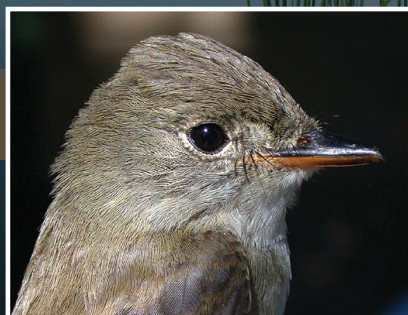


# **SOUTHWESTERN WILLOW FLYCATCHER PRESENCE/ABSENCE SURVEYS FOR THE PG&E TOPOCK COMPRESSOR STATION**

## **Prepared By:**

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NATURAL & CULTURAL RESOURCE CONSULTANTS



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

**Prepared by:**

Garcia and Associates

**Prepared for:**

CH2M HILL, Inc. and

Pacific Gas & Electric Co.

**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.*

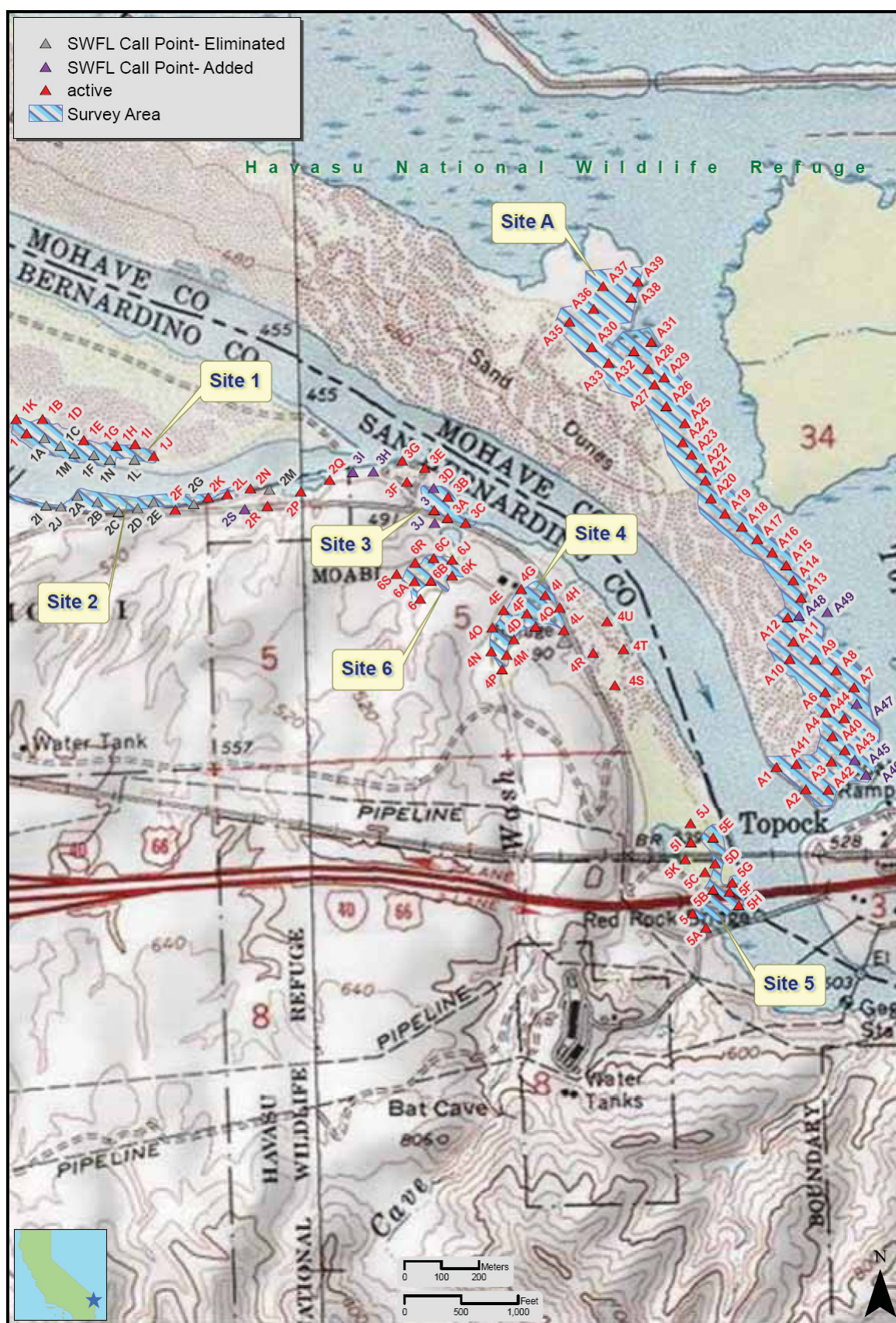
## Site Description

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.





### ***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).
  - Call points 2 and 2H (eliminated in 2006)
  - Call points 1C, 1F, 1L, 1M, 1N, 2A, 2B, 2D, 2E, 2G, 2I, 2J, and 2M (eliminated in 2008)
  - 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.
  - Call points 2P, 2Q, 2R, 3H, 4R, 4S, 4T, and 4U (added in 2009)
  - 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.

