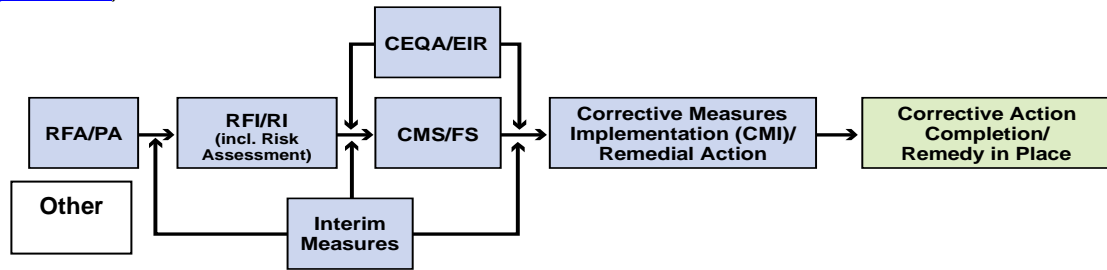


# Topock Project Executive Abstract

<p>Document Title:</p> <p>2015 Western Yellow-Billed Cuckoo Presence/Absence Surveys for the PG&amp;E Topock Compressor Station Needles, California</p> <p>Final Document? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Date of Document: November 30, 2015</p> <p>Who Created this Document?: (i.e. PG&amp;E, DTSC, DOI, Other)</p> <p>PG&amp;E</p>
<p>Priority Status: <input type="checkbox"/> <b>HIGH</b> <input type="checkbox"/> <b>MED</b> <input checked="" type="checkbox"/> <b>LOW</b></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 &amp; 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 2014 Programmatic Biological Assessment (PBA). Not performing the survey and preparing this report would 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 2015 Western Yellow-Billed Cuckoo Presence/Absence Surveys Report presents the findings of the western yellow-billed cuckoo (YBCU) protocol survey conducted between June and August 2015 in areas near the PG&amp;E Topock Compressor Station. One potential, unconfirmed YBCU vocalization was observed during the 2015 survey. The auditory observation was a single detection occurring during a single survey period and at a time when YBCU could be expected to be transient and migrating through the area. According to the protocol, YBCU must be detected during more than one period to be considered breeding in the area. Because this was the fifth year in which YBCU were observed, there is potential for YBCU to breed in the survey area in the future.</p> <p>Written by: PG&amp;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 YBCU Mitigation Measure 2 (Section 5.2.2.8) of the 2014 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](http://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



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Electric  
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November 30, 2015

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:** 2015 Western Yellow-Billed Cuckoo Presence/ Absence Surveys for the PG&E Topock Compressor Station

Dear Ms. Dodson & Ms. Marr:

This letter transmits the *2015 Western Yellow-Billed Cuckoo Presence/Absence Surveys for the PG&E Topock Compressor Station*. This report was prepared in conformance with the 2014 Programmatic Biological Assessment western yellow-billed cuckoo (YBCU) mitigation measure 2 (Section 5.2.2.8), and includes information on the 2015 annual field survey for the YBCU on lands near the PG&E Topock Compressor Station. The survey was conducted by Garcia and Associates (GANDA) and followed protocols outlined in the 2015 Final Draft: *A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo* (Halterman *et al.* 2015).

One potential, unconfirmed YBCU auditory observation was noted during the 2015 survey. The observation was a single detection occurring during a single survey period and at a time when YBCU could be expected to be transient and migrating through the area. According to the protocol, YBCU must be detected during more than one period to be considered breeding in the area. Because this was the fifth year in which YBCU were observed, there is potential for YBCU to breed in the survey area in the future.

As approved in the Final Groundwater Remedy Programmatic Biological Assessment on July 7, 2014, the 2015 YBCU survey is the second of the two initial protocol YBCU surveys.

If you have any questions, please do not hesitate to contact me at (805) 546-5243 or Virginia Strohl at (559) 263-7417.

Sincerely,

Yvonne Meeks  
Topock Remediation Project Manager

Page 2  
November 30, 2015

Cc:

Aaron Yue / DTSC  
David Vigil / CDFW  
Dawn Addelson / ADGF  
Linda Miller/ HNWR

Enclosure



# WESTERN YELLOW-BILLED CUCKOO PRESENCE / ABSENCE SURVEYS FOR THE PG&E TOPOCK COMPRESSOR STATION

November 2015

Garcia and Associates  
Natural and Cultural Resource Consultants



## PREPARED BY:

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

2015 Western Yellow-billed Cuckoo  
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.

**November 2015**

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- Appendix C: Survey Forms
- Appendix D: Call Points and Detection UTM Coordinates

## Introduction

Garcia and Associates (GANDA) conducted a protocol survey for the western yellow-billed cuckoo (*Coccyzus americanus*) (YBCU) near the Pacific Gas and Electric Company (PG&E) Topock Compressor Station Groundwater Remediation Project, 15 miles southeast of Needles, California, on June 23-25, July 8-10, July 21-23, and August 4-6, 2015. The purpose of the survey was to confirm YBCU presence or absence and whether breeding may be occurring in the project area. The project's Programmatic Biological Assessment (PBA) identified tamarisk and some riparian areas of the project area as potential YBCU habitat within the Groundwater Remediation Project's Action Area (CH2M HILL 2014). In 2014, the U.S. Fish and Wildlife Service (USFWS 2014a) listed the western population of YBCU as Threatened and recommended that critical habitat be designated for the species (USFWS 2014b). YBCU are listed as Threatened by the Arizona Game and Fish Department (AZGFD) and as Endangered by the California Department of Fish and Wildlife (CDFW).

The survey was conducted following the survey protocol outlined in the 2015 *A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo* (Halterman *et al.* 2015). This is the second year that PG&E has sponsored focused surveys for YBCU in the project area. YBCU were observed during last year's focused survey and during previous southwestern willow flycatcher (*Empidonax traillii extimus*) (SWFL) surveys in the project area. With the listing of the species by the USFWS, concurrence with the 2014 PBA by the USFWS requires that YBCU surveys be conducted for the project. This survey and report fulfills the USFWS project requirements and the permit requirements of the surveyor.

## Background

The California Natural Diversity Database (CNDDDB) contains one occurrence record for YBCU within 20 miles of the project area (Figure 1) (CDFW 2015). This occurrence record is located along the Colorado River and within the Havasu National Wildlife Refuge and contains multiple reports of YBCU spanning from 1977 to 2009. Some of the reports for this occurrence assume that the YBCU are breeding in the area. This occurrence record is as close as 3 miles northwest from the project area.

The presence of YBCU in the project vicinity had been established through observations of YBCU in Topock Marsh during project-related surveys (Figure 2). A YBCU was observed in 2014 during a YBCU survey (Garcia and Associates [GANDA] 2014) and YBCU were observed while conducting SWFL surveys in 2008, 2009 and 2010 (GANDA 2008, GANDA 2009, and GANDA 2010). All observations were of a single individual. No YBCU were observed in 2012 (GANDA 2012) and no surveys were conducted in 2013. The locations of all YBCU observations are shown in Figure 2.

