SOUTHWESTERN WILLOW FLYCATCHER PRESENCE/ABSENCE SURVEYS FOR THE PG&E TOPOCK COMPRESSOR STATION



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NATURAL & CULTURAL RESOURCE CONSULTANTS



2010 Southwestern Willow Flycatcher Presence/Absence Surveys for the PG&E Topock Compressor Station

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Prepared for:

CH2M HILL, Inc. and

Pacific Gas & Electric Co.

September 2010

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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, 15 miles southeast of Needles, California. The purpose of the survey was to determine the presence or absence of the federally and State of California threatened SWFL. This is the sixth year that GANDA has conducted these surveys (GANDA 2005-2009). 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) (CH2M HILL 2007). Measure 26 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 seven sites near the Topock Compressor Station. The sites are located along either side of the Colorado River. Six sites are in San Bernardino County, California, and one site is in Mohave County, Arizona. The Arizona site, the largest of the sites, is in the USFWS Havasu National Wildlife Refuge (Site A, Figure 1). Three of the California sites are on Bureau of Land Management (BLM) land (Sites 3, 4 and 6, Figure 1), two sites are in the Moabi Regional Park (Sites 1 and 2, Figure 1), and one site is in the California portion of the Havasu National Wildlife Refuge (Site 5, Figure 1). Survey sites total approximately 80 acres and vary in elevation from 400 to 500 feet above sea level. None of the survey sites are located within USFWS designated critical habitat for the SWFL (USFWS 2005).

Vegetation and Habitat Quality

The most abundant plant species in the survey area include common salt cedar (*Tamarix ramosissima*), narrow-leaved willow (*Salix exigua*), catclaw acacia (Senegalia (*Acacia*) greggii), arrowweed (*Pluchea sericea*), and yellow palo verde (*Parkinsonia microphylla*). Common salt cedar 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 B.

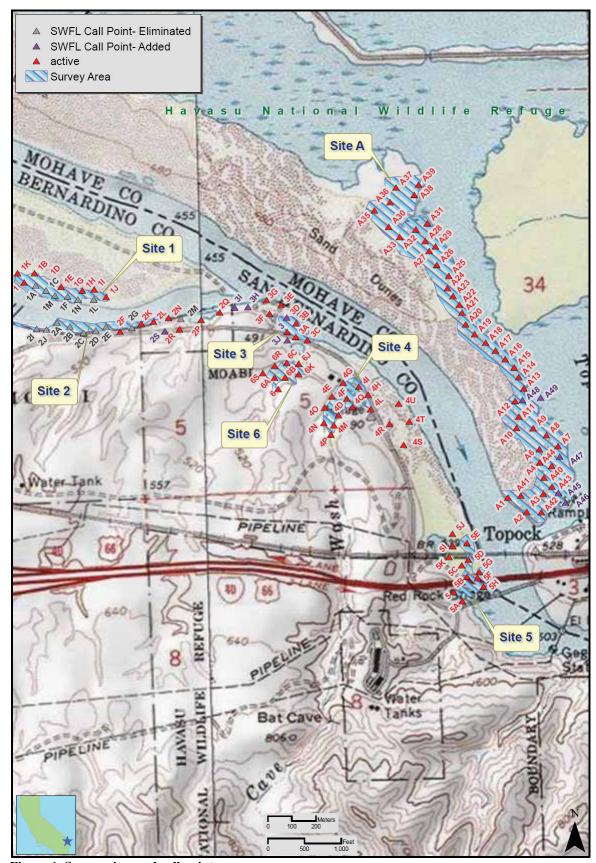


Figure 1. Survey sites and call points

Habitat Quality

Overall, the survey area is of moderate habitat quality for SWFL. The Colorado River provides standing surface water throughout the breeding season and includes a suitable vegetation composition; however, habitat fragmentation and human disturbance detract from the overall habitat quality. The California sites (Figure 1) are small and geographically isolated by the surrounding desert, National Trails Highway, and the Colorado River. Additionally, the proximity of the California sites to Park Moabi, Interstate 40, the Burlington Northern Santa Fe (BNSF) Railway, and the PG&E Topock Compressor Station results in a high level of human disturbance. The Arizona site (Figure 1) is located on a large peninsula and is generally bordered by contiguous riparian habitat and bulrush-dominated marsh. However, this site is also adjacent to the Topock Marina, a community that includes a dozen houses and several businesses. Watercraft, frequently observed on the Colorado River and in the Topock Marsh, contribute to human disturbance at this location. Additionally a fire that destroyed a large portion of potential habitat adjacent to the Arizona site the previous year combined with the clearance of the vegetation in that area this year may also be contributing to the reduced habitat quality for SWFL (figure 2). A photo of each survey site is included in Appendix A.



Figure 2. Burned area adjacent to the Arizona site.

Survey Methods

GANDA wildlife biologist Jeff Steinman (USFWS permit #TE-085026-3, AZGFD Permit #SP-597467, and CDFG Permit SC-007801) conducted the SWFL surveys, following 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). The 2010 protocol recommends five surveys during three survey periods, with two surveys occurring within each of the last two survey periods. These three survey periods are May 15 to 31, June 1 to 24, and June 25 to July 17. Mr. Steinman conducted the SWFL surveys from May 18 to 21, June 9 to 12, June 22 to 24, July 7 to 9, and July 14 to 16. All surveys were conducted between 05:00 AM and 10:00 AM. Completed survey forms for each site are included in Appendix C.

The habitat quality of the survey sites and the area surrounding them has been re-assessed each year during the first survey period. The reassessment consists of observing each site for an increase or decrease in habitat due to an increase in size and density of vegetation or the elimination of habitat due to vegetation removal. The area surveyed in 2010 was the same area surveyed in previous years with the following exceptions:

- Call points were eliminated in locations where vegetation had been removed in Moabi Regional Park (Figures 2-4).
 - o Call points 2 and 2H (eliminated in 2006)
 - o Call points 1C, 1F, 1L, 1M, 1N, 2A, 2B, 2D, 2E, 2G, 2I, 2J, and 2M (eliminated in 2008)
 - o Call points 1A and 2C (eliminated in 2010)
- Call points were added where habitat quality around sites 2, 3, 4, and A (Figures 5-7) improved due to an increase in the size and density of the vegetation.
 - o Call points 2P, 2Q, 2R, 3H, 4R, 4S, 4T, and 4U (added in 2009)
 - o Call points 2S, 3I, 3J, A45, A46, A47, A48, A49 (added in 2010)

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 to ensure that the same call points were used each year. Call points were placed 30 to 50 meters apart, depending on the quality of the habitat, thickness of vegetation, and accessibility. The call points were located in 2010 using a GPS unit containing their UTM coordinates. Appendix D includes a complete list of call points and their corresponding UTM coordinates.

At each survey site, Mr. Steinman first spent 10 minutes 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.



Figure 3. Additional habitat removed on the south side of Site 1.



Figure 4. Additional habitat removed on the southwest side of Site 2.



Figure 5. Sites 1 and 2 in 2009 before vegetation removal.



Figure 6. Additional habitat surveyed on the south side of Site 2.



Figure 7. Additional habitat surveyed on the west side of Site 3.



Figure 8. Additional habitat surveyed in Site A



Figure 9. Additional habitat surveyed on the east side of Site 4

Results

SWFL

No SWFL were detected during any of the surveys at any of the survey sites.

Incidental Species

Multiple incidental wildlife species were observed during the SWFL survey. The diversity and abundance of wildlife species encountered were 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 vertebrate species were desert cottontail (*Sylvilagus audubonii*), coyote (*Canis latrans*), American bullfrog (*Rana catesbeiana*), and common side-blotched lizard (*Uta stansburiana*). The most commonly observed avian species were great-tailed grackle (*Quiscalus mexicanus*), white-winged dove (*Zenaida asiatica*), verdin (*Auriparus flaviceps*), and black-tailed gnatcatcher (*Polioptila melanura*). Complete lists of the avian and non-avian vertebrate species observed are included in Appendix B.

Notable observations during the 2010 surveys were the detections of yellow-billed cuckoo (*Coccyzus americanus*), Yuma clapper rail (*Rallus longirostris yumanensis*), Arizona Bell's vireo (*Vireo bellii*), and brown-headed cowbird (*Molothrus ater*).