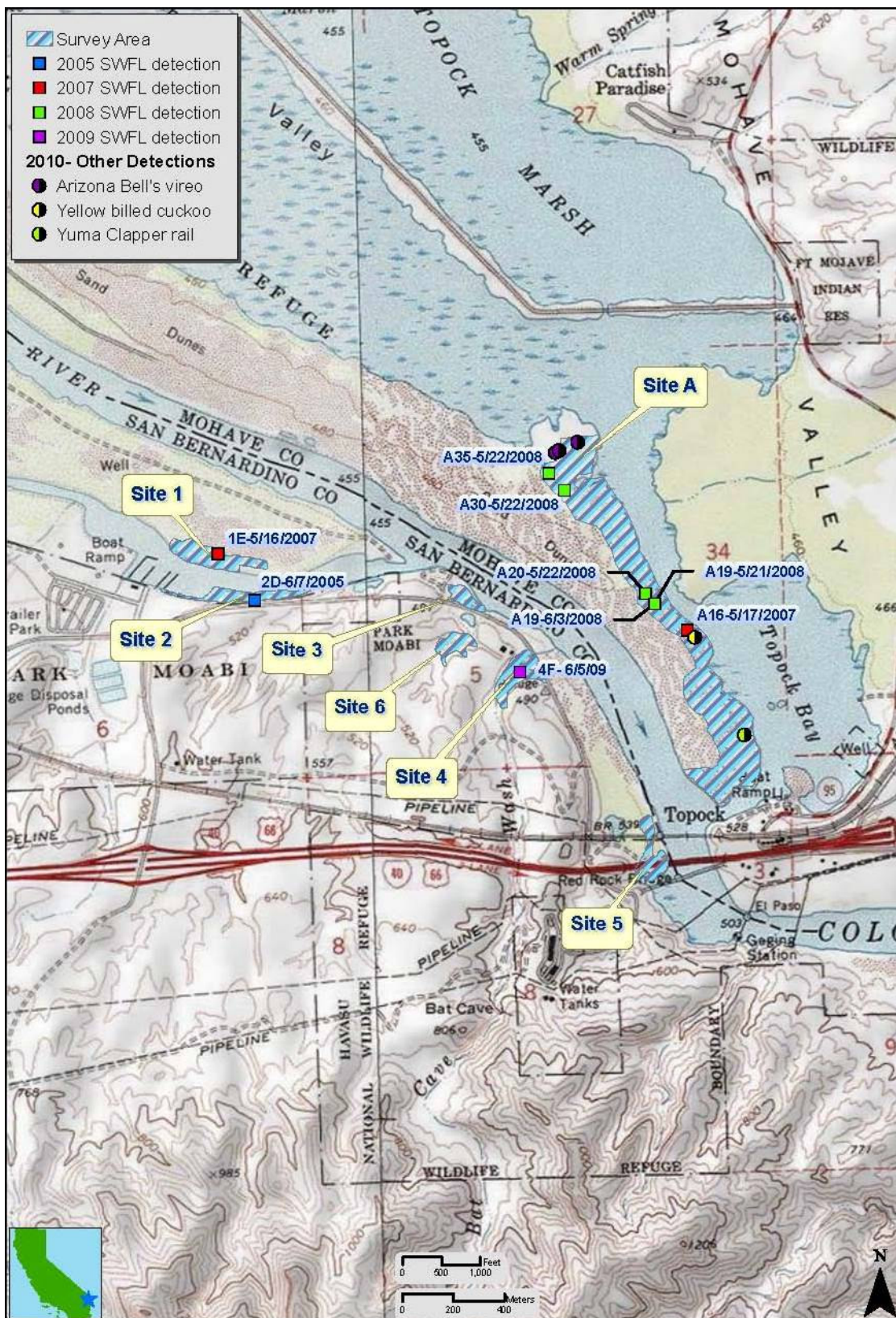
### ***Incidental Species***

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.



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 were 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**

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



Common Names	Scientific Names
Lucy's Warbler	<i>Vermivora luciae</i>
Mallard	<i>Anas platyrhynchos</i>
Marsh Wren	<i>Cistothorus palustris</i>
Mourning Dove	<i>Zenaida macroura</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>
Orange-crowned Warbler	<i>Vermivora celata</i>
Rock Pigeon	<i>Columba livia</i>
Rock Wren	<i>Salpinctes obsoletus</i>
Ruddy Duck	<i>Oxyura jamaicensis</i>
Snowy Egret	<i>Egretta thula</i>
Song Sparrow	<i>Melospiza melodia</i>
Summer Tanager	<i>Piranga rubra</i>
Turkey Vulture	<i>Cathartes aura</i>
Verdin	<i>Auriparus flaviceps</i>
Western Grebe	<i>Aechmophorus occidentalis</i>
Western Kingbird	<i>Tyrannus verticalis</i>
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>
White-faced Ibis	<i>Plegadis chihi</i>
White-throated Swift	<i>Aeronautes saxatalis</i>
White-winged Dove	<i>Zenaida asiatica</i>
Wilson's Warbler	<i>Wilsonia pusilla</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>

**Table 2. Wildlife Species Observed**

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

**Table 3. Plant Species Observed**

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

## **Appendix C**

### **Survey Forms**



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

Site Name: Topock Site A State: AZ County: Mohave  
 USGS Quad Name: Topock Elevation: 134 (meters)  
 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 Coordinates: Start: E 38 46 178 N 11 07 29 655 UTM Datum: 83 (See instructions)  
 Stop: E 38 44 828 N 11 07 29 259 UTM Zone: 11

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

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

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N  If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
