of work was added to the north corner of the substation footprint for the installation of the proposed recycled water line and temporary power. The habitat within the added portion of the substation footprint is consistent with the previously mapped habitat of the area, and is primarily composed of disturbed habitat dominated by iceplant (*Carpobrotus edulis*) African daizy (*Gazania* sp.), sweet clover (*Melilotus indicus*), and Russian thistle (*Salsola tragus*) (Figure 7).

A supplemental Photo Document is provided with this verification memo.

Wildlife species observed during the verification survey include house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), American kestrel (*Falco sparverius*), California towhee (*Melozone crissalis*), house wren (*Troglodytes aedon*), western meadowlark (*Sturnella neglecta*), and coastal California gnatcatcher (*Polioptila californica californica*; NCCP-covered species). No active bird nests or nesting activities were observed at the project area during the verification survey. Several California ground squirrel (*Otospermophilus beecheyi*) burrows were observed throughout the survey area; however, no ground squirrels were observed during the survey.

If you have any questions, please contact me at 619-610-7653.

Sincerely,
Brynne Mulrooney

PHOTO DOCUMENT
SDG&E Salt Creek Substation, Chula Vista
Chula Vista, California
Site Visit June 24, 2016

Figure 1: East-facing view of proposed Salt Creek substation (overview).

Figure 2: South-facing view of nonnative grassland within substation footprint.

PHOTO DOCUMENT
SDG&E Salt Creek Substation, Chula Vista
Chula Vista, California
Site Visit June 24, 2016

Figure 3: North-facing view of coastal sage scrub within substation footprint.

Figure 4: Southwest-facing view of wildflower field within substation footprint. Red pin flag indicates presence of Palmer's grapplinghook (*Harpagonella palmeri*).

PHOTO DOCUMENT
SDG&E Salt Creek Substation, Chula Vista
Chula Vista, California
Site Visit June 24, 2016

Figure 5: North-facing view of disturbed habitat within substation footprint.

Figure 6: Northeast-facing view of development within substation footprint.

PHOTO DOCUMENT
SDG&E Salt Creek Substation, Chula Vista
Chula Vista, California
Site Visit June 24, 2016

Figure 7: North-facing view of disturbed habitat within newly added portion of the substation footprint.

Sheila Hoyer

From: Cuppage, Keri A
Sent: Wednesday, July 20, 2016 12:38 PM
To: 'Susanne Heim'; 'Chen, Connie'
Cc: Sheila Hoyer; Aaron Lui; Renger, Andy; Quasarano, Richard P; 'Fehrensen, Michelle'; Ron Walker (ron.walker@aecom.com); Holland, Arthur Lee
Subject: Salt Creek - NBRR
Attachments: Salt Creek Substation Project Nest Log_072016.xlsx

Hello Susanne and Eric,

I am attaching our nesting bird log with updated observation details. I had previously submitted (7/15) Nest Buffer Reduction Requests (NBRR) for two nests.

During the last three days, the biologist has determined the Yellow-breasted Chat (YBCH) nest is inactive. We will no longer need a NBR for the nest.

For the BLGR NBRR, just to confirm, per MM Biology-6 (NBR section) our understanding is: within 2 business days; if a response is not received, SDG&E may proceed with the buffer reduction until CPUC's independent biologist can review and approve or deny the buffer reduction request. If SDG&E proceeds with a reduced buffer, nests shall be monitored on a daily basis during construction activities…

Our plan is to reduce the buffer today and continue to monitor the nest.

Please let me know if you have any questions or concerns.

Kindest Regards,

Keri Cuppage, **C.P.M**
Senior Environmental Compliance Specialist
SDG&E Environmental Services
8315 Century Park Ct.
MS CP21E
San Diego, CA 92123
Office: 858-650-6198
Cell: 619-372-1602
kcuppage@semprautilities.com

Salt Creek Substation Project - 2016 Nest Monitoring Log

Species Code	Common Name	Nest ID	Nearest Project Feature	Habitat	Most Intense Activity (Clearing, grading, vehicle access, etc.)	Minimum True Distance of Work to Nest (ft.)	Initial Buffer Distance (ft.)	Nest Outcome Buffer Distance (ft.)	Smallest Buffer Distance (ft.)	Nest Outcome	Date Nest Found	Nest Outcome Date	Dates and Observations	Fledged (Yes/No/ Unknown)	Nest Substrate	Substrate Orientation	Height Above Ground (ft.)	Nest Location Description	Lat	Long
(*Example*) MODO	Mourning Dove	010115_kats_01	Water Drop Tank	Tamarisk Woodland	Trenching array lines	80	100	80	80	Failed due to natural causes	1/1/2015	2/13/2015	**1/1/15** - New nest found about 85% complete with no eggs or young, approximately 6 feet above ground level in a tamarisk. - KAlberts **1/8/15** - Nest still intact and being built. - KAlberts **1/15/15** - Incubating. - KAlberts **1/22/15** - Incubating. - ASteyers **1/29/15** - 2 eggs seen on nest. - ASteyers **2/6/15 -** Feeding nestlings and brooding. - KAlberts **2/13/15** - Nest found destroyed and torn from the bottom with no sign of the young or adults. - KAlberts	No	*Tamarix ramosissima*	NW	6	About 250 feet north of the office trailer, 6 feet above ground level toward the northwest edge of a tamarisk near the fenceline.	33.10498	-116.00429
BLGR	Blue Grosbeak	071516_lbal_01	Unknown	Disturbed Riparian	Vegetation Removal and fence installation	95	250	TBD	TBD	TBD	########	TBD	**07/15/16** - Female incubating, nest contains 4 eggs. - Lbernal **07/18/16**-Incubating.- Lbernal **07/19/15**- Incubating. -LBernal **07/20/15**-Female not observed incubating during morning check. 4 eggs still in nest. Could have been off the nest momentarily to forage. - LBernal	TBD	*Helminthotheca echiodes*	E	4	Located in the middle of a bristly ox tongue plant approximately 4 feet above the ground within a drainsge feature.	32.61818	-116.94963
YBCH	Yellow-breasted Chat	071516_srrs_01	Unknown	Disturbed Riparian	Vegetation Removal and fence installation	118	250	TBD	TBD	Inactive	########	7/20/2016	**07/15/16** - Pair was observed at the nest, at one time the female was in the nest. No eggs or young present at this time. - Sreimers **07/18/16**- Observed passively for ~1hr from about 65-70 ft from the nest, and observed not activity to or near the nest. After passive observation, approached nest, and noticed scat on the outer rim of the nest, which is indicative of an old nest. Put foliage in the nest, to check next day, in order to see if the female would clean out the foliage, which would indicate nest building. **07/19/16**- Checked nest after 15 min of passive observation, and found that foliage was still in the nest but was on the outer rim. Unsure it was moved there by the female or if the wind blew it there. Observed passively for two, 1 hour intervals in the morning. No activity observed. New foliage placed in nest. **07/20/16**- Monitored passively for ~30 min, with no activity observed. Checked nest, foliage still in nest, also noticed a few ants in the nest as well.	TBD	*Foeniculum vulgare*	N	2.5	Located in the center of the base of a mature fennel plant, approximately 2.5 feet above ground level, and along the south side of a drainage that is situated to the south of the permanent impact area.	592596	3664200

SALT CREEK SUBSTATION PROJECT
NEST SURVEY REPORT

Date: 7-15-2016

Biologist(s): Seth Reimers, Lorena Bernal

Survey Area/Project Feature ID #: Salt Creek Substation and 500-foot buffer

Proposed Construction: Clearing, grubbing, grading and BMP installation

Survey Task: A primary focus of the survey was to conduct avian nesting surveys in the delineated work limits and buffers for active raptor and CDFW-protected bird nests within 500 feet of Project work areas, within 48 hours prior to the start of ground-disturbing construction or vegetation trimming or removal activities. Surveys included nests of protected species within vegetation identified for removal and/or pruning, and within the following buffers of active work areas: 1-mile buffer for golden eagle, 0.5-mile buffer for Swainson's hawk, 0.25-mile buffer for white-tailed kite, 500 feet for raptors, coastal California gnatcatcher and least Bell's vireo, 250 feet for passerine birds in open space areas, and 150 feet for common (non-special-status) passerine birds in residential, commercial and industrial areas. If there is no work in an area for seven days, it shall be considered a new work area if construction, vegetation trimming, or vegetation removal begins again, per the MMRP.

If no active nests or occupied burrows are found, clearing can proceed. "Active" shall be defined as from nest construction through fledging of young.