A single western yellow-billed cuckoo (YBCU) was observed on July 14 at call point A19 in the Arizona survey area. This is the third year that YBCU have been observed in the Arizona survey area. The western yellow-billed cuckoo is listed as an Endangered species by the California Department of Fish and Game (CDFG), a Species of Concern by the Arizona Game and Fish Department (AZGFD), and a Candidate for listing by the USFWS. Although this observation was of a single individual, the late-season observation coupled with the third year of observation may indicate that cuckoo are breeding in the area.

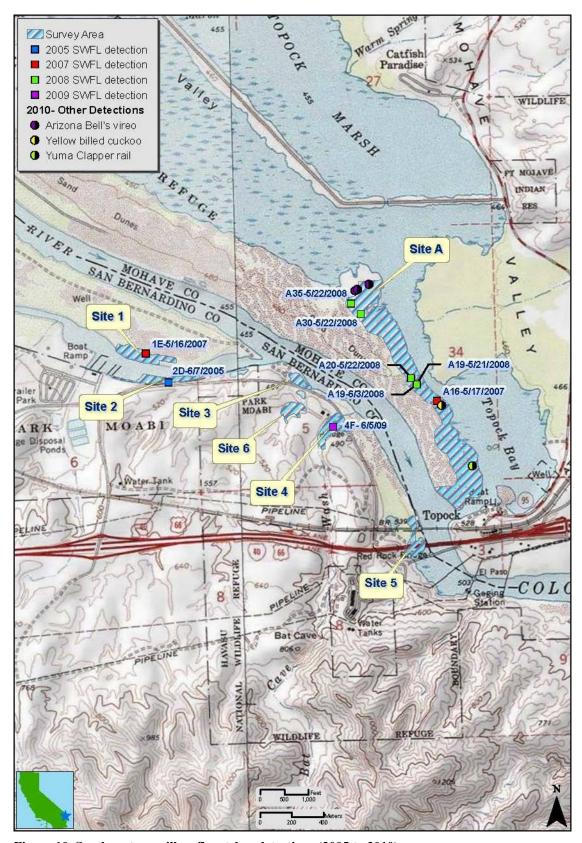


Figure 10. Southwestern willow flycatcher detections (2005 to 2010).

A single Yuma clapper rail was observed on July 14 at call point A47 in the Arizona Site. The Yuma clapper rail is listed as an Endangered species by both the USFWS and CDFG and a Species of Concern by the AZGFD. This is the third year that Yuma clapper rails were detected in the Arizona survey area.

Arizona Bell's vireos (AZBV) were detected in the Arizona survey area on June 6, June 19, and July 22 AZBV were observed at call points A35, A37, and A39. Although this species has no Arizona or federal protective status, the California subspecies, least Bell's vireo (*Vireo bellii pusillus*), is listed as Endangered in California. This is the sixth year that Arizona Bell's vireo have been observed, although the number of observations has been decreasing since 2008, when they were detected during every survey period and at every call point between A39 and A20, and in 2009 when they where detected at six different call points.

Brown-headed cowbirds were observed at three sites in the survey area (Sites A, 2, and 3). The numbers of occurrences and sites in which cowbirds were observed was less than in previous years. However, cowbirds were observed pair bonding this year, which confirms that they are breeding in the survey area. Cowbirds are known nest parasites of SWFL and other songbirds, and their presence may be affecting SWFL occurrence in the area.

Conclusions

Although no SWFL were detected in 2010, in previous surveys transient SWFL were detected at call points 2D in 2005, at 1E and A16 in 2007, call point A19, A20, A30, and A35 in 2008, and at call point 4F in 2009 (Figure 8) (Ganda 2005, 2006, 2007, 2008 and 2009). Collectively these detections indicate that the survey sites provide habitat as a stopover point for SWFL during migration. Given the cumulative detections of SWFL over the years, the presence of suitable habitat, and the presence of nearby breeding populations (Ellis, *et al.* 2008, SWCA 2004), there is a potential for SWFL to breed in the survey area in the future. However the nearby fire and continued human presence in the surrounding area may be outlying factors reducing the quality of the habitat for SWFL.

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Appendix A

Photo Log



Site 1 Overall



Site 1 Exterior



Site 1 Interior



Site 2 Overall



Site 2 Exterior



Site 2 Interior



Site 3 Overall



Site 3 Exterior



Site 3 Interior



Site 4 Overall



Site 4 Exterior



Site 4 Interior



Site 5 Overall



Site 5 Exterior



Site 5 Interior



Site 6 Overall



Site 6 Exterior



Site 6 Interior



Site A Overall



Site A Exterior



Site A Interior

Appendix B

Incidental Plant and Wildlife Species

Table 1. Bird Species Observed

Common Names	Scientific Names
Abert's Towhee	Pipilo aberti
American Coot	Fulica americana
American Kestrel	Falco sparverius
Anna's humingbird	Calypte anna
Arizona Bell's Vireo	Vireo bellii
Ash-throated Flycatcher	Myiarchus cinerascens
Bewick's Wren	Thryomanes bewickii
Black Phoebe	Sayornis nigricans
Black-chinned Hummingbird	Archilochus alexandri
Black-tailed Gnatcatcher	Polioptila melanura
Blue-gray Gnatcatcher	Polioptila caerulea
Blue Grosbeak	Passerina caerulea
Brown-headed Cowbird	Molothrus ater
Bushtit	Psaltriparus minimus
Canada Goose	Branta canadensis
Canyon Wren	Catherpes mexicanus
Clark's Grebe	Aechmophorus clarkia
Cliff Swallow	Petrochelidon pyrrhonota
Common Merganser	Mergus merganser
Common Poorwill	Phalaenoptilus nuttallii
Common Raven	Corvus corax
Common Yellowthroat	Geothlypis trichas
Common-ground Dove	Columbina passerina
Double-crested Cormorant	Phalacrocorax auritus
Eared Grebe	Podiceps nigricollis
European Starling	Sturnus vulgaris
Gadwall	Anas strepera
Gambel's Quail	Callipepla gambelii
Great Blue Heron	Ardea herodias
Great Egret	Ardea alba
Greater Roadrunner	Geococcyx californianus
Great-tailed Grackle	Quiscalus mexicanus
Green Heron	Butorides virescens
Hooded Oriole	Icterus cucullatus
House Finch	Carpodacus mexicanus
Inca Dove	Columbina inca
Killdeer	Charadrius vociferous
Ladder-backed Woodpecker	Picoides scalaris
Lesser Goldfinch	Carduelis psaltria
Lesser Nighthawk	Chordeiles acutipennis

Common Names	Scientific Names
Lucy's Warbler	Vermivora luciae
Mallard	Anas platyrhynchos
Marsh Wren	Cistothorus palustris
Mourning Dove	Zenaida macroura
Northern Mockingbird	Mimus polyglottos
Northern Rough-winged Swallow	Stelgidopteryx serripennis
Orange-crowned Warbler	Vermivora celata
Rock Pigeon	Columba livia
Rock Wren	Salpinctes obsoletus
Ruddy Duck	Oxyura jamaicensis
Snowy Egret	Egretta thula
Song Sparrow	Melospiza melodia
Summer Tanager	Piranga rubra
Turkey Vulture	Cathartes aura
Verdin	Auriparus flaviceps
Western Grebe	Aechmophorus occidentalis
Western Kingbird	Tyrannus verticalis
White-crowned Sparrow	Zonotrichia leucophrys
White-faced Ibis	Plegadis chihi
White-throated Swift	Aeronautes saxatalis
White-winged Dove	Zenaida asiatica
Wilson's Warbler	Wilsonia pusilla
Yellow-billed Cuckoo	Coccyzus americanus
Yellow-breasted Chat	Icteria virens
Yellow-headed Blackbird	Xanthocephalus xanthocephalus
Yuma Clapper Rail	Rallus longirostris yumanensis

Table 2. Wildlife Species Observed

Common Name	Scientific Name
American Bullfrog	Rana catesbeiana (=Lithobates catesbeianus)
Beaver	Castor canadensis
Black-tailed Jackrabbit	Lepus californicus
Coyote	Canis latrans
Desert Cottontail	Sylvilagus audubonii
Desert Iguana	Dipsosaurus dorsalis
Feral Hog	Sus scrofa
Common Side-blotched Lizard	Uta stansburiana
Texas Spiny Softshell	Apalone spinifera emoryi

