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October 29, 2014

Ms. Amanda Dodson
U.S. Department of the Interior
Bureau of Land Management
2610 Sweetwater Avenue
Lake Havasu City, AZ 86406

Ms. Carrie Marr
U.S. Fish and Wildlife Service Project Manager
2321 W Royal Palm Road, Suite 103
Phoenix, AZ 85021

Subject: 2014 Southwestern Willow Flycatcher Presence/ Absence Surveys for the PG&E Topock Compressor Station

Dear Ms. Dodson & Ms. Marr:

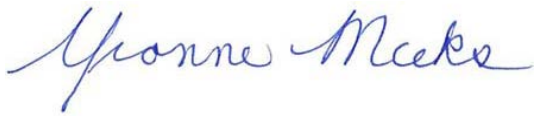
This letter transmits the *2014 Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station*. This report was prepared in conformance with the 2007 Programmatic Biological Assessment, general project management measure 26, and includes information on the 2014 annual field survey for the southwestern willow flycatcher (SWFL) on lands near the PG&E Topock Compressor Station. The survey was conducted by Garcia and Associates (GANDA), and followed protocols established by the U.S. Fish and Wildlife Service.

Five SWFL were observed during the 2014 survey. Based on the single detections for each observation, it was concluded that they were most likely transient SWFL rather than nesting birds. However, because more transient SWFL were observed in 2014 than any of the previous surveys, it was thought this could indicate an increase in vigor of nearby populations. As approved in the Final Groundwater Remedy Programmatic Biological Assessment on July 7, 2014, the frequency of SWFL surveys will be every three years, with the next survey to be conducted in 2017.

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October 29, 2014

If you have any questions, please do not hesitate to contact me at (805) 546-5243.

Sincerely,

A handwritten signature in blue ink that reads "Yvonne Meeks". The signature is fluid and cursive, with the first name "Yvonne" and last name "Meeks" clearly distinguishable.

Yvonne Meeks
Topock Remediation Project Manager

Cc:

Aaron Yue / DTSC
David Vigil / CDFW
Dawn Addelson / ADGF

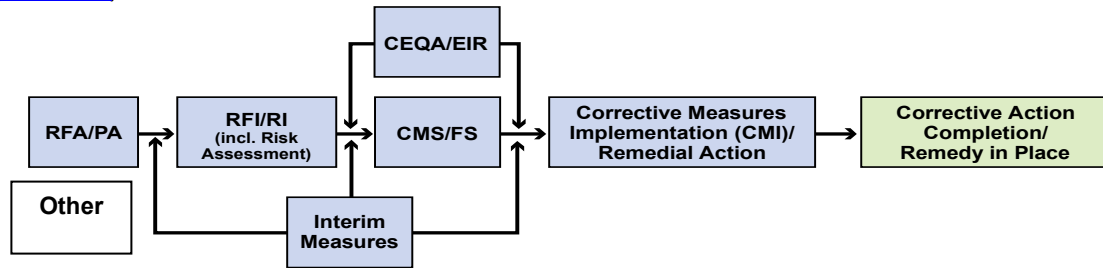
Enclosure

Topock Project Executive Abstract

<p>Document Title:</p> <p>2014 Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station Needles, California</p> <p>Final Document? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Date of Document: October 29, 2014</p> <p>Who Created this Document?: (i.e. PG&E, DTSC, DOI, Other)</p> <p>PG&E</p>
<p>Priority Status: <input type="checkbox"/> HIGH <input type="checkbox"/> MED <input checked="" type="checkbox"/> LOW</p> <p>Is this time critical? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>Action Required:</p> <p><input checked="" type="checkbox"/> Information Only <input type="checkbox"/> Review & Comment</p> <p>Return to: _____</p> <p>By Date: _____</p> <p><input type="checkbox"/> Other / Explain:</p>
<p>Type of Document:</p> <p><input type="checkbox"/> Draft <input checked="" type="checkbox"/> Report <input type="checkbox"/> Letter <input type="checkbox"/> Memo</p> <p><input type="checkbox"/> Other / Explain:</p>	<p><input type="checkbox"/> Other / Explain:</p>
<p>What does this information pertain to?</p> <p><input type="checkbox"/> Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA)/Preliminary Assessment (PA)</p> <p><input type="checkbox"/> RCRA Facility Investigation (RFI)/Remedial Investigation (RI) (including Risk Assessment)</p> <p><input type="checkbox"/> Corrective Measures Study (CMS)/Feasibility Study (FS)</p> <p><input type="checkbox"/> Corrective Measures Implementation (CMI)/Remedial Action</p> <p><input type="checkbox"/> California Environmental Quality Act (CEQA)/Environmental Impact Report (EIR)</p> <p><input type="checkbox"/> Interim Measures</p> <p><input checked="" type="checkbox"/> Other / Explain: Biological Reports</p>	<p>Is this a Regulatory Requirement?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If no, why is the document needed?</p>
<p>What is the consequence of NOT doing this item? What is the consequence of DOING this item?</p> <p>This report is required by the approved Programmatic Biological Assessment (PBA). Not performing the survey and preparing this report constitute non-compliance with the PBA.</p>	<p>Other Justification/s:</p> <p><input type="checkbox"/> Permit <input type="checkbox"/> Other / Explain:</p>
<p>Brief Summary of attached document:</p> <p>The 2014 Southwestern Willow Flycatcher Presence/Absence Surveys Report presents the finding of the five Southwestern Flycatcher (SWFL) protocol surveys conducted between May and July 2014 in areas near the PG&E Topock Compressor Station. Five SWFL were observed during the 2014 survey. Based on the single detections for each observation, it was concluded that they were most likely transient SWFL rather than nesting birds. However, because more transient SWFL were observed in 2014 than any of the previous surveys, it was thought this could indicate an increase in vigor of nearby populations.</p>	
<p>Written by: PG&E</p>	
<p>Recommendations:</p> <p>This report is for information only.</p>	
<p>How is this information related to the Final Remedy or Regulatory Requirements:</p> <p>The survey and this report fulfill the requirement of project management Measure 26 of the PBA.</p>	
<p>Other requirements of this information?</p> <p>None.</p>	

Related Reports and Documents:

Click any boxes in the Regulatory Road Map (below) to be linked to the Documents Library on the DTSC Topock Web Site (www.dtsc-topock.com).



Legend

RFA/PA – RCRA Facility Assessment/Preliminary Assessment

RFI/RI – RCRA Facility Investigation/CERCLA Remedial Investigation (including Risk Assessment)

CMS/FS – RCRA Corrective Measure Study/CERCLA Feasibility Study

CEQA/EIR – California Environmental Quality Act/Environmental Impact Report

Version 10



Southwestern Willow Flycatcher Presence / Absence Surveys for the PG&E Topock Compressor Station

October 2014

Garcia and Associates
Natural and Cultural Resource Consultants



Prepared by:

Garcia and Associates
2601 Mission Street, Suite 600
San Francisco, California 94110

2014 Southwestern Willow Flycatcher
Presence/Absence Surveys
for the
PG&E Topock Compressor Station

Prepared by:

Garcia and Associates

Prepared for:

CH2M HILL, Inc. and

Pacific Gas & Electric Co.

October 2014

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Introduction

Under contract to CH2M HILL, Garcia and Associates (GANDA) conducted a protocol survey for the southwestern willow flycatcher (SWFL) (*Empidonax traillii extimus*) for Pacific Gas and Electric (PG&E) near the Topock Compressor Station Groundwater Extraction Project, 15 miles southeast of Needles, California. The purpose of the survey was to determine the presence or absence of SWFL, which are listed as endangered by the Arizona Game and Fish Department (AZGFD) and threatened by the California Department of Fish and Wildlife (CDFW) and the U.S. Fish and Wildlife Service (USFWS). In addition to this year's survey, GANDA conducted seven previous surveys at this site between 2005 and 2012. All surveys were conducted following the survey protocol outlined in *A Natural History Summary and Survey Protocol for the Southwestern Willow Flycatcher* (Sogge *et al.* 2010). This report fulfills General Project Management Measure 26 of the Programmatic Biological Assessment (PBA) prepared for the project (CH2M HILL 2007), which states:

Riparian areas surrounding the proposed action site and subject to influence of operations and maintenance activities shall be surveyed for southwestern willow flycatcher according to the protocol established by the USFWS. These surveys shall be completed each year by a biologist permitted by the USFWS to carry out flycatcher surveys until the action has been completed and all facilities have been removed. Reports shall be provided to the biologists in the BLM Lake Havasu Field Office on an annual basis.

Site Description

The survey area consists of twelve sites near the Topock Compressor Station. The sites are located along both sides of the Colorado River. Seven sites are in San Bernardino County, California, and five sites are in Mohave County, Arizona. California sites CA-3, CA-4, and CA-6 are located on land managed by the Bureau of Land Management. Sites CA-1 and CA-2 are located in Moabi Regional Park. Sites CA-5 and CA-7 are in the California portion of the Havasu National Wildlife Refuge. All Arizona sites are located in the USFWS Havasu National Wildlife Refuge with the exception of site AZ-2, which is on land owned by Kinder Morgan (Figures 3 and 4). Due to habitat fragmentation and small patch size sites CA-1 and AZ-2 were eliminated from the survey effort in June of this year with the permission of the USFWS (Appendix A). The 2014 survey sites total approximately 160 acres and vary in elevation from 300 to 500 feet above sea level. None of the survey sites are located within USFWS designated critical habitat for the SWFL (USFWS 2005). Photographs of the survey sites are provided in Appendix B.