Environmental Data:

	Start	**End**
Survey Time:	0719	1230
Temperature (°F):	68	93
Wind Speeds (mph):	1-3	3-6
Cloud Cover (%):	100	0

Precipitation Type: None Duration: None

Vegetation Previously Cleared in Impact Area(s)?: ☐ Yes ☒ No

Habitat/Vegetation Description (*include community types, dominant and sub-dominant shrubs/trees/primary forb/grass species, % shrub/tree covers, average heights, visibility between shrubs/trees (clumped vs. separated), bare ground %, topographical features, slope aspects, accessibility, etc. to illustrate relative nest detection probabilities*)**:** The survey area to the north of Hunte Parkway included developed habitat: ornamental landscaping, asphalt, residential housing communities, concrete sidewalks, etc. The survey area south of Hunte Parkway, and within the permanent disturbance area, consists of landscaped ornamentals and disturbed habitat. A large area of the sloped hillside is landscaped ornamentals dominated by heartleaf iceplant (*Aptenia cordifolia*), Peruvian pepper trees (*Shinus molle*) and ornamental pine trees (*Pinus* sp.). Beyond the landscaped area, habitat is disturbed and mostly consists of invasive

species including: of ripgut brome (*Bromus diandrus*), fox-tail brome (*Bromus madritensis*), short-pod mustard (*Hirschfeldia incana*), Russian thistle (*Salsola* sp.), star thistle (*Centaria melentensis*), wild oat (*Avena barbata),* fennel (*Foeniculum vulgare)* and Gazania (*Gazania linearis*). The southeast area of the permanent disturbance area consists of Coastal Sage Scrub habitat (CSS) dominated by California buckwheat (*Eriogonum fasciculatum)*, California sagebrush (*Artemisia californica)* and San Diego sunflower (*Bahiopsis laciniata)*. Average overall shrub height within the CSS was 2.5 feet and 40% cover. Outside the southern border of the permanent disturbance area runs a small riparian corridor dominated by red willow (*Salix laevigata*) and black willow (*Salix gooddingii*) and sub-dominant species mulefat (*Baccharis salicifolia)* and fennel. Average height within this riparian habitat was about 25 feet. Beyond the riparian area to the south and east is north-facing slope covered by non-native grassland species such as ripgut brome, fox-tail brome, short-pod mustard, Russian thistle, star thistle and wild oat. *The area north of the riparian habitat and east of the permanent disturbance area is also CSS with similar species composition, shrub height and percent cover as mentioned above.*

Survey Methods (*active and passive*)**:** Biologists conducted active surveys, passive surveys and/or transect-based surveys, as situationally appropriate, in and adjacent to the work area. Passive observation was conducted from select vantage points that provided maximum visibility of the survey area. Passive survey methods included stationary observation periods from strategic points in the survey area, using binoculars as necessary. Passive observation was followed by focused observation of specific areas where birds may have been observed exhibiting higher levels of activity or potential breeding behavior. If potential general avian nesting behavior was observed within the 250-foot buffer, specific shrubs, grounds, structures and/or trees were directly searched for nests. Active survey methods included walking meandering transects through the habitats while observing bird behavior with the aid of binoculars and directly searching in and under vegetation. All potential raptor nesting areas within the 500-foot buffer were searched directly and/or with the aid of binoculars. Fifteen to 80-foot transects were walked within all habitats to search for nesting birds and burrowing owl suitable burrows within the 250-foot buffer.

Site Approval Determination:

(1) A complete survey of the nesting status at the site is possible. ☒

(2) More information or an additional survey is needed. ☐

(3) A complete survey of the nesting status at the site is not possible. ☐

Determination Comments: Visibility, access and weather conditions were all conducive to collecting comprehensive breeding data, and ample time was spent surveying all potential nest sites. Survey efforts were undertaken for all potentially breeding birds observed.

SURVEY RESULTS

In the "Observation Notes" column, please include nest substrate, orientation, height above ground level (AGL), general nest location description, nesting stage, observed behaviors, etc.

New Active Nest(s) Located (*# found*)**:** 2

Species Code	Nest ID	Observation Notes	Latitude (UTM)	Longitude (UTM)
BLGR	071516_lbal_01	Nest is located approximately 4 feet AGL in the center of a bristly ox tongue (*Helminthotheca echioides*) plant. The nest is located approximately 10 feet south of the dirt road that runs along the south side of the permanent impact area. One female Blue Grosbeak was initially flushed during the survey and later observed returning to the nest to incubate. Biologists were able to confirm 4 eggs in the nest.	32.61818	-116.94963
YBCH	071516_srrs_01	Nest is located approximately 2.5 feet AGL in the center of the base of a mature Fennel (*Foeniculum vulgare)* plant. The nest is located approximately 30 feet south of the dirt road that runs along the south side of the permanent impact area. One pair of Yellow-Breasted Chats were observed flying to the nest location. The female was observed sitting in the nest for a brief moment and then the pair was seen flying southeast of the nest location. Biologists checked the nest for eggs or an incubating female and did not see either, however the nest appears to be in very suitable condition. It is possible that the female nearing the end of nest construction and/or getting ready to lay eggs.	32.61814	-116.94971

All Avian Species Observed: American Kestrel, Common Raven, Black Phoebe, Anna's Hummingbird, House Finch, Lesser Goldfinch, Mourning Dove, Say's Phoebe, Bewick's Wren, Song Sparrow, California Towhee, California Gnatcatcher, Wrentit, Costa's Hummingbird, Yellow-breasted Chat, Hooded Oriole, Bushtit, Common Yellowthroat, Greater Roadrunner, Northern Mockingbird, Rufous-crowned Sparrow, Cliff Swallow, Cassin's Kingbird, Nuttall's Woodpecker, Least Bell's Vireo, Blue Grosbeak, Red-tailed Hawk, Rock Pigeon, and Caspian Tern.

Suitable Nesting Raptor Habitat Present?: ☒ Yes ☐ No

Suitable Nesting Threatened/Endangered Species Habitat Present?: ☒ Yes ☐ No

List Threatened/Endangered Species Observed (*CAGN, LBVI, SWFL, None*)**:** CAGN, LBVI

Suitable BUOW Habitat Present?: ☒ Yes ☐ No

List BUOW & BUOW Sign Observed (*i.e., owls, burrows, pellets, whitewash, feathers, None*)**:** No sign was observed, however two suitable burrows were found within the survey area. The majority of squirrel burrows within the permanent impact area were filled prior to the survey to preclude future BUOW access.

DETAILED NOTES

For each sub-section, provide short paragraphs for each species engaged in said activities within buffer zones. Provide enough detail to glean ample data to ascertain comprehensive breeding status at this time in relation to the project site and the proposed construction. Provide any nest buffer justifications within the paragraphs, including Nest IDs from the table above.

Item Carry (*i.e., nest material, food items, fecal sacs that indicate nesting in progress*)**:** None observed.

Agitated/Territorial Behavior (*indicating potential nest sites or an intent to nest*)**:** None observed.

Courtship Behavior (*i.e., copulation, chasing flights, displays, etc.*)**:** None observed.

Pair in Suitable Habitat (*utilizing all or portions of the buffer zones*)**:** One pair of Yellow-breasted Chat were observed at nest location 071516_srrs_01, at one point the female was observed sitting on the nest. One Pairs of House Finch, California Towhee and Lesser Goldfinch were observed within the survey area, however no nests associated with these pairs were observed.

Additional Notes (*e.g., old inactive nests found, behavioral notes, seasonal notes, habitat notes, etc. to further reinforce results*)**:** One old cup nest was found in a lemonade berry (*Rhus integrifolia*) shrub within the permanent impact area. Two old cup nests were found in two separate California sagebrush shrubs. Additionally, family groups of Hooded Orioles and California Gnatcatchers were observed utilizing portions of the survey area.

Survey Notification: The signature(s) below (or electronic facsimile(s) thereof) attest(s) that this Nest Survey Report constitutes the actual and truthful record of the avian survey performed on the above stated date at and adjacent to the above stated site. All observations, descriptions and conclusions herein are mine (ours) and were made using the stated methodologies, existing relevant protocols, my (our) training and experience, and represent my (our) qualified biological opinion.

Signature: _____

Signature: _____

BLACKHAWK
Environmental

Salt Creek Substation Project

Notice of Construction

On May 12, 2016, the California Public Utilities Commission (CPUC) approved San Diego Gas and Electric (SDG&E) Company's Salt Creek Substation Project. Construction of the project is anticipated to begin in July 2016, once the CPUC issues a Notice to Proceed ("NTP"). Issuance of the NTP will be contingent upon SDG&E compliance with pre-construction requirements.

