

September 28, 2015

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

RE: 2015 SOUTHWESTERN WILLOW FLYCATCHER SURVEY SUMMARY REPORT FOR THE ENCINA 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 2015 focused, protocol-level, presence/absence surveys for the federally and state-listed endangered southwestern willow flycatcher (*Empidonax traillii extimus*) 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 the San Diego Gas & Electric Company (SDG&E) to evaluate the potential impacts of the Encina Hub portion of the Proposed Project in the City of Carlsbad, San Diego County, California (Appendix A: Figures 1 and 2).

BACKGROUND INFORMATION

A brief summary of the Proposed Project and southwestern willow flycatcher are provided in this section.

Proposed Project Location and Description

The Encina Hub portion of the Proposed Project is in the southern portion of the U.S. Geological Survey (USGS) 7.5-minute San Luis Rey topographic quadrangle (USGS 1968) in the City of Carlsbad, San Diego County, California (Appendix A: Figures 1 and 2). The Encina Hub contains gently sloping to moderately sloping topography, with elevations ranging from approximately 240 feet above mean sea level (amsl) to 40 feet amsl. Land use within the Encina Hub consists primarily of undeveloped land and natural preserve lands. Adjacent land use includes a municipal golf course, hotels, agriculture, and additional undeveloped land and preserve lands. The Encina Hub is dominated by the following vegetation communities: Diegan coastal sage scrub, disturbed Diegan coastal sage scrub, disturbed habitat, and bare ground. Other vegetation communities present in smaller proportions include southern riparian scrub, southern willow scrub, mulefat scrub, nonnative grassland, native grassland, ornamental, and developed lands. An unnamed ephemeral drainage in the southwestern portion of Encina Hub runs north to connect with a

riparian corridor in an unnamed canyon drainage within the northeastern portion of Encina Hub.

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. 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 portion of the Proposed Project:

- 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 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 southwestern willow flycatcher surveys were conducted for the Proposed Project within all suitable habitats within and adjacent to the current Proposed Project alignment. Because the Encina Hub portion of the Proposed Project is located in a geographically distinct location and is not within the immediate vicinity of the main alignment portion of the Proposed Project (Appendix A: Figure 1), two separate southwestern willow flycatcher survey summary reports were prepared for the spring 2015 surveys, one for the southwestern willow flycatcher surveys conducted at Encina Hub and one for the southwestern willow flycatcher surveys conducted along the main alignment. This report focuses on the results of the focused southwestern willow flycatcher surveys conducted at the Encina Hub portion of the Proposed Project.

Southwestern Willow Flycatcher Species Information

The southwestern willow flycatcher is a small, olive-colored, migratory songbird that is federally and state-listed as endangered. One of four subspecies of willow flycatcher it is distinguished by breeding distribution, song, call and plumage. The southwestern willow flycatcher is a neotropical migrant that is endemic to the Americas and is a summer breeding resident in the southwestern U.S., specifically within Arizona, New Mexico, southern California, southern portions of Nevada and Utah, southwestern Colorado, far western Texas, and extreme northwestern Mexico [U.S. Fish and Wildlife Service (USFWS) 2002]. It is the only race of willow flycatcher that is known to breed in southern California, ranging from Kern County to San Diego County. This species arrives on breeding territories by late April to early May and migrates southward again to wintering areas in southern Mexico, Central America, and northern South America in August and September. The two other subspecies of willow flycatcher (e.g., *E. t. brewsteri* and *E. t. adastus*) migrate through

southern California in the spring and fall to and from their breeding grounds in northern California.

The southwestern willow flycatcher typically breeds in patchy to dense, well-developed riparian woodlands along streams, rivers, lakes, or other wetlands, less than 8,000 feet in elevation, that provide surface water and/or saturated soil during mid-summer (Sedgwick 2000; Sogge et al. 1997; USFWS 2002). Typical breeding habitat for southwestern willow flycatcher is composed of native riparian species such as willows (*Salix* spp.) and mulefat (*Baccharis salicifolia*) in patches at least two acres or greater in extent, with linear-shaped habitats at least 10 meters (33 feet) wide (Sogge et al. 1997); however, the species has also been observed successfully breeding in riparian communities dominated by extensive patches of non-native species such as tamarisk (*Tamarix ramosissima*) and Russian olive (*Eleagnus angustifolia*) (USFWS 2002).

Once a common species in southern California, in the early 20th century the southwestern willow flycatcher population collapsed from the combined effects of habitat loss and nest parasitism by brown-headed cowbird (*Molothrus ater*) (Craig and Williams 1998; Garret and Dunn 1981; Sedgwick 2000; Unitt 2004; USFWS 2002). Currently, in southern California it breeds locally at 75 known sites within 18 drainages from San Diego to Santa Barbara and Kern counties and the Owens Valley, most notably within the San Luis Rey, Santa Ana, Santa Ynez, Owens, and Kern rivers which support approximately 70 percent of known territories (Sogge et al. 2003). Currently, of the estimated 200 breeding pairs in southern California nearly half of them occur in San Diego County, primarily along the upper San Luis Rey River (Unitt 2004).

METHODS

A habitat assessment and focused, protocol-level, southwestern willow flycatcher surveys were performed within suitable habitat located within the Encina Hub portion of the Proposed Project and within a 500-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 southwestern willow flycatcher surveys at the Encina Hub, a USFWS-permitted biologist conducted a focused habitat assessment to identify locations of suitable habitat for the species both within and adjacent to the Encina Hub.