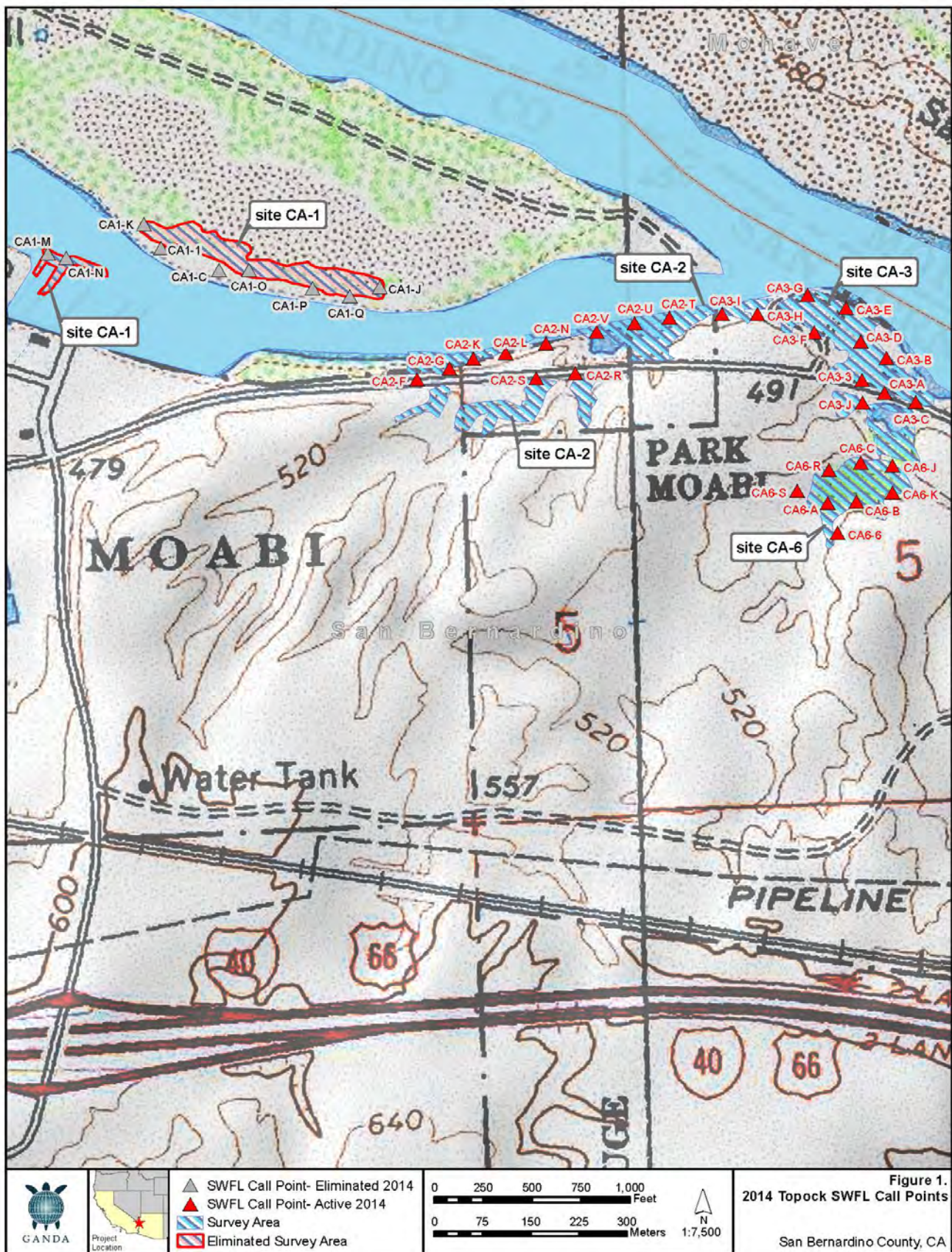


Figure 1. California survey sites CA-1, CA-2, CA-3, and CA-6.

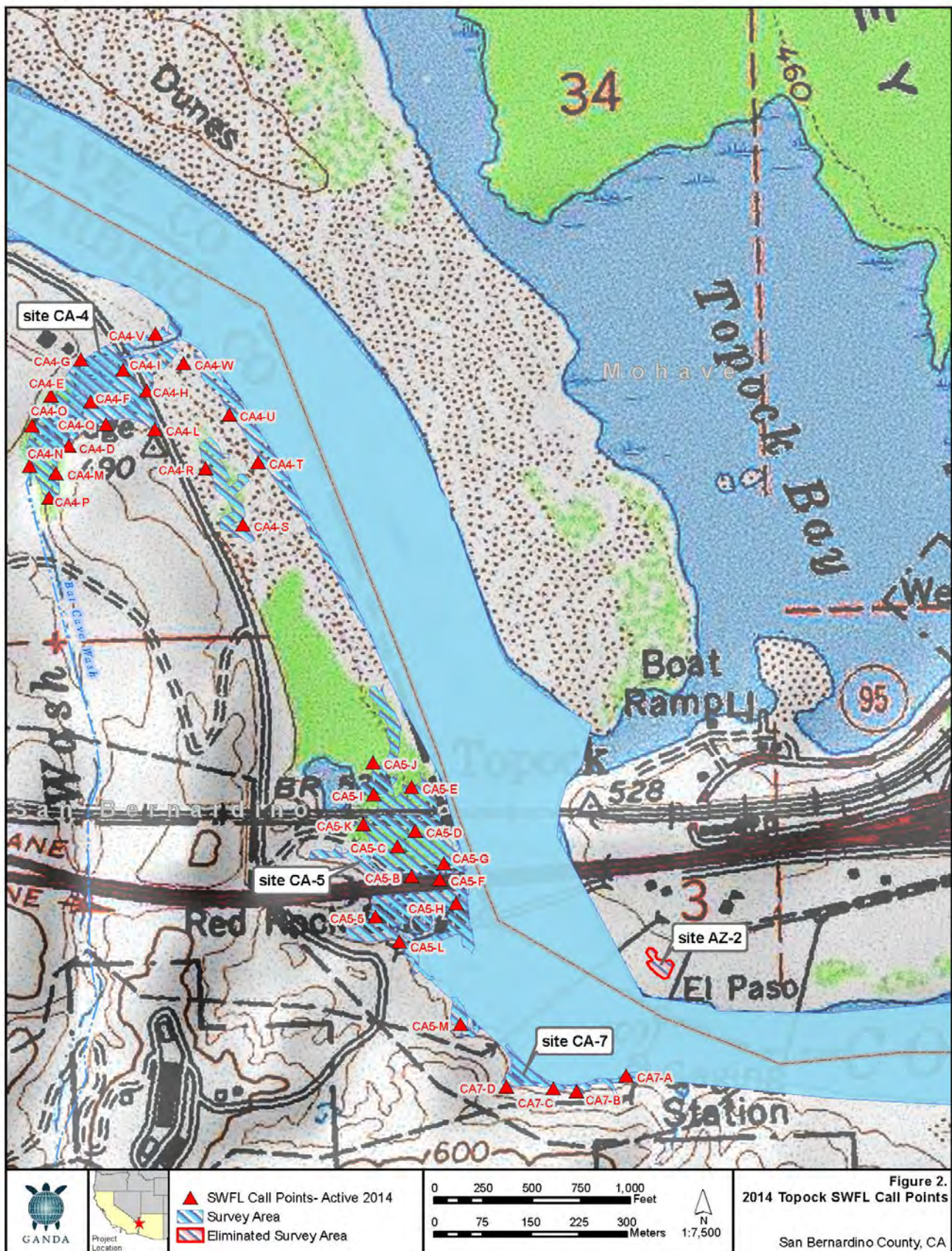


Figure 2. California survey sites CA-4, CA-5, CA-7 and AZ-2.

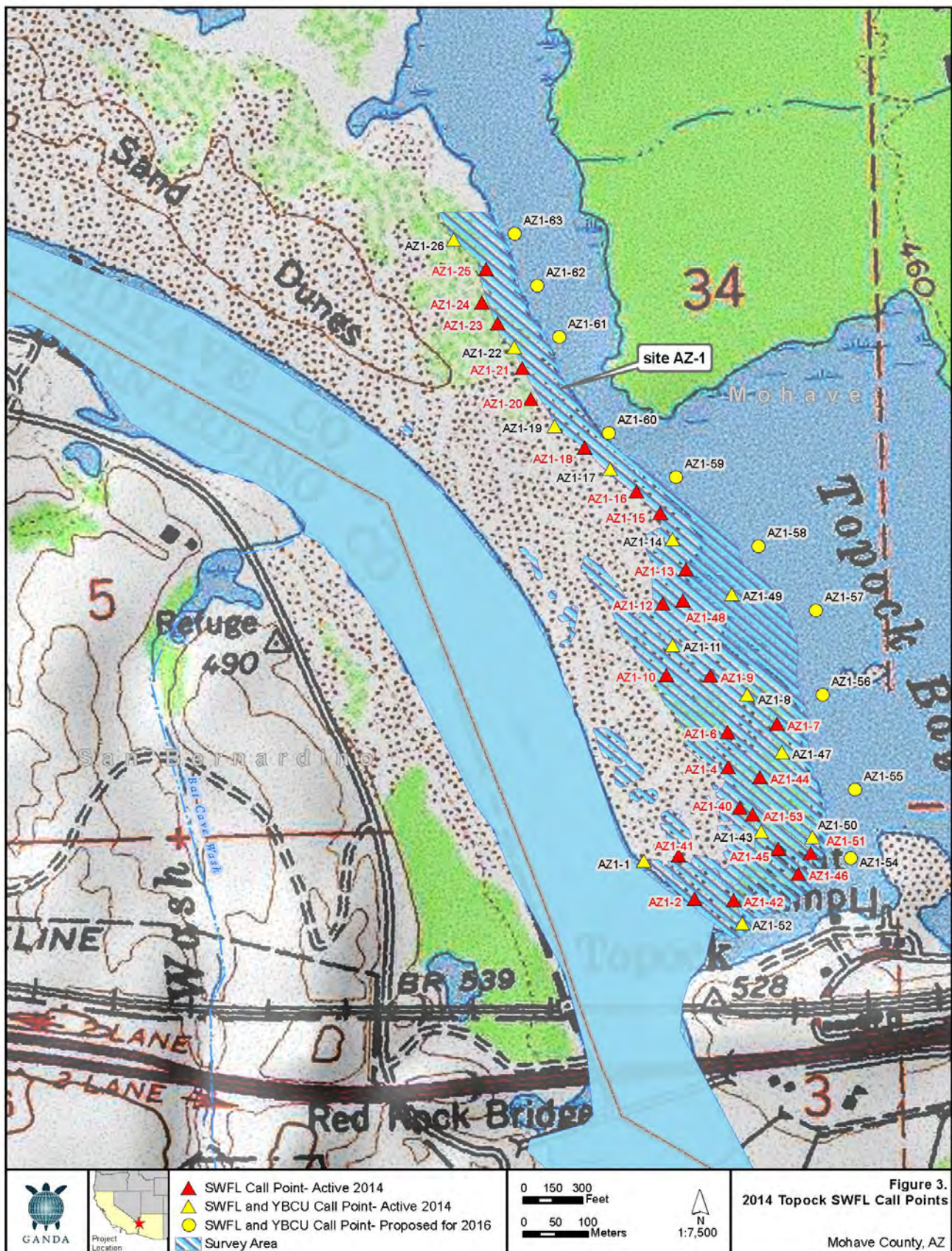


Figure 3. Arizona survey sites AZ-1 and AZ-2.