The project is needed to enhance the reliable delivery of electricity to the rapidly growing communities of Otay Ranch and Eastlake, and the foreseeable future development of Eastern Chula Vista.

Location:	**1775 Hunte Pkwy, Chula Vista, CA 91915**
Work Days:	**Monday – Saturday**
Hours:	**7am – 7pm**
Duration:	**July 2016 – December 2017**
Road Closures:	**None anticipated**
Detours:	**None anticipated**

As part of the project, SDG&E will be constructing a new low-profile 69/12 kV substation on privately owned, undeveloped land near Exploration Falls Drive and Hunte Parkway in the City of Chula Vista. Two new poles will be installed to connect the new substation to the nearby existing power line east of the site. Although not anticipated, advanced additional notification will be provided should planned interruptions of electric service, road closures, or traffic delays be deemed necessary.

Activities may temporarily increase local noise levels, dust and other disturbances. SDG&E is working closely with local municipalities to ensure the construction schedule is as least disruptive to the neighboring community as possible. Residents are encouraged to close windows/doors and plan commutes accordingly to minimize said disturbances. SDG&E is committed to keeping communities informed during all phases of the Salt Creek Substation Project construction.

For more information on the project, please visit www.sdge.com/key-initiatives/salt-creek-substation or contact Todd Voorhees, Regional Public Affairs Manager at 844-765-6388.

Salt Creek Substation Project

Notice of Construction

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For more information on the project, please visit www.sdge.com/key-initiatives/salt-creek-substation or contact Todd Voorhees, Regional Public Affairs Manager at 844-765-6388.

CUSTOMER NAME	ADDRESS
ROLLY DELACRUZ	1773 TRELLIS WAY
LEE E SIMPSON	1777 TRELLIS WAY
FELICIANO MARTINEZ	1785 PICKET FENCE DR
TERESA A DYSON	1789 PICKET FENCE DR
SUQUON D COMBS	1793 PICKET FENCE DR
ASMEROM GEBRIEL	1794 PICKET FENCE DR
VERONICA ESCALANTE-FELIX	1797 PICKET FENCE DR
MONICA FLORES	1798 PICKET FENCE DR
HUDSON LEWIS	1799 PICKET FENCE DR
BETTY MORENO	2278 TRELLIS ST
ALICIA REINHART	2282 TRELLIS ST
ALLYSON DOPWELL	2283 TRELLIS ST
ROBERT RASMUSSEN	2286 TRELLIS ST
DEAMIRA ROMO	2287 TRELLIS ST
BRISEIDA B TARBONA	2290 TRELLIS ST
HOWARD D ALBIS	2291 TRELLIS ST
C J LEIGHTON	2294 TRELLIS ST
OMAR ZEVALLOS	2295 TRELLIS ST
DENMARK CANILANG	2298 TRELLIS ST
MARCELO GIRONDO	2299 TRELLIS ST
RAY ESTEBAN	2300 WANDER ST
JUANITA BUONO	2302 TRELLIS ST
KAREN REID	2303 TRELLIS ST
ELIEL RIOS	2304 WANDER ST
GREG BRONGIEL	2306 TRELLIS ST
KEVIN CARD	2307 TRELLIS ST
BRIAN VALERIO	2308 WANDER ST
MIRNA ESTRADA	2310 TRELLIS ST
ROBERT J WILLIAMS	2311 TRELLIS ST
TIMOTHY S HANCOCK	2312 WANDER ST
WALTER VELASQUEZ	2314 TRELLIS ST
MICHELLE OSUNA	2315 TRELLIS ST
ANTONIO P VERA CRUZ	2316 WANDER ST
JASMINE TRAN	2318 TRELLIS ST
JASMIN S RATLIFF	2319 TRELLIS ST
ELISABETH YAOTANI	2320 WANDER ST
TYRUS WOODARD	2322 TRELLIS ST
JOSE JR HERNANDEZ	2323 TRELLIS ST
CURRENT RESIDENT	2324 WANDER ST
NENITA DELACRUZ	2326 TRELLIS ST
RASHUANDA HENSON	2327 TRELLIS ST
GUSTAVO BARRIOS	2328 WANDER ST
GLEN GERBER	2330 TRELLIS ST
PAVLINA DITTMAN	2331 TRELLIS ST
STACEY O'NEAL	2332 WANDER ST
ELIZABETH COYLE	2334 TRELLIS ST

ALBERT L DEVELA	2335 TRELLIS ST
ELLE BERGERON	2338 TRELLIS ST
DOREEN ALMIROL	2339 TRELLIS ST
RINA RONQUILLO	2340 WANDER ST
PETER GACH	2342 TRELLIS ST
MATTHEW PALAFOX	2343 TRELLIS ST
CHAD TORRES	2344 WANDER ST
AMBER MAYORGA	2346 TRELLIS ST
ERWIN CAOILE	2347 TRELLIS ST
SANDRA L LONG	2348 WANDER ST
RONALD SIMS	2350 TRELLIS ST
JOHN D COLLINS	2351 TRELLIS ST
JOHN BROWN	2352 WANDER ST
PATRICIA COLLAZOS	2354 TRELLIS ST
TIMOTHY JORDAN	2355 TRELLIS ST
SHANE TERREL	2356 WANDER ST
JONATHAN II GREENWOOD	2358 TRELLIS ST
AMANTE REYES	2359 TRELLIS ST
VIVA NGUYEN	2360 WANDER ST
ADALBERTO ALEJANDRO LOO	2362 TRELLIS ST
FAIZ HYDER	2363 TRELLIS ST
JOSEPH T SPENCER	2364 WANDER ST
CURRENT RESIDENT	2366 TRELLIS ST
ANNE BEVERLY OBLIMA	2367 TRELLIS ST
FROILAN SARMIENTO	2368 WANDER ST
CARMEN H MURPHY	2370 TRELLIS ST
KYLE BIBEL	2371 TRELLIS ST
VARDON ROBERTS	2372 WANDER ST
BRIAN BRIGGS	2374 TRELLIS ST
KARLO VARGAS	2375 TRELLIS ST
ANNIE SANQUE	2376 WANDER ST
JOSEPH SHANNON	2378 TRELLIS ST
CHRISTOPHER BALAGOT	2379 TRELLIS ST
PHILLIP M STULL	2380 WANDER ST
ALEJANDRO LOMELI	2382 TRELLIS ST
SHANNON RICHARDSON	2384 WANDER ST
LISA K KUNTZ	2386 TRELLIS ST
HENRY COBB	2388 WANDER ST
JEREMY WEATHERS	2390 TRELLIS ST
CHARLES HARTFIELD	2391 TRELLIS ST
SEAN MARTIN	2394 TRELLIS ST
RICARDO MATUS	2395 TRELLIS ST
JOHN HENDRICK	2398 TRELLIS ST

CITY STATE ZIP
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619.610.7600 tel
619.610.7601 fax

June 07, 2016

Clifford LaChappa, Chairperson
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA, 92040

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson LaChappa,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Barona Group of the Capitan Grande was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

However, as there are previously recorded cultural resources located near project activities and construction of the proposed substation would include ground disturbance that could expose previously undiscovered archaeological resources, monitoring by a qualified archaeologist and Native American monitor will occur during vegetation removal or ground-disturbing activities for the project.

Per Mitigation Measure Cultural Resources-4 (MMCR-4) in the San Diego Gas & Electric Salt Creek Substation Project Final Environmental Impact Report (Application No. A.13-09-014), we would like to inform you that the project scope has been reduced, and there have been no new projects components added since the initial consultation. Attached please find a project map, a reply form for any comments you may have regarding this project, and a self-addressed stamped envelope for your convenience.

Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

Enclosures: Project Maps
Response form
Stamped reply envelope

Bowden-Renna, Cheryl

2012a Cultural Resources Survey for a Proponents Environmental Assessment (PEA) for the Salt Creek Substation and Transmission Line Improvement Project in the Otay Mesa Area of Southwestern San Diego County, California.

2012b Revised Cultural Resources Survey for a Proponents Environmental Assessment (PEA) for the Salt Creek Substation and Transmission Line Improvement Project in the Otay Mesa Area of Southwestern San Diego County, California.

2013 Revised Cultural Resources Survey for a Proponents Environmental Assessment (PEA) for the Salt Creek Substation and Transmission Line Improvement Project in the Otay Mesa Area of Southwestern San Diego County, California.