Initially, historical occurrence data for southwestern willow flycatcher that have been reported from within 5 miles of the Encina Hub were evaluated prior to conducting the habitat assessment field survey for southwestern willow flycatcher. A Geographic Information Systems (GIS) specialist generated a map from the most recent version of the CDFW *California Natural Diversity Database* (CNDDB; CDFW 2014) and other databases identifying reported southwestern willow flycatcher detections within a 5-mile buffer of the Encina Hub to allow the USFWS-permitted biologist to view the historic distribution of southwestern willow flycatcher within the vicinity of the Encina Hub.

Next, a USFWS-permitted biologist conducted a field habitat assessment within the Encina Hub and 500-foot buffer to identify potential southwestern willow flycatcher 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 southwestern willow flycatcher habitat was either added or eliminated from the survey area through closer investigation on foot during this first of five focused, protocol-level southwestern willow flycatcher surveys.

Focused Southwestern Willow Flycatcher Survey Methods

A USFWS-permitted biologist from BBS conducted protocol-level surveys for the southwestern willow flycatcher in accordance with the current USFWS survey protocol, titled *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher* (2010). The survey protocol entails intensive surveys of suitable habitat as well as detailed datasheets documenting detections, habitat, and other information about the southwestern willow flycatcher.

Five surveys were conducted during the three survey periods, including one survey conducted during the first period (May 15 to June 1), two surveys conducted during the second period (June 1 to June 24), and two surveys conducted during the third period (June 24 to July 17). All surveys were conducted between approximately 5:30am and 10:30am and avoided periods of adverse weather conditions (e.g., excessively hot or cold temperatures, high winds, steady rain, dense fog, and other inclement weather conditions) that would impede detection of the southwestern willow flycatcher.

Surveyors slowly walked throughout the suitable habitat within the survey area and used visual and auditory cues to detect the southwestern willow flycatcher. Various routes were utilized to conduct an unbiased survey of the potentially suitable habitat within the survey area. Pre-recorded southwestern willow flycatcher vocalization playbacks were used only to elicit initial calls from the southwestern willow flycatcher and were not used frequently or to elicit further behaviors. Pre-recorded vocalizations were played for a period of 10 to 15 seconds and were generally repeated approximately every 70 to 100 feet within the surveyed habitat. No more than approximately 0.6 mile of suitable habitat was surveyed per day by the USFWS-permitted biologist.

The Willow Flycatcher Survey and Detection Form was completed during each survey. For each willow flycatcher detection, surveyors recorded the approximate location electronically using a hand-held Global Positioning Systems (GPS) device and by hand onto a high-resolution aerial image of the survey area. 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. Surveyors specifically recorded numbers and locations of parasitic brown-headed cowbirds and sensitive species within and adjacent to the survey area.

RESULTS

The results of the habitat assessment and focused, protocol-level southwestern willow flycatcher surveys are presented in this section.

Habitat Assessment Results

A USFWS-permitted BBS biologist, Laurie Gorman, conducted a field habitat assessment for southwestern willow flycatcher within and adjacent to the Encina Hub during fall 2014. The initial assessment of potentially suitable southwestern willow flycatcher habitat within the Encina Hub and a 500-foot buffer was further refined by Ms. Gorman through closer investigation on foot during the first focused, protocol-level southwestern willow flycatcher survey. A total of approximately 12.52 acres of potentially suitable southwestern willow flycatcher habitat was surveyed within the 500-foot buffer adjacent to the Encina Hub (Appendix A: Figure 3).

Potentially suitable habitat for the southwestern willow flycatcher that required surveys was present along an unnamed ephemeral drainage located in the 500-foot survey buffer north of the Proposed Project site. As part of the Agua Hedionda Watershed, this ephemeral drainage is tributary to Agua Hedionda Creek and is approximately 0.3 mile upstream of Agua Hedionda Lagoon. The potentially suitable habitat for southwestern willow flycatcher consisted of southern riparian scrub and southern willow scrub, with mulefat scrub intermixed. Within the survey area, the vegetation communities listed above have a closed canopy dominated by willows (*Salix* spp.) and/or mulefat (*Baccharis salicifolia*) ranging in height from approximately 5 to 15 feet and a dense shrub and herbaceous understory dominated by California bulrush (*Schoenoplectus californicus*), broadleaf cattail (*Typha latifolia*), and/or coyote brush (*Baccharis pilularis*).

Vegetation communities excluded from the focused, protocol-level southwestern willow flycatcher surveys because they were determined through field reconnaissance not to contain suitable habitat for the species include various upland vegetation communities, such as coastal sage scrub, chaparral, grassland, bare ground, developed lands, ornamental vegetation, and disturbed habitat.

Focused Southwestern Willow Flycatcher Survey Results

A total of five protocol-level southwestern willow flycatcher surveys were conducted within approximately 12.52 acres of potentially suitable habitat between May 19 and July 9, 2015 (Appendix A: Figure 3). Each survey took one 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 BBS biologist Laurie Gorman (TE-233367-2). Appendix B provides a summary of survey conditions, including survey times, weather conditions, and name of surveyor. Appendix C contains photographs of the southwestern willow flycatcher survey area.

A total of two willow flycatchers were detected during the focused surveys. Both of these individuals were detected during the second focused survey on June 3, 2015, approximately 0.25 mile apart from each other (see Table 1, below; Appendix A: Figures 4 and 5). These individuals were observed foraging and heard making “whit” and “fitz-bew” vocalizations in response to the pre-recorded vocalization playbacks. No willow flycatchers

were detected during the subsequent three surveys. Therefore, the two willow flycatchers detected were determined to be migrating individuals, likely of the little willow flycatcher subspecies (*Empidonax traillii brewsteri*), which have a peak migration in San Diego County during early June (Unitt 2004). The breeding range of the little willow flycatcher is found further north than the southwestern willow flycatcher, extending from Tulare County, California into Vancouver Island, Canada (Craig et al. 1998, Sogge et al. 2010). No breeding southwestern willow flycatchers were detected during the surveys. Appendix D contains the Willow Flycatcher Survey and Detection Form that was completed during each survey and that contains details on the two willow flycatcher detections.