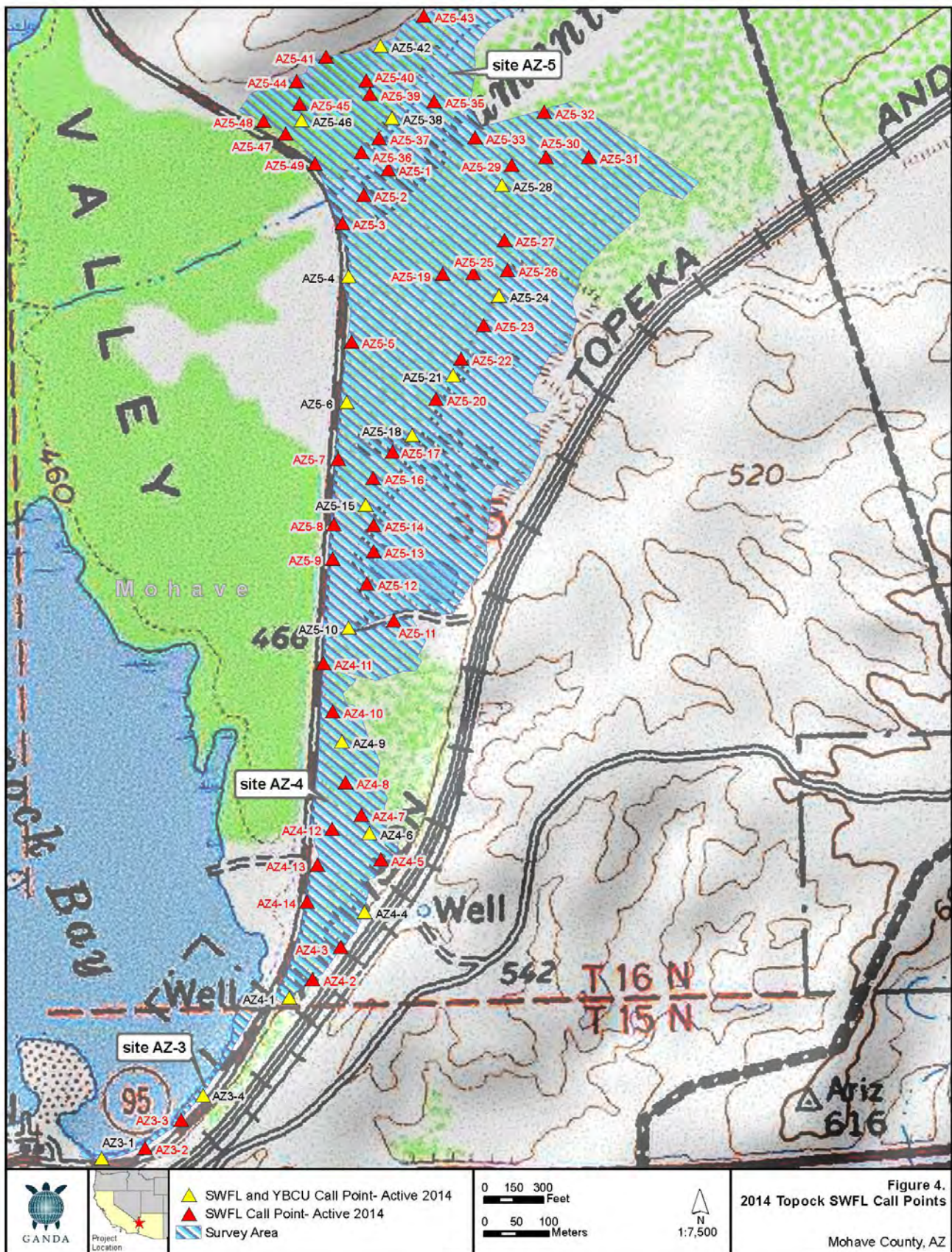


Figure 4. Arizona survey sites AZ-3, AZ-4 and AZ-5.

Vegetation and Habitat Quality

The most abundant plant species in the survey area include tamarisk (*Tamarix ramosissima* and *Tamarix aphylla*), coyote willow (*Salix exigua*), catclaw acacia (*Senegalia greggii*) and arrow weed (*Pluchea sericea*). Tamarisk is the dominant species throughout the survey area, often forming dense thickets over eight feet in height. A complete list of the plant species observed is included in Appendix C.

Habitat Quality

The habitat quality of the survey sites and the area surrounding them has been reassessed each year during the first survey period. The reassessment consists of observing each site for an increase or decrease in habitat, either due to an increase in size and density of vegetation or the elimination of habitat due to vegetation removal. Additionally, any changes in the project's Area of Potential Effect (APE) were assessed to determine if any areas should be eliminated or added to the survey area. This year, it was determined that sites CA-1 and AZ-2 no longer contained sufficient habitat to support breeding SWFL. Site CA-1 had diminished in habitat quality because of the removal of vegetation and the expansion of the Pirate Cove Resort in Moabi Regional Park. Site AZ-2 was fenced off and under construction during the 2012 habitat assessment and survey, and, therefore, was not assessed. In 2014, AZ-2 was determined to be too small to support breeding SWFL and was eliminated.

Overall, the survey area is of moderate habitat quality for SWFL. The Colorado River provides standing surface water throughout the breeding season and includes suitable vegetation composition; however, habitat fragmentation and human disturbance detract from the overall habitat quality. The California sites (Figures 1 and 2) are small and geographically isolated by the surrounding desert, National Trails Highway, and the Colorado River. Additionally, the California sites are subject to a high level of human disturbance due to their proximity to Moabi Regional Park, Interstate 40, the Burlington Northern Santa Fe Railway, The Pirate Cove Resort, and the PG&E Topock Compressor Station. Arizona site AZ-1 (Figure 3) is located on a large peninsula and is bordered by contiguous riparian habitat and bulrush-dominated marsh. However, this site and the other Arizona sites (Figure 4) are also adjacent to Old Route 66 and the Topock Marina, a community that includes several houses and businesses. Recreational watercraft, frequently observed on the Colorado River and in the Topock Marsh, contribute to regular human disturbance at all locations. Additionally, a fire destroyed a large portion of potential habitat adjacent to the Arizona sites in 2009, and this, combined with the mechanical clearing of the vegetation in that area, may be contributing to the degradation of habitat quality for SWFL at these sites. Appendix B provides representative views of each survey site.

Survey Methods

Surveys were conducted by GANDA wildlife biologist Jeff Steinman (USFWS Permit #TE-085026-4, AZGFD Permit #SP-7801, and CDFW Permit SC-007801). All surveys followed the protocol outlined by Sogge *et al.* (2010). This protocol replaces the 1997 *A Natural History*

Summary and Survey Protocol for the Southwestern Willow Flycatcher and the 2000 revision prepared by the USFWS (USFWS 2000). For project-related surveys, the 2010 protocol recommends that five surveys be conducted during three survey periods, with two surveys occurring within each of the last two survey periods. The three survey periods are defined as May 15 to 31, June 1 to 24, and June 25 to July 17. Mr. Steinman conducted the SWFL surveys from May 20 to 23, June 3 to 6, June 16 to 19, July 1 to 3, and July 15 to 17. All surveys were conducted between 5:00 AM and 10:30 AM. Completed survey forms for each site are included in Appendix D. This year western yellow-billed cuckoo (YBCU) (*Coccyzus americanus*) surveys were added to the survey effort at the Arizona sites with the exception of the eliminated site AZ-2. Surveys for the two species were combined when the survey windows overlapped on June 16-17, June 30, July 2 and July 16-17. Figures 3 and 4 show the call points that were surveyed for both species. The YBCU surveys are addressed in a separate report.

The survey method consisted of using an MP3 player and speaker system to broadcast SWFL calls from established call points. Call points were originally established in the field using aerial photographs, topographic maps, and global positioning system (GPS) units. Call points were placed 30 to 50 meters apart, depending on the quality of the habitat, thickness of vegetation, and accessibility. Appendix E includes a complete list of call points surveyed in 2014 and their corresponding Universal Transverse Mercator (UTM) coordinates.

At each survey site, the first 10 minutes were spent listening for the presence of any singing flycatchers. After this initial listening period, SWFL “fitz-bew” calls were broadcast at each call point for a 30-second period, immediately followed by a 60-second listening period. To reduce bias, start times at each site and the order in which call points were surveyed were intentionally varied from one visit to the next.

Results

SWFL were detected on May 19 at call points CA4-V and CA6-K. Both of these detections were visual and auditory, with the characteristic “fitz-bew” call heard during both detections. Two SWFL were observed at CA4-V and a single SWFL was observed at CA6-K. A SWFL was detected on May 22 at site AZ4-10; this was a visual detection of a single SWFL and no vocalizations were heard. A SWFL was also detected on August 7 at site AZ-1, at an unestablished SWFL call point during a YBCU survey; this detection was a visual and auditory detection of a single SWFL, with the characteristic “fitz-bew” call heard. All of these detections were in response to the SWFL vocalization being played. In the case of the detection on August 7, the SWFL call was unintentionally played while playing YBCU calls. No additional SWFL were detected during any of the other surveys or at any of the other survey sites. Due to the early and late dates of the detections and only having a single detection event in all areas, these SWFL are considered to be transients and are not expected to be breeding in the survey area. Transient SWFL had been detected during every previous survey year except 2010, when no SWFL were detected. Previously, SWFL were detected at call points CA2-D in 2005, at CA1-E and AZ1-16 in 2007, call point AZ1-19, AZ1-20, AZ1-30, and AZ1-35 in 2008, at call point CA4-F AZ5-8 in 2009 and at call point CA4-V and AZ5-5 in 2012 (GANDA 2005, 2006, 2007, 2008, 2009, 2010 and 2012). The locations of all SWFL observations recorded since 2005 are shown in Figure 5.

