

May 1, 2015

Ms. Stacey Love Recovery Permits Coordinator Carlsbad Fish and Wildlife Office 2177 Salk Avenue, Suite 250 Carlsbad, California 92008

### RE: COASTAL CALIFORNIA GNATCATCHER SURVEY SUMMARY REPORT FOR THE ENCINCA HUB PORTION OF THE PROPOSED SAN DIEGO GAS & ELECTRIC COMPANY SYCAMORE TO PEÑASQUITOS 230 kV TRANSMISSION LINE PROJECT, SAN DIEGO COUNTY, CALIFORNIA

Ms. Love:

This letter report summarizes the results of the focused, protocol-level, presence/absence surveys for the federally listed threatened coastal California gnatcatcher (*Polioptila californica californica*) for the Encina Hub portion of the proposed Sycamore to Peñasquitos 230 Kilovolt (kV) Transmission Line Project (Proposed Project). Busby Biological Services, Inc. (BBS) was contracted by Chambers Group, Inc. (Chambers) to conduct these surveys on behalf of San Diego Gas & Electric Company (SDG&E) to evaluate the potential impacts of the Encina Hub portion of the Proposed Project. The Encina Hub portion of the Proposed Project was added after the initial coastal California gnatcatcher surveys were performed in fall 2013.

This survey summary report focuses on the methods and results used to evaluate areas within the Encina Hub. A separate report was prepared to summarize the methods and results for the surveys performed in areas of the main alignment that were not previously surveyed for the Proposed Project. This report is titled *Coastal California Gnatcatcher Survey Summary Report for Areas Not Previously Surveyed for the Proposed San Diego Gas & Electric Company Sycamore to Peñasquitos 230 kV Transmission Line Project, San Diego County, California* and dated April 28, 2015.

# **BACKGROUND INFORMATION**

A brief summary of the Proposed Project and coastal California gnatcatcher are provided in this section.

#### Proposed Project Location and Description

The Proposed Project includes construction of a new, approximately 16.7-mile 230 kV transmission line between the existing SDG&E Sycamore Canyon and Peñasquitos substations; the consolidation of two existing 69 kV power lines onto new double-circuit, steel structures that would replace existing, predominantly wood structures; and re-routing at the Encina and Mira Mesa Hubs.

This survey summary report focuses on the portion of the Proposed Project that is proposed at the Encina Hub. An existing San Luis Rey–Mission 230 kV transmission line would be removed from service at the Encina Hub to create an open position for the proposed new 230-kV transmission line. The following steps would occur to reconfigure the 230 kV transmission lines at Encina Hub:

- Remove jumpers between existing towers
- Transfer the existing conductor between towers
- Install jumpers from towers
- Install new conductor from tower between three existing towers
- Install dead ends assemblies, dampers and spacers on existing towers

All new transmission line facilities would be located within existing SDG&E Right-of-Way (ROW) or within franchise position within existing public roadways, and the entire Proposed Project is located within San Diego County (Appendix A: Figures 1 and 2).

# Brief Survey Area Explanation

Focused coastal California gnatcatcher surveys were conducted for the Proposed Project within all suitable habitats within and adjacent to the current Proposed Project alignment.

During fall 2013, focused, protocol-level, non-breeding season coastal California gnatcatcher surveys were conducted within the original Biological Survey Area (BSA), which included a 500-foot-wide survey corridor along the approximately 16.7-mile Proposed Project alignment, the Sycamore Canyon and Peñasquitos Substations, and the proposed Sycamore and Stowe construction yards (Appendix A: Figures 1, 2, and 3). The results of the fall 2013 coastal California gnatcatcher surveys conducted within the original BSA were summarized previously in a separate survey summary report, titled *Coastal California Gnatcatcher Survey Summary Report for the Proposed San Diego Gas & Electric Company Sycamore to Peñasquitos 230 kV Transmission Line Project, San Diego County, California and dated January 14, 2014.* 

During Spring 2015, subsequent focused, protocol-level, breeding season coastal California gnatcatcher surveys were conducted within and adjacent to the portions of the current BSA that were added after the original BSA had already been surveyed, including access roads, staging yards, the Encina Hub, the Mira Mesa Hub, and all other associated work areas (Appendix A: Figures 1, 2, and 3).

Because the Encina Hub is located in a geographically distinct location and is not within the immediate vicinity of the main Proposed Project alignment (Appendix A: Figure 1), two separate survey summary reports were prepared for the spring 2015 surveys, one for the coastal California gnatcatcher surveys conducted at Encina Hub and one for the surveys that were conducted along the main Proposed Project alignment. This report focuses on the results of the focused coastal California gnatcatcher surveys conducted at the Encina Hub.

The results of the focused coastal California gnatcatcher surveys in the original BSA, new areas along the main alignment, and the Encina Hub will be compiled so that all survey results are utilized to inform future Proposed Project planning efforts.

# Coastal California Gnatcatcher Species Information

The coastal California gnatcatcher is a small, blue-gray, non-migratory songbird that is a federally listed threatened species and a California Department of Fish and Wildlife (CDFW) species of special concern. One of three subspecies of the California gnatcatcher (*Polioptila californica*), the coastal California gnatcatcher has one of the most limited distributions of any bird species in North America (Atwood 1991). The coastal California gnatcatcher occurs on coastal slopes in southern California, from the coast and foothills of southern Ventura County, south through Los Angeles County, Orange County, southwestern San Bernardino County, western Riverside County, and San Diego County, and south into northwestern Baja California, Mexico (Atwood 1991).