Table 1. Summary of Willow Flycatcher Detections

| WIFL* Detection # | Survey # | Survey Date | GPS Location (NAD 83, Zone 11S) | | Notes |
|----------------------|-------------|----------------|------------------------------------|------------|---|
| | | | Northing | Easting | |
| 1 | 2 | 6/03/15 | 33.13280 | -117.30374 | One willow flycatcher observed foraging. Heard making "whit" and "fitz-bew" vocalizations in response to playback tape. Otherwise only made an occasional shy "whit." |
| 2 | 2 | 6/03/15 | 33.13531 | -117.30695 | One willow flycatcher observed foraging. Heard making "whit" and "fitz-bew" vocalizations in response to playback tape. Otherwise only made an occasional shy "whit." |

*WIFL: willow flycatcher

In addition to the willow flycatcher, 54 other wildlife species were detected during the focused southwestern willow flycatcher surveys or incidentally during access to and from the survey area (Appendix E). Of these 54 species, the coastal California gnatcatcher (*Poliioptila californica californica*) is listed as federally threatened by the USFWS and as a Species of Special Concern by the CDFW, and the yellow-breasted chat (*Icteria virens*), yellow warbler (*Dendroica petechia*), and the Clark's marsh wren (*Cistothorus palustris clarkae*) are considered Species of Special Concern by the CDFW. Appendix F provides GPS locations of sensitive species detected during the focused surveys. In addition, one male brown-headed cowbird was detected calling east of the survey area during the first focused survey on May 19, 2015, at GPS location (NAD83) 33.133565 degrees North, -117.304547 degrees West.

Detection locations of sensitive species and brown-headed cowbirds are depicted on an aerial map of the survey area in Figure 4 of Appendix A. Figure 5 of Appendix A displays the locations of willow flycatcher detections on a USGS quadrangle map. It should be noted that the list of sensitive species presented in Appendix F and locations of sensitive species presented in Figures 4 and 5 of Appendix A were either detected during the focused southwestern willow flycatcher surveys or incidentally during access to and from the survey area and may reflect repeated detections of the same individuals of a species from one survey to the next. Therefore, these Appendices are intended to show the type and general location of sensitive species detected, not quantity of individuals present.

SUMMARY

No southwestern willow flycatcher were detected during the 2015 focused, protocol-level southwestern willow flycatcher surveys conducted at the Encina Hub.

Please do not hesitate to contact Melissa Busby at melissa@busbybiological.com or 858.334.9507 or me at darin@busbybiological.com or 858.334.9508 if you have any questions.

Sincerely,



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

APPENDICES

- Appendix A: Figures
- Appendix B: Survey Conditions
- Appendix C: Photographs
- Appendix D: Willow Flycatcher Survey and Detection Form
- Appendix E: Wildlife Species Detected
- Appendix F: Incidental Sensitive Species Detected

REFERENCES

- Barbour, M. G., and J. Major eds.
1977 Terrestrial vegetation of California. John Wiley and Sons, New York.
- California Department of Fish and Wildlife (CDFW)
2013 Natural Diversity Data Base. Nongame-Heritage Program, California Department of Fish and Wildlife, Sacramento.
- Craig, D. and P. L. Williams
1998 Willow Flycatcher (*Empidonax traillii*). In The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California. California Partners in Flight.
http://www.prbo.org/calpif/htmldocs/riparian_v-2.html.
- Garrett, K. and J. Dunn
1981 Birds of southern California: status and distribution. Los Angeles Audubon Soc., Los Angeles.
- Holland, R.F.
1986 *Preliminary Descriptions of the Terrestrial Natural Communities of California*. State of California, The Resources Agency, Department of Fish and Game, Natural Heritage Division, Sacramento, California.
- Patten, M. A., McCaskie, G., Unitt, P.
2003 Birds of the Salton Sea. Univ. of California Press, Los Angeles.
- Rosenberg, K. V., R. D. Ohmart, W. C. Hunter and B. W. Anderson
1991 Birds of the lower Colorado River valley. Univ. of Arizona Press, Tucson.
- Sogge, M.K., R.M. Marshall, S.J. Sferra, and T.J. Tibbitts
1997 A Southwestern Willow Flycatcher Natural History Summary and Survey Protocol. Technical Report NPS/NAUCPRS/NRTR-97/12. USGS Colorado Plateau Research Station, Northern Arizona University, Flagstaff, Arizona.
- Sogge, M. K., Sferra, S. J., McCarthy, T. D., Williams, S. O., and Kus, B. E.
2003 Distribution and characteristics of Southwestern Willow Flycatcher breeding sites and territories: 1993-2001. Studies in Avian Biology No. 26:5-11. Colorado River valley. Univ. of Arizona Press, Tucson.
- Sogge, M.K., Ahlers, Darrell, and Sferra, S.J.,
2010 *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher*. U.S. Geological Survey Techniques and Methods. 2A-10, 38 p.
- Sedgwick, James A.
2000 Willow Flycatcher (*Empidonax traillii*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/533>.

U.S. Fish and Wildlife Service (USFWS)

2002 Final Recovery Plan Southwestern Willow Flycatcher (*Empidonax traillii extimus*). Prepared By Southwestern Willow Flycatcher Recovery Team Technical Subgroup. August 2002.