Incidental Species

Many additional wildlife species were observed during the SWFL survey. The diversity and abundance of wildlife species encountered are influenced by the proximity of the survey area to the creosote-dominated desert and the Topock Marsh, a large wetland with abundant wildlife. The most commonly observed non-avian wildlife species were black-tailed jackrabbit (*Lepus californicus*), burro (*Equus asinus*) and western side-blotched lizard (*Uta stansburiana*). The most commonly observed avian species were great-tailed grackle (*Quiscalus mexicanus*), white-winged dove (*Zenaida asiatica*), and black-tailed gnatcatcher (*Polioptila melanura*). Complete lists of wildlife species observed are included in Appendix B.

Notable observations during the 2014 surveys were detections of Arizona Bell's vireo (*Vireo bellii arizonae*), brown-headed cowbird (*Molothrus ater*), yellow warbler (*Setophaga petechia*), YBCU, and Yuma clapper rail (*Rallus longirostris yumanensis*). This year two great blue heron nests (*Ardea herodias*) were observed in site AZ-5 at the same location that contained a single nest in 2012. The locations of all notable observations are shown in Figure 5 and their GPS coordinates are located in Appendix E.

Conclusions

Five SWFL were observed during the 2014 survey. Each observation was a single detection occurring at a time when some SWFL would be expected to be migrating through the area. The absence of additional detections in each location indicates that they were most likely transient SWFL and that the species is not currently nesting in the survey areas. However, more transient SWFL were observed in 2014 than any of the previous surveys and could indicate an increase in vigor of nearby populations. Coupled with the cumulative detections of SWFL over the years and the presence of suitable habitat (Ellis, *et al.* 2008, SWCA 2004), there is potential for SWFL to breed in the survey area in the future. Given these conditions, continuing the survey effort is recommended, as agreed to in the Final Groundwater Remedy PBA (CH2M HILL 2014). Additionally, given the elimination of sites AZ-2 and CA-1 and the detection of a SWFL at the edge of Topock Marsh in Site AZ-1 continuing to assess the habitat quality would be recommended in addition to establishing new call points along the Topock Marsh for the 2016 surveys (Figure 3).

References

- CH2M HILL. 2007. Programmatic Biological Assessment for Pacific Gas and Electric Topock Compressor Station Remedial and Investigative Actions. January 2007.
2014. Final Programmatic Biological Assessment for the Final Groundwater Remedy at the Topock Compressor Station. April 28.
- Ellis, L.A., D.M. Weddle, S.D. Stump, H.C. English, and A.E. Graber. 2008. Southwestern Willow Flycatcher Final Survey and Nest Monitoring Report. Arizona Game and Fish Department, Research Technical Guidance Bulletin #10. Arizona Game and Fish Department, Phoenix, AZ.
- Garcia and Associates (GANDA). 2005. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Compressor Station Expanded Groundwater Extraction and Treatment System, Topock, California. August.
2006. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station Expanded Groundwater Extraction and Treatment System. September.
2007. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station. September.
2008. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station. September.
2009. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station. September.
2010. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station. September.
2012. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station. September.
- 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.
- SWCA Environmental Consultants. 2004. Southwestern Willow Flycatcher Surveys, Demography, and Ecology along the Lower Colorado River and Tributaries. Annual Report. February.
- U.S. Fish and Wildlife Service (USFWS). 2000. Southwestern Willow Flycatcher Protocol Revision 2000. July 11, 2000.
2005. Federal Register, Department of the Interior, Fish and Wildlife Service. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Southwestern Willow Flycatcher; Final Rule. 50 CFR Part 17. RIN 1018-AT88. October 19.

Appendix A

USFWS Approval to Eliminate Sites AZ-2 and CA-1

From: Marr, Carrie [mailto:carrie_marr@fws.gov]
Sent: Monday, June 23, 2014 1:45 PM
To: Strohl, Virginia
Subject: Re: FW: swfl site elimination.

Virginia,

PG&E's southwestern willow flycatcher (WIFL) survey contractor, Garcia and Associates (GANDA), has proposed eliminating surveys at two call sites from the 2014 survey where habitat modification has occurred or site access is blocked. GANDA has determined that neither site currently provides sufficient habitat to support breeding WIFLs. The first site, CA-1, was initially surveyed in 2006 and the size and quality of the habitat since then has been significantly reduced. The habitat at this survey location has been isolated and fragmented by construction of recreation equipment and ATV paths. The second site, AZ-2, was first surveyed in 2012 and the habitat size and quality remain unchanged. However, access to the site has been blocked, preventing complete evaluation of the site. Recently, GANDA (WIFL contractor) also evaluated the size of the site and determined that it is not large enough to support WIFL nesting (the patch size is 0.1 ha vs 0.8 ha necessary for breeding WIFLs, Sogge et al. 2010).

I agree with GANDA and PG&E's proposal to eliminate survey sites CA-1 and AZ-2 given the documentation provided for the habitat disturbance and fragmentation at CA-1 and the restricted access and small size of AZ-2. Ten WIFL survey stations will continue to be surveyed to determine WIFL occurrence in and around the PG&E Topock Compressor Station and other sites in CA and AZ involved in the groundwater remedy and soil investigation. In the 2014 WIFL survey report, please include a write-up of the eliminated survey sites and why they were discontinued.

Thanks,

Carrie

Carrie

Environmental Contaminant Specialist
U.S. Fish and Wildlife Service
Arizona Ecological Services Office
2321 W Royal Palm Road, Suite 103
Phoenix, AZ 85021
602.242.0210, fax 602.242.2513
<http://www.fws.gov/southwest/es/arizona/contaminants.htm>

Appendix B

Photo Log



Site AZ-1 Exterior



Site AZ-1 Interior



Site AZ-2 Exterior



Site AZ-2 Interior



Site AZ-3 Exterior



Site AZ-3 Interior



Site AZ-4 Exterior



Site AZ-4 Interior



Site AZ-5 Exterior



Site AZ-5 Interior



Site CA-1 Exterior



Site CA-1 Interior



Site CA-2 Exterior



Site CA-2 Interior



Site CA-3 Exterior



Site CA-3 Interior



Site CA-4 Exterior



Site CA-4 Interior



Site CA-5 Exterior



Site CA-5 Interior



Site CA-6 Exterior



Site CA-6 Interior



Site CA-7 Exterior



Site CA-7 Interior

Appendix C

Incidental Plant, Vertebrate and Avian Species

Incidental Plant Species

Common Name	Latin Name
Arrowweed	<i>Pluchea sericea</i>
Athel Salt Cedar	<i>Tamarix aphylla</i>
Cheesebush	<i>Hymenoclea salsola</i>
Prickly Lettuce	<i>Lactuca serriola</i>
Buckhorn Cholla	<i>Cylindropuntia c.f. achanthocarpa</i>
Silver Cholla	<i>Cylindropuntia echinocarpa</i>
Pencil Cholla	<i>Cylindropuntia ramosissima</i>
California Barrel Cactus	<i>Ferocactus cylindraceus</i>
Beavertail	<i>Opuntia basilaris</i> var. <i>basilaris</i>
Russian Thistle	<i>Salsola tragus</i>
Catclaw Acacia	<i>Acacia greggii</i>
Screw Bean Mesquite	<i>Prosopis pubescens</i>
Palo Verde	<i>Cercidium microphyllum</i>
Salt Cedar	<i>Tamarix ramosissima</i>
Coyote Willow	<i>Salix exigua</i>
Gooding's Willow	<i>Salix gooddingii</i>
Cattail	<i>Typha angustifolia</i>

Incidental Vertebrate Species

Common Name	Scientific Name
American Bullfrog	<i>Rana catesbeiana</i>
Beaver	<i>Castor canadensis</i>
Black-tailed Jackrabbit	<i>Lepus californicus</i>
Burro	<i>Equus asinus</i>
Coyote	<i>Canis latrans</i>
Desert Cottontail	<i>Sylvilagus audubonii</i>
Desert Iguana	<i>Dipsosaurus dorsalis</i>
Feral Hog	<i>Sus scrofa</i>
Gray Fox	<i>Urocyon cinereoargenteus</i>
Western Side-blotched Lizard	<i>Uta stansburiana</i>

Incidental Avian Species

Common Names	Scientific Names
Abert's Towhee	<i>Pipilo aberti</i>
American Coot	<i>Fulica americana</i>
American Kestrel	<i>Falco sparverius</i>
Anna's Hummingbird	<i>Calypte costae</i>
Arizona Bell's Vireo	<i>Vireo bellii</i>
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>
Bewicks Wren	<i>Thryomanes bewickii</i>
Black-chinned Hummingbird	<i>Archilochus alexandri</i>
Black-tailed Gnatcatcher	<i>Poliophtila melanura</i>
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Bushtit	<i>Psaltiriparus minimus</i>
California Gull	<i>Larus californicus</i>
Canada Goose	<i>Branta canadensis</i>
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>
Common Raven	<i>Corvus corax</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Cooper's Hawk	<i>Accipiter cooperii</i>
Double-crested Cormorant	<i>Phalacrocorax auritus</i>
Gambel's Quail	<i>Callipepla gambelii</i>
Great Blue Heron	<i>Ardea herodias</i>
Great horned Owl	<i>Bubo virginianus</i>
Greater Roadrunner	<i>Geococcyx californianus</i>
Great-tailed Grackle	<i>Quiscalus mexicanus</i>
Green Heron	<i>Butorides virescens</i>
House Finch	<i>Carpodacus mexicanus</i>
Lesser Goldfinch	<i>Carduelis psaltria</i>
Killdeer	<i>Charadrius vociferous</i>
Lesser Nighthawk	<i>Chordeiles acutipennis</i>
Loggerhead Shrike	<i>Lanius ludovicianus</i>
Mallard	<i>Anas platyrhynchos</i>
Marsh Wren	<i>Gstothorus palustris</i>
Mourning Dove	<i>Zenaida macroura</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
Phainopepla	<i>Phainopepla nitens</i>
Pied-billed Grebe	<i>Podilymbus podiceps</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Summer Tanager	<i>Piranga rubra</i>
Snowy Egret	<i>Egretta thula</i>
Song Sparrow	<i>Melospiza melodia</i>
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>
Townsend's Warbler	<i>Dendroica townsendi</i>
Turkey Vulture	<i>Cathartes aura</i>
Verdin	<i>Auriparus flaviceps</i>
Western Grebe	<i>Aechmophorus occidentalis</i>
Western Kingbird	<i>Tyrannus verticalis</i>
White-faced Ibis	<i>Plegadis chihi</i>
White-winged Dove	<i>Zenaida asiatica</i>
Wilson's Snipe	<i>Gallinago delicata</i>
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>
Yellow-breasted Chat	<i>Icteria virens</i>
Yellow-Headed Blackbird	<i>Xanthocephalus xanthocephalus</i>
Yuma Clapper Rail	<i>Rallus longirostris yumanensis</i>