The coastal California gnatcatcher typically occurs from sea level to approximately 2,500 feet in elevation in or near coastal sage scrub habitat, which is patchily distributed throughout the species' range. The species occurs most frequently within coastal sage scrub stands on mesas, gently sloping areas, and along the lower slopes of the coast ranges that are dominated by California sagebrush (*Artemisia californica*) (Atwood 1990). Other plant species important for the nesting and foraging of this species include California buckwheat (*Eriogonum fasciculatum*), white sage (*Salvia apiana*), black sage (*Salvia mellifera*), coyote brush (*Baccharis pilularis*), and broom baccharis (*Baccharis sarothroides*). Chamise (*Adenostoma fasciculatum*) habitats may also support breeding pairs, especially where coastal sage scrub may occur nearby or form a component of the habitat (Bontrager 1991).

The coastal California gnatcatcher typically occurs in high frequencies and densities in coastal sage scrub with a slope gradient of less than 40 percent and with an open or broken canopy with a shrub cover of 20 to 60 percent and a shrub height of 3 to 4 feet. The coastal California gnatcatcher occurs in low frequencies and densities or is absent in coastal sage scrub with a very short or tall shrub height and with a dense or closed canopy (Weaver 1998); this species is usually absent from coastal sage scrub dominated by tall shrubs. Territory size is highly variable as vegetation density decreases with distance from the coast, probably as a result of food resource availability, ranging from less than 1 hectare along the coast to over 9 hectares inland (Braden 1997, Preston et al. 1998, Atwood et al. 1998). Nonbreeding season home range size is about 80 percent larger than breeding season home range (Preston et al. 1998, Bontrager 1991).

While predominantly dependent on coastal sage scrub, the coastal California gnatcatcher also uses other habitats and shows seasonal and daily patterns in such use of these habitats. In particular, the coastal California gnatcatcher has been documented using chaparral, grassland, and riparian habitats where these habitats occur adjacent to coastal sage scrub and especially when these habitats are mesic and not summer-deciduous. The use of these habitats appears to be most frequent during late summer, autumn, and winter for dispersal and during periods of drought for dispersal and foraging opportunities; however, breeding territories have also been documented outside of coastal sage scrub habitat (Campbell *et al.* 1998). Factors contributing to the gnatcatcher's use of alternative habitats may include improved food source availability, higher survival rates during juvenile dispersal, fire avoidance, cooler microclimate during heat stress, and lower predation rates for juveniles (Campbell *et al.* 1998).

The coastal California gnatcatcher becomes highly territorial each year by late February or early March, and males generally become more vocal during this period (Mock *et al.* 1990). In southwestern San Diego County, where the Proposed Project is located, the mean breeding season territory size ranges from 12 to 27 acres per pair, and nonbreeding season territory size ranges from 12 to 42 acres per pair (Preston *et al.* 1998). During the nonbreeding season, the coastal California gnatcatcher has been observed to wander in adjacent territories and unoccupied habitat, increasing its home range size to approximately 78 percent larger than its breeding territory (Preston *et al.* 1998).

The coastal California gnatcatcher breeding season extends from mid-February through the end of August, with peak nesting activity occurring from mid-March through mid-May. Nest building begins in mid-March, with the earliest recorded egg date of March 20 (Mock *et al.* 1990). The nest of the coastal California gnatcatcher is a small, cup-shaped basket usually found 1 to 3 feet above the ground in a small shrub. Clutch size ranges between three and five eggs. Juvenile birds associate with their parents for several weeks (sometimes months) after fledging (Atwood 1990). Post breeding dispersal of fledglings occurs between late May and late November. The coastal California gnatcatcher is a persistent nest builder and often attempts multiple broods, which suggests high reproductive potential. However, this is typically offset by high rates of nest predation and brood parasitism (Atwood 1990; Grishaver *et al.* 1998).

The principal reasons for the federally threatened status of the coastal California gnatcatcher is the loss, fragmentation, and adverse modification of habitat from urban and agricultural development, wildfire, invasive nonnative plants, grazing, nest predation, and brood parasitism by brown-headed cowbirds (*Molothrus ater*) (Mock et al. 1990,). It is estimated that up to 90 percent of coastal sage scrub vegetation has been lost as a result of development and land conversion, and coastal sage scrub is considered to be one of the most depleted habitat types in the United States (Kirkpatrick and Hutchinson 1977; O'Leary 1990; Westman 1981a-b; Barbour and Major 1977; Bontrager 1991; USFWS 2007, USFWS 2010).

# METHODS

A habitat assessment and focused, protocol-level, breeding coastal California gnatcatcher surveys were performed within suitable habitat located within the Encina Hub footprint and within a 300-foot buffer of the Encina Hub. The methods used for the habitat assessment and focused, protocol-level surveys are presented in this section.

# Habitat Assessment Methods

Prior to initiating the focused, protocol-level, breeding coastal California gnatcatcher surveys at the Encina Hub, a focused habitat assessment was conducted in fall 2014 by U.S. Fish and Wildlife Service (USFWS) permitted biologists to identify locations of suitable habitat for the species both within and adjacent to the Encina Hub.