<b>Survey # 1</b> Observer(s): J steinman	Date:	0	0	0	0					
	5/19/2010									
	start-stop									
	0550-0900									
	Date:									
	5/20/2010									
total time	start-stop									
357min	0555-0843									
<b>Survey # 2</b> Observer(s): J steinman	Date:	0	0	0	0					
	6/10/2010									
	start-stop									
	0528-0809									
	Date:									
	6/11/2010									
total time	start-stop									
325	0606-0850									
<b>Survey # 3</b> Observer(s): J steinman	Date:	0	0	0	0					
	6/22/2010									
	Start:									
	5:05									
	Stop:									
	8:40									
Total hrs:	215.0									
<b>Survey # 4</b> Observer(s): J steinman	Date:	0	0	0	0					
	7/7/2010									
	Start:									
	5:17									
	Stop:									
	8:38									
Total hrs:	201.0									
<b>Survey # 5</b> Observer(s): J steinman	Date:	0	0	0	0					
	7/14/2010									
	Start:									
	5:15									
	Stop:									
	8:49									
Total hrs:	214.0									
<b>Overall Site Summary</b> Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals.		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u>    </u> No <u>    </u>  If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs:	1312min	0	0	0	0					

Reporting Individual: Jeff Steinman Date Report Completed:                       
 US Fish & Wildlife Service Permit #:    State Wildlife Agency Permit #:   

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

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

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

Length of area surveyed: 1.1 (km)

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

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

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

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

\_\_\_\_\_ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

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

Tamarix spp., Acacia gregii, Salix spp.