The proposed YBCU critical habitat (USFWS 2014b) includes a portion of Havasu National Wildlife Refuge, Topock Marsh, and the project area (Figure 1).



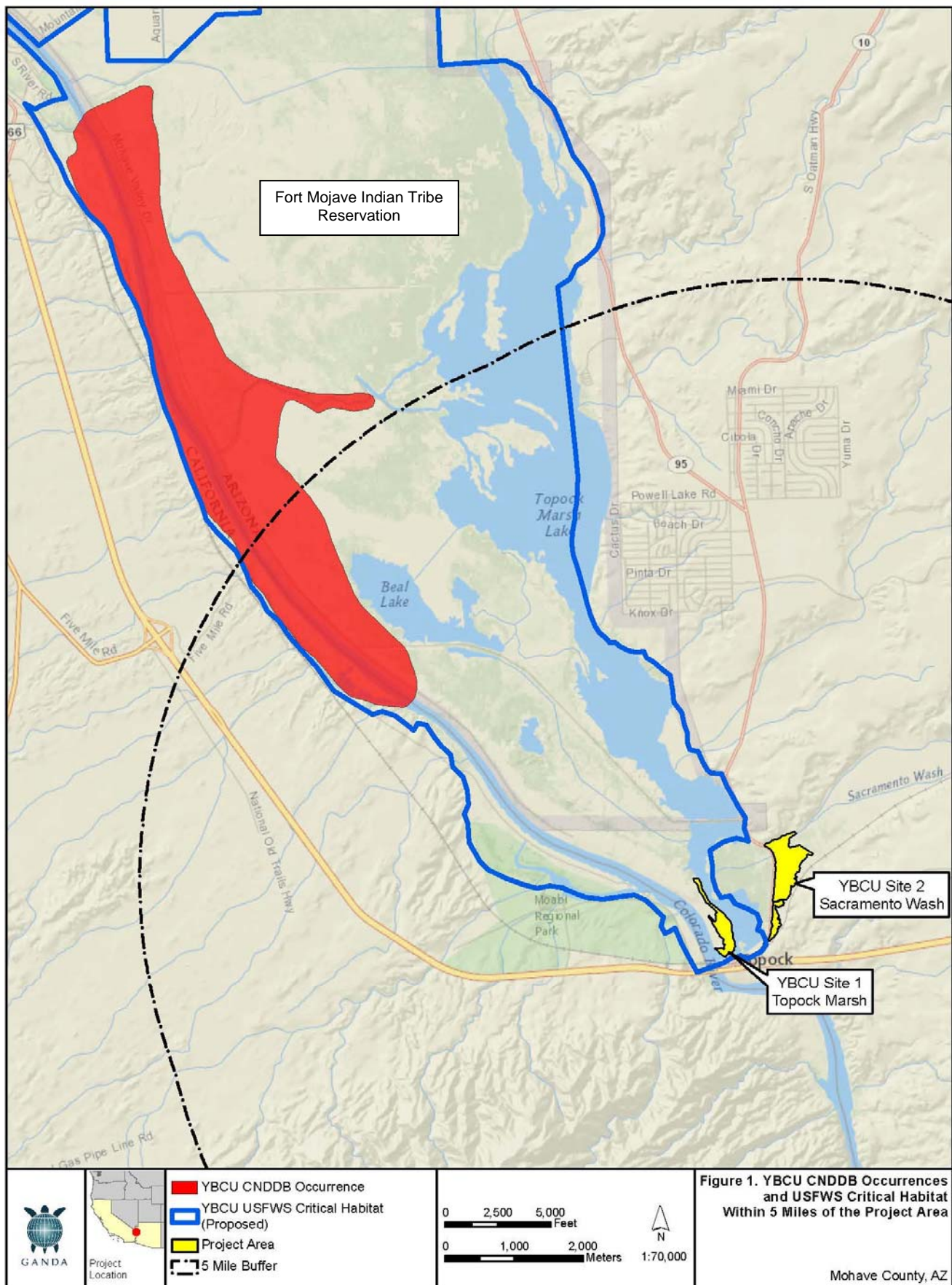


Figure 1. YBCU CNDDDB Occurrences and USFWS Critical Habitat.