Initially, historical occurrence data for coastal California gnatcatcher that have been reported from within 5 miles of the Encina Hub were evaluated prior to conducting the habitat assessment field survey for coastal California gnatcatcher. A Geographic Information Systems (GIS) specialist generated a map from the most recent version of the CDFW *California Natural Diversity Database* (CNDDB; CDFW 2013) and other databases

identifying reported coastal California gnatcatcher detections within a 5-mile buffer of the Encina Hub to allow USFWS-permitted biologists to view the historic distribution of coastal California gnatcatcher within the vicinity of the Encina Hub.

Next, USFWS-permitted biologists conducted a field habitat assessment within the Encina Hub and 300-foot buffer to identify potential coastal California gnatcatcher habitat. The field habitat assessment was conducted by assessing the vegetation communities on foot to gain a closer look at the plant species composition within the potentially suitable habitat.

Polygons of suitable habitat were hand-drawn onto high-resolution aerial field maps. The polygons on these field maps were later screen-digitized in the office by a GIS specialist using ArcGIS software. Finally, survey boundaries were adjusted and potentially suitable coastal California gnatcatcher habitat was either added or eliminated from the survey area through closer investigation on foot during this first round of focused, protocol-level, breeding coastal California gnatcatcher surveys.

# Focused Coastal California Gnatcatcher Survey Methods

Focused surveys for coastal California gnatcatcher were conducted by USFWS-permitted biologists in accordance with the current USFWS survey protocol for coastal California gnatcatcher surveys within NCCP areas, titled *Coastal California Gnatcatcher* (Polioptila californica californica) *Presence/Absence Survey Guidelines* and dated February 28, 1997.

All surveys were conducted between approximately 6:00am and 12:00pm and avoided periods of adverse weather conditions (e.g., excessively hot or cold temperatures, high winds, steady rain, dense fog, other inclement weather conditions) that would impede detection of the coastal California gnatcatcher. Surveyors slowly walked throughout the suitable habitat identified within and adjacent to the Encina Hub during the habitat assessment and used visual and auditory cues to detect the coastal California gnatcatcher. Various routes were utilized to conduct an unbiased survey of the potentially suitable habitat.

Pre-recorded coastal California gnatcatcher vocalization playbacks were only used to elicit initial calls from coastal California gnatcatcher and were not used frequently or to elicit further behaviors. Pre-recorded vocalizations were played for a period of 5 to 15 seconds and were generally repeated approximately every 100 feet within the surveyed habitat. No more than approximately 80 acres of suitable habitat were surveyed per day, per USFWS-permitted biologist.

For each coastal California gnatcatcher detection, surveyors recorded the approximate location electronically using a hand-held Global Positioning Systems (GPS) device and/or by hand onto a high resolution aerial image of the survey areas. Surveyors also estimated the age, sex, and number of individuals detected and included notes about each detection. In addition, surveyors recorded other wildlife species observed directly or detected indirectly by sign, including scat, tracks, calls, and other evidence.

# RESULTS

The results of the habitat assessment and focused, protocol-level coastal California gnatcatcher surveys are presented in this section.

# Habitat Assessment Results

BBS biologist, Laurie Gorman, conducted a field habitat assessment for coastal California gnatcatcher within and adjacent to the Encina Hub during fall 2014. The initial assessment of potentially suitable coastal California gnatcatcher habitat within the Encina Hub and a 300-foot buffer was further refined by BBS biologist, Charles Vettes, through closer investigation on foot during the first round of focused, protocol-level coastal California gnatcatcher surveys. A total of approximately 49.60 acres of potentially suitable coastal California Gnatcatcher habitat was surveyed within and adjacent to the Encina Hub (Appendix A: Figure 3).

Potentially suitable habitat for the coastal California gnatcatcher that required surveys included Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, and some of the disturbed habitat (Appendix A: Figure 3). The potentially suitable habitat that was identified within these vegetation communities listed above typically has an open or broken canopy with a shrub cover of 20 to 60 percent, a shrub height of 3 to 4 feet, and contains the following species that either dominate or form a component of the vegetation communities: California sagebrush, California buckwheat, white sage, black sage, coyote brush, and broom baccharis.

Vegetation communities excluded from the focused, protocol-level coastal California gnatcatcher surveys because they were determined through field reconnaissance not to contain suitable habitat for the species include southern riparian scrub, mulefat scrub, bare ground, native grassland, nonnative grassland, developed lands, and ornamental vegetation.

The following paragraphs provide a description of the vegetation communities that were considered suitable or potentially suitable coastal California gnatcatcher habitat.

# Diegan Coastal Sage Scrub/Disturbed Diegan Coastal Sage Scrub

Diegan coastal sage scrub is a wide-spread vegetation community ranging from coastal Los Angeles County into northern Baja California. It consists mainly of low, soft-woody subshrubs (approximately 3 feet high) that are most actively growing in winter and early spring and are facultatively drought-deciduous. Within and adjacent to Encina Hub, this vegetation community is dominated by a variable mix of California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), laurel sumac (*Malosma laurina*), coast goldenbush (*Isocoma menziesii*), deerweed (*Acmispon glaber*), coyote brush (*Baccharis pilularis*), California sunflower (*Encelia californica*), and occasional black sage (*Salvia melifera*) and coast pricklypear (*Opuntia littoralis*).