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

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

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

Attach additional sheets if necessary.

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

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

Attach additional sheets if necessary

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

Site Name: **Topock CA-1** State: **CA** County: **San Bernardino**

USGS Quad Name: **Whale Mountain** Elevation: **134** (meters)

Creek, River, or Lake Name: **Colorado River, Topock Marsh**

Is copy of USGS map marked with survey area and WIFL sightings attached (as required)? Yes **X** No

Survey Coordinates: Start: E **38 45 150** N **11 07 29 384** UTM Datum: **83** (See instructions)  
Stop: E **38 45 317** N **11 07 29 537** UTM Zone: **11**

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

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

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N  If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
Survey # 1 Observer(s): J steinman	Date:	0	0	0	0					
	5/21/2010									
	Start:									
	6:03									
	Stop:									
	7:05									
	Total hrs:									
	62min									
Survey # 2 Observer(s): J steinman	Date:	0	0	0	0					
	6/9/2010									
	Start:									
	7:24									
	Stop:									
	8:15									
	Total hrs:									
	51min									
Survey # 3 Observer(s): J steinman	Date:	0	0	0	0					
	6/23/2010									
	Start:									
	6:01									
	Stop:									
	6:40									
	Total hrs:									
	39min									
Survey # 4 Observer(s): J steinman	Date:	0	0	0	0					
	7/8/2010									
	Start:									
	7:55									
	Stop:									
	8:35									
	Total hrs:									
	40min									
Survey # 5 Observer(s): J steinman	Date:	0	0	0	0					
	7/15/2010									
	Start:									
	5:20									
	Stop:									
	5:58									
	Total hrs:									
	38min									
Overall Site Summary Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals.		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes No				
Total survey hrs: 230min		0	0	0	0	If yes, report color combination(s) in the comments section on back of form and report to USFWS.				

Reporting Individual: **Jeff Steinman** Date Report Completed: \_\_\_\_\_  
US Fish & Wildlife Service Permit #: \_\_\_\_\_ State Wildlife Agency Permit #: \_\_\_\_\_

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

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

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

Length of area surveyed: 0.5 (km)

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

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

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

Tamarix spp., Cercidium microphyllum

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

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

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

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

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

Attach additional sheets if necessary



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

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

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N  If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
<b>Survey # 1</b>	Date:	0	0	0	0		# Birds	Sex	UTM E	UTM N
Observer(s):	5/18/2010									
J steinman	Start:									
	7:26									
	Stop:									
	8:31									
	Total hrs: 65min									
<b>Survey # 2</b>	Date:	0	0	0	0		# Birds	Sex	UTM E	UTM N
Observer(s):	6/12/2010									
J steinman	Start:									
	8:04									
	Stop:									
	8:40									
	Total hrs: 36min									
<b>Survey # 3</b>	Date:	0	0	0	0		# Birds	Sex	UTM E	UTM N
Observer(s):	6/24/2010									
J steinman	Start:									
	7:40									
	Stop:									
	8:15									
	Total hrs: 35.0									
<b>Survey # 4</b>	Date:	0	0	0	0		# Birds	Sex	UTM E	UTM N
Observer(s):	7/9/2010									
J steinman	Start:									
	6:30									
	Stop:									
	7:00									
	Total hrs: 30min									
<b>Survey # 5</b>	Date:	0	0	0	0		# Birds	Sex	UTM E	UTM N
Observer(s):	7/16/2010									
J steinman	Start:									
	6:23									
	Stop:									
	7:01									
	Total hrs: 38.0									
<b>Overall Site Summary</b> Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals. Total survey hrs:		Total Adult Residents	Total Pairs	Total Territories	Total Nests		Were any WIFLs color-banded?	Yes	No	
	204 min						0	0	0	0

Reporting Individual:	<b>Jeff Steinman</b>	Date Report Completed:	
US Fish & Wildlife Service Permit #:		State Wildlife Agency Permit #:	