Table 3. Plant Species Observed

Common Name	Latin Name				
Arrowweed	Pluchea sericea				
Athel Tamarisk	Tamarix aphylla				
Cheesebush	Ambrosia salsola				
Common Prickly Lettuce	Lactuca serriola				
Buckhorn Cholla	Cylindropuntia achanthocarpa				
Silver Cholla	Cylindropuntia echinocarpa				
Branched Pencil Cholla	Cylindropuntia ramosissima				
California Barrel Cactus	Ferocactus cylindraceus				
Beavertail Cactus	Opuntia basilaris var. basilaris				
Fish-hook Cactus	Mammillaria dioica				
Russian Thistle	Salsola tragus				
Catclaw Acacia	Senegalia (Acacia) greggii				
Yellow Palo Verde	Parkinsonia microphylla				
Honey Mesquite	Prosopis glandulosa var. torreyana				
Desert Lavender	Hyptis emoryi				
Cooper's Box Thorn	Lycium cooperi				
Desert Tobacco	Nicotiana obtusifolia				
Thick-leaved Ground Cherry	Physalis crassifolia				
Common Salt Cedar	Tamarix ramosissima				
Cottonwood	Populus sp.				
Narrow-leaved Willow	Salix exigua				
Gooding's Willow	Salix gooddingii				
Narrow-leaved Cattail	Typha angustifolia				
Desert Ironwood	Olneya tesota				

Appendix C

Survey Forms

	V	Villow I	lyc	atch	er (WIFI	.) Surve	y and Detection Form (revis	ed Apri	l, 2010)	
Site Name:	Topock Si						State: AZ	County:			
USGS Quad N	lame:	Topock						Elevation:	134	(meters	;)
Creek, River,	or Lake Na	ame:	Cole	orado	River, Top	ock Mar	rsh				
Is copy o	f USGS m	ap marke	d wit	h sur	vey area an	d WIFL s	sightings attached (as required)?	Yes	X	No	
Survey Coord	inates:	Start:	Е	38	8 46 178	N	11 07 29 655 UTM	Datum:	83	(See inst	ructions)
		Stop:	Е		8 44 828	N		Zone:			
If s	urvey coor	rdinates cl	_				ordinates for each survey in commer		on back	of this page.	
			/	Fill i	n additioi	ıal site i	information on back of this po	ıge			
Survey#	Date (m/d/y)	Number of	Estir	nated	Estimated	Nest(s) Found? Y or N	Comments (e.g., bird behavior, evidence of pairs or breeding-potential threats [livestock, cowbirds,	1		IFL Detections nn for documenting	individuals
Observer(s) (Full Name)	Survey Time	Adult WIFLs	l	ber of airs	Number of Territories	If Yes, number of nests	Diorhabda spp.]). If Diorhabda found, contact USFWS and State WIFL coordinator.	pairs, or grou	ips of birds		
Survey # 1	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	5/19/2010										
J steinman	start-stop										
	0550-0900	0	0	0	0	0					
	Date: 5/20/2010										
total time	start-stop										
357min	0555-0843	-									
Survey # 2	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	6/10/2010										
J steinman	start-stop										
	0528-0809	0	0	0	0	0					
	Date:										
total time	6/11/2010 start-stop										
325	0606-0850										
Survey # 3	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	6/22/2010							" Direct	COX	CINE	CIMIT
J steinman	Start:										
	5:05		0	0	0	0					
	Stop:		ľ		0						
	8:40										
	Total hrs: 215.0										
Survey # 4	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	7/7/2010							" Direct	COX	CINE	Olmir
J steinman	Start:										
	5:17	0	0	0	0	0					
	Stop:										
	8:38										
	Total hrs: 201.0										
Survey # 5	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	7/14/2010							,, Direct	201	O I M E	CIMIT
J steinman	Start:										
	5:15	. 0	0	0	0	0					
	Stop:		ľ								
	8:49 Total hrs:										
	1 otai nrs: 214.0										
Overall Site Su											
Totals do not equal the	sum of each	Total Adult	m. ·	LD-2-	Total	T-4-132					
column. Include only r Do not include migrant		Residents	1 ota	l Pairs	Territories	Total Nests	Were any WIFLs color-banded	? Yes		No	
fledglings.											
Be careful not to double individuals.	count	0		0	0	0	If yes, report color co				
Total survey hrs	1312min					section on back of form and report to USFWS.					

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

Reporting Individual:

US Fish & Wildlife Service Permit #:

Date Report Completed:

State Wildlife Agency Permit #:

Jeff Steinman

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

Reporting Individual	Jeff Steinman		Phone #	415 250 2692
Affiliation	Garcia and Associates		E-mail	steinman@garciaandassociates.com
Site Name	Topock AZ	Date :	report Completed	
	revious year? Yes_X No Unknown_			
	ne is consistent with that used in previous yrs?	Yes X	No	Not Applicable
If name is different, what name	•			
	id you survey the same general area this year?	Yes X	No	If no, summarize below.
Did you survey the same genera	d area during each visit to this site this year?	Yes X	No	If no, summarize below.
Management Authority for Surv	rey Area: Federal x Municipa	al/County	State	TribalPrivate
Name of Management Entity or	Owner (e.g., Tonto National Forest)	H	Iavasu Wildlife Re	efuge
Length of area surveyed:	1.1	(km)		
Vegetation Characteristics: Ch	eck (only one) category that best describes the pre-	dominant tree/shrub foli	ar layer at this site:	
Native broa	dleaf plants (entirely or almost entirely, > 90% na	tive)		
Mixed nativ	re and exotic plants (mostly native, 50 - 90% nativ	re)		
x Mixed nativ	e and exotic plants (mostly exotic, 50 - 90% exoti	ie)		
Exotic/intro	duced plants (entirely or almost entirely, > 90% e	xotic)		
Identify the 2-3 predominant tre	e/shrub species in order of dominance. Use scient	ific name.		
	Tamarix spp.,Acacia	gregii, Salix spp.		
Average height of canopy (Do r	not include a range):	5	(meters)	
Attach the following: 1) copy of	f USGS quad/topographical map (REQUIRED) o	f survey area, outlining	survey site and loca	tion of WIFL detections;
2) sketch or aerial photo showir	g site location, patch shape, survey route, location	n of any detected WIFLs	or their nests;	
3) photos of the interior of the p	atch, exterior of the patch, and overall site. Descr	ribe any unique habitat f	eatures in Commen	ts.
Comments (such as start and en Attach additional sheets if neces	d coordinates of survey area if changed among sur ssary.	rveys, supplemental visi	ts to sites, unique h	abitat features.

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

			Tyc	atch	er (WIFL	ے) Surve	ey and Detection Form (revis	-			
	Topock C						State: CA	_		rnardino	
USGS Quad N		Whale N						Elevation:	134	(meter	s)
Creek, River,					River, Top						
		-			-		sightings attached (as required)?	Yes	X	No	_
Survey Coord	inates:	Start:			8 45 150	. N	11 07 29 384 UTM	Datum:		(See inst	ructions)
		Stop:	Е		8 45 317	N		Zone:			
If s	urvey coor	rdinates cl					ordinates for each survey in commen		on back	of this page.	
			/	Fill i	n addition	ıal site i	information on back of this po	ıge			
Survey# Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Num	mated ber of airs	Estimated Number of Territories	Nest(s) Found? Y or N If Yes, number of	Comments (e.g., bird behavior, evidence of pairs or breeding-potential threats [livestock, cowbirds, Diorhabda spp.]). If Diorhabda found, contact USFWS and State WIFL coordinator.	(this is an opt pairs, or grou	ional colum ps of birds t	nn for documenting	
						nests					
Survey # 1	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	5/21/2010										
J steinman	Start:										
	6:03	0	0	0	0	0					
	Stop:										
	7:05										
	Total hrs:										
	62min							# P1 4			
Survey # 2	Date:							#Birds	Sex	UTM E	UTM N
Observer(s): J steinman	6/9/2010 Start:										
5 steinman	7:24										
	Stop:	0	0	0	0	0					
	8:15										
	Total hrs:										
	51min										
Survey # 3	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	6/23/2010										
J steinman	Start:										
	6:01	0	0	0	0	0					
	Stop:										
	6:40										
	Total hrs:										
	39min										
Survey # 4	Date:							#Birds	Sex	UTM E	UTM N
Observer(s): J steinman	7/8/2010 Start:										
5 steinman	7:55										
	Stop:	0	0	0	0	0					
	8:35										
	Total hrs:										
	40min										
Survey # 5	Date:							#Birds	Sex	UTM E	UTM N
Observer(s):	7/15/2010										
J steinman	Start:										
	5:20		0	0	0	0					
	Stop:	Ů									
	5:58										
	Total hrs:										
0 11-1: -	38min										
Overall Site Sur Totals do not equal the		TD-4-1 4 4 7									
column. Include only r	esident adults.	Total Adult Residents	Total	l Pairs	Total Territories	Total Nests	Were any WIFLs color-banded	? Yes		No	
Do not include migrant fledglings.	s, nestlings, and						were any wirts color-banded	. res		140	
Be careful not to double	e count						16	mbination(-)	in the err	ana ante	-
individuals.	220 1	0	4	0	0	0	If yes, report color co section on back of				
Total survey hrs											
Reporting Individ	1191:				Jeff Steinman		Date Report Complet	arti:			