U.S. Geological Survey (USGS)

1968 7.5-minute San Luis Rey Topographic Quadrangle (Photorevised 1975)

Unitt, Philip

2004 San Diego County Bird Atlas. San Diego Natural History Museum. San Diego, CA.

PROJECT BIOLOGIST SIGNATURE PAGE

All biologists performing focused, protocol-level, southwestern willow flycatcher (*Empidonax traillii extimus*) 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 Proposed Project biologist certifies this report to be a complete and accurate account of the findings and conclusions of surveys for southwestern willow flycatcher conducted for the Proposed Project during spring 2015.



Laurie Gorman
Senior Biologist/Project Manager
Busby Biological Services, Inc.
ESA Permit Number TE-233367-2

APPENDIX A – Figures







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Sycamore to Peñasquitos 230 kV Transmission Line Project

Project Location Map

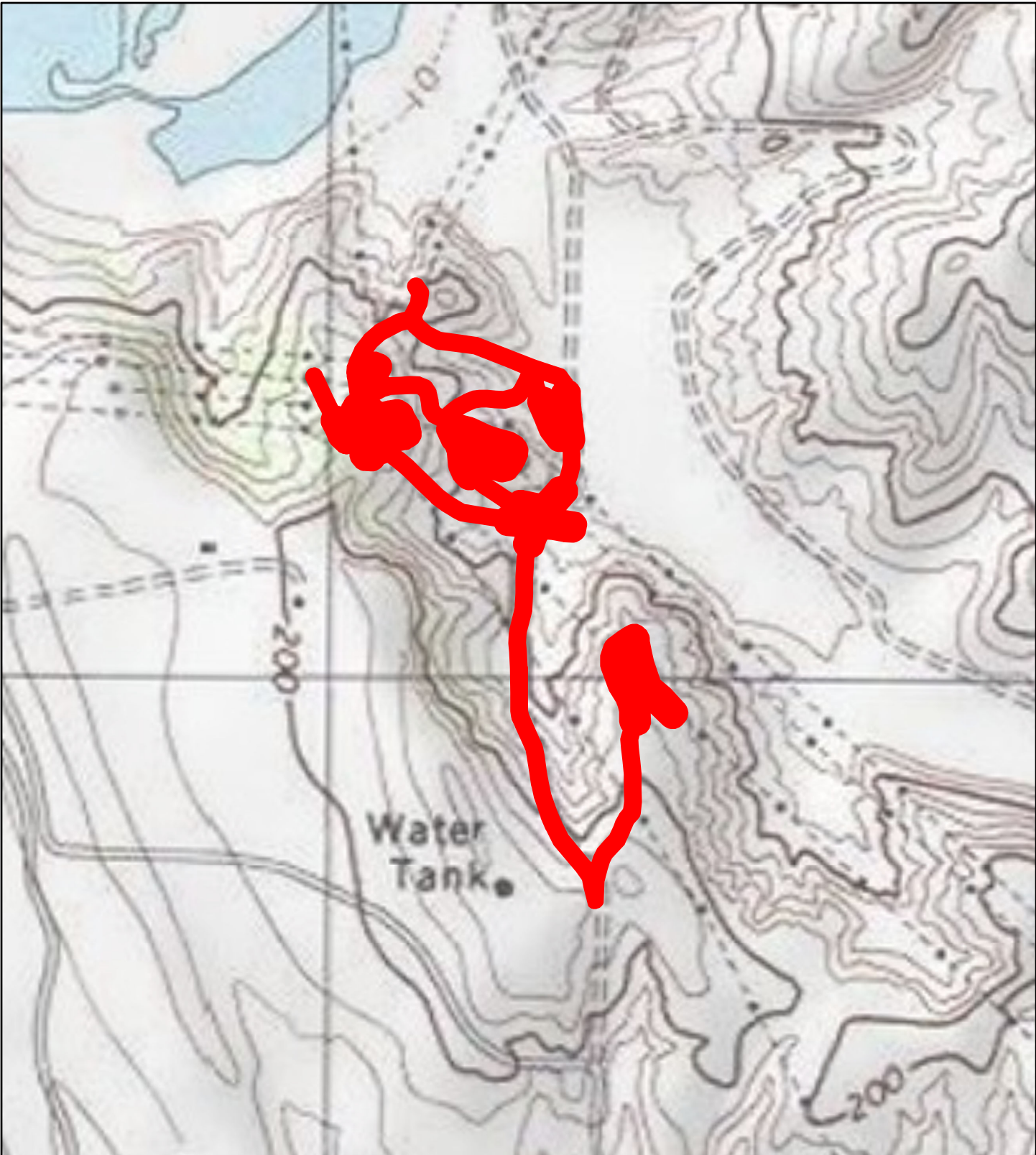
Figure 1

-  Proposed Project Route
-  Staging Yards
-  Encina Hub
-  Mira Mesa Hub



7/2/2015






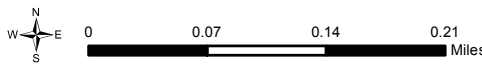
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Sycamore to Peñasquitos 230 kV Transmission Line Project

Encina Hub Project Area

Figure 2

 Encina Hub Project Area



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A Sempra Energy utility

Sources: SDG&E; Copyright: © 2013 National Geographic Society, i-cubed. Content may not reflect National Geographic's current map policy.