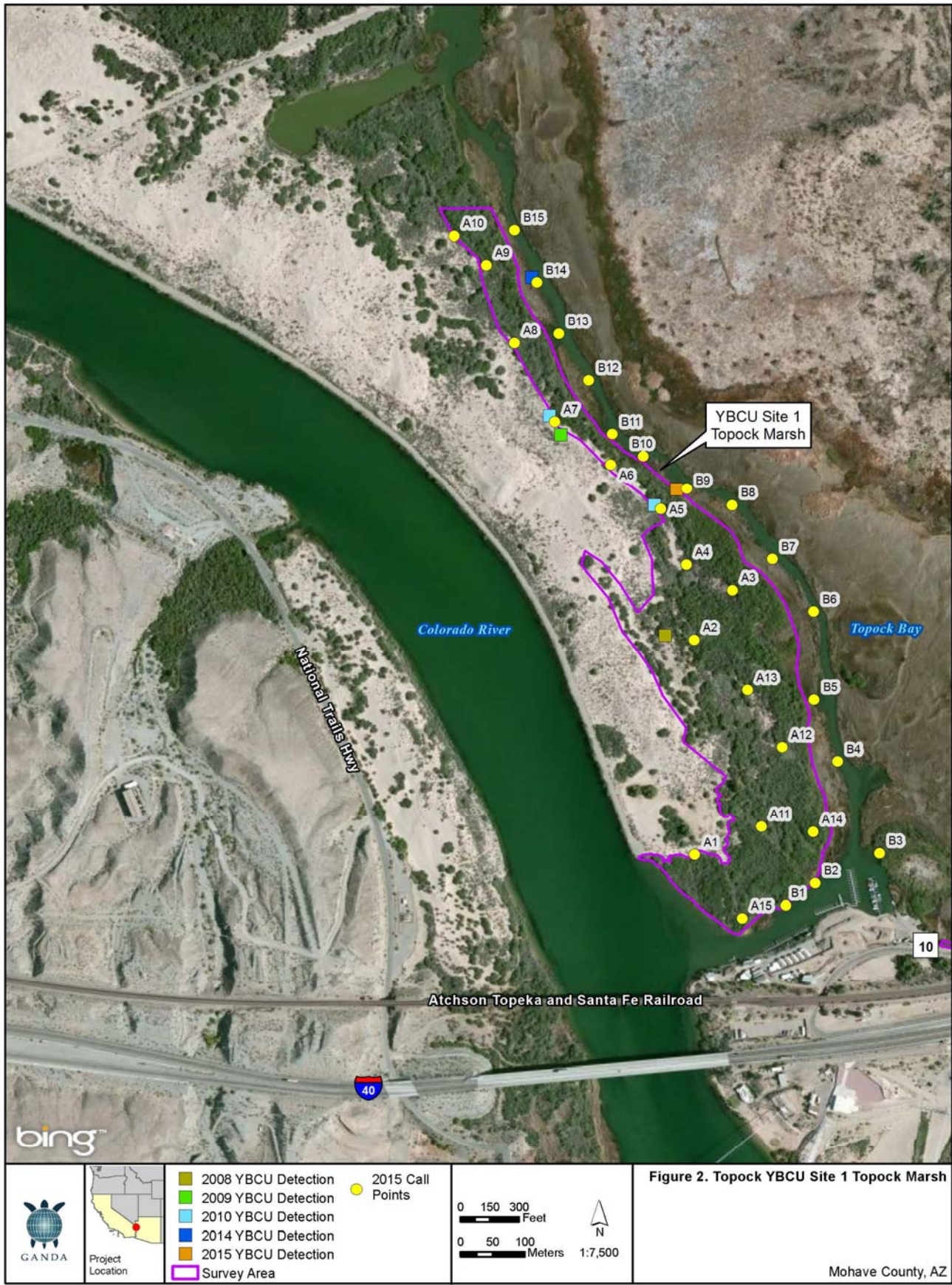


Figure 2. Topock Site 1 Topock Marsh

## Site Description and Habitat Quality

The survey area consisted of two sites inside the USFWS Havasu National Wildlife Refuge on the Arizona side of the Colorado River in Mohave County, Arizona. The survey protocol identifies potential YBCU habitat as suitable habitat greater than 5 hectares (ha) in size and that is either:

1. *Multi-layered riparian vegetation with riparian canopy trees (at least a few within a patch) and at least one layer of understory vegetation; or*
2. *Mesquite and/or hackberry bosque, primarily in southeastern Arizona or when adjacent to habitat 1 above.*

The two sites, Topock Marsh Site 1 and Sacramento Wash Site 2, were identified by their size and habitat as having potential to support breeding YBCU. However, both sites (Figure 2 and Figure 3) are also adjacent to State Route 95, the BNSF Railway, and the Topock Marina, which is a community of several houses and businesses. Recreational watercraft, frequently observed on the Colorado River and in the Topock Marsh, contribute to regular human disturbance at both sites. Additionally, a fire affected a large portion of suitable habitat within Sacramento Wash adjacent to the sites in 2009, which, combined with the mechanical clearance of the vegetation in that area, may be contributing to the degradation of habitat quality for YBCU at these sites. Appendix A provides representative photographs of each survey site. The sites vary in elevation from 400 to 500 feet above sea level.

### Site 1: Topock Marsh

Site 1, the Topock Marsh Site, is located on a large peninsula between the Colorado River and Topock Bay (Figure 2). It is bordered by bulrush-dominated marsh on one side and the fast flowing Colorado River on the other. The site totals 39.5 acres.

Overall, the survey area has moderate habitat quality for YBCU. The Colorado River and Topock Marsh provide standing surface water throughout the breeding season, and the site includes a suitable vegetation composition of contiguous riparian habitat with a dense multistory canopy composed primarily of native riparian species.

The most abundant plant species are coyote willow (*Salix exigua*), tamarisk (*Tamarix ramosissima* and *Tamarix aphylla*), catclaw acacia (*Senegalia greggii*) and arrow weed (*Pluchea sericea*). Coyote willow is the most dominant plant species throughout the survey area. Photographs of the survey sites are provided in Appendix A. A list of the plant species observed is included in Appendix B.



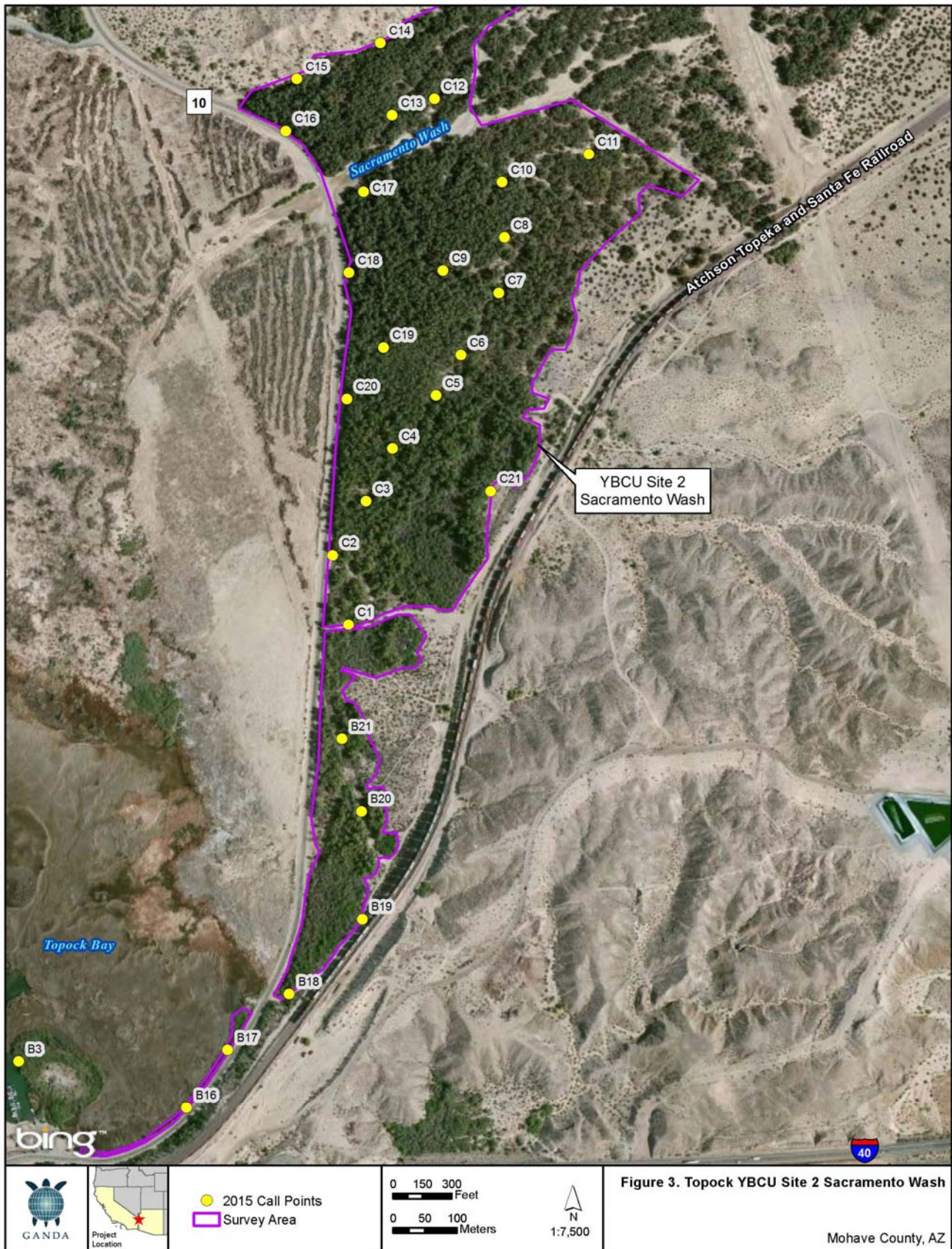


Figure 3. Topock Site 2 Sacramento Wash

## Site 2: Sacramento Wash

Site 2 sits in the floodplain of Sacramento Wash, which drains the Sacramento Valley during monsoonal rains.