Appendix D

Survey Forms

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

Site Name: Topock AZ-1 State: AZ County: Mohave
 USGS Quad Name: Topock Elevation: 134 (meters)
 Creek, River, or Lake Name: Colorado River
Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 729823 N 3845913 UTM Datum: 83 (See instructions)
 Stop: E 730272 N 3844792 UTM Zone: 11

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) J Steinman	Date: 5/21/2014	0	0	0	NA	BHCO, NOSH and AZBV observed	
	Start: 5:50						
	Stop: 9:08						
	Total hrs: 198.0						
Survey # 2 Observer(s) J Steinman	Date: 6/3/2014	0	0	0	NA	NOSH and AZBV observed	
	Start: 6:01						
	Stop: 8:44						
	Total hrs: 163.0						
Survey # 3 Observer(s) J Steinman	Date: 6/16/2014	0	0	0	NA	AZBV and BHCO observed	
	Start: 5:47						
	Stop: 8:57						
	Total hrs: 190.0						
Survey # 4 Observer(s) J Steinman	Date: 7/2/2014	0	0	0	NA	BHCO and NOSH	
	Start: 5:38						
	Stop: 9:01						
	Total hrs: 203.0						
Survey # 5 Observer(s) J Steinman	Date: 7/16/2014	0	0	0	NA	AZBV adult and juvenile observed and YBCU observed in response to YBCU call	
	Start: 6:30						
	Stop: 8:55						
	Total hrs: 145.0						
Survey # 6 Observer(s) J Steinman	Date: 8/7/2014	1	0	0	NA	SWFL responds to accidental SWFL call at 8:10 while conducting YBCU surveys. Visual and auditory detection. Very vocal with fitz-bew and whits calls.	
	Start: 8:10						
	Stop: 8:20						
	Total hrs: N/A						
Overall Site Summary <small>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.</small>		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u>X</u>	
		0	0	0	na	If yes, report color combination(s) in the comments section on back of form and report to USFWS.	
Total survey hrs: 15.0							

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE-085026-4 State Wildlife Agency Permit #: AZ SP790914

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

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

Reporting Individual Jeff Steinman Phone # (415) 250-2692
 Affiliation Garcia and Associates E-mail jsteinman@garciaandassociates
 Site Name Topock AZ-1 Date report Completed 9/30/2014
 Was this site surveyed in a previous year? Yes x No Unknown
 Did you verify that this site name is consistent with that used in previous yrs? Yes x No Not Applicable
 If name is different, what name(s) was used in the past? Topack AZ
 If site was surveyed last year, did you survey the same general area this year? Yes Not Applicable No x If no, summarize below.
 Did you survey the same general area during each visit to this site this year? Yes x No Not Applicable If no, summarize below.
 Management Authority for Survey Area: Federal x Municipal/County Not Applicable State Not Applicable Tribal Not Applicable Private Not Applicable
 Name of Management Entity or Owner (e.g., Tonto National Forest) Havasupai National Wildlife Refuge
 Length of area surveyed: 1.2 (km)

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

- Not Applicable Native broadleaf plants (entirely or almost entirely, > 90% native)
Not Applicable Mixed native and exotic plants (mostly native, 50 - 90% native)
x Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)
Not Applicable Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

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

Tamarix spp., Salix Gooddingii, Accacia greggii

Average height of canopy (Do not include a range): 5 (meters)

- Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features, Attach additional sheets if necessary).

The survey area is smaller than that was surveyed in previous years to eliminate the survey of areas outside the projects Are of Potential Effect

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

Territory Number	All Dates Detected	UTM E	UTM N	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)

Attach additional sheets if necessary

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

Site Name: Topock AZ-2 State: AZ County: Mohave
 USGS Quad Name: Topock Elevation: 144 (meters)
 Creek, River, or Lake Name: Colorado River

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 730324 N 3844433 UTM Datum: 83 (See instructions)
 Stop: E 730324 N 3844433 UTM Zone: 11

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): J Steinman	Date: 5/22/2014	0	0	0	NA					
	Start: 9:01									
	Stop: 9:19									
	Total hrs: 18 min.									
Survey # 2 Observer(s): J Steinman	Date: 6/4/2014	0	0	0	NA					
	Start: 9:01									
	Stop: 9:12									
	Total hrs: 11 min.									
Survey # 3 Observer(s): J Steinman	Date: 6/19/2014	0	0	0	NA					
	Start: 9:40									
	Stop: 9:45									
	Total hrs: 5 min.									
Survey # 4 Observer(s): N/A	Date: N/A	0	0	0	NA	Survey Area Eliminated				
	Start:									
	Stop:									
	Total hrs:									
Survey # 5 Observer(s): N/A	Date: N/A	0	0	0	NA	Survey Area Eliminated				
	Start:									
	Stop:									
	Total hrs:									
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 Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u> </u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs: <u> </u>		0	0	0	0					

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE 085026 4 State Wildlife Agency Permit #: AZ SP790914

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

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

Reporting Individual Jeff Steinman Phone # (415) 250-2692
 Affiliation Garcia and Associates E-mail jsteinman@garciaandassociates
 Site Name Topock AZ-2 Date report Completed 9/30/2014
 Was this site surveyed in a previous year? Yes ☐ No ☐ Unknown ☒
 Did you verify that this site name is consistent with that used in previous yrs? Yes ☐ No ☐ Not Applicable ☒
 If name is different, what name(s) was used in the past? _____
 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) _____

Length of area surveyed: 10 meters (km)

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

- ☐ Native broadleaf plants (entirely or almost entirely, > 90% native)
☐ 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.

Arundo donax, Salix spp., Tamarix spp.

Average height of canopy (Do not include a range): 4 (meters)

- Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).
Attach additional sheets if necessary.

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

Territory Number	All Dates Detected	UTM E	UTM N	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)

Attach additional sheets if necessary

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

Site Name: Topock AZ-3 State: AZ County: Mohave
 USGS Quad Name: Topock Elevation: 141 (meters)
 Creek, River, or Lake Name: Colorado River

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 730616 N 3844747 UTM Datum: 83 (See instructions)
 Stop: E 730773 N 3844846 UTM Zone: 11

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): J Steinman	Date: 5/22/2014	0	0	0	NA	YUCL and AZBV heard				
	Start: 5:21									
	Stop: 5:42									
	Total hrs: 21min									
Survey # 2 Observer(s): J Steinman	Date: 6/4/2014	0	0	0	NA	YUCL and AZBV heard				
	Start: 5:30									
	Stop: 5:50									
	Total hrs: 20min									
Survey # 3 Observer(s): J Steinman	Date: 6/17/2014	0	0	0	NA	AZBV heard				
	Start: 5:23									
	Stop: 5:50									
	Total hrs: 27min									
Survey # 4 Observer(s): J Steinman	Date: 6/30/2014	0	0	0	NA					
	Start: 8:30									
	Stop: 8:55									
	Total hrs: 25min									
Survey # 5 Observer(s): J Steinman	Date: 7/17/2014	0	0	0	NA					
	Start: 9:19									
	Stop: 9:40									
	Total hrs: 21min									
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 Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u> </u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs: 2.0		0	0	0	na					

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE 085026 4 State Wildlife Agency Permit #: AZ SP790914

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

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

Reporting Individual Jeff Steinman Phone # (415) 250-2692
 Affiliation Garcia and Associates E-mail jsteinman@garciaandassociates.com
 Site Name Topock AZ-3 Date report Completed 9/30/2014
 Was this site surveyed in a previous year? Yes ☐ No ☐ Unknown ☒
 Did you verify that this site name is consistent with that used in previous yrs? Yes ☐ No ☒ Not Applicable ☒
 If name is different, what name(s) was used in the past? _____
 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) Havasui Wildlife Refuge

Length of area surveyed: 208 meters (km)

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

- ☐ Native broadleaf plants (entirely or almost entirely, > 90% native)
☐ 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 gooddingii, Tamarix spp.

Average height of canopy (Do not include a range): 2 (meters)

- Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).
 Attach additional sheets if necessary.

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

Territory Number	All Dates Detected	UTM E	UTM N	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)

Attach additional sheets if necessary

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

Site Name: Topock AZ-4 State: AZ County: Mohave
 USGS Quad Name: Topock Elevation: 143 (meters)
 Creek, River, or Lake Name: Colorado River

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 730908 N 3844998 UTM Datum: 83 (See instructions)
 Stop: E 730961 N 3845519 UTM Zone: 11

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): J Steinman	Date: 5/22/2014	1	0	0	NA	Single male fitz-bew and whitt visual and auditory detection Single male fitz-bew and whitt visual and auditory detection				
	Start: 8:09									
	Stop: 8:50									
	Total hrs: 41min									
Survey # 2 Observer(s): J Steinman	Date: 6/4/2014	0	0	0	NA					
	Start: 5:52									
	Stop: 6:38									
	Total hrs: 46min									
Survey # 3 Observer(s): J Steinman	Date: 6/17/2014	0	0	0	NA					
	Start: 5:50									
	Stop: 6:30									
	Total hrs: 29/1900									
Survey # 4 Observer(s): J Steinman	Date: 6/30/2014	0	0	0	NA					
	Start: 7:50									
	Stop: 8:30									
	Total hrs: 40min									
Survey # 5 Observer(s): J Steinman	Date: 7/17/2014	0	0	0	NA					
	Start: 8:37									
	Stop: 9:19									
	Total hrs: 42min									
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 Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u> </u>				
Total survey hrs: 3.5		0	0	0	na	If yes, report color combination(s) in the comments section on back of form and report to USFWS.				