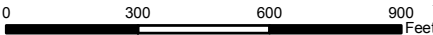
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Sycamore to Peñasquitos 230 kV Transmission Line Project

Survey Area Map - Encina Hub

Figure 3

-  Potential Southwestern Willow Flycatcher Habitat
-  Encina Hub 500ft Buffer



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Species Detections

Brood Parasite

- Brown-headed Cowbird

Sensitive Species

- Clark's Marsh Wren
- Coastal California Gnatcatcher
- Willow Flycatcher
- Yellow Warbler

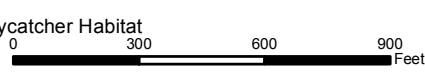
- Yellow-breasted Chat

- ▨ Potential Southwestern Willow Flycatcher Habitat
- ▭ Encina Hub 500ft Buffer

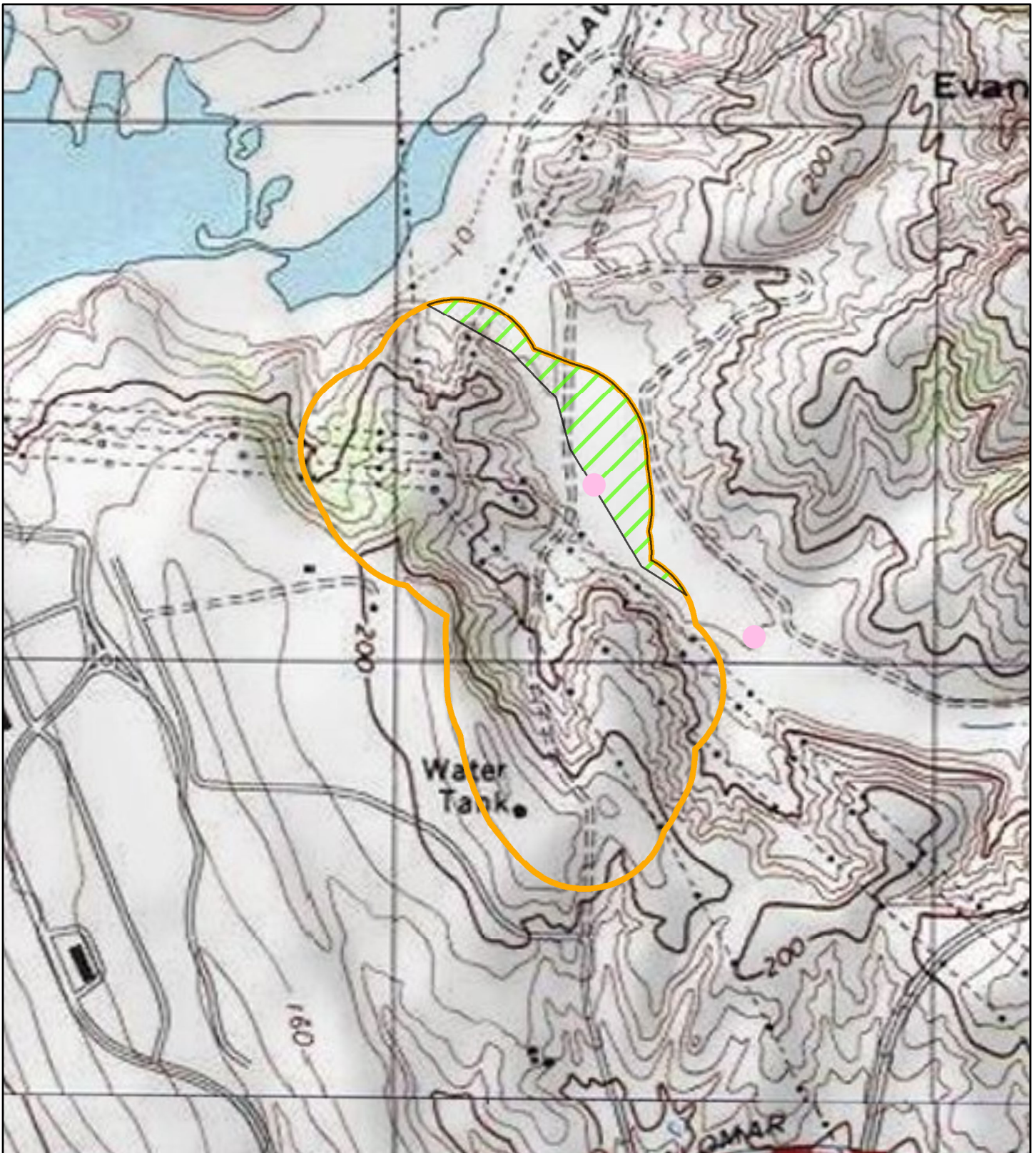
Sycamore to Peñasquitos 230 kV Transmission Line Project

Species Detection Map - Encina Hub

Figure 4



7/13/2015 Semptra Energy Utility



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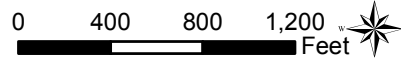
Sycamore to Peñasquitos 230 kV Transmission Line Project

Willow Flycatcher Detections Quad Map - Encina Hub

Figure 5

Willow flycatcher Detections

- Willow Flycatcher Detection Site
- Potential Southwestern Willow Flycatcher Habitat
- Encina Hub 500ft Buffer






APPENDIX B – Survey Conditions

Appendix B – Survey Conditions

| Survey # | Date | Time | | Weather | | | | Surveyors |
|----------|---------|-------|------|--------------|---------------|---------------|--------|---------------|
| | | | | Temp (°F) | Wind (mph) | Clouds (%) | Precip | |
| 1 | 5/19/15 | Start | 0535 | 55 | 0-1 | 30 | 0 | Laurie Gorman |
| | | End | 1000 | 67 | 1-5 | 25 | 0 | |
| 2 | 6/3/15 | Start | 0600 | 63 | 0-1 | 100 | 0 | Laurie Gorman |
| | | End | 1045 | 70 | 2-6 | 50 | 0 | |
| 3 | 6/11/15 | Start | 0600 | 62 | 0-1 | 100 | 0 | Laurie Gorman |
| | | End | 1030 | 68 | 0-3 | 100 | 0 | |
| 4 | 6/27/15 | Start | 0645 | 67 | 0-1 | 100 | 0 | Laurie Gorman |
| | | End | 1040 | 74 | 1-5 | 70 | 0 | |
| 5 | 7/9/15 | Start | 0630 | 65 | 0-2 | 95 | 0 | Laurie Gorman |
| | | End | 1035 | 72 | 0-4 | 50 | 0 | |