Site 2 is a large area composed of contiguous riparian habitat and moderate habitat quality for YBCU. The site totals 93.16 acres. It is almost completely composed of athel tamarisk that forms a dense, almost impenetrable, stand (Figure 3). However, the Sacramento Wash is an ephemeral desert wash and there is no permanent flowing or standing water at the site.

The most abundant plant species are athel tamarisk, catclaw acacia, coyote willow, and arrow weed. Photographs of the survey sites are provided in Appendix A. A list of the plant species observed is included in Appendix B.

## Survey Methods

Surveys were conducted by GANDA wildlife biologist Jeff Steinman. Mr. Steinman has a USFWS permit and scientific collecting permits from California and Arizona to conduct YBCU surveys (USFWS Permit #TE-085026-5, AZGFD Permit #SP-713705, and CDFW Permit SC-007801). Surveys followed the protocol outlined by Halterman *et al.* (2015). The protocol recommends that four surveys be conducted between June 15 and August 15, with a minimum of 12 days and a maximum of 15 days between each survey visit. Mr. Steinman conducted the YBCU surveys on June 23-25, July 8-10, July 21-23, and August 4-6, 2015. All surveys were conducted between 0500 hours and 1100 hours. As required by the protocol, surveys were only conducted during fair weather conditions and when air temperature was lower than 104 degrees Fahrenheit. The survey was broken up into three survey transects surveyed over three days. Surveys were conducted on foot at Site 2 and on foot and by kayak at Site 1. In order to improve the efficiency of the survey effort a portion of Site 2 was surveyed on the same day as the kayak survey of Site 1. Figures 2 and 3 show the call points that were surveyed. Completed survey forms for each site are included in Appendix C.

The same area was surveyed during the 2014 YBCU survey. To improve coverage of the survey area, the naming and location of the call points have been changed from the previous survey. Call points were established in the field using Google Earth and hand-held global positioning system (GPS) units. Call points were placed approximately 100 meters apart, with variation based on the quality of the habitat, thickness of vegetation, and accessibility. Appendix D includes a complete list of call points surveyed and their corresponding Universal Transverse Mercator (UTM) coordinates.

The survey method consisted of using an MP3 player and speaker system to broadcast YBCU calls from established call points. At each call point, YBCU “kowlp” calls were broadcast once every minute, following an initial one-minute 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

One possible YBCU was detected at 0707 hours on July 8, 2015 in Site 1 at call point A5 (Figure 2). The detection consisted of a single YBCU “kowlp” call in response to the first recorded call of the survey point. Upon detection of the YBCU, the broadcasting device was turned off and a listening and observation period was initiated. After no further response or observations another series of calls were played, which did not elicit any additional responses. It is possible this detection was of another species of bird, such as a pied-billed grebe, which have been observed in the immediate area and have a similar vocalization to YBCU. The survey effort was continued after the detection occurred in hopes of receiving an additional response to confirm YBCU presence. The survey was completed at 0820 hours with no additional detections. No additional YBCU were detected during any of the other surveys or at any of the other survey sites.

## Incidental Species

Many additional wildlife species were observed during the YBCU 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*), beaver (*Castor canadensis*), 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 (*Poliophtila melanura*). Complete lists of wildlife species observed are included in Appendix B.

Notable additional observations during the 2015 surveys were detections of Arizona Bell’s vireo (*Vireo bellii arizonae*), brown-headed cowbird (*Molothrus ater*), and Yuma clapper rail (*Rallus longirostris yumanensis*).

## Conclusions

One potential, but unconfirmed, auditory YBCU observation was noted during the 2015 survey. The observation was a single detection occurring during a single survey period and at a time when YBCU could be expected to be transient and migrating through the area. According to the protocol, YBCU must be detected during more than one survey period to be considered breeding in the area. However, due to the cryptic nature of the species, quality of the habitat, and the fact that this is the fifth year in which YBCU were observed, there is potential for YBCU to breed in the survey area in the future.

## References

- California Department of Fish and Game (CDFW). 2015. California Natural Diversity Database (CNDDB). Biogeographic Data Branch, California Department of Fish and Wildlife, Sacramento.
- CH2M HILL. 2014. Programmatic Biological Assessment for Pacific Gas and Electric Topock Compressor Station Final Groundwater Remedy. April 2014.
- Garcia and Associates (GANDA). 2008. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Compressor Station Expanded Groundwater Extraction and Treatment System, Topock, California. August 2008.
- \_\_\_\_\_. 2009. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station. September 2009.
- \_\_\_\_\_. 2010. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station. September 2010.
- \_\_\_\_\_. 2012. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station. September 2012.
- \_\_\_\_\_. 2014. Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station. September 2014.
- Halterman, Murrelet; Johnson, M.J.; and Holmes, J.A. 2015. A Natural History Summary and Survey Protocol for the Western Distinct Population Segment of the Yellow-billed Cuckoo. Final Draft 22 April 2015.
- U.S. Fish and Wildlife Service (USFWS). 2014a. Federal Register, Department of the Interior, Fish and Wildlife Service. Endangered and Threatened Wildlife and Plants; Determination of threatened Status for the Western Distinct Population Segment of the Yellow-Billed Cuckoo; Final Rule. 50 CFR Part 17. RIN 1018-AY53. October 3, 2014.
- \_\_\_\_\_. 2014b. Federal Register, Department of the Interior, Fish and Wildlife Service. Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Western Distinct Population Segment of the Yellow-Billed Cuckoo; Proposed Rule. 50 CFR Part 17. RIN 1018-AZ44. August 15, 2014.

## **Appendix A**

### **Photo Log**





**YBCU Topock Marsh Site 1 Exterior**



**YBCU Topock Marsh Site 1 Interior**



**YBCU Sacramento Wash Site 2 Exterior**



**YBCU Sacramento Wash Site 2 Interior**

## **Appendix B**

### **Incidental Plant, Vertebrate and Avian Species**



## Plants

Common Name	Scientific Name
Arrowweed	<i>Pluchea sericea</i>
Athel Salt Cedar	<i>Tamarix aphylla</i>
Cheesebush	<i>Hymenoclea salsola</i>
Prickly Lettuce	<i>Lactuca serriola</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>

## Animals

Common Name	Scientific Name
American Bullfrog	<i>Rana catesbeiana</i>
Beaver	<i>Castor canadensis</i>
Black-tailed Jackrabbit	<i>Lepus californicus</i>
Coyote	<i>Canis latrans</i>
Desert Cottontail	<i>Sylvilagus audubonii</i>
Feral Hog	<i>Sus scrofa</i>
Muskrat	<i>Ondatra zibethicus</i>