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

US Fish & Wildlife Service Permit #:

State Wildlife Agency Permit #:

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

Reporting Indi	vidual	Jeff Ste	inman		Phone #	415 250 2692
Affiliation		Garcia and Asso	ciates		E-mail	steinman@garciaandassociates.com
Site Name		ock CA-1		Da	te report Completed	1
	urveyed in a previous year?		nknown			
Did you verify t	hat this site name is consistent	with that used in previou	is yrs? Yes	X	No	Not Applicable
If name is differ	ent, what name(s) was used in	the past?				
If site was surve	yed last year, did you survey th	e same general area this	year? Yes	X	No	If no, summarize below.
Did you survey	the same general area during ea	ch visit to this site this y	vear? Yes	X	No	If no, summarize below.
Management Au	nthority for Survey Area:	Federal	Municipal/County	X	State	TribalPrivate
Name of Manag	ement Entity or Owner (e.g., To	onto National Forest)			Moabi Regional I	ark
Length of area s	urveved:	0.5	(km)			
X	Pacteristics: Check (only one) or Native broadleaf plants (en Mixed native and exotic pla Mixed native and exotic pla Exotic/introduced plants (e predominant tree/shrub species	tirely or almost entirely, ants (mostly native, 50 - ants (mostly exotic, 50 - ntirely or almost entirely in order of dominance.	> 90% native) 90% native) 90% exotic) 7, > 90% exotic)		ionar layer at this site:	
Average height	of canopy (Do not include a rar	nge):	4		(meters)	
Attach the follo	wing: 1) copy of USGS quad/to	opographical map (REQ	UIRED) of survey ar	a, outlini	ing survey site and loca	ation of WIFL detections;
2) sketch or aeri	al photo showing site location,	patch shape, survey rout	e, location of any det	ected WI	FLs or their nests;	
3) photos of the	interior of the patch, exterior of	f the patch, and overall s	ite. Describe any un	que habit	at features in Commer	nts.
	n as start and end coordinates of all sheets if necessary.	f survey area if changed	among surveys, supp	lemental	visits to sites, unique h	abitat features.

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 C		Tyc	aten	ci (wiii i) Sui ve	State: CA	•	-	<i>r</i> nardino	
USGS Quad 1		Whale N	Ioun	tain				Elevation:		(meter	s)
Creek, River,					River, Top						
	_	ap marke	d wit	h sur	vey area an	d WIFL	sightings attached (as required)?	Yes	X	No	_
Survey Coord	inates:	Start:			8 45 617	N		Datum:	83		ructions)
_		Stop:	Е		8 45 638	N	11 07 28 760 UTM	Zone:	11		
If s	survey coor	rdinates c					ordinates for each survey in comme		on back	of this page.	
			1	eul i	n additior		information on back of this p	age			
						Nest(s) Found?	Comments (co. bird behavior evidence of coince	- CDS Cii-	-t 6 WI	EL Datastiana	
Survey#	Date (m/d/y)	Number of		mated ber of	Estimated Number of	Y or N	Comments (e.g., bird behavior, evidence of pairs of breeding;-potential threats [livestock, cowbirds,	1		r L Detections nn for documenting	g individuals,
Observer(s) (Full Name)	Survey Time	Adult WIFLs	ı	airs	Territories	If Yes,	Diorhabda spp.]). If Diorhabda found, contact USFWS and State WIFL coordinator.	pairs, or grou	-		acassom:
						number of nests	OSFWS and State WIFL coordinator.	each survey).	meidde ac	lditional sheets if n	ecessary.
Survey # 1	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	5/18/2010										
J steinman	Start:										
	7:26	0	0	0	0	0					
	Stop: 8:31										
	Total hrs:										
	65min										
Survey # 2	Date:							#Birds	Sex	UTM E	UTM N
Observer(s):	6/12/2010										
J steinman	Start:										
	8:04 Stop:	0	0	0	0	0					
	8:40										
	Total hrs:										
	36min										
Survey # 3	Date:							# Birds	Sex	UTM E	UTM N
Observer(s): J steinman	6/24/2010										
5 steriman	Start: 7:40										
	Stop:	0	0	0	0	0					
	8:15										
	Total hrs:										
	35.0										
Survey # 4	Date:							# Birds	Sex	UTM E	UTM N
Observer(s): J steinman	7/9/2010 Start:										
	6:30				_	_					
	Stop:	0	0	0	0	0					
	7:00										
	Total hrs: 30min										
Survey # 5	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	7/16/2010							# Bilds	Sex	OIME	OTMIN
J steinman	Start:										
	6:23	. 0	0	0	0	0					
	Stop:										
	7:01 Total hrs:										
	38.0										
Overall Site Su	mmary										
Totals do not equal the		Total Adult	Total	l Pairs	Total	Total Nests					
column. Include only : Do not include migran		Residents			Territories		Were any WIFLs color-banded	i? Yes		No	
fledglings. Be careful not to doubl	e count						1				-
individuals.		. 0		0	0	0	If yes, report color co section on back of	4.7			
Total survey hr					1.000						
Reporting Individ		rnoit #			Jeff Steinmar	1	Date Report Comple				
US Fish & Wildli							State Wildlife Agency Po				
	Subn	nit_form	to US	SFWS	S and State	Wildlife A	Agency by September 1st. Retain a	copy for yo	ur recoi	rds.	

Southwestern Willow Flycatcher Survey PG&E Topock Compressor Station

Reporting Individual	Jeff Steinn	nan		Phone #	415 250 2692
Affiliation	Garcia and Associat	tes		E-mail	steinman@garciaandassociates.com
Site Name	Topock CA-2		Da	ite report Completed	
Was this site surveyed i	n a previous year? Yes_X No Unkn	own			
Did you verify that this sit	e name is consistent with that used in previous yr	s? Yes_	X	No	Not Applicable
If name is different, what i	name(s) was used in the past?				
If site was surveyed last ye	ear, did you survey the same general area this yea	r? Yes_	X	No	If no, summarize below.
Did you survey the same g	eneral area during each visit to this site this year	Yes_	X	No	If no, summarize below.
Management Authority for	r Survey Area: Federal M	unicipal/County	X	State	TribalPrivate
Name of Management Ent	ity or Owner (e.g., Tonto National Forest)			Moabi Regional F	ark
Length of area surveyed:	609m	(km)			
Native Mixed Mixed X Exotic	: Check (only one) category that best describes the broadleaf plants (entirely or almost entirely, > 9 native and exotic plants (mostly native, 50 - 90% native and exotic plants (mostly exotic, 50 - 90% /introduced plants (entirely or almost entirely, > 9 native entirely, > 9 native entirely species in order of dominance. Use Tamarix spp., 6	0% native) % native) % exotic) 90% exotic)		ional layer at uns site.	
Average height of canopy	(Do not include a range):	4		(meters)	
sketch or aerial photo sl photos of the interior of Comments (such as start as	opy of USGS quad/topographical map (REQUIR nowing site location, patch shape, survey route, lo the patch, exterior of the patch, and overall site. and end coordinates of survey area if changed amo	ocation of any dete Describe any unic	cted WI jue habit	FLs or their nests; at features in Commen	tts.
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)

