

**ROOSEVELT
HABITAT CONSERVATION PLAN
ANNUAL REPORT
2009**



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Cover photo: Rockhouse Riparian Demonstration Project, Gila County, AZ

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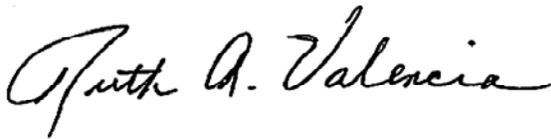
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- J. Southwestern willow flycatcher and yellow-billed cuckoo surveys along the Gila River at Fort Thomas, Arizona: 2009 summary report. EcoPlan Associates, Inc., Mesa, Arizona.¹
- K. Southwestern Willow Flycatcher and Yellow-billed Cuckoo Surveys along the Verde River at Camp Verde Riparian Preserve, Yavapai County, Arizona: 2009 Summary Report¹
- L. Southwestern Willow Flycatcher and Yellow-billed Cuckoo Surveys at the Rockhouse Demonstration Project Site, Gila County, Arizona: 2009 Summary Report.¹

¹Locations of endangered species are sensitive data considered confidential by U.S. Fish and Wildlife Service.

²Property boundaries overlaid on aerial photographs are approximate due to slight distortions on the aerial photography.

CERTIFICATION

Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, the information submitted is true, accurate, and complete.



January 15, 2009

Ruth A. Valencia
Sr. Environmental Scientist
Siting and Studies
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Date

I. INTRODUCTION

In February 2003, the U.S. Fish and Wildlife Service (FWS) issued an Incidental Take Permit (ITP) pursuant to Section 10(a)(1)(B) of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended, to Salt River Project (SRP) for southwestern willow flycatcher (*Empidonax traillii extimus*) (“flycatcher”), yellow-billed cuckoo (*Coccyzus americanus*) (“cuckoo”), bald eagle (*Haliaeetus leucocephalus*) and Yuma clapper rail (*Rallus longirostris yumanensis*) (“clapper rail”). The activity covered by the ITP is the continued operation by SRP of Roosevelt Dam and Lake up to an elevation of 2,151’. The ITP is conditioned upon SRP’s implementation of the Roosevelt Habitat Conservation Plan (“Roosevelt HCP”) (Salt River Project 2002).

The Roosevelt HCP provides measures to minimize and mitigate incidental take of the four species listed above “to the maximum extent practicable and ensures that incidental take will not appreciably reduce the likelihood of the survival and recovery of these species in the wild” (FWS 2002). Mitigation efforts focus primarily on the acquisition and management of riparian habitat. Additional habitat conservation measures include the protection and management of habitat at Roosevelt Lake, acquisition of water rights for maintenance of riparian habitat, acquisition of buffer lands to benefit riparian habitat, creation of habitat and support for bald eagle protection activities.

II. ANNUAL REPORTING COMPLIANCE

Obligation: SRP is required to submit an annual report to FWS, Bureau of Reclamation (USBR) and the Tonto National Forest (TNF) describing all Roosevelt HCP activities occurring during the past year. A draft report must be sent to FWS prior to the annual meeting in October/November of each year. The report is to be finalized by February 1st of the following year.

Actions: SRP submits this report to FWS, USBR and the Tonto Basin District Office of the TNF to fulfill the annual reporting requirement. The report covers all activities relating to the Roosevelt HCP from November 1, 2008 through October 31, 2009, including a summary of reservoir operations, management activities, monitoring results, status reports and planned future activities.

III. ROOSEVELT LAKE AREA COMPLIANCE

A. Summary of Reservoir Operations - Water Year 2009

Obligation: Data on reservoir elevations are used in conjunction with habitat monitoring information to determine permit compliance. Impacts to covered species will primarily occur from effects on occupied vegetation resulting from changes in water levels and duration of inundation or desiccation in Roosevelt Lake.

Action: SRP monitors lake levels throughout the year to evaluate impacts and ITP compliance.