Disturbed Diegan coastal sage scrub contains many of the same species that are found in undisturbed Diegan coastal sage scrub but may contain various types of disturbance, ranging from a predominance of invasive or ornamental species, physical disturbance from grading or fire management activities, or a recent history of fire.

At the Encina Hub, coastal California gnatcatcher surveys were conducted in the Diegan coastal sage scrub and disturbed Diegan coastal sage scrub located within and adjacent to Encina Hub.

### Disturbed Habitat

Disturbed habitat refers to any land on which the native vegetation has been significantly altered by agriculture, construction, or other land-clearing activities, and the species composition and site conditions are not characteristic of the disturbed phase of a particular vegetation community (e.g., disturbed chaparral). Disturbed habitat is typically found in vacant lots, roadsides, construction staging areas, or abandoned fields, and is dominated by nonnative annual species and perennial broadleaf species.

At the Encina Hub, coastal California gnatcatcher surveys were conducted in the disturbed habitat that was associated with the Diegan coastal sage scrub and disturbed Diegan coastal sage scrub, when the disturbed habitat had a potential to support coastal California gnatcatcher breeding or foraging.

# Focused Coastal California Gnatcatcher Survey Results

A total of three, NCCP protocol-level, breeding focused coastal California gnatcatcher survey rounds were conducted within approximately 49.60 acres of potentially suitable habitat between February 24 and March 17, 2015 (Appendix A: Figure 3). Each survey round took 1 day to complete because the habitat was easily accessible and contiguous throughout the survey area. All surveys were conducted during appropriate weather conditions by USFWS-permitted biologists Charles Vettes (TE-20160B-0) and Laurie Gorman (TE-233367-1). Appendix B provides a summary of survey conditions, including survey times, weather conditions, and name of surveyor.

During the coastal California gnatcatcher surveys, the number of coastal California gnatcatcher detections ranged from 13 individuals during survey rounds 1 and 2 to 12 individuals during survey round 3 (Table 1; Appendix A: Figures 4a and 4b).

Survey Round	Date	Number of Individuals
Round 1	2/24/15	13
Round 2	3/7/15	13
Round 3	3/17/15	12

Table 1. Summary	of Individuals Detected	per Survey Round
------------------	-------------------------	------------------

After reviewing the location of all detections during all the surveys throughout the BSA, the total number of individual coastal California gnatcatcher within the BSA is estimated to be between approximately 12 and 13 individuals.

Coastal California gnatcatcher detections during these surveys ranged from nesting adults pairs to solitary adult male and female individuals. Appendix C provides a more detailed breakdown of each detection, including the number of individuals, GPS coordinates, and brief notes about the detection.

The majority of coastal California gnatcatcher detections were within Diegan coastal sage scrub. During the breeding season, it is typical for coastal California gnatcatcher to remain in territories within higher quality habitats. During the fall, it is common for coastal California

gnatcatcher to be detected in a variety of habitats not typically considered suitable during the breeding season because adult nonbreeding season home range size compared to breeding season home range size increases by approximately 80 percent (Preston et al. 1998, Bontrager 1991), juveniles are dispersing through submarginal habitats, and adjacent habitats provide diverse foraging opportunities for individuals.

In addition to the coastal California gnatcatcher, 38 other wildlife species were detected during the focused coastal California gnatcatcher surveys. Appendix D provides a complete list of all wildlife species detected during the focused coastal California gnatcatcher surveys.

# SUMMARY

Based on the results of these spring 2015 surveys, approximately 12 to 13 individual coastal California gnatcatchers are estimated within and adjacent to the Encina Hub. Coastal California gnatcatchers were detected primarily in Diegan coastal sage scrub and disturbed Diegan coastal sage scrub.

Please do not hesitate to contact Melissa Busby at <u>melissa@busbybiological.com</u> or 858.334.9507 or Darin Busby at <u>darin@busbybiological.com</u> or 858.334.9508 if you have any questions.

Sincerely,

heliod Sus by

Melissa Busby Owner/Principal Biologist Busby Biological Services, Inc.

cc: Paul Morrissey, Chambers Joshua Taylor, TRC Elisha Back, TRC Robert Fletcher, SDG&E

Darin Busby Owner/Principal Biologist Busby Biological Services, Inc.

#### REFERENCES

Atwood, J.