## Birds

Common Names	Scientific Names
Abert's Towhee	<i>Pipilo aberti</i>
American Coot	<i>Fulica americana</i>
American Kestrel	<i>Falco sparverius</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 Pheobe	<i>Sayornis nigricans</i>
Black-tailed Gnatcatcher	<i>Polioptila melanura</i>
Blue Grossbeak	<i>Passerina caerulea</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Bushtit	<i>Psaltiriparus minimus</i>
Caspian Tern	<i>Hydroprogne caspia</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Double-crested Cormorant	<i>Phalacrocorax auritus</i>
Downy Woopecker	<i>Picoides pubescens</i>
Great Blue Heron	<i>Ardea herodias</i>
Greater Roadrunner	<i>Geococcyx californianus</i>
Great-horned Owl	<i>Bubovirginianus</i>
Great-tailed Grackle	<i>Quiscalus mexicanus</i>
Green Heron	<i>Butorides virecens</i>
House Finch	<i>Carpodacus mexicanus</i>
Killdeer	<i>Charadrius vociferous</i>
Least Bittern	<i>Ixobrychus exilis</i>
Loggerhead Shrike	<i>Lanius ludovicianus</i>
Long-billed Curlew	<i>Numenius americanus</i>
Lucy Warbler	<i>Oreothlypis luciae</i>
Marsh Wren	<i>Cistothorus palustris</i>
Mourning Dove	<i>Zenaida macroura</i>
Northern Harrier	<i>Circus cyaneus</i>
Pied-billed Grebe	<i>Podilymbus podiceps</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Song Sparrow	<i>Melospiza melodia</i>
Willow Flycatcher	<i>Empidonax traillii</i>
Turkey Vulture	<i>Cathartes aura</i>
Verdin	<i>Auriparus flaviceps</i>
Western Grebe	<i>Aechmophous occidentalis</i>
White-faced Ibis	<i>Plegadis chihi</i>
White-winged Dove	<i>Zenaida asiatica</i>
White-throated Swift	<i>Aeronautes saxatalis</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 C**

### **Survey Forms**

# Yellow-Billed Cuckoo (YBCU) Survey Form

Page 1 of 1

Site Code:	Site Name: Topock Marsh Site 1	Survey Period: 1	Date (mm/dd/yy): 06/23/15
Survey Start Time: 0520	Wind: 0	Cloud cover (%): 0	Precip: 0 Noise: 0 (train=2) # of stops 15
Survey Stop Time: 0900	Wind: 0	Cloud cover (%): 0	Precip: 0 Noise: 0 (train=2) Observers: Jeff Steinman
Zone: 841	GPS #: N/A	GPS acc. (m): 5	Hours surveying: 4 Estimated # of individual YBCU: 0

Point Start Time	UTM Coordinates		Waypoint Number	# Broadcast Plays	Cuckoo #	Detection Type (N or R)	Time of Detection	How Detected (A, V, or B)	Compass Bearing	Estimated Distance (m)	Dist. Acc.	Vocal Code	Behavior / Breeding	Note #
	Easting (6 digits)	Northing (7 digits)												
0539	730197	3845027	A2	5	0									
0550	730256	3845304	A3											
0601	730185	3845314	A4											①
0612	730145	3845431	A5											
0622	730067	3845500	A6											②
0637	729980	3845562	A7											
0650	729917	3845610	A8											
0701	729873	3845812	A9											③
0710	729823	3845857	A10											
0740	730286	3845148	A13											
0749	730334	3845059	A12											
0801	730202	3844935	A11											
0811	730302	3844926	A14											
0827	730272	3844772	A15											
0837	730198	3844871	A1	5	0									

Notes:

① 2x AZBVGA4 730148 3845453 / 730161 3845441 UTM

② YUMA @ A6 UTM 730061 3845543

③ AZBV @ A9 UTM 729876 3845823

	Date	Initials
Data Entry:		
Data Proof:		
Data Scan:		



# Yellow-Billed Cuckoo (YBCU) Survey Form

Page 1 of 1

Site Code:	Site Name: <u>Topock Marsh Site 1</u>	Survey Period: <u>2</u>	Date (mm/dd/yy): <u>07/08/15</u>
Survey Start Time: <u>0520</u>	Wind: <u>0</u>	Cloud cover (%): <u>80</u>	Precip: <u>0</u> Noise: <u>0.3 train</u> # of stops: <u>15</u>
Survey Stop Time: <u>0820</u>	Wind: <u>1</u>	Cloud cover (%): <u>10</u>	Precip: <u>0</u> Noise: <u>0.3 train</u> Observers: <u>Jeff Steinman</u>
Zone: <u>11</u>	GPS #: <u></u>	GPS acc. (m): <u></u>	Hours surveying: <u></u> Estimated # of individual YBCU: <u></u>

Point Start Time	UTM Coordinates		Waypoint Number	#	Broadcast Plays	Cuckoo #	Detection Type (N or R)	Time of Detection	How Detected (A, V, or B)	Compass Bearing	Estimated Distance (m)	Dist. Acc.	Vocal Code	Behavior / Breeding	Note #
	Easting (6 digits)	Northing (7 digits)													
0526	730198	3844891	A1	5	0										
0540	730272	3844792	A15												
0551	730302	3844985	A11												
0602	730382	3844926	A14												
0613	730280	3845148	A13												
0624	730334	3845059	A12												
0636	730192	3845027	A2												①
0647	730256	3845304	A3												
0658	730185	3845344	A4												
0705	730145	3845431	A5			1	N	0707	A	66°	50	Y	KOWLP	NV	②
0717	730067	3845500	A6			0	N	0719							
0736	730980	3845567	A7												
0750	730917	3845690	A8												
0759	730893	3845812	A9												
0807	730823	3845857	A10												

Notes:

① AZOV @ A3 UTM 730277 3845301

② YBCU @ A5 Kowlp after 1st playback/no vocal/no other detection/Resume playback after 15 minutes no response. Could be PBGR March close to contact location. Resume survey without further detection UTM 730243 3845319 50M @ 66°

	Date	Initials
Data Entry:		
Data Proof:		
Data Scan :		



# Yellow-Billed Cuckoo (YBCU) Survey Form

Page 1 of 1

Site Code:	Site Name: <u>Topock Marsh Site 1</u>			Survey Period: <u>2</u>	Date (mm/dd/yy): <u>07/21/15</u>
Survey Start Time: <u>0515</u>	Wind: <u>0</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>	Noise: <u>0 (train 2)</u>	# of stops: <u>15</u>
Survey Stop Time: <u>0815</u>	Wind: <u>1</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>	Noise: <u>0 (train 2)</u>	Observers: <u>Jeff Steiman</u>
Zone:	GPS #: <u>N/A</u>	GPS acc. (m): <u>5</u>	Hours surveying: <u>3</u>	Estimated # of individual YBCU: <u>0</u>	

Point Start Time	UTM Coordinates		Waypoint Number	# Broadcast Plays	Cuckoo #	Detection Type (N or R)	Time of Detection	How Detected (A, V, or B)	Compass Bearing	Estimated Distance (m)	Dist. Acc.	Vocal Code	Behavior / Breeding	Note #
	Easting (6 digits)	Northing (7 digits)												
0535	730198	3844891	A1	5	0									
0541	730272	3844772	A15											
0548	730302	3844935	A11											
0557	730382	3844926	A14											
0609	730334	3845059	A12											
0617	730280	3845148	A13											
0625	730197	3845227	A2											
0636	730256	3845304	A3											
0647	730185	3845344	A4											
0701	730195	3845431	A5											
0716	730067	3845508	A6											
0724	729980	3845567	A7											
0735	729917	3845690	A8											
0747	729875	3845812	A9											
0750	729823	3845857	A10											