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San Diego, CA 92101
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619.610.7600 tel
619.610.7601 fax

June 07, 2016

Sheilla Alvarez
Barona Group of the Capitan Grande
1095 Barona Road
Lakeside, CA 92040

Subject: SDG&E Salt Creek Substation Project

Dear Ms. Alvarez,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Barona Group of the Capitan Grande was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

However, as there are previously recorded cultural resources located near project activities and construction of the proposed substation would include ground disturbance that could expose previously undiscovered archaeological resources, monitoring by a qualified archaeologist and Native American monitor will occur during vegetation removal or ground-disturbing activities for the project.

Per Mitigation Measure Cultural Resources-4 (MMCR-4) in the San Diego Gas & Electric Salt Creek Substation Project Final Environmental Impact Report (Application No. A.13-09-014), we would like to inform you that the project scope has been reduced, and there have been no new projects components added since the initial consultation. Attached please find a project map, a reply form for any comments you may have regarding this project, and a self-addressed stamped envelope for your convenience.

Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

Enclosures: Project Maps
Response form
Stamped reply envelope

Bowden-Renna, Cheryl

2012a Cultural Resources Survey for a Proponents Environmental Assessment (PEA) for the Salt Creek Substation and Transmission Line Improvement Project in the Otay Mesa Area of Southwestern San Diego County, California.

2012b Revised Cultural Resources Survey for a Proponents Environmental Assessment (PEA) for the Salt Creek Substation and Transmission Line Improvement Project in the Otay Mesa Area of Southwestern San Diego County, California.

2013 Revised Cultural Resources Survey for a Proponents Environmental Assessment (PEA) for the Salt Creek Substation and Transmission Line Improvement Project in the Otay Mesa Area of Southwestern San Diego County, California.

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June 07, 2016

Ralph Goff, Chairperson
Campo Band of Mission Indians
36190 Church Road, Suite 1
Campo, CA 91906

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Goff,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Campo Band of Mission Indians was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

However, as there are previously recorded cultural resources located near project activities and construction of the proposed substation would include ground disturbance that could expose previously undiscovered archaeological resources, monitoring by a qualified archaeologist and Native American monitor will occur during vegetation removal or ground-disturbing activities for the project.

Per Mitigation Measure Cultural Resources-4 (MMCR-4) in the San Diego Gas & Electric Salt Creek Substation Project Final Environmental Impact Report (Application No. A.13-09-014), we would like to inform you that the project scope has been reduced, and there have been no new projects components added since the initial consultation. Attached please find a project map, a reply form for any comments you may have regarding this project, and a self-addressed stamped envelope for your convenience.

Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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Bowden-Renna, Cheryl

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June 07, 2016

Michael Garcia, Vice Chairperson
Ewiiaapaayp Tribal Office
4054 Willows Road
Alpine, CA 91901

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Garcia,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Ewiiaapaayp Tribal Office was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

However, as there are previously recorded cultural resources located near project activities and construction of the proposed substation would include ground disturbance that could expose previously undiscovered archaeological resources, monitoring by a qualified archaeologist and Native American monitor will occur during vegetation removal or ground-disturbing activities for the project.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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June 07, 2016

Will Micklin, Executive Director
Ewiiaapaayp Tribal Office
4054 Willows Road
Alpine, CA 91901

Subject: SDG&E Salt Creek Substation Project

Dear Mr. Micklin,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Ewiiaapaayp Tribal Office was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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June 07, 2016

Ewiiaapaayp Tribal Office
Robert Pinto, Sr., Chairperson
4054 Willows Road
Alpine, CA 91901

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Pinto,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Ewiiaapaayp Tribal Office was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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Bowden-Renna, Cheryl

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June 07, 2016

Clint Linton
Director of Cultural Resources
Iipay Nation of Santa Ysabel
P.O. Box 507
Santa Ysabel, CA 92070

Subject: SDG&E Salt Creek Substation Project

Dear Mr. Linton,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Iipay Nation of Santa Ysabel was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

However, as there are previously recorded cultural resources located near project activities and construction of the proposed substation would include ground disturbance that could expose previously undiscovered archaeological resources, monitoring by a qualified archaeologist and Native American monitor will occur during vegetation removal or ground-disturbing activities for the project.

Per Mitigation Measure Cultural Resources-4 (MMCR-4) in the San Diego Gas & Electric Salt Creek Substation Project Final Environmental Impact Report (Application No. A.13-09-014), we would like to inform you that the project scope has been reduced, and there have been no new projects components added since the initial consultation. Attached please find a project map, a reply form for any comments you may have regarding this project, and a self-addressed stamped envelope for your convenience.

Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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Bowden-Renna, Cheryl

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June 07, 2016

Virgil Perez, Chairperson
Iipay Nation of Santa Ysabel
P.O. Box 130
Santa Ysabel, CA 92070

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Perez,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Iipay Nation of Santa Ysabel was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

However, as there are previously recorded cultural resources located near project activities and construction of the proposed substation would include ground disturbance that could expose previously undiscovered archaeological resources, monitoring by a qualified archaeologist and Native American monitor will occur during vegetation removal or ground-disturbing activities for the project.

AECOM

Per Mitigation Measure Cultural Resources-4 (MMCR-4) in the San Diego Gas & Electric Salt Creek Substation Project Final Environmental Impact Report (Application No. A.13-09-014), we would like to inform you that the project scope has been reduced, and there have been no new projects components added since the initial consultation. Attached please find a project map, a reply form for any comments you may have regarding this project, and a self-addressed stamped envelope for your convenience.

Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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Bowden-Renna, Cheryl

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June 07, 2016

Rebeca Osuna, Chairman
Inaja Band of Mission Indians
2005 S. Escondido Blvd.
Escondido, CA 92025

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Osuna,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Inaja Band of Mission Indians was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

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Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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Bowden-Renna, Cheryl

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June 07, 2016

Erica Pinto, Chairperson
Jamul Indian Village
P.O. Box 612
Jamul, CA 91935

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Pinto,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Jamul Indian Village was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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June 07, 2016

Ron Christman
Kumeyaay Cultural Historic Committee
56 Viejas Grade Road
Alpine, CA. 91901

Subject: SDG&E Salt Creek Substation Project

Dear Mr. Christman,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Kumeyaay Cultural Historic Committee was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

However, as there are previously recorded cultural resources located near project activities and construction of the proposed substation would include ground disturbance that could expose previously undiscovered archaeological resources, monitoring by a qualified archaeologist and Native American monitor will occur during vegetation removal or ground-disturbing activities for the project.

AECOM

Ron Christman
Kumeyaay Cultural Historic Committee
June 07, 2016
Page 2

Per Mitigation Measure Cultural Resources-4 (MMCR-4) in the San Diego Gas & Electric Salt Creek Substation Project Final Environmental Impact Report (Application No. A.13-09-014), we would like to inform you that the project scope has been reduced, and there have been no new projects components added since the initial consultation. Attached please find a project map, a reply form for any comments you may have regarding this project, and a self-addressed stamped envelope for your convenience.

Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

Enclosures: Project Maps
Response form
Stamped reply envelope

Bowden-Renna, Cheryl

2012a Cultural Resources Survey for a Proponents Environmental Assessment (PEA) for the Salt Creek Substation and Transmission Line Improvement Project in the Otay Mesa Area of Southwestern San Diego County, California.

2012b Revised Cultural Resources Survey for a Proponents Environmental Assessment (PEA) for the Salt Creek Substation and Transmission Line Improvement Project in the Otay Mesa Area of Southwestern San Diego County, California.

2013 Revised Cultural Resources Survey for a Proponents Environmental Assessment (PEA) for the Salt Creek Substation and Transmission Line Improvement Project in the Otay Mesa Area of Southwestern San Diego County, California.

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June 07, 2016

Mr. Kim Bactad, Executive Director
Kumeyaay Diegueno Land Conservancy
2 Kwaaypaay Court
El Cajon, CA 92019

Subject: SDG&E Salt Creek Substation Project

Dear Mr. Bactad,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Kumeyaay Diegueno Land Conservancy was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

However, as there are previously recorded cultural resources located near project activities and construction of the proposed substation would include ground disturbance that could expose previously undiscovered archaeological resources, monitoring by a qualified archaeologist and Native American monitor will occur during vegetation removal or ground-disturbing activities for the project.

Per Mitigation Measure Cultural Resources-4 (MMCR-4) in the San Diego Gas & Electric Salt Creek Substation Project Final Environmental Impact Report (Application No. A.13-09-014), we would like to inform you that the project scope has been reduced, and there have been no new projects components added since the initial consultation. Attached please find a project map, a reply form for any comments you may have regarding this project, and a self-addressed stamped envelope for your convenience.

Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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June 07, 2016

Steve Banegas, Spokesperson
Kumeyaay Cultural Repatriation Committee
1095 Barona Road
Lakeside, CA. 92040

Subject: SDG&E Salt Creek Substation Project

Dear Mr. Banegas,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Kumeyaay Cultural Repatriation Committee was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

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Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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June 07, 2016

Carmen Lucas
Kwaaymii Laguna Band of Mission Indians
P.O. Box 775
Pine Valley, CA 91962

Subject: SDG&E Salt Creek Substation Project

Dear Ms. Lucas,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Kwaaymii Laguna Band of Mission Indians was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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Bowden-Renna, Cheryl

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June 07, 2016

Gwendolyn Parada, Chairperson
La Posta Band of Mission Indians
8 Crestwood Road
Boulevard, CA 91905

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Parada,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

La Posta Band of Mission Indians was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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Bowden-Renna, Cheryl

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June 07, 2016

Javaughn Miller, Tribal Administrator
La Posta Band of Mission Indians
8 Crestwood Road
Boulevard, CA. 91905

Subject: SDG&E Salt Creek Substation Project

Dear Javaughn Miller,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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Bowden-Renna, Cheryl

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June 07, 2016

Leroy J. Elliot, Chairperson
Manzanita Band of Kumeyaay Nation
P.O. Box 1302
Boulevard, CA 91905

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Elliot,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Manzanita Band of Kumeyaay Nation was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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Bowden-Renna, Cheryl

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June 07, 2016

Nick Elliott, Cultural Resources Coordinator
Manzanita Band of the Kumeyaay Nation
P.O. Box 1302
Boulevard, CA 91905

Subject: SDG&E Salt Creek Substation Project

Dear Mr. Elliott,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

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Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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619.610.7601 fax

June 07, 2016

Manzanita Band of Mission Indians
ATTN: David Thompson, EPA
P.O. Box 1302
Boulevard, CA. 91905

Subject: SDG&E Salt Creek Substation Project

Dear Mr. Thompson,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

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Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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Stamped reply envelope

Bowden-Renna, Cheryl

2012a Cultural Resources Survey for a Proponents Environmental Assessment (PEA) for the Salt Creek Substation and Transmission Line Improvement Project in the Otay Mesa Area of Southwestern San Diego County, California.

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2013 Revised Cultural Resources Survey for a Proponents Environmental Assessment (PEA) for the Salt Creek Substation and Transmission Line Improvement Project in the Otay Mesa Area of Southwestern San Diego County, California.

AECOM
401 West A Street
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San Diego, CA 92101
www.aecom.com

619.610.7600 tel
619.610.7601 fax

June 07, 2016

Virgil Oyos, Chairperson
Mesa Grande Band of Mission Indians
PO Box 270
Santa Ysabel, CA 92070

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Oyos,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Mesa Grande Band of Mission Indians was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

However, as there are previously recorded cultural resources located near project activities and construction of the proposed substation would include ground disturbance that could expose previously undiscovered archaeological resources, monitoring by a qualified archaeologist and Native American monitor will occur during vegetation removal or ground-disturbing activities for the project.

Per Mitigation Measure Cultural Resources-4 (MMCR-4) in the San Diego Gas & Electric Salt Creek Substation Project Final Environmental Impact Report (Application No. A.13-09-014), we would like to inform you that the project scope has been reduced, and there have been no new projects components added since the initial consultation. Attached please find a project map, a reply form for any comments you may have regarding this project, and a self-addressed stamped envelope for your convenience.

Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

Enclosures: Project Maps
Response form
Stamped reply envelope

Bowden-Renna, Cheryl

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June 07, 2016

Allen E. Lawson, Chairperson
San Pasqual Band of Mission Indians
PO Box 365
Valley Center, CA 92082

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Lawson,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

San Pasqual Band of Mission Indians was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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June 07, 2016

San Pasqual Band of Mission Indians
John Flores, Environmental Coordinator
PO Box 365
Valley Center, CA 92082

Subject: SDG&E Salt Creek Substation Project

Dear Mr. Flores,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

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The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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June 07, 2016

Cody J. Martinez, Chairperson
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, CA 92019

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Martinez,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Sycuan Band of the Kumeyaay Nation was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

The records search for the cultural study indicated that while cultural resources have been previously documented in the vicinity of the proposed project, there are no previously documented cultural resources within the project footprint. No known cemeteries exist and no recorded Native American or other human remains have been identified within or adjacent to the project area. A recent record search of the Native American Heritage Commission (NAHC) Sacred Lands Files did not indicate the presence of Native American traditional cultural places within the proposed project area. Further, intensive pedestrian surveys conducted for the proposed project identified no cultural resources within the proposed Salt Creek Substation footprint or along the underground TL 6910 loop-in area.

However, as there are previously recorded cultural resources located near project activities and construction of the proposed substation would include ground disturbance that could expose previously undiscovered archaeological resources, monitoring by a qualified archaeologist and Native American monitor will occur during vegetation removal or ground-disturbing activities for the project.

Per Mitigation Measure Cultural Resources-4 (MMCR-4) in the San Diego Gas & Electric Salt Creek Substation Project Final Environmental Impact Report (Application No. A.13-09-014), we would like to inform you that the project scope has been reduced, and there have been no new projects components added since the initial consultation. Attached please find a project map, a reply form for any comments you may have regarding this project, and a self-addressed stamped envelope for your convenience.

Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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June 07, 2016

Lisa Haws, Cultural Resource Manager
Sycuan Band of the Kumeyaay Nation
1 Kwaaypaay Court
El Cajon, CA 92019

Subject: SDG&E Salt Creek Substation Project

Dear Ms. Haws,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Sycuan Band of the Kumeyaay Nation was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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June 07, 2016

Robert J. Welch, Sr., Chairperson
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, CA 91901

Subject: SDG&E Salt Creek Substation Project

Dear Chairperson Welch,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

Viejas Band of Kumeyaay Indians was originally contacted about this project in April, 2012. The Preliminary Cultural Resources Survey Report was prepared by AECOM in June 2012 (Bowden-Renna 2012a) and revised in October 2012 (Bowden-Renna 2012b) and July 2013 (Bowden-Renna 2013). At the time, an associated 5-mile-long 69kV Transmission Line was also included with the project. Currently, only the proposed Salt Creek Substation footprint and the associated underground TL 6910 loop-in totaling approximately 12.5 acres are included as the proposed project. Construction on the project is scheduled to begin in late June, 2016.

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Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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619.610.7601 fax

June 07, 2016

Julie Hagen, Cultural Resources
Viejas Band of Kumeyaay Indians
1 Viejas Grade Road
Alpine, CA. 91901

Subject: SDG&E Salt Creek Substation Project

Dear Ms. Hagen,

San Diego Gas & Electric (SDG&E) is proposing to construct and operate a new 120-megavolt ampere 69/12-kilovolt (kV) substation, known as the Salt Creek Substation, and an underground 69 kV power line loop-in (TL 6910) at the proposed substation (See attached Project Maps). AECOM is contracted by SDG&E to provide environmental technical and permitting support for SDG&E's application for a Permit to Construct the proposed project, as required by the California Public Utilities Commission's (CPUC) California Environmental Quality Act (CEQA) Information and Criteria List, as well as the CPUC's requirements for the Permit to Construct, pursuant to General Order 131-D. CPUC is the lead agency for complying with CEQA.

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Respectfully,

Stacie L. Wilson, M.S., RPA
Senior Archaeologist

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San Diego Gas & Electric Co.
Salt Creek Substation Project

Enhancing System Reliability

Est. Construction: July 2016 – December 2017

SDGE

A Sempra Energy utility®

Questions?
Contact Todd Voorhees, SDG&E
1-844-765-6388

www.sdge.com/key-initiatives/salt-creek-substation

Source: GoogleEarth 2016

0 165 330 Feet

Sign Location Map

Salt Creek Substation Project Restoration Plan

Path: P:_6048\60485246_Salt_Creek\900-CAD-GIS\930 Graphics\Fig_X Post Signs.ai\ dbrady 6/28/16

Sheila Hoyer

From: Cuppage, Keri A
Sent: Wednesday, July 20, 2016 12:38 PM
To: 'Susanne Heim'; 'Chen, Connie'
Cc: Sheila Hoyer; Aaron Lui; Renger, Andy; Quasarano, Richard P; 'Fehrensen, Michelle'; Ron Walker (ron.walker@aecom.com); Holland, Arthur Lee
Subject: Salt Creek - NBRR
Attachments: Salt Creek Substation Project Nest Log_072016.xlsx

Hello Susanne and Eric,

I am attaching our nesting bird log with updated observation details. I had previously submitted (7/15) Nest Buffer Reduction Requests (NBRR) for two nests.