	v	Villow I	Tye	atch	er (WIFI) Surve	y and Detection Form (revis	ed April	l, 2010)	
Site Name:	Topock C		•		`		State: CA	-		ernardino	
USGS Quad N	lame:	Topock						Elevation:	134	(meters	s)
Creek, River,					River, Top						
Is copy o	f USGS m	ap marke	d wit	h sur	vey area an	d WIFL s	sightings attached (as required)?	Yes	X	No	
Survey Coord	inates:	Start:	Е	38	8 45 653	N	11 07 29 128 UTM	Datum:	83	(See inst	ructions)
		Stop:	Е		8 45 544	N		Zone:			
If s	urvey coor	rdinates cl					ordinates for each survey in comme		on back	of this page.	
			/	Fill i	n additior	ıal site i	information on back of this p	age			
						Nest(s)					
Survey#	Date (m/d/y)	Number of	Estir	nated	Estimated	Found? Y or N	Comments (e.g., bird behavior, evidence of pairs o breeding:-potential threats [livestock, cowbirds,	1		IFL Detections nn for documenting	individuals
Observer(s) (Full Name)	Survey Time	Adult WIFLs		ber of iirs	Number of Territories	If Yes,	Diorhabda spp.]). If Diorhabda found, contact	pairs, or grou		-	, mai viduais,
(run rvanic)		WILLS	1.0	1113	Territories	number of	USFWS and State WIFL coordinator.	each survey).	Include a	dditional sheets if n	ecessary.
Survey # 1	Date:					nests		# Birds	Cov	TETALE	LITMAN
Observer(s):	5/18/2010							# Dilus	Sex	UTM E	UTM N
J steinman	Start:										
	6:37		0	0	0	0					
	Stop:	0		0	0	0					
	7:24										
	Total hrs: 47.0										
Survey # 2	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	6/9/2010							# Dildo	OUX	OTME	CIMIN
J steinman	Start:										
	5:40	0	0	0	0	0					
	Stop:										
	6:28 Total hrs:										
	48min										
Survey # 3	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	6/24/2010										
J steinman	Start:										
	5:58	0	0	0	0	0					
	Stop: 7:00										
	Total hrs:	-									
	62.0										
Survey # 4	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	7/9/2010										
J steinman	Start:										
	7:08 Stop:	0	0	0	0	0					
	8:11										
	Total hrs:										
	63.0										
Survey # 5	Date:							# Birds	Sex	UTM E	UTM N
Observer(s): J steinman	7/16/2010 Start:										
3 Steinman	7:33										
	Stop:	0	0	0	0	0					
	8:17										
	Total hrs:										
0 110': 0	44.0										
Overall Site Sur Totals do not equal the		Total Adult			Total						
column. Include only r	esident adults.	Residents	Total	Pairs	Territories	Total Nests	Were any WIFLs color-banded	i? Yes		No	
Do not include migrant fledglings.								- 40			
Be careful not to double individuals.	count	0		0	0	0	If yes, report color co	ombination(s)	in the cor	mments	
Total survey hrs	264min	0		0	0	0	section on back of	4.7			
Reporting Individ	ual:				Jeff Steinman		Date Report Complet	ted:			

US Fish & Wildlife Service Permit #:

State Wildlife Agency Permit #:

Reporting Individ	Hual		Jeff Steinm	an			Phone #	4	15 250 2692
Affiliation	•	Garcia ar	nd Associate	es			E-mail	steinman@g	garciaandassociates.cor
Site Name		Topock CA-3				Date report Co	ompleted		
	-	s year? Yes_X No							
-		nsistent with that used in	previous yrs	s? Y	es X	No		_ No	t Applicable
If name is different									
If site was surveyed	l last year, did you s	urvey the same general	area this year	? .	es X	No		_If no, summa	rize below.
Did you survey the	same general area o	uring each visit to this s	ite this year?	, ,	es X	No		If no, summa	rize below.
Management Author	ority for Survey Are	a: Federal_	x Mt	unicipal/County		State		Tribal	Private
Name of Managem	ent Entity or Owner	(e.g., Tonto National Fo	orest)				BLM		
Length of area surv	eyed:	152m		(km)					
x	Native broadleaf p Mixed native and e Mixed native and e Exotic/introduced	y one) category that bes ants (entirely or almost xotic plants (mostly nat xotic plants (mostly exo plants (entirely or almos species in order of dom	entirely, > 90 ive, 50 - 90% etic, 50 - 90% t entirely, > 9 ninance. Use s	onative) native) exotic)	e.	rub foliar layer a	t this site:		
Average height of o	anopy (Do not incl	ide a range):		4			(meters)		
sketch or aerial p photos of the inter-	photo showing site le erior of the patch, es start and end coord	6 quad/topographical ma ocation, patch shape, sur sterior of the patch, and inates of survey area if o	rvey route, loo overall site.	cation of any Describe any	detected unique h	WIFLs or their inabitat features in	nests; Commen	ıts.	

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)

	v	Villow I	lye	atch	er (WIFI) Surve	y and Detection Form (revise	ed April	, 2010)	
Site Name:	Topock C		•		`	_	State: CA	•		ernardino	
USGS Quad N		Topock						Elevation:		(meters	;)
Creek, River,			Colo	rado	River, Top	ock Mar	rsh			`	
							sightings attached (as required)?	Yes	X	No	
Survey Coord	inates:	Start:	Е	38	8 45 150	N	11 07 29 384 UTM	Datum:	83	3 (See inst	ructions)
,		Stop:	Е		8 45 317	N		Zone:		`	,
If s	survey coor		hange			, enter co	ordinates for each survey in commen			of this page.	
			_				information on back of this pa			1 0	
						Nest(s)					
Survey# Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Num	nated ber of airs	Estimated Number of Territories	Found? Y or N If Yes, number of	Comments (e.g., bird behavior, evidence of pairs or breeding:-potential threats [livestock, cowbirds, Diorhabda spp.]). If Diorhabda found, contact USFWS and State WIFL coordinator.	(this is an opt pairs, or grou	tional colum ps of birds	IFL Detections nn for documenting found on dditional sheets if no	,
S# 1	Data					nests		# Dinda			
Survey # 1	Date:							# Birds	Sex	UTM E	UTM N
Observer(s): J steinman	5/21/2010 Start:										
	7:11										
	Stop:	0	0	0	0	0					
	8:27										
	Total hrs:										
	76min										
Survey # 2	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	6/12/2010										
J steinman	Start:										
	6:07	0	0	0	0	0					
	Stop: 7:01										
	Total hrs:										
	54min										
Survey # 3	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	6/23/2010										
J steinman	Start:										
	7:40	. 0	0	0	0	0					
	Stop:	Ů									
	8:44										
	Total hrs:										
S	64min Date:							# Dinds	0	TERM C.E.	T. 1773 . C. 3. T.
Survey # 4 Observer(s):								# Birds	Sex	UTM E	UTM N
J steinman	7/8/2010 Start:	-									
	6:45										
	Stop:	0	0	0	0	0					
	7:50										
	Total hrs:										
	65min										
Survey # 5	Date:							# Birds	Sex	UTM E	UTM N
Observer(s): J steinman	7/15/2010										
) steinman	Start: 6:05										
	Stop:	0	0	0	0	0					
	6:54										
	Total hrs:										
	49min										
Overall Site Su	mmary										
Totals do not equal the		Total Adult	Total	Pairs	Total	Total Nests					
column. Include only i Do not include migrant		Residents		2 500112	Territories	2 2544 1 10010	Were any WIFLs color-banded?	Yes		No	
fledglings. Be careful not to doubl	e count						1				
individuals.		0		0	0	0	If yes, report color cor				
Total survey hr	308min						section on back of f	orm and rep	ort to USI	WS.	

Reporting Individual:

US Fish & Wildlife Service Permit#:

Date Report Completed:

State Wildlife Agency Permit #:

Jeff Steinman

Reporting Individual	Jeff Steinman		Phone #	415 250 2692
Affiliation	Garcia and Associates		E-mail	steinman@garciaandassociates.com
Site Name	Topock CA-4	Dat	e report Completed	
	n a previous year? Yes_X No Unknown			
	e 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 ye	ear, did you survey the same general area this year?	Yes X	No	If no, summarize below.
Did you survey the same g	general area during each visit to this site this year?	Yes X	No	If no, summarize below.
Management Authority for	r Survey Area: Federal x Municipal/G	County	State	TribalPrivate
Name of Management Ent	rity or Owner (e.g., Tonto National Forest)		BLM	
Length of area surveyed:	249m	(km)		
Native Mixed	E. Check (only one) category that best describes the predoce broadleaf plants (entirely or almost entirely, > 90% native and exotic plants (mostly native, 50 - 90% native) I native and exotic plants (mostly exotic, 50 - 90% exotic) (introduced plants (entirely or almost entirely, > 90% exo	re)	oliar layer at this site:	
Identify the 2-3 predomina	ant tree/shrub species in order of dominance. Use scientific	c name.		
	Tamarix spp.,Aca			
Average height of canopy	(Do not include a range):	4.5	(meters)	
Attach the following: 1) c	opy of USGS quad/topographical map (REQUIRED) of s	urvey area, outlinir	ng survey site and loca	ntion of WIFL detections;
2) sketch or aerial photo sl	howing site location, patch shape, survey route, location o	f any detected WIF	Ls or their nests;	
3) photos of the interior of	the patch, exterior of the patch, and overall site. Describe	e any unique habita	t features in Commen	ts.
Comments (such as start a Attach additional sheets if	nd end coordinates of survey area if changed among surve necessary.	eys, supplemental v	isits to sites, unique h	abitat features.