Discussion

The largest influence on Salt and Verde reservoir operations this past water year was actually the previous Water Year. Water Year 2008 was a productive runoff year filling both the Verde and Salt reservoir systems. Water Year 2009 produced below median runoff but Roosevelt Lake elevation entered Flood Control Space for the first time in its history. The seasonal river swap from the Salt System to Verde System was initiated on June 15, 2009. Precipitation during 2009 monsoon, as defined by June 15 through September 30, was just 56% of normal. When comparing 2009 to the entire record, this past monsoon was the second driest. Indications for this coming winter are for ocean conditions to continue at weak-to-moderate strength El Niño. While the past is no guarantee of the future, a look at watershed history over the last 110 years is encouraging. Eight of the nine years with poor monsoon summers in which an El Niño was developing resulted in wet winters. SRP's reservoir system has sufficient capacity in May allowing for a full allocation of surface water for the remainder of 2009 and 2010.

Winter Precipitation: During early Fall 2008, sea surface temperatures across the Equatorial Pacific were near normal suggesting the Southern Oscillation would likely have little influence on the regional weather of the Southwestern United States during the upcoming winter. However, beginning in the late Fall and early Winter, cooling began off the west coast of South America and spread as a weak-to-moderate La Nina, which developed and persisted into early Spring 2009. This transition may help explain the shift from a productive weather pattern over the region that brought several "cold" storm systems to Arizona during late November and December to a much less productive pattern that persisted from January through March and allowed only one significant storm system to affect Arizona during February. As a result, there was a sharp contrast between the cumulative average precipitation across the Salt/Verde watershed for December when 4.30" or 253% of normal for the month was recorded and January through March when only 3.01" or 46% of normal for those three months occurred. Combined, the 7.31" of precipitation that was recorded on average across the Salt/Verde watershed for the December-March period was 88% of normal.

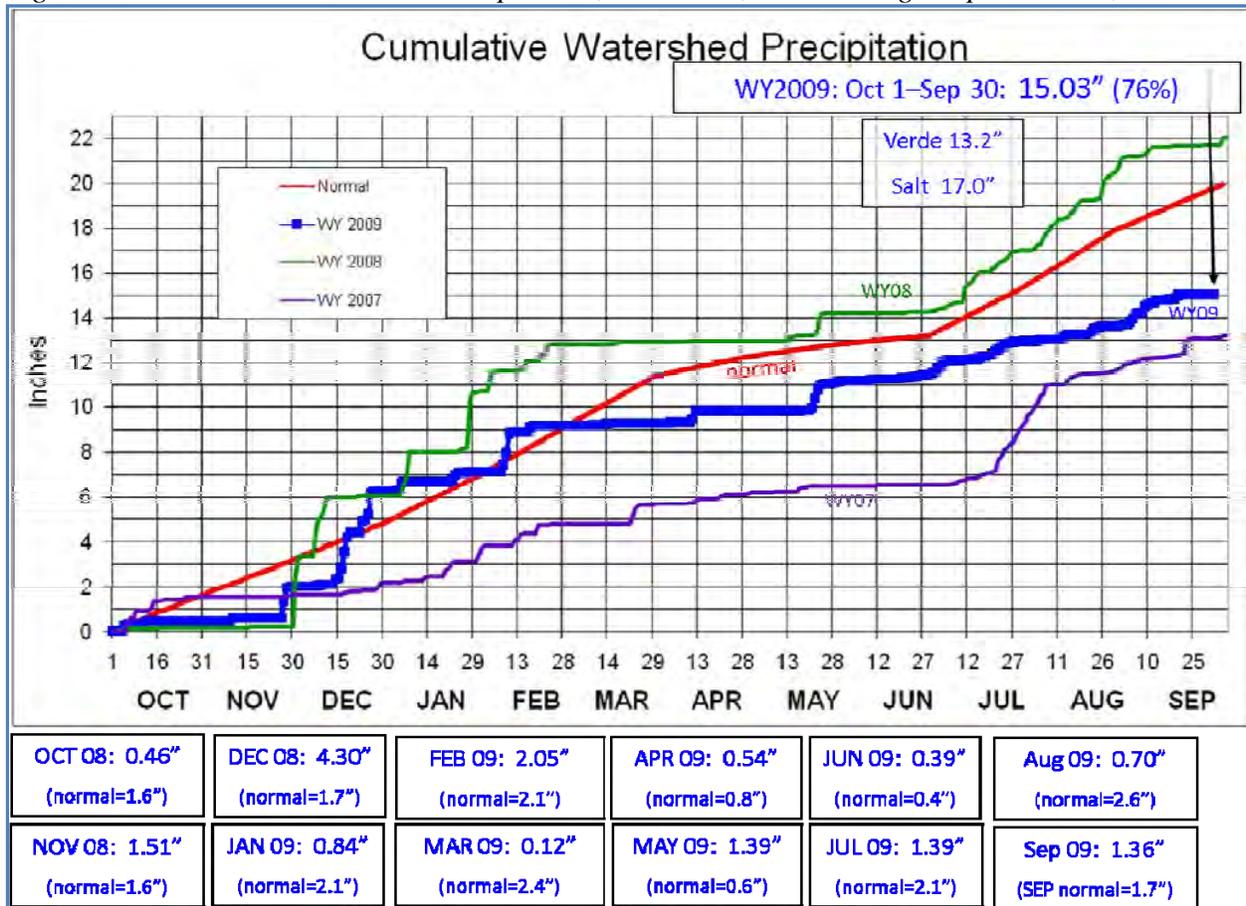
Summer Precipitation: As quickly as the Southern Oscillation swung towards La Nina conditions during the early months of 2009, it transitioned back to a near neutral status and then weak-to-moderate El Nino conditions as Summer 2009 approached. As was the case during the preceding winter, this transition in the Southern Oscillation may have had a profound effect on the weather pattern observed across the Southwestern United States during subsequent months. Instead of gradually weakening and retreating northwards during the late spring months as is typical, the Westerlies remained much stronger than normal over the Southwestern United States from June through August. This in turn prevented a persistent monsoon circulation from developing over the region through the summer so that true "bursts" in the monsoon producing widespread, significant precipitation within Arizona were few and far between. As a result, from June 15 through September 30, 2009, the period that has been defined as the monsoon, a Salt/Verde watershed average precipitation accumulation of 3.76" was observed which is only 56% of normal and the second least amount on record for the monsoon.