During the last three days, the biologist has determined the Yellow-breasted Chat (YBCH) nest is inactive. We will no longer need a NBR for the nest.

For the BLGR NBRR, just to confirm, per MM Biology-6 (NBR section) our understanding is: within 2 business days; if a response is not received, SDG&E may proceed with the buffer reduction until CPUC's independent biologist can review and approve or deny the buffer reduction request. If SDG&E proceeds with a reduced buffer, nests shall be monitored on a daily basis during construction activities…

Our plan is to reduce the buffer today and continue to monitor the nest.

Please let me know if you have any questions or concerns.

Kindest Regards,

Keri Cuppage, **C.P.M**
Senior Environmental Compliance Specialist
SDG&E Environmental Services
8315 Century Park Ct.
MS CP21E
San Diego, CA 92123
Office: 858-650-6198
Cell: 619-372-1602
kcuppage@semprautilities.com

Sheila Hoyer

From: Molumby, William D <WMolumby@semprautilities.com>
Sent: Monday, June 27, 2016 4:44 PM
To: Renger, Andy
Cc: Walker, Ron; Fehrensen, Michelle; Cuppage, Keri A
Subject: FW: Salt Creek Construction Fire Plan Review

Below is Cal Fire's response to the "request to review" MM. This email should be filed with the MM. Still working through some questions Chula Vista FD has regarding the Fire Plan. Bill

---

From: Nissen, Dave@CALFIRE [mailto:Dave.Nissen@fire.ca.gov]
Sent: Monday, June 27, 2016 4:00 PM
To: Molumby, William D
Subject: RE: Salt Creek Construction Fire Plan Review

Hi Bill,

After reviewing the document for the Salt Creek Sub-station, the project was identified to be entirely within the City of Chula Vista. At this time CAL FIRE will not have any further comment as we are not the FAHJD. Please let me know if you have any questions.

Regards,

Dave Nissen, Deputy Chief
Southern Operations
CAL FIRE, San Diego County Fire
619/701/0701

From: Molumby, William D [mailto:WMolumby@semprautilities.com]
Sent: Monday, June 27, 2016 3:05 PM
To: Nissen, Dave@CALFIRE
Subject: Salt Creek Construction Fire Plan Review

Chief Nissen,

Per CPUC request, SDG&E is required to make contact with fire agencies that might have jurisdictional interest during the construction of the Salt Creek Sub-station in East Lake (Chula Vista). The location is adjacent to the intersection of Hunte Parkway and Exploration Falls Drive. Please let me know if this project is within Cal Fire's jurisdiction. I have attached the fire plan if it does require your review.

Thank you,
Bill Molumby, Fire Coordinator

Sheila Hoyer

From: Molumby, William D <WMolumby@semprautilities.com>
Sent: Tuesday, June 28, 2016 8:26 PM
To: Renger, Andy
Cc: Cuppage, Keri A; Fehrensen, Michelle; Walker, Ron
Subject: Fwd: Salt Creek Fire Plan Review

Just got the approval from Chula Vista FD. Please file this response with the MM for fire mitigation. Bill

Sent from my iPhone

Begin forwarded message:

> **From:** Harry Muns <Hmuns@chulavistaca.gov>
> **Date:** June 28, 2016 at 20:13:17 PDT
> **To:** "Molumby, William D" <WMolumby@semprautilities.com>, Justin Gipson <JGipson@chulavistaca.gov>
> **Cc:** "Renger, Andy" <ARenger@semprautilities.com>
> **Subject: RE: Salt Creek Fire Plan Review**
>
> Good Evening,
>
> Chula Vista operations can support the plan.
>
> Thank you,
> Harry
>
> Harry Muns
> CVFD DC-OPS
> (619)517-2326
>
> -------- Original message --------
> From: "Molumby, William D" <WMolumby@semprautilities.com>
> Date: 6/28/16 5:12 PM (GMT-08:00)
> To: Justin Gipson <JGipson@chulavistaca.gov>, Harry Muns <Hmuns@chulavistaca.gov>
> Cc: "Renger, Andy" <ARenger@semprautilities.com>
> Subject: RE: Salt Creek Fire Plan Review
>
> Justin,
> Answer to your two questions;
>
> The only structure is the substation control house which is situated in the center of the substation. It will be a concrete masonry structure with a metal roof. There is also a 10' high concrete wall around the entire perimeter of the substation.
>
> Landscaping will conform to the city standards:

A fuel modification zone will be established from the concrete perimeter wall out 150".
Zone 1 will be the first 30' which will be unplanted, gravel or decomposed granted.
Zone 2 will be the remaining 120' which includes a selective irrigated planting of low growing vegetation and widely space native trees.
There will be annually maintenance performed within this fuel modification zone to maintain a low fuel loading..

What I am looking for is concurrence that our wildland fire prevention measures during construction meet with your approval:

- All personnel will be trained in wildland fire prevention and suppression.
- A cache of shovels, pulaskis, and 5 gallon back pack pumps will be on site at all time and known by those involved in construction.
- At least 1 water tender will be on site during the grading operation at all times.

Thanks for your assistance, Bill

From: Justin Gipson [mailto:JGipson@chulavistaca.gov]
Sent: Monday, June 27, 2016 3:33 PM
To: Molumby, William D; Harry Muns
Cc: Renger, Andy
Subject: RE: Salt Creek Fire Plan Review

Hi Bill,

It sounds like the station will include a structure? If so, can you detail the construction type (e.g. concrete block with built-up roof)? Also, is brush management prescribed to maintain 100 feet of distance from fuels to the structure?

Thank you,

Justin Gipson
Fire Division Chief
Director of Fire Prevention & Support Services

From: Molumby, William D [mailto:WMolumby@semprautilities.com]
Sent: Monday, June 27, 2016 2:36 PM
To: Justin Gipson; Harry Muns
Cc: Renger, Andy
Subject: Salt Creek Fire Plan Review

Justin and Harry,

Attached is the Project Fire Plan overview map which we submitted to the CPUC for project approval. They have responded with the following statement;

Fire prevention and response	California Department of Forestry and Fire Protection (CAL FIRE) and local fire departments	MM Hazards-1	SDG&E's Fire Marshal/Coordinator shall contact and coordinate with CAL FIRE and applicable local fire departments (i.e., City of Chula Vista and San Diego County) to determine the appropriate amounts of fire equipment to be carried on the vehicles and appropriate locations for the water tanks if water trucks are not used. SDG&E shall submit verification of its consultation with CAL FIRE and the local fire departments to CPUC no less than 7 days prior to construction+.	**CPUC:** TBD	**CPUC:** TBD	**Pending**

This is our standard fire plan which we have used on numerous other construction projects around the county. Would you be able to give it a review? I am available to meet and discuss any details you may have. I am sorry for the short turn around on this but the project is scheduled to start July 11th and just got the approval to move forward. Also, you will notice the reference to Cal Fire review. The project is not in their jurisdiction so will not require their review.

Thanks, Bill

This email originated outside of Sempra Energy. Be cautious of attachments, web links, or requests for information.

CITY OF CHULA VISTA **Public Works Department**

September 16, 2016
File # 0780-70-KY181

TO: All Developers, Contractors, and Subcontractors Working in the City of Chula Vista

SUBJECT: CITY OF CHULA VISTA'S CONSTRUCTION STORM WATER REQUIREMENTS DURING THE WET SEASON

The purpose of this letter is to inform you that the "official" wet season in San Diego County begins on October 1st and continues through April 30th. You are required to continue to implement and maintain all Best Management Practices (BMPs) necessary to prevent erosion and control sediment and to prevent discharge of pollutants or non-storm water to the City's storm drainage systems at all times during the year, with extra provisions implemented during the wet season. These requirements are included in one or more of the following documents:

- Your Land Development Permit and associated plans.
- City of Chula Vista's Grading Ordinance (Chapter 15.04 of the Chula Vista Municipal Code).
- City of Chula Vista's Storm Water Management and Discharge Control Ordinance (Chapter 14.20 of the Chula Vista Municipal Code).
- City of Chula Vista's BMP Design Manual.
- NPDES Construction General Permit, Order No. 2009-0009-DWQ amended by 2010-2014-DWQ & 2012-0006-DWQ.