APPENDIX C – Photographs

Appendix C – Photographs

| | |
|--|--|
| <p>Photograph 1: Overview of riparian habitat within the southwestern willow flycatcher survey area. As part of the Agua Hedionda Watershed, this unnamed ephemeral drainage is tributary to Agua Hedionda Creek and feeds into the Agua Hedionda Lagoon. Note dense habitat with varying canopy height. View facing southwest from under Cannon Road bridge on June 3, 2015.</p> |  |
| <p>Photograph 2: Southern riparian scrub habitat where the first of two migrating willow flycatchers was detected on June 3, 2015. View facing east on June 3, 2015.</p> |  |
| <p>Photograph 3: Southern willow scrub habitat where the second of two migrating willow flycatchers was detected on June 3, 2015. View facing southwest on June 3, 2015.</p> |  |

APPENDIX D – Willow Flycatcher Survey and Detection Form

Appendix 1. Willow Flycatcher Survey and Detection Form

Always check the U.S. Fish and Wildlife Service Arizona Ecological Services Field Office web site (<http://www.fws.gov/southwest/es/arizona/>) for the most up-to-date version.

Willow Flycatcher (WIFL) Survey and Detection Form (revised April 2010)

Site Name Encina Hub State CA County San Diego
 USGS Quad Name San Luis Rey Elevation 30 ft (9.1 meters) (meters)
 Creek, River, Wetland, or Lake Name Tributary to Agua Hedionda Creek
 Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes No

Survey Coordinates: Start: E 471541.77 N 3666126.12 UTM Datum NAD83 (See instructions)
 Stop: E 471057.39 N 3666663.02 UTM Zone 11S

If survey coordinates changed between visits, enter coordinates for each survey in comments section on back of this page.

**** Fill in additional site information on back of this page ****

| Survey # Observer(s) (Full Name) | Date (m/d/y) Survey time | Number of Adult WIFLs | Estimated Number of Pairs | Estimated Number of Territories | Nest(s) Found? Y or N If Yes, number of nests | Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator | GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary. | | | |
|---|--|-----------------------|---------------------------|---------------------------------|--|---|---|------------|---------------|----------------|
| | | | | | | | # Birds | Sex | UTM E | UTM N |
| Survey # 1 Observer(s) <u>Laurie Gorman</u> | Date <u>5/19/15</u> Start <u>0535</u> Stop <u>1000</u> Total hrs <u>4.5</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>N</u> | <u>one brown-headed cowbird detected E of survey area @ GPS NAD 83 11S 471593 mE 3666135 mN</u> | | | | |
| Survey # 2 Observer(s) <u>L. Gorman</u> | Date <u>6/3/15</u> Start <u>0600</u> Stop <u>1045</u> Total hrs <u>4.75</u> | <u>2</u> | <u>0</u> | <u>0</u> | <u>N</u> | <u>Both individuals vocalizing "whit" and "fite-bee" in response to tape but otherwise not vocal. Foraging and moving about habitat</u> | <u>1</u> | <u>unk</u> | <u>471668</u> | <u>3666050</u> |
| Survey # 3 Observer(s) <u>L. Gorman</u> | Date <u>6/11/15</u> Start <u>0600</u> Stop <u>1030</u> Total hrs <u>4.5</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>N</u> | <u>N/A</u> | | | | |
| Survey # 4 Observer(s) <u>L. Gorman</u> | Date <u>6/27/15</u> Start <u>0645</u> Stop <u>1040</u> Total hrs <u>4</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>N</u> | <u>N/A</u> | | | | |
| Survey # 5 Observer(s) <u>L. Gorman</u> | Date <u>7/9/15</u> Start <u>0630</u> Stop <u>1035</u> Total hrs <u>4</u> | <u>0</u> | <u>0</u> | <u>0</u> | <u>N</u> | <u>N/A</u> | | | | |
| Overall Site Summary Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals. Total Survey Hrs | | Total Adult Residents | Total Pairs | Total Territories | Total Nests | Were any Willow Flycatchers color-banded? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, report color combination(s) in the comments section on back of form and report to USFWS. | | | | |
| | | <u>0</u> | <u>0</u> | <u>0</u> | <u>0</u> | | | | | |

Reporting Individual Laurie Gorman Date Report Completed 7/9/15
 US Fish and Wildlife Service Permit # TE-233367-2 State Wildlife Agency Permit # SC-8778

Submit form to USFWS and State Wildlife Agency by September 1st. Retain a copy for your records.

32 A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher

Fill in the following information completely. Submit form by September 1st. Retain a copy for your records.

Reporting Individual Laurie Gorman Phone # 949-933-9432
 Affiliation Busby Biological Services, Inc. E-mail laurie@busbybiological.com
 Site Name Encina Hub Date Report Completed 7-9-15

Did you verify that this site name is consistent with that used in previous years? Yes ___ No ___ Not Applicable
 If site name is different, what name(s) was used in the past? N/A
 If site was surveyed last year, did you survey the same general area this year? Yes ___ No ___ If no, summarize below.
 Did you survey the same general area during each visit to this site this year? Yes No ___ If no, summarize below.