Notes:

① AZBU @ A8 UTM 729921 3845702

	Date	Initials
Data Entry:		
Data Proof:		
Data Scan :		

# Yellow-Billed Cuckoo (YBCU) Survey Form

Page 1 of 1

Site Code:	Site Name: <u>Topock WMA Site 1</u>			Survey Period: <u>3</u>	Date (mm/dd/yy): <u>08/04/15</u>
Survey Start Time: <u>0530</u>	Wind: <u>0</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>	Noise: <u>0 (train 2)</u>	# of stops <u>15</u>
Survey Stop Time: <u>0815</u>	Wind: <u>0</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>	Noise: <u>0 (train 2)</u>	Observers: <u>Jeff Steinman</u>
Zone:	GPS #: <u>N/A</u>	GPS acc. (m): <u>5</u>	Hours surveying:	Estimated # of individual YBCU: <u>0</u>	

Point Start Time	UTM Coordinates		Waypoint Number	#	Broadcast Plays	Cuckoo #	Detection Type (N or R)	Time of Detection	How Detected (A, V, or B)	Compass Bearing	Estimated Distance (m)	Dist. Acc.	Vocal Code	Behavior / Breeding	Note #
	Easting (6 digits)	Northing (7 digits)													
0540	729823	3845857	A10												
0550	729873	3845812	A9												
0605	729917	3845670	A8												
0612	729780	3845567	A7												
0618	730067	3845500	A6												
0624	720145	3845431	A5												
0632	730185	3845374	A4												
0646	730256	3845304	A3												
0654	730197	3845227	A2												
0704	730280	3845148	A13												
0718	730334	3845051	A12												
0728	730382	3844926	A14												
0737	730302	3844735	A11												
0744	730272	3844792	A15												
0800	730198	3844871	A1												

Notes:

Date Entry:	Date	Initials
Data Proof:		
Data Scan :		



# Yellow-Billed Cuckoo (YBCU) Survey Form

Page 1 of 2

Site Code:	Site Name: <u>Topock Marsh Site 1 East</u>	Survey Period: <u>1</u>	Date (mm/dd/yy): <u>06/24/15</u>
Survey Start Time: <u>0610</u>	Wind: <u>0</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u> Noise: <u>0-3 min</u> # of stops
Survey Stop Time:	Wind: <u>1</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u> Noise: <u>0-3 min</u> Observers: <u>Jeff Steinman</u>
Zone: <u>11</u>	GPS #: <u>N/A</u>	GPS acc. (m): <u>5</u>	Hours surveying: Estimated # of individual YBCU: <u>0</u>

Point Start Time	UTM Coordinates		Waypoint Number	#	Broadcast Plays	Cuckoo #	Detection Type (N or R)	Time of Detection	How Detected (A, V, or B)	Compass Bearing	Estimated Distance (m)	Dist. Acc.	Vocal Code	Behavior / Breeding	Note #
	Easting (6 digits)	Northing (7 digits)													
0615	730339	3844812	B1	5	0										
0622	730385	3844846	B2												
0631	730486	3844893	B3												
0640	730420	3845036	B4												
0652	730384	3845133	B5												
0658	730383	3845271	B6												
0707	730318	3845352	B7												
0717	730256	3845436	B8												
0728	730185	3845462	B9												
0737	730117	3845513	B10												
0750	730069	3845548	B11												
0800	730032	3845631	B12												
0811	729986	3845704	B13												
0820	729952	3845785	B14												
0831	729917	3845866	B15												

Notes:

Date Entry:	Date	Initials
Data Proof:		
Data Scan :		

[illegible]

Site: Topack Marsh Site 1 Date: 06/24/15 Page 2 of 2



# Yellow-Billed Cuckoo (YBCU) Survey Form

Page 1 of 2

Site Code:	Site Name: <u>Topock Marsh Site 1 Bant</u>			Survey Period: <u>2</u>	Date (mm/dd/yy): <u>07/07/15</u>	
Survey Start Time: <u>0615</u>	Wind: <u>1</u>	Cloud cover (%): <u>25</u>	Precip: <u>0</u>	Noise: <u>0 (train 2)</u>	# of stops	
Survey Stop Time:	Wind: <u>2</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>	Noise: <u>(train 2)</u>	Observers:	
Zone: <u>11</u>	GPS #: <u>N/A</u>	GPS acc. (m): <u>5</u>	Hours surveying:	Estimated # of individual YBCU: <u>0</u>	<u>Jeff Steinman</u>	

Point Start Time	UTM Coordinates		Waypoint Number	# Broadcast Plays	Cuckoo #	Detection Type (N or R)	Time of Detection	How Detected (A, V, or B)	Compass Bearing	Estimated Distance (m)	Dist. Acc.	Vocal Code	Behavior / Breeding	Note #
	Easting (6 digits)	Northing (7 digits)												
0624	730420	3845036	B4	5	0									
0634	730384	3845133	B5											
0641	730383	3845271	B6											
0651	730383	3845352	B7											
0702	730256	3845436	B8											
0712	730185	3845462	B9											
0724	730117	3845513	B10											
0733	730069	3845548	B11											
0740	730032	3845631	B12											
0748	729986	3845704	B13											
0801	729952	3845785	B14											
0811	729917	3845866	B15											
0829	730486	3844893	B3											
0837	730585	3844846	B2											
0849	730339	3844812	B1	4	0									

Notes:

Date Entry:	Date	Initials
Data Proof:		
Data Scan :		

[illegible]

Site: Topack Marsh Site 1 Date: 02/09/15 Page 2 of 2



# Yellow-Billed Cuckoo (YBCU) Survey Form

Page 1 of 2

Site Code:	Site Name: <u>Topock Marsh Site 1 Bont</u>		Survey Period: <u>2</u>	Date (mm/dd/yy): <u>07/22/15</u>
Survey Start Time: <u>0605</u>	Wind: <u>1</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>	Noise: <u>0 (train 2)</u>
Survey Stop Time:	Wind: <u>1</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>	Noise: <u>0 (train 2)</u>
Zone: <u>11</u>	GPS #: <u>N/A</u>	GPS acc. (m): <u>5</u>	Hours surveying:	Estimated # of individual YBCU: <u>0</u>
				# of stops
				Observers: <u>Jeff Steinman</u>

Point Start Time	UTM Coordinates		Waypoint Number	# Broadcast Plays	Cuckoo #	Detection Type (N or R)	Time of Detection	How Detected (A, V, or B)	Compass Bearing	Estimated Distance (m)	Dist. Acc.	Vocal Code	Behavior / Breeding	Note #
	Easting (6 digits)	Northing (7 digits)												
0650	727717	3845866	B15	5	0									
0702	727952	3845785	B14											
0712	727786	3845704	B13											
0720	730032	3845631	B12											
0728	730069	3845548	B11											①
0736	730117	3845513	B10											
0744	730185	3845462	B9											
0751	730256	3845436	B8											
0759	730318	3845352	B7											
0808	730387	3845271	B6											
0817	730384	3845193	B5											
0825	730420	3845076	B4											②
0832	730486	3844875	B3											
0847	7302086	3844846	B2											
0856	730185	3844812	B1	✓	✓									