- 1990 Status review of the California gnatcatcher (*Polioptila californica*). Manomet Bird Observatory, Manomet, Massachusetts.
- Atwood, J. L. and J. S. Bolsinger
  - 1991 Elevational distribution of California gnatcatchers in the United States. Journal of Field Ornithology 63(2):159-168.
- Barbour, M. G., and J. Major eds.
  - 1977 Terrestrial vegetation of California. John Wiley and Sons, New York.
- Bontrager, D. R.
  - 1991 Habitat requirements, home range and breeding biology of the California gnatcatcher (*Polioptila californica*) in South Orange County, California. Prepared for Santa Margarita Company, Rancho Santa Margarita, California.
- Braden, G. T., R. L. McKernan, and S. M. Powell.
  - 1997 Association of within-territory vegetation characteristics and fitness components of California Gnatcatchers. The Auk 114:601-609.
- California Department of Fish and Wildlife (CDFW)
  - 2013 Natural Diversity Data Base. Nongame-Heritage Program, California Department of Fish and Wildlife, Sacramento.
- Campbell, K. F., R. A. Erickson, W. E. Haas, and M. A. Patten
  - 1998 California Gnatcatcher use of habitats other than coastal sage scrub: conservation and management implications. Western Birds 29: 421-433.
- Grishaver, M. A., P. J. Mock, and K. L. Preston
  - 1998 Breeding behavior of the California Gnatcatcher in southwestern San Diego County, California. Western Birds 29: 299-322.
- Kirkpatrick, J. B. and C. F. Hutchinson
  - 1977 The Community Composition of Californian Coastal Sage Scrub. Vegetation vol. 35, 1:21 33.
- Mock, P. J., B. L. Jones, and J. Konecny
  - 1990 California Gnatcatcher Survey Guidelines. Unpublished Report Prepared by Environmental and Energy Services Company, San Diego, California.
- O'Leary, J. F.
  - 1990 Californian coastal sage scrub: general characteristics and considerations for biological conservation. Pages 24-41 in Schoenherr, A. A, (ed.), Endangered plant communities of southern California. Southern California Botanists Special Publication No. 3.
- Preston, K. L., P. J. Mock, M. A. Grishaver, E. A. Bailey, and D. F. King 1998 California gnatcatcher territorial behavior. Western Birds 29(4):242-257.

United States Fish and Wildlife Service

- 1997 Coastal California Gnatcatcher (*Polioptila californica californica*) Presence/Absence Survey Guidelines – February 28, 1997.
- 2007 Critical Habitat for the Coastal California Gnatcatcher (Polioptila californica californica), Final Rule. Department of the Interior. Federal Register: December 19, 2007 (Volume 72, Number 243), 50 CFR Part 17.
- 2010 Coastal California gnatcatcher (*Polioptila californica californica*) 5-year Review: Summary and Evaluation. Carlsbad Fish and Wildlife Office, Carlsbad, California. 51 pp.

Weaver, K. L.

1998 A new site of sympatry of the California and Black-tailed Gnatcatchers in the United States. Western Birds 29(4):476-479.

Westman, W.

- 1981a Diversity relations and succession in California coastal sage scrub. Ecology 62:170-184.
- 1981b Factors influencing the distribution of species of California coastal sage scrub. Ecology 62:439-455



# PROJECT BIOLOGIST SIGNATURE PAGE

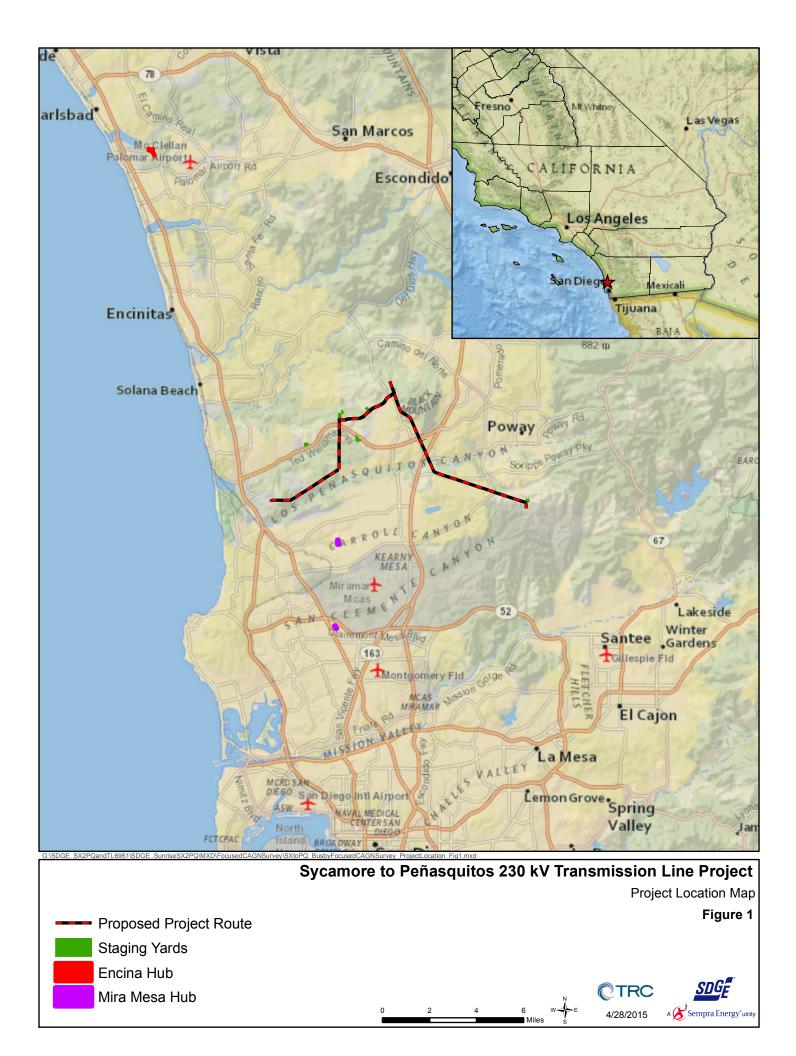
All biologists performing focused, protocol-level, coastal California gnatcatcher (*Polioptila californica californica*) surveys for the Encina Hub portion of the proposed Sycamore to Peñasquitos Substation 230 kilovolt transmission line project (Proposed Project) were permitted to survey for this species under Section 10(a)(1)(A) of the Endangered Species Act (ESA). The undersigned project biologists certify this report to be a complete and accurate account of the findings and conclusions of surveys for coastal California gnatcatcher conducted for the Proposed Project during spring 2015.