Management Authority for Survey Area : Federal ___ Municipal/County State ___ Tribal ___ Private ___
 Name of Management Entity or Owner (e.g., Tonto National Forest) City of Carlsbad

Length of area surveyed: 724 (meters)

Vegetation Characteristics: Mark the category that best describes the predominant tree/shrub foliar layer at this site (check one):

- Native broadleaf plants (entirely or almost entirely, > 90% native, includes high-elevation willow)
- ___ Mixed native and exotic plants (mostly native, 50 - 90% native)
- ___ Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)
- ___ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

Identify the 2-3 predominant tree/shrub species in order of dominance. Use scientific name.

Salix sp., Baccharis salicifolia

Average height of canopy (Do not include a range): 3.66 (12 feet) (meters)

Attach copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections.
 Attach sketch or aerial photo showing site location, patch shape, survey route, location of any WIFLs or WIFL nests detected.
 Attach photos of the interior of the patch, exterior of the patch, and overall site; describe any unique habitat features.

Comments (attach additional sheets if necessary)

The 2 willow flycatcher detections were 2 foraging individuals during survey #2 that were approx. 0.25 mile apart. No willow flycatchers were detected in subsequent surveys. Therefore, the willow flycatchers detected in the second survey were determined to be migratory individuals.

Territory Summary Table. Provide the following information for each verified territory at your site.

| Territory Number | All Dates Detected | UTM N | UTM E | Pair Confirmed? Y or N | Nest Found? Y or N | Description of How You Confirmed Territory and Breeding Status (e.g., vocalization type, pair interactions, nesting attempts, behavior) |
|------------------|--------------------|-------|-------|------------------------|--------------------|---|
| N/A | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Attach additional sheets if necessary

APPENDIX E – Wildlife Species Detected

Appendix E - Wildlife Species Detected

| INVERTEBRATES | | |
|------------------------|-------------------------------|---|
| Class: Insecta | | Insects |
| Order: Lepidoptera | | Butterflies |
| Family Papilionidae | | Parnassians and Swallowtails |
| | <i>Papilio eurymedon</i> | Pale Swallowtail |
| Family Nymphalidae | | Brush-footed Butterflies |
| | <i>Danaus plexippus</i> | Monarch |
| Class: Sauropsida | | Reptiles |
| Order: Squamata | | Snakes and Lizards |
| Family Phrynosomatidae | | Spiny Lizards |
| | <i>Uta stansburiana</i> | Common Side-blotched Lizard |
| VERTEBRATES | | |
| Class: Aves | | Birds |
| Order Galliformes | | Gallinaceous Birds |
| Family Odontophoridae | | New World Quail |
| | <i>Callipepla californica</i> | California Quail |
| Order Ciconiiformes | | Herons, Ibises, Storks, American Vultures, and Allies |
| Family Accipitridae | | Hawks, Kites, Eagles, and Allies |
| | <i>Pandion haliaetus</i> | Osprey |
| | <i>Buteo jamaicensis</i> | Red-tailed Hawk |
| Order Columbiformes | | Pigeons and Doves |
| Family Columbidae | | Pigeons and Doves |
| | <i>Zenaida macroura</i> | Mourning Dove |
| Order Apodiformes | | Swifts and Hummingbirds |
| Family Apodidae | | Swifts |
| | <i>Aeronautes saxatalis</i> | White-throated Swift |
| Family Trochilidae | | Hummingbirds |
| | <i>Calypte anna</i> | Anna's Hummingbird |
| | <i>Calypte costae</i> | Costa's Hummingbird |
| | <i>Selasphorus sasin</i> | Allen's Hummingbird |
| Order Piciformes | | Woodpeckers and Allies |
| Family Picidae | | Woodpeckers |
| | <i>Picoides nuttallii</i> | Nuttall's Woodpecker |
| | <i>Colaptes auratus</i> | Northern Flicker |
| Order Passeriformes | | Perching Birds |
| Family Tyrannidae | | Tyrant Flycatchers |
| | <i>Contopus sordidulus</i> | Western Wood-Pewee |
| | <i>Empidonax traillii</i> | Willow Flycatcher |
| | <i>Empidonax difficilis</i> | Pacific-slope Flycatcher |
| | <i>Sayornis nigricans</i> | Black Phoebe |
| | <i>Tyrannus vociferans</i> | Cassin's Kingbird |
| Family Corvidae | | Crows and Jays |
| | <i>Aphelocoma californica</i> | Western Scrub-Jay |

Appendix E - Wildlife Species Detected (Continued)

| | | |
|-----------------------------|--------------------------------------|--|
| | <i>Corvus brachyrhynchos</i> | American Crow |
| | <i>Corvus corax</i> | Common Raven |
| Family Hirundinidae | | Swallows |
| | <i>Stelgidopteryx serripennis</i> | Northern Rough-winged Swallow |
| | <i>Hirundo pyrrhonota</i> | Cliff Swallow |
| Family Aegithalidae | | Bushtits |
| | <i>Psaltriparus minimus</i> | Bushtit |
| Family Troglodytidae | | Wrens |
| | <i>Thryomanes bewickii</i> | Bewick's Wren |
| | <i>Troglodytes aedon</i> | House Wren |
| | <i>Cistothorus palustris clarkae</i> | Clark's Marsh Wren |
| Family Sylviidae | | Gnatcatchers |
| | <i>Polioptila caerulea</i> | Blue-gray Gnatcatcher |
| | <i>Polioptila californica</i> | Coastal California Gnatcatcher |
| Family Timaliidae | | Babblers |
| | <i>Chamaea fasciata</i> | Wrentit |
| Family Mimidae | | Mockingbirds and Thrashers |
| | <i>Mimus polyglottos</i> | Northern Mockingbird |
| | <i>Toxostoma redivivum</i> | California Thrasher |
| Family Sturnidae | | Starlings |
| | <i>Sturnus vulgaris</i> | European Starling |
| Family Ptilonotidae | | Silky-flycatchers |
| | <i>Phainopepla nitens</i> | Phainopepla |
| Family Parulidae | | Wood-Warblers |
| | <i>Vermivora celata</i> | Orange-crowned Warbler |
| | <i>Dendroica petechia</i> | Yellow Warbler |
| | <i>Geothlypis trichas</i> | Common Yellowthroat |
| | <i>Icteria virens</i> | Yellow-breasted Chat |
| Family Emberizidae | | Emberizids |
| | <i>Pipilo maculatus</i> | Spotted Towhee |
| | <i>Pipilo crissalis</i> | California Towhee |
| | <i>Melospiza melodia</i> | Song Sparrow |
| Family Cardinalidae | | Cardinals and Allies |
| | <i>Pheucticus melanocephalus</i> | Black-headed Grosbeak |
| Family Icteridae | | Blackbirds |
| | <i>Agelaius phoeniceus</i> | Red-winged Blackbird |
| | <i>Molothrus ater</i> | Brown-headed Cowbird |
| Family Fringillidae | | Fringilline and Cardueline Finches and Allies |
| | <i>Carpodacus mexicanus</i> | House Finch |
| | <i>Carduelis psaltria</i> | Lesser Goldfinch |