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE 085026 4 State Wildlife Agency Permit #: AZ SP790914

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

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

Reporting Individual Jeff Steinman Phone # (415) 250-2692
 Affiliation Garcia and Associates E-mail jsteinman@garciaandassociates
 Site Name Topock AZ-4 Date report Completed 9/30/2014
 Was this site surveyed in a previous year? Yes ☐ No ☐ Unknown ☒
 Did you verify that this site name is consistent with that used in previous yrs? Yes ☐ No ☒ Not Applicable ☐
 If name is different, what name(s) was used in the past? _____
 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) Havasupai National Wildlife Refuge

Length of area surveyed: 564 meter (km)

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

☐ Native broadleaf plants (entirely or almost entirely, > 90% native)
☐ 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.

Tamarix spp.

Average height of canopy (Do not include a range): 2 (meters)

Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).
Attach additional sheets if necessary.

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

Territory Number	All Dates Detected	UTM E	UTM N	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)

Attach additional sheets if necessary

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

Site Name: Topock AZ-5 State: AZ County: Mohave
 USGS Quad Name: Topock Elevation: 145 (meters)
 Creek, River, or Lake Name: Colorado River
Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 731000 N 3845574 UTM Datum: 83 (See instructions)
 Stop: E 731118 N 3846528 UTM Zone: 11

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): J Steinman	Date: 5/22/2014	0	0	0	NA	Great Blue Heron Nests				
	Start: 5:42									
	Stop: 8:09									
	Total hrs: 147min									
	min.									
Survey # 2 Observer(s): J Steinman	Date: 6/4/2014	1	0	0	NA	Yellow Warbler at Great Blue Heron Nests				
	Start: 6:39									
	Stop: 8:47									
	Total hrs: 128min									
	min.									
Survey # 3 Observer(s): J Steinman	Date: 6/17/2014	0	0	0	NA					
	Start: 6:30									
	Stop: 9:50									
	Total hrs: 200min									
	min.									
Survey # 4 Observer(s): J Steinman	Date: 6/30/2014	0	0	0	NA					
	Start: 5:41									
	Stop: 7:50									
	Total hrs: 129min									
	min.									
Survey # 5 Observer(s): J Steinman	Date: 7/17/2014	0	0	0	NA					
	Start: 5:40									
	Stop: 7:33									
	Total hrs: 113min									
	min.									
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 Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u> </u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs: 12.0		0	0	0	na					

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE 085026 4 State Wildlife Agency Permit #: AZ SP790914

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

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

Reporting Individual Jeff Steinman Phone # (415) 250-2692
 Affiliation Garcia and Associates E-mail jsteinman@garciaandassociates
 Site Name Topock AZ-5 Date report Completed 9/30/2014
 Was this site surveyed in a previous year? Yes ☐ No ☐ Unknown ☒
 Did you verify that this site name is consistent with that used in previous yrs? Yes ☐ No ☒ Not Applicable ☐
 If name is different, what name(s) was used in the past? _____
 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) Havasupai National Wildlife Refuge

Length of area surveyed: 879 meters (km)

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

- ☐ Native broadleaf plants (entirely or almost entirely, > 90% native)
☐ 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.

Tamarix spp.

Average height of canopy (Do not include a range): 20 (meters)

- Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).

Attach additional sheets if necessary.

The first survey round was only of the east side of the habitat point 1-20 on map. The subsequent surveys were of points AZ5-1 to AZ5-52

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

Territory Number	All Dates Detected	UTM E	UTM N	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)

Attach additional sheets if necessary

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

Site Name: Topock CA-1 State: CA County: San Bernardino
 USGS Quad Name: Whale Mountain Elevation: 134 (meters)
 Creek, River, or Lake Name: Colorado River

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 728449 N 3845723 UTM Datum: 83 (See instructions)
 Stop: E 728081 N 3845821 UTM Zone: 11

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): J Steinman	Date: <u>5/23/2014</u> Start: <u>7:26</u> Stop: <u>7:47</u> Total hrs: <u>21min</u>	0	0	0	NA					
Survey # 2 Observer(s): J Steinman	Date: <u>6/6/2014</u> Start: <u>8:02</u> Stop: <u>8:24</u> Total hrs: <u>22min</u>	0	0	0	NA					
Survey # 3 Observer(s): J Steinman	Date: <u>6/19/2014</u> Start: <u>9:07</u> Stop: <u>9:33</u> Total hrs: <u>26.0</u>	0	0	0	NA					
Survey # 4 Observer(s):	Date: Start: Stop: Total hrs:	0	0	0	NA	Survey Area Eliminated				
Survey # 5 Observer(s):	Date: Start: Stop: Total hrs:	0	0	0	NA	Survey Area Eliminated				
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 Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u> </u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs: <u>N/A</u>		0	0	0	na					

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE 085026.4 State Wildlife Agency Permit #: CA -007801

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

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

Reporting Individual Jeff Steinman Phone # (415) 250-2692
 Affiliation Garcia and Associates E-mail jsteinman@garciaandassociates
 Site Name Topock CA-1 Date report Completed 9/30/2014
 Was this site surveyed in a previous year? Yes x No Unknown
 Did you verify that this site name is consistent with that used in previous yrs? Yes x No Not Applicable
 If name is different, what name(s) was used in the past?
 If site was surveyed last year, did you survey the same general area this year? Yes No x If no, summarize below.
 Did you survey the same general area during each visit to this site this year? Yes x No If no, summarize below.
 Management Authority for Survey Area: Federal Municipal/County x State Tribal Private
 Name of Management Entity or Owner (e.g., Tonto National Forest) Moabi Regional Park

Length of area surveyed: 382 meters (km)

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

- Native broadleaf plants (entirely or almost entirely, > 90% native)
 Mixed native and exotic plants (mostly native, 50 - 90% native)
 Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)
x Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

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

Cercidium microphyllum, Tamarix spp.

Average height of canopy (Do not include a range): 4 (meters)

- Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).

Attach additional sheets if necessary.

The area has had more habitat removed from the expansion of Pirate Coves onto the peninsula of Park Moabi. The habitat has been reduced on both sides to a 5 meter strip. Surveys are now only being conducted on one side.

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

Territory Number	All Dates Detected	UTM E	UTM N	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)

Attach additional sheets if necessary

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

Site Name: Topock CA-2 State: CA County: San Bernardino
 USGS Quad Name: Whale Mountain Elevation: 146 (meters)
 Creek, River, or Lake Name: Colorado River

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 728507 N 3845579 UTM Datum: 83 (See instructions)
 Stop: E 728921 N 3845659 UTM Zone: 11

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): J Steinman	Date: 5/23/2014	0	0	0	NA	BRCO				
	Start: 6:03									
	Stop: 6:39									
	Total hrs: 36min									
Survey # 2 Observer(s): J Steinman	Date: 6/6/2014	0	0	0	NA					
	Start: 5:20									
	Stop: 6:05									
	Total hrs: 45min									
Survey # 3 Observer(s): J Steinman	Date: 6/19/2014	0	0	0	NA					
	Start: 7:25									
	Stop: 7:45									
	Total hrs: 20min									
Survey # 4 Observer(s): J Steinman	Date: 7/1/2014	0	0	0	NA					
	Start: 5:23									
	Stop: 6:00									
	Total hrs: 37min									
Survey # 5 Observer(s): J Steinman	Date: 7/15/2014	0	0	0	NA					
	Start: 5:35									
	Stop: 5:58									
	Total hrs: 23min									
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 Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u> </u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs: <u>2.7</u>		0	0	0	na					

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE 085026.4 State Wildlife Agency Permit #: CA -007801

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

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

Reporting Individual Jeff Steinman Phone # (415) 250-2692
 Affiliation Garcia and Associates E-mail jsteinman@garciaandassociates
 Site Name Topock CA-2 Date report Completed 9/30/2014
 Was this site surveyed in a previous year? Yes ☒ No ☐ Unknown ☐
 Did you verify that this site name is consistent with that used in previous yrs? Yes ☒ No ☐ Not Applicable ☐
 If name is different, what name(s) was used in the past? _____
 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) Moabi Regional Park

Length of area surveyed: 609.0 (km)

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

- ☐ Native broadleaf plants (entirely or almost entirely, > 90% native)
☐ 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.

Cercidium microphyllum, Tamarix spp.

Average height of canopy (Do not include a range): 4 (meters)

Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;

2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;

3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).

Attach additional sheets if necessary.

Pirates cove has incroached and eliminated the habitat on the north side, cut a trail through the middle of the habitat and cleared a portion on the west. See photos in report.

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

Territory Number	All Dates Detected	UTM E	UTM N	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)

Attach additional sheets if necessary

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

Site Name: Topock CA-3 State: CA County: San Bernardino
 USGS Quad Name: Whale Mountain Elevation: 134 (meters)
 Creek, River, or Lake Name: Colorado River

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 729285 N 3845544 UTM Datum: 83 (See instructions)
 Stop: E 729038 N 3845681 UTM Zone: 11

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): J Steinman	Date: 5/23/2014	0	0	0	NA					
	Start: 6:39									
	Stop: 7:17									
	Total hrs: 38min									
Survey # 2 Observer(s): J Steinman	Date: 6/6/2014	10	0	0	NA					
	Start: 6:06									
	Stop: 6:36									
	Total hrs: 30min									
Survey # 3 Observer(s): J Steinman	Date: 6/19/2014	0	0	0	NA					
	Start: 7:45									
	Stop: 8:39									
	Total hrs: 54min									
Survey # 4 Observer(s): J Steinman	Date: 7/1/2014	0	0	0	NA					
	Start: 6:00									
	Stop: 6:29									
	Total hrs: 29min									
Survey # 5 Observer(s): J Steinman	Date: 7/15/2014	0	0	0	NA					
	Start: 5:58									
	Stop: 6:30									
	Total hrs: 32min									
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 Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u> </u>				
Total survey hrs: 3.0		0	0	0	na	If yes, report color combination(s) in the comments section on back of form and report to USFWS.				