During the wet season, you are required to fully implement all action necessary to protect disturbed areas and to control/eliminate erosion and sedimentation. Further, you are required to finish grade and plant slopes prior to October 1st or immediately upon completion of any slopes graded between October 1st and April 30th.

Implementing and maintaining appropriate BMPs must prevent discharge of other pollutants and non-storm water to public storm drainage systems. These requirements are in place to protect public health and safety and to comply with federal, state, and local laws and regulations. Most of the common seasonal BMPs are included in Attachment 1 (*Section K.6 of Appendix K of the City of Chula Vista BMP Design Manual*) to this letter. Other BMPs may be necessary for site-specific circumstances.

A site is considered inactive if construction activities have ceased for a period of 14 or more consecutive calendar days. At any time of year, an inactive site must be fully protected from erosion and discharges of sediment. It is the developer's responsibility at both active and inactive sites to implement a plan to address all potential non-storm water discharges.

Where active or inactive construction sites discharge to permanent treatment control BMPs, it is the responsibility of the developer to prevent, to the maximum extent practicable, any discharges of sediment or other pollutants from construction sites to those BMPs. Permanent BMPs are not designed to handle excessive sediment loads or other pollutants from construction sites, and their operation may become impeded if allowed to receive excessive pollutants.

The ability to deploy standby BMP materials is not sufficient to meet compliance standards. BMPs must be actually deployed.

If your construction project is wholly or partially inactive at this time, or an inactive period is expected, you may be required to develop a Construction Site Stabilization Plan. A copy of the Construction Site Stabilization Plan shall be furnished upon the request of City staff.

The stabilization plan shall include the following information:

1. Project name and a description of areas that are currently inactive or expected to become inactive.
2. A description of the stage of work at which the project became inactive.
3. An estimate of time that the project, or areas of the project, will remain inactive. A description of Best Management Practices that will be used to stabilize inactive areas of the construction site.
4. A project plan delineating areas of the project that are inactive or expected to become inactive, as well as all erosion control, sediment control, and non-storm water Best Management Practices that will be implemented to prevent the discharge of sediment or other pollutants from the site.

Projects covered under the National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000002, Order No. 2009-0009 DWQ amended by 2010-2014-DWQ & 2012-0006-DWQ, are required to continue compliance with said permit requirements, including sampling and monitoring. Ensure that all Permit Registration Documents (PRDs) are electronically filed as required through the State Water Board's Stormwater Multi-Application and Report Tracking System (SMARTS) website. In addition, ensure that your Storm Water Pollution Prevention Plan (SWPPP) is amended or revised by a Qualified SWPPP Developer and the site's required self inspections are conducted by a Qualified SWPPP Practitioner to demonstrate compliance with the current Construction General Permit.

City of Chula Vista's Public Works Inspectors and Storm Water Management staff continues to inspect construction sites for compliance with storm water regulations. Non-compliance with the requirements of the City of Chula Vista storm water regulations and this letter may result in enforcement action, including but not limited to fines of up to $10,000 per day per violation.

Please contact your City Inspector as soon as possible to inspect your erosion control measures and other BMPs. Maintenance of erosion control measures and other BMPs will be closely monitored.

Thank you for your cooperation in complying with federal, state, and local laws and regulations for pollution prevention on construction sites and minimizing rain damage and erosion during the 2016-2017 wet season.

Should you have any questions concerning the above, please contact me at (619) 397-6111.

BOUSHRA SALEM
SENIOR CIVIL ENGINEER

Attachment 1

cc: Silvester Evetovich, Principal Civil Engineer
Don Bergeson, Environmental Health Specialist
All Public Works Inspectors
Mrs. Laurie Walsh, Senior Water Resource Control Engineer, San Diego Water Board, 2375 Northside Drive, Suite 100, San Diego, CA 92108

ATTACHMENT 1

K.6 Required Best Management Practices

K.6.1 Minimum BMP Requirements

BMPs collectively refer to a variety of pollution prevention controls implemented throughout the project site at various times during the project. BMPs discussed herein are specifically aimed to control pollution in storm water runoff during the construction phase of the project. The major construction BMP categories as identified in the MS4 Permit (E.4.c) care:

1. Project Planning;
2. Good Site Management "Housekeeping", including Waste Management;
3. Non Storm Water Management;
4. Erosion Control;
5. Sediment Control;
6. Run-on and Run-off Control; and
7. Active/Passive Sediment Treatment Systems, where applicable

Construction sites are required to implement minimum construction BMPs outlined in Table 5-1 below as applicable to prevent pollution discharges to the MEP regardless of the season. The City also requires additional or enhanced BMPs for specific site conditions that may he different for the rainy season (October 1st – April 30th) than they are for the dry season (May 1st – September 30th). Sites are also required to retain enough materials on site to protect all disturbed areas if a rain event were to occur.

BMP Type	Minimum Required BMPs	CASQA Factsheet	Caltrans Factsheet[1]
Project Planning	Preservation of natural hydrologic features where feasible	-	
	Preservation of riparian buffers and corridors where feasible	-	
	Preservation of existing vegetation	EC-2	SS-2
	Minimization of areas that are cleared and graded to only the portion of the site that is necessary for construction	-	
	Minimization of exposure time of disturbed soil areas	EC-1	SS-1
	Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods to the extent feasible	EC-1	SS-1
	Employee and Subcontractor Training, as applicable	-	
Erosion Control	Temporary stabilization and permanent re-vegetation or landscaping as early as feasible	EC-1	SS-1
	Preservation of existing vegetation	EC-2	SS-2
	Physical Stabilization of exposed soil		
	• Hydraulic Mulch	EC-3	SS-3
	• Hydroseeding	EC-4	SS-4
	• Soil Binders	EC-5	SS-5
	• Straw Mulch	EC-6	SS-6
	• Geotextiles, Plastic Covers, and Erosion Control Blankets/Mats	EC-7 EC-8	SS-7 SS-8
	Site Drainage		
	• Earth Dikes/Drainage Swales	EC-9	SS-9
	• Energy Dissipater/Outlet Protection	EC-10	SS-10
	• Slope Drains	EC-11	SS-11
Sediment Control	Perimeter Protection (one or more must be implemented)		
	• Silt Fence	SE-1	SC-1
	• Gravel Bag Berm	SE-6	SC-6
	• Fiber Rolls	SE-5	SC-5
	Sediment Capture (one or more must be implemented)		
	• Sediment/Desilting Basin[2]	SE-2	SC-2
	• Storm Drain Inlet Protection	SE-10	SC-10
	• Sediment Trap	SE-3	SC-3
	• Gravel Bag Barrier	SE-8	SC-8
	• Straw Barrier	SE-9	SC-9

BMP Type	Minimum Required BMPs	CASQA Factsheet	Caltrans Factsheet[1]
	Sediment Tracking		
	• Stabilized Construction Entrance/Exit	TC-1	TC-1
	• Construction Road Stabilization	TC-2	TC-2
	• Entrance/Exit Tire Wash	TC-3	TC-3
	• Street Sweeping	SC-7	SC-7
Good Site Management, "Housekeeping"	Vehicle and Equipment Management		
	• Cleaning	NS-8	NS-8
	• Fueling	NS-9	NS-9
	• Maintenance	NS-10	NS-10
	Materials Management		
	• Material Delivery and Storage	WM-1	WM-1
	• Material Use	WM-2	WM-2
	• Stockpile Management	WM-3	WM-3
	• Spill Prevention and Control	WM-4	WM-4
	Waste Management (where applicable)		
	• Solid Waste	WM-5	WM-5
	• Hazardous Waste	WM-6	WM-6
	• Contaminated Soil	WM-7	WM-7
	• Concrete	WM-8	WM-8
	• Sanitary Waste	WM-9	WM-9
	• Liquid	WM-10	WM-10
Non-Stormwater Management	• Water Conservation Practices	NS-1	NS-1
	• Dewatering Operations	NS-2	NS-2
	• Paving and Grinding	NS-3	NS-3
	• Potable Water/Irrigation and Flushing	NS-7	NS-7

K.6.2 Additional Erosion and Sediment Control Requirements

In addition to the minimum BMPs listed in the table above, construction projects are also required to comply with the following requirements:

1. The faces of cut-and-fill slopes and the project site shall be prepared and maintained to control against erosion. All exposed disturbed areas must have erosion prevention controls properly installed including building pads, unfinished roads and slopes. Slopes greater than 33.3% or 1:3 (vertical vs. horizontal) may use properly designed and installed de-silting basins at all discharge points in lieu of this requirement.
2. Where necessary, temporary and/or permanent erosion control devices such as desilting basins, check dams, cribbing, riprap, or other devices or methods as approved by the City Engineer shall be employed to control erosion, prevent discharge of sediment, and provide safety.