Southwestern Willow Flycatcher Survey  
PG&E Topock Compressor Station

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

Reporting Individual Jeff Steinman Phone # 415 250 2692  
 Affiliation Garcia and Associates E-mail [steinman@garciaandassociates.com](mailto:steinman@garciaandassociates.com)  
 Site Name Topock CA-2 Date report Completed \_\_\_\_\_  
 Was this site surveyed in a previous year? Yes X No \_\_\_\_\_ Unknown \_\_\_\_\_  
 Did you verify that this site name is consistent with that used in previous yrs? Yes X No \_\_\_\_\_ Not Applicable \_\_\_\_\_  
 If name is different, what name(s) was used in the past? \_\_\_\_\_  
 If site was surveyed last year, did you survey the same general area this year? Yes X No \_\_\_\_\_ If no, summarize below.  
 Did you survey the same general area during each visit to this site this year? Yes X No \_\_\_\_\_ If no, summarize below.  
 Management Authority for Survey Area: Federal \_\_\_\_\_ Municipal/County X State \_\_\_\_\_ Tribal \_\_\_\_\_ Private \_\_\_\_\_  
 Name of Management Entity or Owner (e.g., Tonto National Forest) Moabi Regional Park

Length of area surveyed: 609m (km)

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

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

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

Tamarix spp., Cercidium microphyllum

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

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

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

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

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

Attach additional sheets if necessary

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

Site Name: Topock CA-3 State: CA County: San Bernardino  
 USGS Quad Name: Topock Elevation: 134 (meters)  
 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 Coordinates: Start: E 38 45 653 N 11 07 29 128 UTM Datum: 83 (See instructions)  
 Stop: E 38 45 544 N 11 07 29 285 UTM Zone: 11

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

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

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N  If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
<b>Survey # 1</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 2</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 3</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 4</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 5</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Overall Site Summary</b> Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals.		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u>    </u> No <u>    </u>  If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs:	0	0	0	0						

Reporting Individual: Jeff Steinman Date Report Completed:                       
 US Fish & Wildlife Service Permit #:    State Wildlife Agency Permit #:   

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

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

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

Length of area surveyed: 152m (km)

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

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

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

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

\_\_\_\_\_ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

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

Tamarix spp., Acacia gregii

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

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

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

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

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

Attach additional sheets if necessary.

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

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

Attach additional sheets if necessary



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

Site Name: Topock CA-4 State: CA County: San Bernardino  
 USGS Quad Name: Topock Elevation: 134 (meters)  
 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 Coordinates: Start: E 38 45 150 N 11 07 29 384 UTM Datum: 83 (See instructions)  
 Stop: E 38 45 317 N 11 07 29 537 UTM Zone: 11

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

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

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N  If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
<b>Survey # 1</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 2</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 3</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 4</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 5</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Overall Site Summary</b> Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals.		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u>    </u> No <u>    </u>  If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs:	0	0	0	0						

Reporting Individual: Jeff Steinman Date Report Completed:                       
 US Fish & Wildlife Service Permit #:    State Wildlife Agency Permit #:   

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

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

Reporting Individual Jeff Steinman Phone # 415 250 2692  
 Affiliation Garcia and Associates E-mail [steinman@garciaandassociates.com](mailto:steinman@garciaandassociates.com)  
 Site Name Topock CA-4 Date report Completed \_\_\_\_\_  
 Was this site surveyed in a previous year? Yes X No \_\_\_\_\_ Unknown \_\_\_\_\_  
 Did you verify that this site name is consistent with that used in previous yrs? Yes X No \_\_\_\_\_ Not Applicable \_\_\_\_\_  
 If name is different, what name(s) was used in the past? \_\_\_\_\_  
 If site was surveyed last year, did you survey the same general area this year? Yes X No \_\_\_\_\_ If no, summarize below.  
 Did you survey the same general area during each visit to this site this year? Yes X No \_\_\_\_\_ If no, summarize below.  
 Management Authority for Survey Area: Federal x Municipal/County \_\_\_\_\_ State \_\_\_\_\_ Tribal \_\_\_\_\_ Private \_\_\_\_\_  
 Name of Management Entity or Owner (e.g., Tonto National Forest) BLM

Length of area surveyed: 249m (km)

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

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

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

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

\_\_\_\_\_ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

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

Tamarix spp., Acacia gregii

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

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

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

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

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

Attach additional sheets if necessary.