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)

	v	Villow I	lyc	atch	er (WIFI) Surve	ey and Detection Form (revis	ed April	, 2010)	
Site Name:	Topock C		•		`		State: CA	-		rnardino	
USGS Quad N		Topock						_ Elevation:		(meters	s)
Creek, River,			Colo	orado	River, Top	ock Mar				`	,
							sightings attached (as required)?	Yes	X	No	
Survey Coord	inates:	Start:	Е	38	8 44 738	N	11 07 29 889 UTM	Datum:	83	(See inst	ructions)
,		Stop:	Е		8 44 458	N		Zone:		`	,
If s	survey coor		hang			, enter co	ordinates for each survey in commen			of this page.	
	,		_				information on back of this pa			1 0	
						Nest(s)	 	T .			
Survey# Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Num	mated ber of airs	Estimated Number of Territories	Found? Y or N If Yes, number of nests	Comments (e.g., bird behavior, evidence of pairs or breeding,-potential threats [livestock, cowbirds, Diorhabda spp.]). If Diorhabda found, contact USFWS and State WIFL coordinator.	(this is an op-	tional colum ps of birds	IFL Detections nn for documenting found on dditional sheets if no	
Survey # 1	Date:					nests		# Birds	Sex	UTM E	UTM N
Observer(s):	5/21/2010							" Birdo	CON	CINE	Olinit
J steinman	Start:										
	8:33	0	0	0	0	0					
	Stop:			0	0	0					
	9:27										
	Total hrs:										
E	54min Date:							# Dindo	Cov	T PTD 4 T	TUTACAT
Survey # 2 Observer(s):	6/12/2010							# Birds	Sex	UTM E	UTM N
J steinman	Start:										
	7:06										
	Stop:	0	0	0	0	0					
	7:59										
	Total hrs:										
	53min										
Survey # 3	Date:							#Birds	Sex	UTM E	UTM N
Observer(s): J steinman	6/23/2010 Storts										
5 Steinman	Start: 6:50										
	Stop:	0	0	0	0	0					
	7:37										
	Total hrs:										
	47min										
Survey # 4	Date:							#Birds	Sex	UTM E	UTM N
Observer(s):	7/8/2010										
J steinman	Start: 5:58										
	Stop:	0	0	0	0	0					
	6:44										
	Total hrs:										
	46min										
Survey # 5	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	7/15/2010										
J steinman	Start:										
	7:01	0	0	0	0	0					
	Stop: 7:44										
	Total hrs:										
	40min										
Overall Site Su	mmary							-			
Totals do not equal the	sum of each	Total Adult	Total	l Pairs	Total	Total Nests					
column. Include only i Do not include migrant		Residents			Territories	2 2000 1 10010	Were any WIFLs color-banded	? Yes		No	
fledglings. Be careful not to doubl	e count						-				
individuals.		. 0		0	0	0	If yes, report color co	4.7			
Total survey hr	s: 240min						section on back of	torm and rep	ort to USI	ws.	

Reporting Individual:

US Fish & Wildlife Service Permit #:

Date Report Completed:

State Wildlife Agency Permit #:

Jeff Steinman

Reporting Individual	Jeff Steinman		Phone #	415 250 2692
Affiliation	Garcia and Associates		E-mail	steinman@garciaandassociates.com
Site Name	Topock CA-5	Date	report Completed	
Was this site surveyed in a pre				
	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?	YesX	No	If no, summarize below.
Management Authority for Survey	y Area: Federal x Municipal	l/County	State	TribalPrivate
Name of Management Entity or O	wner (e.g., Tonto National Forest)		Havasu Wildlife Re	efuge
Length of area surveyed:	274m	(km)		
Native broadl Mixed native Mixed native x Exotic/introde	k (only one) category that best describes the pred eaf plants (entirely or almost entirely, > 90% nat and exotic plants (mostly native, 50 - 90% native and exotic plants (mostly exotic, 50 - 90% exotic aced plants (entirely or almost entirely, > 90% ex shrub species in order of dominance. Use scienti Tamarix spp.,Ac	ive) e) cotic) fic name.	liar layer at this site:	
Average height of canopy (Do not	t include a range):	3.5	(meters)	
0 0 171			`	
	USGS quad/topographical map (REQUIRED) of			tion of WIFL detections;
	site location, patch shape, survey route, location			
3) photos of the interior of the pat	ch, exterior of the patch, and overall site. Descri	be any unique habitat	features in Commen	ts.
	coordinates of survey area if changed among sur	veys, supplemental vis	sits to sites, unique h	abitat features.
Attach additional sheets if necessa	uy.			

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)

	v	Villow I	Tye	atch	er (WIFI) Surve	y and Detection Form (revis	ed April	, 2010)	
Site Name:	Topock C		•		`		State: CA	-		ernardino	
USGS Quad N	lame:	Topock						Elevation:	146	(meters	s)
Creek, River, or Lake Name: Colorado River, Topock Marsh											
Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes X No											
Survey Coord	inates:	Start:	E	3	8 45 406	N	11 07 29 101 UTM	Datum:	83	(See inst	ructions)
		Stop:	Е		8 45 444	N	11 07 29 250 UTM	Zone:			
If s	urvey coor	rdinates cl					ordinates for each survey in commen		on back	of this page.	
			/	Fill i	n addition	ıal site i	nformation on back of this po	age			
						Nest(s)					
Survey#	Date (m/d/y)	Number of	Estir	nated	Estimated	Found? Y or N	Comments (e.g., bird behavior, evidence of pairs o breeding;-potential threats [livestock, cowbirds,	1		IFL Detections nn for documenting	individuals
Observer(s) (Full Name)	Survey Time	Adult WIFLs		ber of airs	Number of Territories	If Yes,	Diorhabda spp.]). If Diorhabda found, contact	pairs, or grou		-	, mai viduais,
(run rvanic)		WILLS	1.0	1115	Territories	number of	USFWS and State WIFL coordinator.	each survey). Include additional sheets if necessary.			
Survey # 1	Date:					nests		# Birds	Sex	UTM E	UTM N
Observer(s):	5/18/2010							# Bilus	Sex	amio	OIMIN
J steinman	Start:										
	5:33		0	0	0	0					
	Stop:	0		0	0	0					
	6:33										
	Total hrs: 60min										
Survey # 2	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	6/9/2010							# Direct	OUX	OTME	CIMIN
J steinman	Start:										
	6:30	0	0	0	0	0					
	Stop:										
	7:12 Total hrs:										
	42min										
Survey # 3	Date:							# Birds	Sex	UTM E	UTM N
Observer(s):	6/24/2010										
J steinman	Start:										
	7:02	0	0	0	0	0					
	Stop: 7:39										
	Total hrs:										
	37min										
Survey # 4	Date:							#Birds	Sex	UTM E	UTM N
Observer(s):	7/9/2010				0	0					
J steinman	Start:	0									
	7:02		0	0							
	Stop: 7:58										
	Total hrs:										
	56min										
Survey # 5	Date:							# Birds	Sex	UTM E	UTM N
Observer(s): J steinman	7/16/2010										
) steinman	Start: 7:03		0	0	0	0					
	Stop:										
	7:33										
	Total hrs:										
	30.0										
Overall Site Summary Totals do not senal the sum of each Total											
column. Include only resident adults.		Total Adult Residents	Total	l Pairs	Total Territories	Total Nests	Were any WIFLs color-banded	? Yes		No	
Do not include migrants, nestlings, and fledglings.							Were any WILLS color-ballded	103		110	
Be careful not to double count				,			If yes, report color co	mbination(s)	in the cor	mments	
individuals. Total survey hrs	225min	. 0	1	0	0	0	section on back of	4.7			
Reporting Individ				Jeff Steinman		Date Report Complet	ed:				