For the Water Year of 2009, which covers the period from October 1, 2008, through September 30, 2009, a Salt/Verde watershed average accumulation of 15.03" was recorded which is 76% of normal making this the 32nd driest (or 78th wettest) water year on record. Breaking this down by

basin, the Salt watershed, which received 17.0” on average, was favored over the Verde which received 13.2” on average.

The chart below shows how the cumulative average Salt/Verde watershed precipitation recorded during Water Year 2009 compares to that observed during recent past water years and the long-term normal; monthly totals and normal amounts appear in the boxes below the chart.

Figure 1. Cumulative Watershed Precipitation, October 1, 2008 through September 30, 2009.

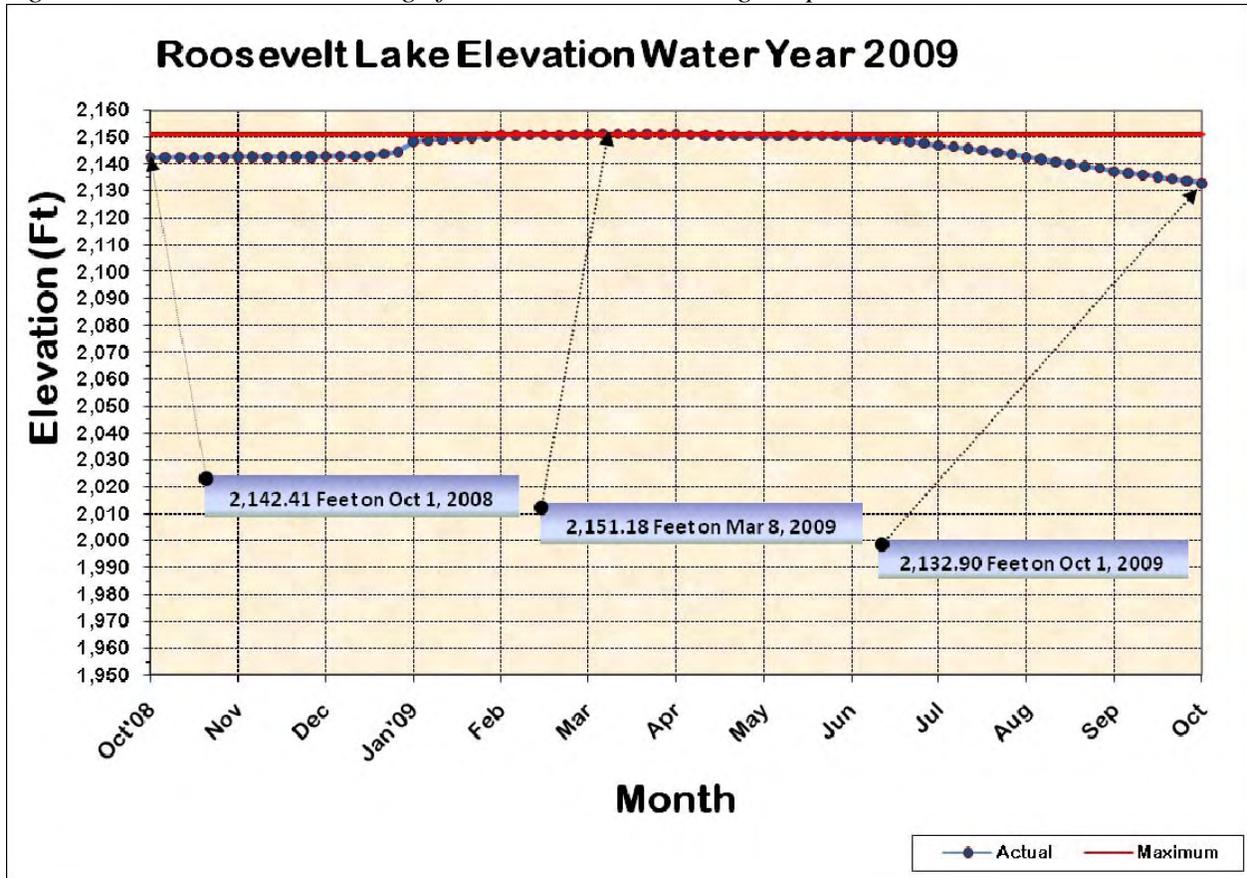


Reservoir Status: In December, total reservoir storage increased 161,281 acre feet, which was the first positive increase in total storage since May 2008. Total reservoir storage was 89% of capacity heading into the winter runoff season. Although January 1, 2009 snowpack on the Verde was 319% of normal and 180% of normal on the Salt, winter runoff was forecasted as below median. Ultimately, the winter runoff (January-May) produced 489,470 acre feet which is 72% of median. Last runoff season’s total inflow to the reservoirs was 1,334,480 acre feet. Total storage at the end of the runoff season was 2,171,955 acre feet which is 94% of capacity compared to 96% the previous season. The Verde reservoirs never reached capacity this season despite an impressive December snowpack. However, Roosevelt Lake recorded the highest elevation in history this runoff season at 2151.18 feet on March 8, 2009.