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

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

Attach additional sheets if necessary

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

Site Name: Topock CA-5 State: CA County: San Bernardino  
 USGS Quad Name: Topock Elevation: 134 (meters)  
 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 Coordinates: Start: E 38 44 738 N 11 07 29 889 UTM Datum: 83 (See instructions)  
 Stop: E 38 44 458 N 11 07 29 930 UTM Zone: 11

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

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

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N  If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
Survey # 1 Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	8:33									
	Stop:									
	9:27									
	Total hrs:									
	54min									
Survey # 2 Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	7:06									
	Stop:									
	7:59									
	Total hrs:									
	53min									
Survey # 3 Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	6:50									
	Stop:									
	7:37									
	Total hrs:									
	47min									
Survey # 4 Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	5:58									
	Stop:									
	6:44									
	Total hrs:									
	46min									
Survey # 5 Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	7:01									
	Stop:									
	7:44									
	Total hrs:									
	40min									
Overall Site Summary Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals.		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u>    </u> No <u>    </u>				
Total survey hrs: 240min		0	0	0	0	If yes, report color combination(s) in the comments section on back of form and report to USFWS.				

Reporting Individual: Jeff Steinman Date Report Completed:                       
 US Fish & Wildlife Service Permit #:    State Wildlife Agency Permit #:   

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



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

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

Length of area surveyed: 274m (km)

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

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

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

Tamarix spp., Acacia gregii

Average height of canopy (Do not include a range): 3.5 (meters)

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

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

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

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

Attach additional sheets if necessary

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

Site Name: Topock CA-6 State: CA County: San Bernardino  
 USGS Quad Name: Topock Elevation: 146 (meters)  
 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 Coordinates: Start: E 38 45 406 N 11 07 29 101 UTM Datum: 83 (See instructions)  
 Stop: E 38 45 444 N 11 07 29 250 UTM Zone: 11

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

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

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N  If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
<b>Survey # 1</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 2</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 3</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 4</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Survey # 5</b> Observer(s): J steinman	Date:	0	0	0	0					
	Observer(s):									
	Start:									
	Stop:									
	Total hrs:									
<b>Overall Site Summary</b> Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals.		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u>    </u> No <u>    </u>  If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
Total survey hrs:	0	0	0	0						

Reporting Individual: Jeff Steinman Date Report Completed:                       
 US Fish & Wildlife Service Permit #:                                      State Wildlife Agency Permit #:                                     

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

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

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

Length of area surveyed: 152m (km)

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

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

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

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

\_\_\_\_\_ Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

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

Tamarix spp., Acacia gregii

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

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

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

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

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

Attach additional sheets if necessary.

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

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

Attach additional sheets if necessary



## **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
2O	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)	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
4O	N34 43.424 W114 29.713
4P	N34 43.363 W114 29.697
4Q	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
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 43.111 W114 29.334
5F	N34 43.030 W114 29.304
5G	N34 43.046 W114 29.303
5H	N34 43.013 W114 29.289
5I	N34 43.106 W114 29.373
5J	N34 43.133 W114 29.373
5K	N34 43.081 W114 29.384
Site 6	
6	N34 43.468 W114 29.838
6A	N34 43.494 W114 29.848
6B	N34 43.494 W114 29.818
6C	N34 43.527 W114 29.813
6J	N34 43.524 W114 29.780
6K	N34 43.501 W114 29.781
6R	N34 43.521 W114 29.845
6S	N34 43.505 W114 29.878
Site A	
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	N34 43.393 W114 29.185
A12	N34 43.428 W114 29.194
A13	N34 43.456 W114 29.169
A14	N34 43.481 W114 29.182
A15	N34 43.504 W114 29.194
A16	N34 43.523 W114 29.218
A17	N34 43.542 W114 29.244
A18	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 43.647 W114 29.339
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 43.792 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 43.897 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
A47 (Added 2010)	N34 43.300 W114 29.077
A48 (Added 2010)	N34 43.430 W114 29.173
A49 (Added 2010)	N34 43.434 W114 29.123