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE 085026.4 State Wildlife Agency Permit #: CA -007801

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

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

Reporting Individual Jeff Steinman Phone # (415) 250-2692
 Affiliation Garcia and Associates E-mail jsteinman@garciaandassociates
 Site Name Topock CA-3 Date report Completed 9/30/2014
 Was this site surveyed in a previous year? Yes X No Unknown
 Did you verify that this site name is consistent with that used in previous yrs? Yes X No Not Applicable
 If name is different, what name(s) was used in the past?
 If site was surveyed last year, did you survey the same general area this year? Yes X No If no, summarize below.
 Did you survey the same general area during each visit to this site this year? Yes X No If no, summarize below.
 Management Authority for Survey Area: Federal X Municipal/County State Tribal Private
 Name of Management Entity or Owner (e.g., Tonto National Forest) BLM

Length of area surveyed: 152 meters (km)

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

Native broadleaf plants (entirely or almost entirely, > 90% native)
 Mixed native and exotic plants (mostly native, 50 - 90% native)
X 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.

Acaci gregii, Tamarix spp.

Average height of canopy (Do not include a range): 4 (meters)

Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).
Attach additional sheets if necessary.

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

Territory Number	All Dates Detected	UTM E	UTM N	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)

Attach additional sheets if necessary

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

Site Name: Topock CA-4 State: CA County: San Bernardino
 USGS Quad Name: Whale Mountain Elevation: 134 (meters)
 Creek, River, or Lake Name: Colorado River

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 729537 N 3845317 UTM Datum: 83 (See instructions)
 Stop: E 729384 N 3845151 UTM Zone: 11

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): J Steinman	Date: 5/20/2014	2	0	0	NA	two SWFL respond fit-bew and whitt visual and auditory detection.				
	Start: 5:37									
	Stop: 6:46									
	Total hrs: 69min									
Survey # 2 Observer(s): J Steinman	Date: 6/5/2014	0	0	0	NA	BHCO observed	1	unk		
	Start: 5:15									
	Stop: 7:15									
	Total hrs: 120min									
Survey # 3 Observer(s): J Steinman	Date: 6/18/2014	0	0	0	NA					
	Start: 5:34									
	Stop: 6:24									
	Total hrs: 50min									
Survey # 4 Observer(s): J Steinman	Date: 7/1/2014	0	0	0	NA					
	Start: 7:28									
	Stop: 8:30									
	Total hrs: 62min									
Survey # 5 Observer(s): J Steinman	Date: 7/15/2014	0	0	0	NA	BHCO				
	Start: 8:22									
	Stop: 9:04									
	Total hrs: 42min									
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 Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u> </u>				
Total survey hrs: 5.8		0	0	0	na	If yes, report color combination(s) in the comments section on back of form and report to USFWS.				

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE 085026 4 State Wildlife Agency Permit #: CA -007801

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

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

Reporting Individual Jeff Steinman Phone # (415) 250-2692
 Affiliation Garcia and Associates E-mail jsteinman@garciaandassociates
 Site Name Topock CA-4 Date report Completed 9/30/2014
 Was this site surveyed in a previous year? Yes ☒ No ☐ Unknown ☐
 Did you verify that this site name is consistent with that used in previous yrs? Yes ☒ No ☐ Not Applicable ☐
 If name is different, what name(s) was used in the past? _____
 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) BLM

Length of area surveyed: 249 meters (km)

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

☐ Native broadleaf plants (entirely or almost entirely, > 90% native)
☐ 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.

Tamarix spp. Acacia gregii

Average height of canopy (Do not include a range): 4.5 (meters)

Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).

Attach additional sheets if necessary.

The site was expanded to include several points around the east sided of the bat cave wash route 66 bridge. This areas has improved over the years.

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

Territory Number	All Dates Detected	UTM E	UTM N	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)

Attach additional sheets if necessary

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

Site Name: Topock CA-5 State: CA County: San Bernardino
 USGS Quad Name: Whale Mountain Elevation: 134 (meters)
 Creek, River, or Lake Name: Colorado River

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 729889 N 3844738 UTM Datum: 83 (See instructions)
 Stop: E 730025 N 3844330 UTM Zone: 11

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): J Steinman	Date: 5/20/2014	0	0	0	NA					
	Start: 6:51									
	Stop: 7:39									
	Total hrs: 48min									
Survey # 2 Observer(s): J Steinman	Date: 6/5/2014	0	0	0	NA					
	Start: 7:22									
	Stop: 8:09									
	Total hrs: 42min									
Survey # 3 Observer(s): J Steinman	Date: 6/18/2014	0	0	0	NA					
	Start: 6:57									
	Stop: 8:17									
	Total hrs: 80min									
Survey # 4 Observer(s): J Steinman	Date: 7/3/2014	0	0	0	NA					
	Start: 6:03									
	Stop: 6:50									
	Total hrs: 47min									
Survey # 5 Observer(s): J Steinman	Date: 7/15/2014	0	0	0	NA					
	Start: 7:34									
	Stop: 8:20									
	Total hrs: 46min									
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 Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u> </u>				
Total survey hrs: 4.4		0	0	0	na	If yes, report color combination(s) in the comments section on back of form and report to USFWS.				

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE 085026.4 State Wildlife Agency Permit #: CA -007801

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

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

Reporting Individual	Jeff Steinman	Phone #	(415) 250-2692
Affiliation	Garcia and Associates	E-mail	jsteinman@garciaandassociates
Site Name	Topock CA-5	Date report Completed	9/30/2014
Was this site surveyed in a previous year? Yes <u>x</u> No <u> </u> Unknown <u> </u>			
Did you verify that this site name is consistent with that used in previous yrs?		Yes <u>x</u>	No <u> </u> Not Applicable <u> </u>
If name is different, what name(s) was used in the past? <u> </u>			
If site was surveyed last year, did you survey the same general area this year?		Yes <u>x</u>	No <u> </u> If no, summarize below. <u> </u>
Did you survey the same general area during each visit to this site this year?		Yes <u> </u>	No <u>x</u> If no, summarize below. <u> </u>
Management Authority for Survey Area:		Federal <u>x</u>	Municipal/County <u> </u> State <u> </u> Tribal <u> </u> Private <u> </u>
Name of Management Entity or Owner (e.g., Tonto National Forest)		BLM	

Length of area surveyed: **152 meters** (km)

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

Native broadleaf plants (entirely or almost entirely, > 90% native)

Mixed native and exotic plants (mostly native, 50 - 90% native)

x	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.

Tamarix spp., *Acacia greggii*

Average height of canopy (Do not include a range): 4 (meters)

Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WFL detections.

2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;

3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).

Attach additional sheets if necessary.

The site has been extended to the south to include the expanded Project Area of Potential Effect.

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

[illegible]

Attach additional sheets if necessary

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

Site Name: Topock CA-6 State: CA County: San Bernardino
 USGS Quad Name: Whale Mountain Elevation: 134 (meters)
 Creek, River, or Lake Name: Colorado River

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 729163 N 3845340 UTM Datum: 83 (See instructions)
 Stop: E 729249 N 3845445 UTM Zone: 11

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): J Steinman	Date: 5/20/2014	1	0	0	NA	SWFL: single individual auditory and visual detection fitz-bew heard				
	Start: 8:31									
	Stop: 8:55									
	Total hrs: 24min									
Survey # 2 Observer(s): J Steinman	Date: 6/6/2014	0	0	0	NA					
	Start: 6:38									
	Stop: 7:37									
	Total hrs: 59min									
Survey # 3 Observer(s): J Steinman	Date: 6/18/2014	0	0	0	NA					
	Start: 6:25									
	Stop: 6:54									
	Total hrs: 29min									
Survey # 4 Observer(s): J Steinman	Date: 7/1/2014	0	0	0	NA	BHCO				
	Start: 6:36									
	Stop: 7:28									
	Total hrs: 52min									
Survey # 5 Observer(s): J Steinman	Date: 7/15/2014	0	0	0	NA					
	Start: 6:30									
	Stop: 7:00									
	Total hrs: 30min									
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 Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u> </u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs: 3.2		0	0	0	na					

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE 085026.4 State Wildlife Agency Permit #: CA -007801

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

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

Reporting Individual Jeff Steinman Phone # (415) 250-2692
 Affiliation Garcia and Associates E-mail jsteinman@garciaandassociates
 Site Name Topock CA-6 Date report Completed 9/30/2014
 Was this site surveyed in a previous year? Yes x No Unknown
 Did you verify that this site name is consistent with that used in previous yrs? Yes x No Not Applicable
 If name is different, what name(s) was used in the past?
 If site was surveyed last year, did you survey the same general area this year? Yes x No If no, summarize below.
 Did you survey the same general area during each visit to this site this year? Yes x No If no, summarize below.
 Management Authority for Survey Area: Federal x Municipal/County State Tribal Private
 Name of Management Entity or Owner (e.g., Tonto National Forest) BLM

Length of area surveyed: 152.0 (km)

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

Native broadleaf plants (entirely or almost entirely, > 90% native)

Mixed native and exotic plants (mostly native, 50 - 90% native)

x 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.

Acacia gregii, Tamarix spp.

Average height of canopy (Do not include a range): 4 (meters)

Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;

2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;

3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).

Attach additional sheets if necessary.

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

Territory Number	All Dates Detected	UTM E	UTM N	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)

Attach additional sheets if necessary

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

Site Name: Topock CA-7 State: CA County: San Bernardino
 USGS Quad Name: Whale Mountain Elevation: 141 (meters)
 Creek, River, or Lake Name: Colorado River

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No
 Survey Coordinates: Start: E 730283 N 3844249 UTM Datum: 83 (See instructions)
 Stop: E 730097 N 3844233 UTM Zone: 11

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): J Steinman	Date: 5/20/2014	0	0	0	NA					
	Start: 7:45									
	Stop: 8:24									
	Total hrs: 39min									
Survey # 2 Observer(s): J Steinman	Date: 6/5/2014	0	0	0	NA					
	Start: 8:11									
	Stop: 8:56									
	Total hrs: 45min									
Survey # 3 Observer(s): J Steinman	Date: 6/18/2014	0	0	0	NA					
	Start: 8:25									
	Stop: 9:06									
	Total hrs: 41min									
Survey # 4 Observer(s): J Steinman	Date: 7/3/2014	0	0	0	NA					
	Start: 6:55									
	Stop: 7:20									
	Total hrs: 25min									
Survey # 5 Observer(s): J Steinman	Date: 7/15/2014	0	0	0	NA					
	Start: 7:06									
	Stop: 7:30									
	Total hrs: 24min									
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 Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u> </u> No <u> </u> If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs: 3.0		0	0	0	0					

Reporting Individual: Jeff Steinman Date Report Completed: 9/30/2014
 US Fish & Wildlife Service Permit #: TE 085026 4 State Wildlife Agency Permit #: CA -007801

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

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

Reporting Individual Jeff Steinman Phone # (415) 250-2692
 Affiliation Garcia and Associates E-mail jsteinman@garciaandassociates
 Site Name Topock CA-7 Date report Completed 9/30/2014
 Was this site surveyed in a previous year? Yes ☐ No ☐ Unknown ☒
 Did you verify that this site name is consistent with that used in previous yrs? Yes ☐ No ☐ Not Applicable ☐
 If name is different, what name(s) was used in the past? _____
 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) _____ PG&E

Length of area surveyed: 228 meters (km)

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

- ☐ Native broadleaf plants (entirely or almost entirely, > 90% native)
☒ 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 Gooddingii, Acacia greggii, Tamarix spp.