US Fish & Wildlife Service Permit #:

State Wildlife Agency Permit #:

Reporting Individual	Jeff Steinman		Phone #	415 250 2692
Affiliation	Garcia and Associates	E-mail	steinman@garciaandassociates.com	
Site Name	Topock CA-6	Date	report Completed	
•	a previous year? Yes_X No Unknown			
	name is consistent with that used in previous yrs?	Yes X	No	Not Applicable
If name is different, what na	me(s) was used in the past?			
If site was surveyed last yea	r, did you survey the same general area this year?	Yes X	No	If no, summarize below.
Did you survey the same ge	neral 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	TribalPrivate
Name of Management Entit	y or Owner (e.g., Tonto National Forest)		BLM	
Length of area surveyed:	152m	_(km)		
Vegetation Characteristics:	Check (only one) category that best describes the predo	minant tree/shrub fol	iar layer at this site:	
Native l	proadleaf plants (entirely or almost entirely, > 90% nativ	/e)		
Mixed r	native and exotic plants (mostly native, 50 - 90% native)	1		
x Mixed i	native and exotic plants (mostly exotic, 50 - 90% exotic)			
Exotic/i	ntroduced plants (entirely or almost entirely, > 90% exc	otic)		
Identify the 2-3 predominan	t tree/shrub species in order of dominance. Use scientifi	c name.		
	Tamarix spp.,Aca	ıcia gregii		
Average height of canopy (I	Do not include a range):	4	(meters)	
Attach the following: 1) co	py of USGS quad/topographical map (REQUIRED) of s	urvey area, outlining	survey site and loca	tion of WIFL detections;
2) sketch or aerial photo sho	owing site location, patch shape, survey route, location o	f any detected WIFL	s or their nests;	
	he patch, exterior of the patch, and overall site. Describ	-		ts.
Comments (such as start and	d end coordinates of survey area if changed among surve	eys, supplemental vis	its to sites, unique h	abitat features.
Attach additional sheets if n	ecessary.			

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)

Appendix D

Call Points and UTM coordinates

	Site 1				
1	N34 43.722 W114 30.522				
1A (eliminated 2010)	N34 43.703 W114 30.496				
1B	N34 43.742 W114 30.493				
1C (eliminated 2008)	N34 43.703 W114 30.463				
1D	N34 43.731 W114 30.459				
1E	N34 43.710 W114 30.422				
1F (eliminated 2008)	N34 43.688 W114 30.405				
1G	N34 43.701 W114 30.397				
1H	N34 43.701 W114 30.365				
1I	N34 43.702 W114 30.332				
1J	N34 43.685 W114 30.300				
1K	N34 43.743 W114 30.539				
1L (eliminated 2008)	N34 43.680 W114 30.333				
1M (eliminated 2008)	N34 43.691 W114 30.439				
1N (eliminated 2008)	N34 43.681 W114 30.377				
	Site 2				
2 (eliminated 2006)	N34 43.623 W114 30.531				
2A (eliminated 2008)	N34 43.630 W114 30.435				
2B (eliminated 2008)	N34 43.620 W114 30.400				
2C (eliminated 2010)	N34 43.605 W114 30.364				
2D (eliminated 2008)	N34 43.610 W114 30.330				
2E (eliminated 2008)	N34 43.618 W114 30.302				
2F	N34 43.606 W114 30.264				
2H (eliminated 2006)	N34 43.614 W114 30.231				
2G (eliminated 2008)	N34 43.633 W114 30.561				
2I (eliminated 2008)	N34 43.617 W114 30.491				
2J (eliminated 2008)	N34 43.615 W114 30.465				
2K	N34 43.623 W114 30.206				
2L	N34 43.627 W114 30.172				
2M (eliminated 2008)	N34 43.632 W114 30.098				
2N	N34 43.634 W114 30.132				
20	N34 43.593 W114 30.229				
2P (added 2009)	N34 43.628 W114 30.043				
2R (added 2009)	N34 43.644 W114 29.992				
2Q (added 2009)	N34 43.608 W114 30.102				
2S (added 2010)	N34 43.604 W114 30.142				
	Site 3				
3	N34 43.596 W114 29.810				
3A	N34 43.585 W114 29.787				
3B	N34 43.615 W114 29.785				
3C	N34 43.580 W114 29.746				
3D	N34 43.629 W114 29.810				
3E	N34 43.658 W114 29.824				
3F	N34 43.638 W114 29.857				
3G	N34 43.577 W114 29.809				
3H	N34 43.654 W114 29.915				
3I (added 2010)	N34 43.655 W114 29.951				
3J (added 2010)					
33 (added 2010)	N34 43.577 W114 29.809				

	Site 4
4D	N34 43.406 W114 29.676
4E	N34 43.449 W114 29.692
4F	N34 43.443 W114 29.652
4G	N34 43.479 W114 29.661
4H	N34 43.451 W114 29.594
4I	N34 43.469 W114 29.618
4L	N34 43.418 W114 29.587
4M	N34 43.384 W114 29.689
4N	N34 43.390 W114 29.716
40	N34 43.424 W114 29.713
4P	N34 43.363 W114 29.697
40	N34 43.424 W114 29.637
4R (Added 2009)	N34 43.384 W114 29.537
4S (Added 2009)	N34 43.336 W114 29.500
4T (Added 2009)	N34 43.388 W114 29.483
4U (Added 2009)	N34 43.429 W114 29.511
(110000 2005)	Site 5
5	N34 43.003 W114 29.374
5A	N34 42.981 W114 29.351
5B	N34 43.036 W114 29.337
5C	N34 43.062 W114 29.341
5D	N34 43.078 W114 29.318
5E	N34 43.076 W114 29.316
5F	N34 43.111 W114 29.334 N34 43.030 W114 29.304
5G	N34 43.030 W114 29.304 N34 43.046 W114 29.303
5H	
51	N34 43.013 W114 29.289
5J	N34 43.106 W114 29.373
5K	N34 43.133 W114 29.373
JK .	N34 43.081 W114 29.384 Site 6
6	N34 43.468 W114 29.838
6A	
6B	N34 43.494 W114 29.848
6C	N34 43.494 W114 29.818
6J	N34 43.527 W114 29.813
6K	N34 43.524 W114 29.780
6R	N34 43.501 W114 29.781
6S	N34 43.521 W114 29.845
US	N34 43.505 W114 29.878
A 1	Site A N24 42 247 W414 20 249
A1	N34 43.217 W114 29.218
A2	N34 43.179 W114 29.169
A3	N34 43.218 W114 29.123
A4	N34 43.289 W114 29.131
A6	N34 43.319 W114 29.131
A7	N34 43.324 W114 29.080
A8	N34 43.349 W114 29.111
A9	N34 43.366 W114 29.147
A10	N34 43.342 W114 29.174