Appendix E - Wildlife Species Detected (Continued)

| | | |
|---------------------------|------------------------------|----------------------------------|
| Family Estrildidae | | Estrildid Finches |
| | <i>Lonchura punctulata</i> | Scaly-breasted Munia |
| Class: Mammalia | | Mammals |
| Order Lagomorpha | | Rabbits, Hares, and Pikas |
| Family Leporidae | | Rabbits and Hares |
| | <i>Sylvilagus audubonii</i> | Desert Cottontail |
| Order Rodentia | | Rodents |
| Family Sciuridae | | Squirrels and Chipmunks |
| | <i>Spermophilus beecheyi</i> | California Ground Squirrel |
| Family Muridae | | Mice, Rats, and Voles |
| | <i>Neotoma lepida</i> | Desert Woodrat |
| Order Carnivora | | Carnivores |
| Family Canidae | | Dogs and foxes |
| | <i>Canis familiaris</i> | Domestic Dog |
| | <i>Canis latrans</i> | Coyote |
| Family Procyonidae | | Raccoons and Relatives |
| | <i>Procyon lotor</i> | Raccoon |
| Order Artiodactyla | | Even-toed Ungulates |
| Family Cervidae | | Deer and Elk |
| | <i>Odocoileus hemionus</i> | Mule Deer |

APPENDIX F – Incidental Sensitive Species Detected

Appendix F – Incidental Sensitive Species Detected

| Survey # | Date | Species Type* | Status** | # of Individuals | GPS Location (Decimal Degrees) | |
|----------|---------|---------------|----------|------------------|--------------------------------|-------------|
| | | | | | Northing | Easting |
| 1 | 5/19/15 | CAGN | FT, SSC | 1 | 33.136045 | -117.309608 |
| 1 | 5/19/15 | CAGN | FT, SSC | 2 | 33.138372 | -117.307792 |
| 1 | 5/19/15 | YBCH | SSC | 1 | 33.138196 | -117.307726 |
| 1 | 5/19/15 | YEWA | SSC | 1 | 33.138486 | -117.308418 |
| 1 | 5/19/15 | CAGN | FT, SSC | 2 | 33.135843 | -117.312189 |
| 1 | 5/19/15 | CMWR | SSC | 1 | 33.136605 | -117.307447 |
| 2 | 6/03/15 | YEWA | SSC | 1 | 33.133521 | -117.304732 |
| 2 | 6/03/15 | YBCH | SSC | 1 | 33.133159 | -117.303767 |
| 2 | 6/03/15 | YEWA | SSC | 1 | 33.135146 | -117.306363 |
| 2 | 6/03/15 | CAGN | FT, SSC | 1 | 33.133968 | -117.307876 |
| 3 | 6/11/15 | CAGN | FT, SSC | 2 | 33.132674 | -117.304550 |
| 3 | 6/11/15 | YBCH | SSC | 2 | 33.133210 | -117.304464 |
| 3 | 6/11/15 | YBCH | SSC | 1 | 33.134504 | -117.306095 |
| 3 | 6/11/15 | YEWA | SSC | 1 | 33.135201 | -117.306728 |
| 3 | 6/11/15 | YBCH | SSC | 1 | 33.138080 | -117.309281 |
| 4 | 6/26/15 | CAGN | FT, SSC | 1 | 33.135993 | -117.308552 |
| 4 | 6/26/15 | CAGN | FT, SSC | 5 | 33.134655 | -117.308101 |
| 4 | 6/26/15 | CAGN | FT, SSC | 1 | 33.133535 | -117.308257 |
| 5 | 7/09/15 | CAGN | FT, SSC | 1 | 33.135788 | -117.307704 |
| 5 | 7/09/15 | CAGN | FT, SSC | 1 | 33.133094 | -117.305167 |
| 5 | 7/09/15 | CAGN | FT, SSC | 1 | 33.133869 | -117.306384 |
| 5 | 7/09/15 | CAGN | FT, SSC | 2 | 33.134081 | -117.308182 |
| 5 | 7/09/15 | YBCH | SSC | 1 | 33.133275 | -117.304625 |

***Species Codes:**

CAGN = coastal California gnatcatcher (*Poliophtila californica californica*)

YBCH = yellow-breasted chat (*Icteria virens*)

YEWA = yellow warbler (*Dendroica petechia*)

CMWR = Clark's marsh wren (*Cistothorus palustris clarkae*)

****Status:**

FT = Federally Threatened (USFWS)

SSC = Species of Special Concern (CDFW)