Notes:

① YUMA @ B11 UTM 730055 3845561

② YUMA @ B4 UTM 730439 3845035

	Date	Initials
Data Entry:		
Data Proof:		
Data Scan :		

[illegible]

Site: Topack Marsh Site 1

Date: 07/22/15

Page 2 of 2



Page 1 of 2[illegible]

AZBV @ BG Juvenile UTM 730397 3845282

Garcia and Associates  
November

WIND (Beaufort Scale)	PRECIP		NOISE		VOCALIZATION	CODE	BEHAVIOR	CODE	BREEDING	CODE	BREEDING	CODE	BREEDING	CODE	
calm	0	None	0	Quiet	0	Contact	CON	No visual	NV	Vocal Exchange	VEX	Copulation	COP	Nest	N
Smoke drifts	1	Mist	1	Low	1	Coo	COO	Sitting	ST	Carry Food	CF	Incubating	IN	At Nest	AN
Felt on face	2	Drizzle	2	Medium	2	Knock/Alarm	ALA	Forages	FO	Fecal sac carry	SC	Brooding	BR	Leaves Nest	LN
Leaves move	3	Rain	3	Noise		Juv. Calls	JCON	Flies	FLY	Carry Nest Material	CN	Fledgling	FL	Nest Eggs	NE
Sm. branches move	4	Heavy rain	4	High	3	Kowlp	Kowlp	Catches Prey	CP	Juvenile	JUV	Feeds Young	FY	Pair	PA
Small trees move	5	Snow	5	Noise		Other voc	VO	Eats Food	EF	Distraction Display	DD	Southern Sierra Research Station			
Detection Type: Mark N (new) for the first detection of an individual YBCU, for each subsequent detection of that same YBCU mark an R (repeat) instead															
How detected: A: aural, V: visual, B: both A+V. Distance Accuracy: 1: known ybcu location/measured, 2: est/measured, 3: est ≤25 m, 4: est ≤50 m, 5: est ≤100 m, 6: complete guess															

**Notes:**

Date: 08/05/15



# Yellow-Billed Cuckoo (YBCU) Survey Form

Page 1 of 2

Site Code:	Site Name: <u>Sacramento Wash Site 2</u>	Survey Period: <u>1</u>	Date (mm/dd/yy): <u>06/25/15</u>
Survey Start Time: <u>0455</u>	Wind: <u>0</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>
Survey Stop Time: <u>0756</u>	Wind: <u>0</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>
Zone: <u>11</u>	GPS #: <u>N/A</u>	GPS acc. (m): <u>5</u>	Hours surveying: <u>3</u>
Estimated # of individual YBCU: <u>0</u>			# of stops: <u>21</u>
Observers: <u>Jeff Steinman</u>			

Point Start Time	UTM Coordinates		Waypoint Number	# Broadcast Plays	Cuckoo #	Detection Type (N or R)	Time of Detection	How Detected (A, V, or B)	Compass Bearing	Estimated Distance (m)	Dist. Acc.	Vocal Code	Behavior / Breeding	Note #
	Easting (6 digits)	Northing (7 digits)												
0507	730975	3845682	C2	5	0									
0515	731027	3845766	C3											
0522	730998	3845926	C20											①
0531	731055	3846006	C19											
0540	731001	3846123	C18											
0547	731024	3846249	C17											
0555	731068	3846369	C13											
0603	731134	3846895	C12											
0613	731049	3846481	C14											
0620	730919	3846426	C15											
0628	730902	3846344	C16											
0640	731375	3846308	C17											
0648	731239	3846264	C10											
0657	731243	3846178	C8											
0706	731147	3846126	C9											

Notes:

① SWFL @ C20 @ 0524 auditory only no visual single bird  
UTM 731013 3845954

Date	Initials
Data Entry:	
Data Proof:	
Data Scan :	





# Yellow-Billed Cuckoo (YBCU) Survey Form

Page 1 of 2

Site Code:	Site Name: <u>Sacramento West Site 2</u>	Survey Period: <u>2</u>	Date (mm/dd/yy): <u>07/10/15</u>
Survey Start Time: <u>0540</u>	Wind: <u>0</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>
Survey Stop Time: <u>0900</u>	Wind: <u>0</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>
Zone: <u>11</u>	GPS #: <u>N/A</u>	GPS acc. (m): <u>5</u>	Hours surveying: <u>3</u>
Estimated # of individual YBCU: <u>0</u>		Observers: <u>Jeff Steinman</u>	

Point Start Time	UTM Coordinates		Waypoint Number	# Broadcast Plays	Cuckoo #	Detection Type (N or R)	Time of Detection	How Detected (A, V, or B)	Compass Bearing	Estimated Distance (m)	Dist. Acc.	Vocal Code	Behavior / Breeding	Note #
	Easting (6 digits)	Northing (7 digits)												
0550	730902	3846344	C16	5	0									
0601	731024	3846249	C17											
0617	731068	3846369	C13											
0626	731134	3846395	C12											
0635	731049	3846481	C14											
0642	730919	3846426	C15											
0655	731375	3846308	C11											
0705	731239	3846264	C10											
0712	731243	3846178	C8											
0719	731235	3846091	C7											
0727	731147	3846126	C9											
0736	731175	3845994	C6											
0743	731137	3845931	C5											
0752	731067	3845848	C4											
0800	731027	3845766	C3	8	4									

Notes:

Date	Initials
Data Entry:	
Data Proof:	
Data Scan :	





# Yellow-Billed Cuckoo (YBCU) Survey Form

Page 1 of 2

Site Code:	Site Name: <u>Sacramento Wash Site 2</u>			Survey Period: <u>2</u>	Date (mm/dd/yy): <u>07/23/15</u>
Survey Start Time: <u>0550</u>	Wind: <u>0</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>	Noise: <u>0-3 train</u>	# of stops <u>21</u>
Survey Stop Time: <u>0950</u>	Wind: <u>0</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u>	Noise: <u>0-3 train</u>	Observers: <u>Jeff Steinman</u>
Zone: <u>11</u>	GPS #: <u>N/A</u>	GPS acc. (m): <u>5</u>	Hours surveying: <u>3.4</u>	Estimated # of individual YBCU: <u>0</u>	

Point Start Time	UTM Coordinates		Waypoint Number	#	Broadcast Plays	Cuckoo #	Detection Type (N or R)	Time of Detection	How Detected (A, V, or B)	Compass Bearing	Estimated Distance (m)	Dist. Acc.	Vocal Code	Behavior / Breeding	Note #
	Easting (6 digits)	Northing (7 digits)													
0601	731222	3845781	C21		5	0									
0613	731000	3845574	C1												
0620	730975	3845682	C2												
0628	730998	3845926	C20												
0638	731055	3846006	C19												
0647	731001	3846123	C18												
0655	731024	3846249	C17												
0711	731375	3846308	C11												
0719	731239	3846264	C10												
0727	731243	3846178	C8												
0738	731147	3846126	C9												
0747	731235	3846091	C7												
0756	731175	3845994	C6												
0806	731137	3845931	C5												
0818	731069	3845848	C4												

Notes:

Date Entry:	Date	Initials
Data Proof:		
Data Scan :		





# Yellow-Billed Cuckoo (YBCU) Survey Form

Page 1 of 2

Site Code:	Site Name: <u>Sacramento Wash site 2</u>	Survey Period: <u>3</u>	Date (mm/dd/yy): <u>08/06/15</u>
Survey Start Time: <u>0540</u>	Wind: <u>0</u>	Cloud cover (%): <u>25</u>	Precip: <u>0</u> Noise: <u>0-3 train</u> # of stops: <u>21</u>
Survey Stop Time: <u>0950</u>	Wind: <u>0</u>	Cloud cover (%): <u>0</u>	Precip: <u>0</u> Noise: <u>0-3 train</u> Observers: <u>Jeff Steinman</u>
Zone: <u>11</u>	GPS #: <u>N/A</u>	GPS acc. (m):	Hours surveying: <u>4</u> Estimated # of individual YBCU:

Point Start Time	UTM Coordinates		Waypoint Number	#	Broadcast Plays	Cuckoo #	Detection Type (N or R)	Time of Detection	How Detected (A, V, or B)	Compass Bearing	Estimated Distance (m)	Dist. Acc.	Vocal Code	Behavior / Breeding	Note #
	Easting (6 digits)	Northing (7 digits)													
0550	731024	3846249	C17	5	0										
0603	731062	3846369	C13												
0615	731049	3846481	C14												
0623	730919	3846426	C15												
0631	730902	3846344	C16												
0641	731134	3846395	C12												
0652	731375	3846308	C11												
0700	731239	3846264	C10												
0708	731243	3846178	C8												
0716	731147	3846126	C9												
0727	731235	3845091	C7												
0736	731175	3845994	C6												
0748	731157	3845931	C5												
0757	731069	3845848	C4												
0809	731022	3845766	C3	4	0										

Notes:

Date Entry:	Date	Initials
Data Proof:		
Data Scan :		

<b>WIND</b> (Beaufort Scale)		<b>PRECIP</b>		<b>NOISE</b>		<b>VOCALIZATION</b>	<b>CODE</b>	<b>BEHAVIOR</b>	<b>CODE</b>	<b>BREEDING</b>	<b>CODE</b>	<b>BREEDING</b>	<b>CODE</b>	<b>BREEDING</b>	<b>CODE</b>
Calm	0	None	0	Quiet	0	Contact	CON	No visual	NV	Vocal Exchange	VEX	Copulation	COP	Nest	N
Smoke drifts	1	Mist	1	Low	1	Coo	COO	Sitting	ST	Carry Food	CF	Incubating	IN	At Nest	AN
Felt on face	2	Drizzle	2	Medium	2	Knock/Alarm	ALA	Forages	FO	Fecal sac carry	SC	Brooding	BR	Leaves Nest	LN
Leaves move	3	Rain	3	Noise		Juv. Calls	JCON	Flies	FLY	Carry Nest Material	CN	Fledgling	FL	Nest Eggs	NE
Sm. branches move	4	Heavy rain	4	High	3	Kowlp	Kowlp	Catches Prey	CP	Juvenile	JUV	Feeds Young	FY	Pair	PA
Small trees move	5	Snow	5	Noise		Other voc	VO	Eats Food	EF	Distraction Display	DD	Southern Sierra Research Station			
<b>Detection Type:</b> Mark N (new) for the first detection of an individual YBCU, for each subsequent detection of that same YBCU mark an R (repeat) instead															
<b>How detected:</b> A: aural, V: visual, B: both A+V. <b>Distance Accuracy:</b> 1: known ybcu location/measured, 2: est/measured, 3: est ≤25 m, 4: est ≤50 m, 5: est ≤100 m, 6: complete guess															

**Notes:**

Page 2 of 2

## **Appendix D**

### **Call Points and Detection UTM Coordinates**

Topock Marsh-Site 1		
Call Point	UTM_Easting	UTM_Northing
A1	730198.00	3844891.00
A2	730197.00	3845227.00
A3	730256.49	3845304.59
A4	730185.00	3845344.00
A5	730145.00	3845431.00
A6	730067.00	3845500.00
A7	729980.00	3845567.00
A8	729917.00	3845690.00
A9	729873.00	3845812.00
A10	729823.00	3845857.00
A11	730302.00	3844935.00
A12	730334.11	3845059.12
A13	730280.00	3845148.00
A14	730382.33	3844926.68
A15	730272.00	3844792.00
B1	730339.65	3844812.17
B2	730385.62	3844846.73
B3	730486.09	3844893.20
B4	730420.63	3845036.97
B5	730384.00	3845133.00
B6	730383.24	3845271.35
B7	730318.98	3845352.44
B8	730256.30	3845436.67
B9	730185.46	3845462.32
B10	730117.37	3845513.56
B11	730069.49	3845548.22
B12	730032.77	3845631.43
B13	729986.13	3845704.53
B14	729952.00	3845785.00
B15	729917.00	3845866.00
B16	730748.00	3844821.00
B17	730812.00	3844911.00
B18	730908.00	3844998.00
B19	731022.00	3845115.00
B20	731020.81	3845282.67
B21	730990.00	3845396.00

Sacramento Wash-Site 2		
Call Point	UTM_Easting	UTM_Northing
C1	731000.58	3845574.20
C2	730975.69	3845682.02
C3	731027.74	3845766.24
C4	731069.20	3845848.87
C5	731137.05	3845931.39
C6	731175.88	3845994.07
C7	731235.01	3846091.80
C8	731243.74	3846178.38
C9	731147.63	3846126.57
C10	731239.64	3846264.63
C11	731375.17	3846308.77
C12	731134.19	3846395.18
C13	731068.30	3846369.55
C14	731049.81	3846481.86
C15	730919.81	3846426.09
C16	730902.33	3846344.96
C17	731024.12	3846249.67
C18	731001.00	3846123.00
C19	731055.00	3846006.00
C20	730998.00	3845926.00
C21	731222.09	3845781.67

Detections				
Date	Species	Call Point	UTM_Easting	UTM_Northing
6/23/15	Arizona Bell's Vireo	A4	730148	3845453
6/23/15	Arizona Bell's Vireo	A4	730161	3845441
6/23/15	Yuma Ridgeway's Rail	A6	730061	3845543
6/23/15	Arizona Bell's Vireo	A9	729876	3845833
6/24/15	Arizona Bell's Vireo	B16	730729	3844808
6/24/15	Arizona Bell's Vireo	B17	730832	3844948
6/25/15	Willow Flycatcher	C20	731013	3845954
7/8/15	Yellow-billed Cuckoo	A5	730243	3845319
7/8/15	Arizona Bell's Vireo	A3	730277	3845301
7/9/15	Arizona Bell's Vireo	B17	730824	3844936
7/9/15	Arizona Bell's Vireo	B16	730717	3844809
7/21/15	Arizona Bell's Vireo	A8	729921	3845702
7/22/15	Yuma Ridgeway's Rail	B11	730055	3845561
7/22/15	Yuma Ridgeway's Rail	B4	730439	3845035
8/5/15	Arizona Bell's Vireo	B6	730397	3845282