Average height of canopy (Do not include a range): 3 (meters)

- Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;
 2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;
 3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features).
Attach additional sheets if necessary.

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

Territory Number	All Dates Detected	UTM E	UTM N	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)

Attach additional sheets if necessary

Appendix E

Call Points and Detection UTM Coordinates

Name	Added/Eliminated	State	Easting	Northing
AZ-1				
AZ1-1		AZ	730119	3844889
AZ1-2		AZ	730198	3844830
AZ1-4		AZ	730251	3845035
AZ1-6		AZ	730250	3845090
AZ1-7		AZ	730327	3845103
AZ1-8		AZ	730280	3845148
AZ1-9		AZ	730223	3845178
AZ1-10		AZ	730154	3845179
AZ1-11		AZ	730164	3845226
AZ1-12		AZ	730149	3845290
AZ1-13		AZ	730185	3845344
AZ1-14		AZ	730164	3845390
AZ1-15		AZ	730145	3845431
AZ1-16		AZ	730108	3845465
AZ1-17		AZ	730067	3845500
AZ1-18		AZ	730027	3845533
AZ1-19		AZ	729980	3845567
AZ1-20		AZ	729943	3845609
AZ1-21		AZ	729929	3845657
AZ1-22		AZ	729917	3845690
AZ1-23		AZ	729891	3845727
AZ1-24		AZ	729867	3845759
AZ1-25		AZ	729873	3845812
AZ1-26		AZ	729823	3845857
AZ1-40		AZ	730269	3844972
AZ1-41		AZ	730173	3844898
AZ1-42		AZ	730259	3844828
AZ1-43		AZ	730302	3844935
AZ1-44		AZ	730300	3845020
AZ1-45		AZ	730329	3844908
AZ1-47		AZ	730334	3845059
AZ1-48		AZ	730180	3845295
AZ1-49		AZ	730256	3845305
AZ1-50		AZ	730382	3844927
AZ1-51		AZ	730379	3844901
AZ1-52		AZ	730272	3844792
AZ1-53		AZ	730289	3844962
AZ1-54		AZ	730441	3844892
AZ1-55		AZ	730442	3844986
AZ1-56		AZ	730400	3845117
AZ1-57		AZ	730398	3845202
AZ1-58		AZ	730296	3845378
AZ1-59		AZ	730168	3845486
AZ1-60		AZ	730063	3845555
AZ1-61		AZ	729986	3845704
AZ1-62		AZ	729952	3845785
AZ1-63		AZ	729917	3845866
AZ-2				
AZ2-1	eliminated June 2014	AZ	730325	3844433
AZ-3				

Name	Added/Eliminated	State	Easting	Northing
AZ3-1		AZ	730616	3844747
AZ3-2		AZ	730683	3844764
AZ3-3		AZ	730740	3844808
AZ3-4		AZ	730774	3844846
AZ-4				
AZ4-1		AZ	730909	3844998
AZ4-10		AZ	730976	3845444
AZ4-11		AZ	730962	3845519
AZ4-12		AZ	730975	3845261
AZ4-13		AZ	730952	3845205
AZ4-14		AZ	730936	3845148
AZ4-2		AZ	730945	3845027
AZ4-3		AZ	730988	3845077
AZ4-4		AZ	731026	3845131
AZ4-5		AZ	731051	3845213
AZ4-6		AZ	731033	3845254
AZ4-7		AZ	731021	3845283
AZ4-8		AZ	730996	3845334
AZ4-9		AZ	730991	3845397
AZ-5				
AZ5-1		AZ	731062	3846290
AZ5-2		AZ	731024	3846250
AZ5-3		AZ	730991	3846205
AZ5-4		AZ	731001	3846123
AZ5-5		AZ	731005	3846021
AZ5-6		AZ	730998	3845926
AZ5-7		AZ	730984	3845838
AZ5-8		AZ	730978	3845736
AZ5-9		AZ	730976	3845682
AZ5-10		AZ	731001	3845574
AZ5-11		AZ	731071	3845586
AZ5-12		AZ	731029	3845643
AZ5-13		AZ	731040	3845694
AZ5-14		AZ	731040	3845735
AZ5-15		AZ	731028	3845766
AZ5-16		AZ	731039	3845808
AZ5-17		AZ	731069	3845849
AZ5-18		AZ	731100	3845875
AZ5-19		AZ	731148	3846127
AZ5-20		AZ	731137	3845931
AZ5-21		AZ	731163	3845968
AZ5-22		AZ	731176	3845994
AZ5-23		AZ	731211	3846046
AZ5-24		AZ	731235	3846092
AZ5-25		AZ	731196	3846128
AZ5-26		AZ	731248	3846132
AZ5-27		AZ	731244	3846178
AZ5-28		AZ	731240	3846265
AZ5-29		AZ	731255	3846296
AZ5-30		AZ	731309	3846309
AZ5-31		AZ	731375	3846309

Name	Added/Eliminated	State	Easting	Northing
AZ5-32		AZ	731306	3846378
AZ5-33		AZ	731198	3846338
AZ5-35		AZ	731134	3846395
AZ5-36		AZ	731021	3846316
AZ5-37		AZ	731048	3846338
AZ5-38		AZ	731068	3846370
AZ5-39		AZ	731034	3846406
AZ5-40		AZ	731028	3846427
AZ5-41		AZ	730965	3846465
AZ5-42		AZ	731050	3846482
AZ5-43		AZ	731118	3846529
AZ5-44		AZ	730920	3846426
AZ5-45		AZ	730924	3846391
AZ5-46		AZ	730927	3846366
AZ5-47		AZ	730902	3846345
AZ5-48		AZ	730868	3846365
AZ5-49		AZ	730948	3846298
CA-1				
CA1-1	eliminated June 2014	CA	728108	3845784
CA1-C	eliminated June 2014	CA	728199	3845750
CA1-J	eliminated June 2014	CA	728449	3845723
CA1-M	eliminated June 2014	CA	727932	3845776
CA1-N	eliminated June 2014	CA	727960	3845769
CA1-K	eliminated June 2014	CA	728081	3845821
CA1-O	eliminated June 2014	CA	728245	3845750
CA1-P	eliminated June 2014	CA	728344	3845721
CA1-Q	eliminated June 2014	CA	728403	3845709
CA-2				
CA2-F		CA	728507	3845579
CA2-G		CA	728558	3845596
CA2-K		CA	728595	3845612
CA2-L		CA	728646	3845620
CA2-N		CA	728708	3845636
CA2-R		CA	728754	3845589
CA2-S		CA	728693	3845581
CA2-T		CA	728901	3845676
CA2-U		CA	728847	3845667
CA2-V		CA	728788	3845654
CA-3				
CA3-3		CA	729201	3845578
CA3-A		CA	729236	3845558
CA3-B		CA	729239	3845613
CA3-C		CA	729285	3845544
CA3-D		CA	729199	3845638
CA3-E		CA	729176	3845691
CA3-F		CA	729127	3845653
CA3-G		CA	729116	3845711
CA3-H		CA	729038	3845681
CA3-I		CA	728983	3845681
CA3-J		CA	729202	3845543
CA-4				

Name	Added/Eliminated	State	Easting	Northing
CA4-D		CA	729415	3845232
CA4-E		CA	729387	3845310
CA4-F		CA	729449	3845300
CA4-G		CA	729434	3845366
CA4-H		CA	729537	3845317
CA4-I		CA	729499	3845350
CA4-L		CA	729549	3845257
CA4-M		CA	729395	3845189
CA4-N		CA	729354	3845200
CA4-O		CA	729357	3845263
CA4-P		CA	729384	3845151
CA4-Q		CA	729473	3845265
CA4-R		CA	729628	3845196
CA4-S		CA	729686	3845109
CA4-T		CA	729710	3845206
CA4-U		CA	729665	3845280
CA4-V		CA	729550	3845406
CA4-W		CA	729594	3845360
CA-5				
CA5-5		CA	729893	3844498
CA5-B		CA	729949	3844561
CA5-C		CA	729927	3844607
CA5-D		CA	729955	3844631
CA5-E		CA	729949	3844700
CA5-F		CA	729993	3844556
CA5-G		CA	730000	3844581
CA5-H		CA	730019	3844519
CA5-I		CA	729890	3844688
CA5-J		CA	729889	3844738
CA5-K		CA	729874	3844642
CA5-L		CA	729930	3844459
CA5-M		CA	730025	3844330
CA-6				
CA6-6		CA	729163	3845340
CA6-A		CA	729148	3845387
CA6-B		CA	729193	3845389
CA6-C		CA	729199	3845450
CA6-J		CA	729249	3845445
CA6-K		CA	729249	3845403
CA6-R		CA	729150	3845438
CA6-S		CA	729100	3845406
CA-7				
CA7-A		CA	730284	3844250
CA7-B		CA	730206	3844225
CA7-C		CA	730171	3844230
CA7-D		CA	730097	3844233
Detections				
SWFL CA4-V		CA	729554	3845357
SWFL CA6-K		CA	729193	3845384
SWFL AZ4-10		AZ	730951	3845404
SWFL AZ1		AZ	730158	3845482

Name	Added/Eliminated	State	Easting	Northing
YUCR AZ3-4		AZ	730778	3844843
YEWA AZ5-21		AZ	731156	3845961
AZBV AZ1		AZ	729949	3845787
AZBV AZ3		AZ	730839	3844943
GBHE nests		AZ	731132	3845968