A11 A12 N34 43.393 W114 29.185 A13 N34 43.428 W114 29.169 A14 N34 43.481 W114 29.169 A15 A15 N34 43.504 W114 29.194 A16 N34 43.523 W114 29.218 A17 N34 43.542 W114 29.270 A19 N34 43.561 W114 29.270 A19 N34 43.580 W114 29.300 A20 N34 43.603 W114 29.323 A21 N34 43.629 W114 29.332 A22 N34 43.668 W114 29.339 A23 N34 43.685 W114 29.356 A24 N34 43.685 W114 29.366 A26 N34 43.713 W114 29.366 A26 N34 43.770 W114 29.418 A28 N34 43.792 W114 29.418 A28 N34 43.780 W114 29.428 A29 N34 43.780 W114 29.428 A29 N34 43.833 W114 29.421 A32 N34 43.833 W114 29.452 A33 N34 43.833 W114 29.452 A35 N34 43.839 W114 29.452 A36 N34 43.894 W114 29.452 A37 N34 43.894 W114 29.452 A38 N34 43.897 W114 29.452 A39 N34 43.899 W114 29.452 A31 N34 43.897 W114 29.452 A35 N34 43.899 W114 29.452 A36 N34 43.897 W114 29.452 A37 N34 43.899 W114 29.452 A38 N34 43.899 W114 29.452 A39 N34 43.897 W114 29.452 A39 N34 43.897 W114 29.454 A39 N34 43.897 W114 29.454 A39 N34 43.290 W114 29.454 A39 N34 43.290 W114 29.452 A31 N34 43.290 W114 29.452 A32 N34 43.897 W114 29.452 A33 N34 43.897 W114 29.452 A34 A39 N34 43.290 W114 29.452 A39 N34 43.800 W114 29.452 A39 N34 43.800 W114 29.452 A39 N34 43.800 W114 29.503 A38 N34 43.800 W114 29.452 A40 N34 43.254 W114 29.503 A38 N34 43.250 W114 29.121 A41 N34 43.254 W114 29.129 A43 N34 43.280 W114 29.129 A44 N34 43.280 W114 29.099 A45 (Added 2010) N34 43.290 W114 29.063 A47 (Added 2010) N34 43.300 W114 29.007		110 / /0 000 11// / 00 /05
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A23 N34 43.668 W114 29.356 A24 N34 43.685 W114 29.370 A25 N34 43.713 W114 29.366 A26 N34 43.739 W114 29.398 A27 N34 43.770 W114 29.418 A28 N34 43.780 W114 29.428 A29 N34 43.780 W114 29.400 A30 N34 43.827 W114 29.526 A31 N34 43.833 W114 29.421 A32 N34 43.819 W114 29.452 A33 N34 43.803 W114 29.497 A35 N34 43.864 W114 29.564 A36 N34 43.882 W114 29.521 A37 N34 43.914 W114 29.503 A38 N34 43.97 W114 29.454 A39 N34 43.254 W114 29.121 A40 N34 43.254 W114 29.121 A41 N34 43.216 W114 29.129 A43 N34 43.234 W114 29.099 A44 N34 43.280 W114 29.099 A45 (Added 2010) N34 43.219 W114 29.083 A46 (Added 2010) N34 43.197 W114 29.063	A21	N34 43.629 W114 29.332
A24 N34 43.685 W114 29.370 A25 N34 43.713 W114 29.366 A26 N34 43.739 W114 29.398 A27 N34 43.770 W114 29.418 A28 N34 43.792 W114 29.428 A29 N34 43.780 W114 29.400 A30 N34 43.827 W114 29.526 A31 N34 43.833 W114 29.421 A32 N34 43.819 W114 29.452 A33 N34 43.803 W114 29.497 A35 N34 43.864 W114 29.564 A36 N34 43.882 W114 29.521 A37 N34 43.897 W114 29.454 A39 N34 43.920 W114 29.442 A40 N34 43.254 W114 29.121 A41 N34 43.216 W114 29.129 A43 N34 43.234 W114 29.099 A44 N34 43.280 W114 29.099 A45 (Added 2010) N34 43.219 W114 29.083 A46 (Added 2010) N34 43.197 W114 29.063	A22	N34 43.647 W114 29.339
A25 N34 43.713 W114 29.366 A26 N34 43.739 W114 29.398 A27 N34 43.770 W114 29.418 A28 N34 43.792 W114 29.428 A29 N34 43.780 W114 29.400 A30 N34 43.827 W114 29.526 A31 N34 43.833 W114 29.421 A32 N34 43.819 W114 29.452 A33 N34 43.803 W114 29.497 A35 N34 43.864 W114 29.564 A36 N34 43.882 W114 29.521 A37 N34 43.914 W114 29.503 A38 N34 43.97 W114 29.454 A39 N34 43.920 W114 29.442 A40 N34 43.254 W114 29.121 A41 N34 43.216 W114 29.185 A42 N34 43.234 W114 29.099 A43 N34 43.230 W114 29.099 A44 N34 43.230 W114 29.099 A45 (Added 2010) N34 43.219 W114 29.083 A46 (Added 2010) N34 43.197 W114 29.063	A23	N34 43.668 W114 29.356
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A29 N34 43.780 W114 29.400 A30 N34 43.827 W114 29.526 A31 N34 43.833 W114 29.421 A32 N34 43.819 W114 29.452 A33 N34 43.803 W114 29.497 A35 N34 43.864 W114 29.564 A36 N34 43.892 W114 29.521 A37 N34 43.914 W114 29.503 A38 N34 43.897 W114 29.454 A39 N34 43.920 W114 29.442 A40 N34 43.254 W114 29.121 A41 N34 43.216 W114 29.185 A42 N34 43.177 W114 29.129 A43 N34 43.234 W114 29.099 A44 N34 43.280 W114 29.099 A45 (Added 2010) N34 43.219 W114 29.083 A46 (Added 2010) N34 43.197 W114 29.063	A27	N34 43.770 W114 29.418
A30 N34 43.827 W114 29.526 A31 N34 43.833 W114 29.421 A32 N34 43.819 W114 29.452 A33 N34 43.803 W114 29.497 A35 N34 43.864 W114 29.564 A36 N34 43.882 W114 29.521 A37 N34 43.914 W114 29.503 A38 N34 43.897 W114 29.454 A39 N34 43.920 W114 29.442 A40 N34 43.254 W114 29.121 A41 N34 43.216 W114 29.185 A42 N34 43.177 W114 29.129 A43 N34 43.234 W114 29.099 A44 N34 43.280 W114 29.099 A45 (Added 2010) N34 43.219 W114 29.083 A46 (Added 2010) N34 43.197 W114 29.063	A28	N34 43.792 W114 29.428
A31 N34 43.833 W114 29.421 A32 N34 43.819 W114 29.452 A33 N34 43.803 W114 29.497 A35 N34 43.864 W114 29.564 A36 N34 43.882 W114 29.521 A37 N34 43.914 W114 29.503 A38 N34 43.897 W114 29.454 A39 N34 43.920 W114 29.442 A40 N34 43.254 W114 29.121 A41 N34 43.216 W114 29.185 A42 N34 43.177 W114 29.129 A43 N34 43.234 W114 29.099 A44 N34 43.280 W114 29.099 A45 (Added 2010) N34 43.219 W114 29.083 A46 (Added 2010) N34 43.197 W114 29.063	A29	N34 43.780 W114 29.400
A32 N34 43.819 W114 29.452 A33 N34 43.803 W114 29.497 A35 N34 43.864 W114 29.564 A36 N34 43.882 W114 29.521 A37 N34 43.914 W114 29.503 A38 N34 43.897 W114 29.454 A39 N34 43.920 W114 29.442 A40 N34 43.254 W114 29.121 A41 N34 43.216 W114 29.185 A42 N34 43.177 W114 29.129 A43 N34 43.234 W114 29.099 A44 N34 43.280 W114 29.099 A45 (Added 2010) N34 43.219 W114 29.083 A46 (Added 2010) N34 43.197 W114 29.063	A30	N34 43.827 W114 29.526
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A36 N34 43.882 W114 29.521 A37 N34 43.914 W114 29.503 A38 N34 43.897 W114 29.454 A39 N34 43.920 W114 29.442 A40 N34 43.254 W114 29.121 A41 N34 43.216 W114 29.185 A42 N34 43.177 W114 29.129 A43 N34 43.234 W114 29.099 A44 N34 43.280 W114 29.099 A45 (Added 2010) N34 43.219 W114 29.083 A46 (Added 2010) N34 43.197 W114 29.063	A33	N34 43.803 W114 29.497
A37 N34 43.914 W114 29.503 A38 N34 43.897 W114 29.454 A39 N34 43.200 W114 29.442 A40 N34 43.254 W114 29.121 A41 N34 43.216 W114 29.185 A42 N34 43.177 W114 29.129 A43 N34 43.234 W114 29.099 A44 N34 43.280 W114 29.099 A45 (Added 2010) N34 43.219 W114 29.083 A46 (Added 2010) N34 43.197 W114 29.063	A35	N34 43.864 W114 29.564
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A45 (Added 2010) N34 43.219 W114 29.083 A46 (Added 2010) N34 43.197 W114 29.063	A43	N34 43.234 W114 29.099
A46 (Added 2010) N34 43.197 W114 29.063	A44	N34 43.280 W114 29.099
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A47 (Added 2010) N34 43.300 W114 29.077	A46 (Added 2010)	N34 43.197 W114 29.063
	A47 (Added 2010)	N34 43.300 W114 29.077
A48 (Added 2010) N34 43.430 W114 29.173	A48 (Added 2010)	N34 43.430 W114 29.173
A49 (Added 2010) N34 43.434 W114 29.123	A49 (Added 2010)	N34 43.434 W114 29.123