3. Temporary desilting basins constructed of compacted earth shall be compacted to a relative compaction of 90 percent of maximum density. A gravel bag or plastic spillway must be installed for overflow, as designed by the engineer of work, to avoid failure of the earthen dam. A soils engineering report prepared by the soils engineer, including the type of field testing performed, location and results of testing shall be submitted to the City Engineer for approval upon completion of the desilting basins.
4. Desilting facilities shall be provided at drainage outlets from the graded site, and shall be designed to provide a desilting capacity capable of containing the anticipated runoff for a period of time adequate to allow reasonable settlement of suspended particles.
5. Desilting basins shall be constructed around the perimeter of projects, whenever feasible, and shall provide improved maintenance access from paved roads during wet weather. Grading cost estimates must include maintenance and ultimate removal costs for temporary desilting basins.
6. The erosion control provisions shall take into account drainage patterns during the current and future phases of grading.
7. Erosion protection may include effective planting of all slopes unless otherwise approved by the City Engineer. Planting of the slopes shall be done as soon as practicable, and prior to rough grade approval. If this is not accomplished, the slope shall be treated with punched cereal straw, broadcast on the soil surface at 4,000 pounds per acre and held with a tackifier, fiber or net, or an equal system approved by the City Engineer. Planting shall be installed, fully germinated, and effectively cover the required slopes prior to finished grade approval.
8. The permittee or owner shall be responsible for control of erosion on all areas of grading until acceptance of the completed grading by the City Council. This responsibility extends to completed and occupied lots.
9. Equipment and workers for emergency work shall be made available at all times. One hundred twenty-five percent of all necessary materials shall be available on site and stockpiled at convenient locations to facilitate rapid construction of temporary devices at all times.
10. All removable protective devices shown shall be in place at the end of each working day when there is a 50 percent chance of rain within a 48-hour period. If the developer does not provide the required installation or maintenance of erosion control structures within two hours of notification at the 24-hour number on the plans, the City Engineer may order City crews or the City's Contractor to do the work or may issue contracts for such work and charge the cost of this work along with reasonable overhead charges to the cash deposits or other instruments implemented for this work without further notification to the owner. No additional work on the project, except erosion control work, may be performed until the full amount drawn from the deposit is restored by the developer.
11. At any time of year, an inactive site shall be fully protected from erosion and discharges of sediment. Flat areas with less than five percent grade shall be fully covered unless sediment control is provided through desilting basins at all project discharge points. A site is considered inactive if construction activities have ceased for a period of 14 or more consecutive days.

K.6.3 ADVANCED TREATMENT METHODS

For the majority of the construction sites within the City's jurisdiction, the minimum required BMPs, if correctly installed and maintained, should adequately control sediment discharges from the site. However, if it is determined that a site possesses characteristics that could result in standard construction BMPs being ineffective in the treatment of sediment, thus resulting in an exceptional threat to water quality, advanced treatment will be required. The term "advanced treatment," as used in this section, includes both active and passive sediment treatment systems. These systems usually involve adding a coagulant to construction site discharge to facilitate sediment removal; see the BMP Design Manual for additional details.

A site is considered to pose an exceptional threat to water quality if it meets all of the following criteria:

- Is located within, adjacent to, or a portion of the site is within 200 feet of waters listed on the 303(d) List for sedimentation or turbidity impairments;
- Disturbance is greater than five acres, including all phases of the development;
- Disturbed slopes are steeper than 4:1 (horizontal: vertical) and higher than 10 feet that drain toward the 303(d) Listed receiving water;

Contains a predominance of soils with U.S. Department of Agriculture – National Resources Conservation Service Erosion factor K greater than or equal to 0.4.Alternatively, applicants may perform a Revised Universal Soil Loss Equation or Modified Universal Soil Loss Equation analysis to prove to the City Engineer's satisfaction that advanced treatment is not required.

Treatment effluent water quality shall meet or exceed the water quality objectives for turbidity, and any other parameter deemed necessary by the City Engineer as listed in the Water Quality Control Plan for the San Diego Basin for Inland Surface Waters and Lagoons and Estuaries (Basin Plan) for the appropriate hydrologic unit.

Additionally, the City may require advanced treatment for sites that have a record of noncompliance with the City's construction BMP requirements, regardless of whether they meet the above criteria. For projects where advanced treatment is required, the applicant must submit the design, operations and maintenance schedule, monitoring plan, and certification of training of staff to the satisfaction of the City.

K.6.4 ADDITIONAL CONTROLS FOR CONSTRUCTION SITES

Depending on specific site conditions and where a threat to water quality is anticipated, the City may require a construction site to implement BMPs in addition to the minimum and seasonal BMPs describe above. Such additional BMPs will be determined by the City on a site-by-site basis. Additional controls may include required de-silting basins, increased inspection frequency, and/or stronger penalties for non-compliance. Currently, there are no water bodies that are 303(d) Listed for sediment in or downstream of the City.

K.6.5 BMP Implementation

BMPs shall be selected, designed, installed, and maintained properly throughout the duration of construction projects to control off-site discharges and prevent sediment-laden water and other pollutants from impacting adjacent properties or entering the City's public storm system and/or adjacent or downstream rivers, streams, and sensitive areas. BMPs must be discussed with all project contractors, subcontractors, and any party involved, because education is essential to good BMP implementation and maintenance and overall site compliance.

K.6.6 BMP Effectiveness

BMPs shall be routinely evaluated for their effectiveness. Additional BMPs shall be implemented as dictated by site conditions throughout all phases of the project. The contractor shall contact the SWPPP developer or CSWPCP preparer as applicable if BMPs are found to be ineffective. As described in Section K.8, The City Inspector may require additional measures depending on individual site conditions.

K.6.7 BMP Maintenance

BMP measures stated in the SWPPP or CSWPCP, as applicable, shall be maintained in fully functional condition until no longer required for a completed phase of work or final stabilization has been achieved.

Sheila Hoyer

From: Phan, Andrew
Sent: Thursday, December 15, 2016 11:28 AM
To: Cuppage, Keri A
Subject: FW: Courtesy Notification: Salt Creek Substation Recycled Water Spill - WDID#: 9 37C375119
Attachments: DSCN0083.jpg; DSCN0084.jpg; DSCN0085.jpg; DSCN0066.jpg; DSCN0070.jpg

FYI

From: Phan, Andrew
Sent: Thursday, December 15, 2016 11:27 AM
To: 'Whitney.Ghoram@waterboards.ca.gov'; 'Donald Bergeson'
Cc: Phan, Andrew; Gaters, Willie; Navrozali, Hashim
Subject: Courtesy Notification: Salt Creek Substation Recycled Water Spill - WDID#: 9 37C375119

Whitney and Don,

This is a courtesy notification for the Salt Creek Substation project with WDID#: 9 37C375119. The Salt Creek Substation is a new substation build project.

On December 12, 2016, at approximately 11:48 a.m., the Geo Pacific water truck operator did not disconnect the hose from the recycled water pipeline and drove away with the hose connected. The hose pulled off the valve from the recycled water pipeline. Upon noticing this, the Geo Pacific supervisor radioed the flagger at the entrance gate and instructed him to turn off the main valve located at street level. Approximately 350-450 gallons of water flowed out of the pipe and entered the v-ditch located adjacent to the broken recycled water valve. The water flowed down the v-ditch and was slowed down by the various check dams in the v-ditch. The water was held back at the last check dam, located just behind the construction trailer, at the project limits. The water was confined to the v-ditch and did not overflow; however, the LEI observed a minimal amount of water leaving the project site through the wattle logs and rock bags and going down the v-ditch for approximately 140 feet and then stopping. SDG&E and the QSP were immediately notified of the occurrence. The QSP arrived at 2:08 p.m. to observe the conditions of the spill and the water that was leaving the site. It is difficult to ascertain how much water left the project limits; however, the water that was leaving the project site was doing so slowly and was minimal, stayed confined to the v-ditch, and did not enter any receiving waters. Standing water in the v-ditch was removed by 3:00 p.m. by pumping water out and into a water truck.

Existing check dams in the v-ditch were in place before the break. The recycled water is authorized for onsite dust control.

Andrew H. Phan
Environmental Specialist
Water and Air
SDGE Environmental Programs
CP21E
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