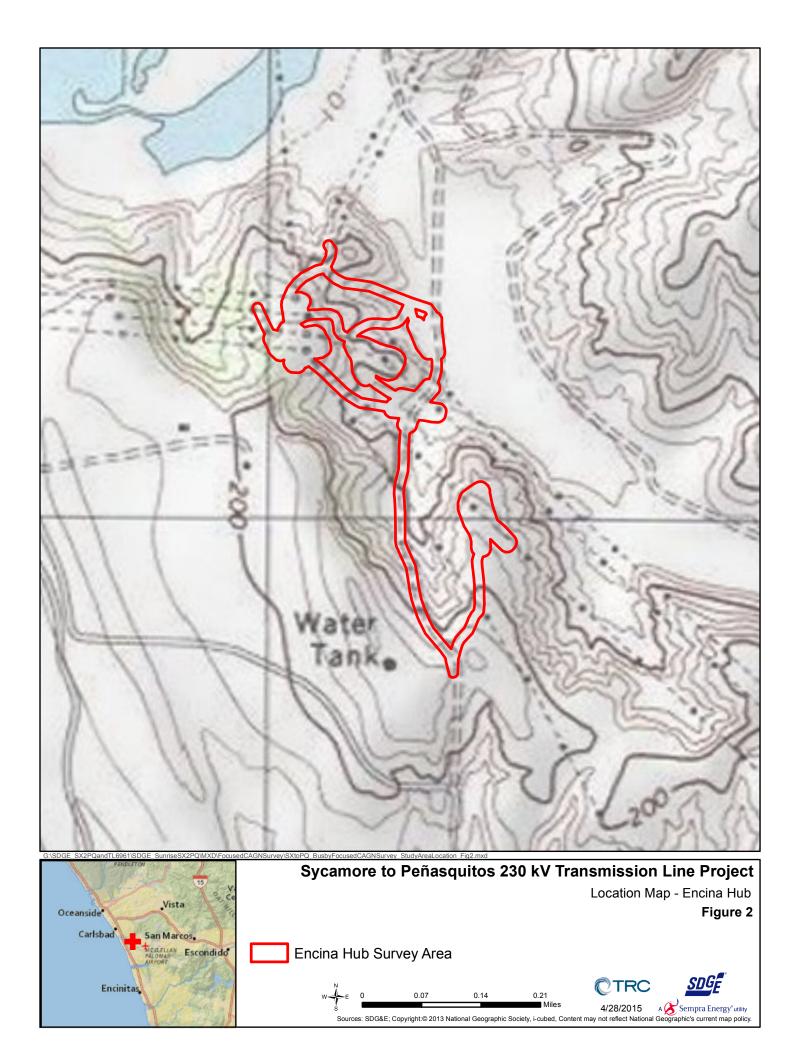
Charles Vettes Biologist Busby Biological Services, Inc. ESA Permit Number TE-233367-1

anniellon

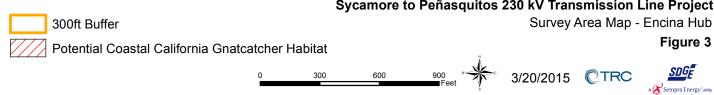
Laurie Gorman Senior Biologist/Project Manager Busby Biological Services, Inc. ESA Permit Number TE-233367-1

**APPENDIX A – Figures** 

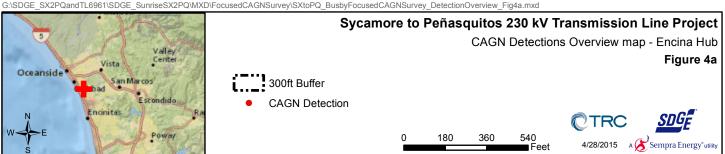




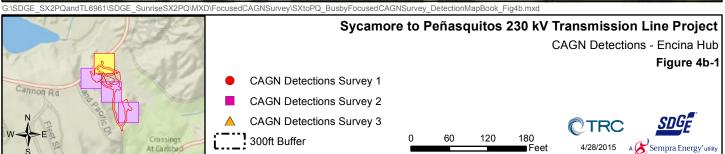


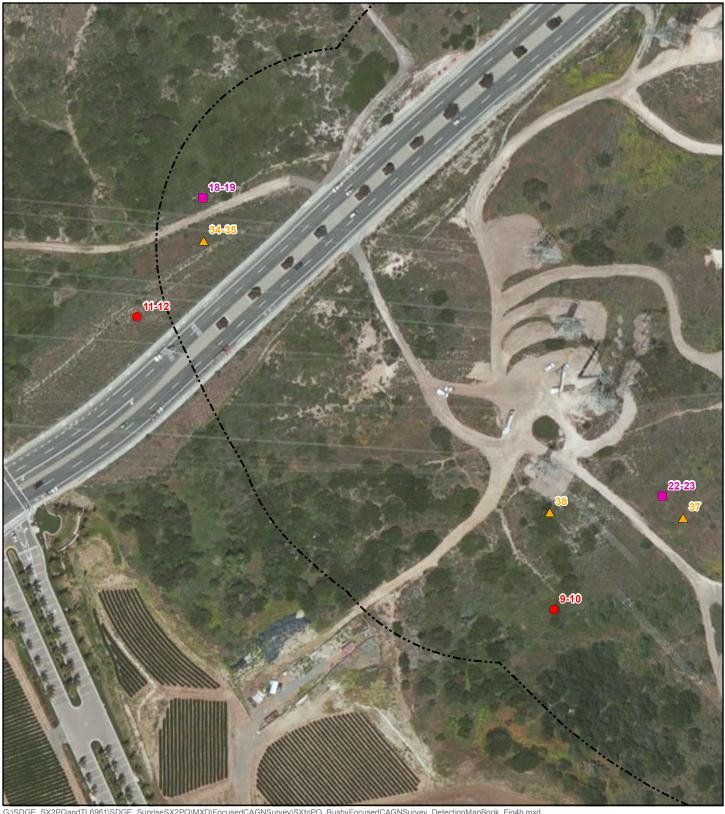


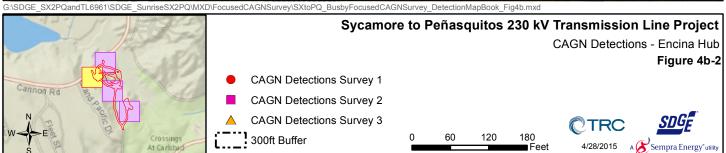




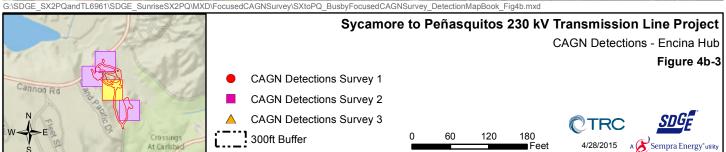












**APPENDIX B – Survey Conditions** 

				Weather				
Survey				Temp	Wind	Clouds		
#	Date	Ti	me	(°F)	(mph)	(%)	Precip	Surveyors
1	2/24/15	Start	600	52	0-2	0	0	Charles
I	2/24/13	End	1200	67	2-6	5	0	Vettes
2	3/7/15	Start	615	47	0-1	0	0	Laurie
2	3/7/10	End	1230	69	0-3	65	0	Gorman
3 3/17/15	2/17/15	Start	645	60	0-1	70	0	Laurie
3	3/17/15	End	1200	75	2-5	50	0	Gorman

# Appendix B – Survey Conditions

**APPENDIX C – Survey Results** 

# Appendix C – Survey Results

CAGN	Survey	Date	GPS Location		Notes	
# On Map			Northing	Easting		
1	1	2/24/15	33.13229	-117.30717	Single CAGN responds to playback. Not seen.	
2-3	1	2/24/15	33.13201	-117.30541	Pair of CAGN foraging closely together and counter calling. Male in breeding plumage.	
4	1	2/24/15	33.13079	-117.30695	Male CAGN in breeding plumage singing from multiple high perches (territorial/mate seeking).	
5	1	2/24/15	33.13311	-117.30905	Male CAGN in breeding plumage singing from multiple high perches (territorial/mate seeking).	
6	1	2/24/15	33.13655	-117.30905	Singing territorial male CAGN in breeding plumage.	
7-8	1	2/24/15	33.13395	-117.30769	Two male CAGN in breeding plumage having a territorial dispute. Male giving off alarm call.	
9-10	1	2/24/15	33.13436	-117.31010	Pair of CAGN foraging together and counter calling.	
11-12	1	2/24/15	33.13560	-117.31224	Pair of CAGN making agitated calls. Territorial. Male giving off alarm call.	
13	1	2/24/15	33.13721	-117.31034	Territorial male CAGN singing and foraging.	
14-15	2	3/7/15	33.13104	-117.30682	Pair of CAGN popped up from same location, both calling and scolding. Male observed with nesting material and then saw nest approx 70% complete in California sagebrush.	
16-17	2	3/7/15	33.13223	-117.30686	Pair of CAGN. Female CAGN observed flying and calling. Then male CAGN observed popping up from habitat without vocalizing. CAGN nest observed almost complete in Russian thistle.	
18-19	2	3/7/15	33.13611	-117.31191	Pair of CAGN. Male CAGN observed scolding, female CAGN countercalling.	
20	2	3/7/15	33.13720	-117.31045	Territorial male CAGN calling in response to playback tape.	
21	2	3/7/15	33.13691	-117.30858	CAGN individual scolding in response to playback tape.	
22-23	2	3/7/15	33.13485	-117.30955	Pair of CAGN. One male CAGN scolding. Then female CAGN appeared and I noticed male is carrying nesting material. Pair flew north along slope side while male still holding nesting material and scolding.	
24	2	3/7/15	33.13401	-117.30747	Territorial male CAGN calling harshly in response to playback tape. Foraging.	
25	2	3/7/15	33.13148	-117.30510	Territorial male CAGN observed scolding and foraging. Just outside of project boundary.	
26	2	3/7/15	33.13147	-117.30580	Male CAGN calling. Scolded at male LGCAGNI16.	

# Appendix C – Survey Results (Con't)

CAGN	Survey	Date	GPS Location		Notes
# On Map			Northing	Easting	
27-28	3	3/17/15	33.13196	-117.30700	Pair of CAGN responded to playback tape with approach, male calling and then scolding.
29-30	3	3/17/15	33.13106	-117.30685	Pair of CAGN. Male scolding at Bushtits and fighting them away from near nest found last survey in Russian thistle.
31	3	3/17/15	33.13146	-117.30575	Male CAGN calling and foraging. No female CAGN observed after approx. 15 mins of observation.
32-33	3	3/17/15	33.13400	-117.30767	Pair of CAGN. Male scolding, female CAGN following closely behind.
34-35	3	3/17/15	33.13593	-117.31190	Territorial male CAGN calling, and second CAGN heard countercalling along drainage approx. 200 feet north.
36	3	3/17/15	33.13714	-117.31044	Territorial male CAGN calling and foraging, acting aggressive and bold.
37	3	3/17/15	33.13476	-117.30944	Territorial male CAGN calling. No female detected.
38	3	3/17/15	33.13477	-117.31012	Male CAGN heard calling in response to playback tape, then approached.

**APPENDIX D – Wildlife Species Detected** 

# Appendix D - Wildlife Species Detected

INVERTEBRATES				
Class: Insecta		Incosto		
		Insects Butterflies		
Order: Lepidopter				
	Vanessa cardui	Painted Lady		
VERTEBRATES				
Class: Aves		Birds		
Order Galliformes	5	Gallinaceous Birds		
Family Odontophe	pridae	New World Quail		
	Callipepla californica	California Quail		
Order Ciconiiform	Ies	Herons, Ibises, Storks, American Vultures, and Allies		
Family Accipitrida	20	Hawks, Kites, Eagles, and Allies		
	Buteo jamaicensis	Red-tailed Hawk		
Order Columbifor		Pigeons and Doves		
Family Columbida		Pigeons and Doves		
	Zenaida macroura	Mourning Dove		
Family Cuculidae	Zenalda maeroara	Cuckoos and Roadrunners		
	Geococcyx californianus	Greater Roadrunner		
Order Apodiforme		Swifts and Hummingbirds		
Family Trochilidae		Hummingbirds		
	Calypte anna	Anna's Hummingbird		
	Selasphorus sasin	Allen's Hummingbird		
Order Piciformes		Woodpeckers and Allies		
Family Picidae		Woodpeckers		
	Picoides nuttallii	Nuttall's Woodpecker		
	Colaptes auratus	Northern Flicker		
Order Passeriforn		Perching Birds		
Family Tyrannidae		Tyrant Flycatchers		
	Sayornis nigricans	Black Phoebe		
	Sayornis saya	Say's Phoebe		
	Tyrannus vociferans	Cassin's Kingbird		
Family Corvidae		Crows and Jays		
	Aphelocoma californica	Western Scrub-Jay		
	Corvus brachyrhynchos	American Crow		
	Corvus corax	Common Raven		
Family Aegithalida		Bushtits		
	Psaltriparus minimus	Bushtit		
Family Troglodyti		Wrens		
	Thryomanes bewickii	Bewick's Wren		
		House Wren		

Family Sylviidae		Gnatcatchers
	Polioptila caerulea	Blue-gray Gnatcatcher
		<b>U</b>
	Polioptila californica	Coastal California Gnatcatcher
Family Turdidae		Thrushes
	Catharus guttatus	Hermit Thrush
Family Timaliidae		Babblers
	Chamaea fasciata	Wrentit
Family Mimidae		Mockingbirds and Thrashers
	Mimus polyglottos	Northern Mockingbird
	Toxostoma redivivum	California Thrasher
Family Sturnidae		Starlings
	Sturnus vulgaris	European Starling
Family Parulidae		Wood-Warblers
	Vermivora celata	Orange-crowned Warbler
	Dendroica coronata	Yellow-rumped Warbler
	Geothlypis trichas	Common Yellowthroat
Family Emberizid	ae	Embrezids
	Pipilo maculatus	Spotted Towhee
	Pipilo crissalis	California Towhee
	Aimophila ruficeps	Rufous-crowned Sparrow
	Melospiza melodia	Song Sparrow
	Zonotrichia leucophrys	White-crowned Sparrow
Family Fringillida	9	Fringilline and Cardueline Finches and Allies
	Carpodacus mexicanus	House Finch
	Carduelis psaltria	Lesser Goldfinch
Class: Mammalia		
		Mammals
Order Rodentia		Rodents
Family Sciuridae		Squirrels and Chipmunks
	Spermophilus beecheyi	California Ground Squirrel
Order Carnivora		Carnivores
Family Canidae		Dogs and foxes
	Canis familiaris	Domestic Dog
	Canis latrans	Coyote

# Appendix D - Wildlife Species Detected (Con't)