Roosevelt Operations: Roosevelt storage was still experiencing the benefits from the previous wet winter entering the winter runoff season in 2009. Although, runoff was below median,

Roosevelt Lake continued to gain storage within the New Conservation Storage space. On February 27, 2009, the lake elevation exceeded elevation 2151 feet encroaching Flood Control Space for the first time in history. Once the lake elevation enters Flood Control Space, SRP is required to operate Roosevelt Dam per the Water Control Manual. The maximum elevation reached in Roosevelt Lake was 2151.18 ft on March 8 but by March 14 the lake level was below 2151 ft. The water order was balanced between inflows and releases to assure a gradual reduction in lake level while meeting water order. The water order was transitioned to the Verde system briefly before returning to normal operations in mid-June (Figure 2).

Figure 2. Roosevelt Lake storage for October 2008 through September 2009.



Weather Outlook: As of this writing, El Niño continues at weak-to-moderate strength, i.e., sea surface temperatures along the equator of the eastern Pacific Ocean are between 0.5°C to 1.0°C warmer than normal. Consensus forecasts from several models suggest further warming is possible through the winter before cooling late this spring. An El Niño of moderate strength (1.0C to 1.5C above normal) seems most likely this winter. In the past on the watershed, many more winters than not have had normal to above normal precipitation with an El Niño in progress. The National Weather Service’s Climate Prediction Center is still following this situation to some extent for their winter season outlooks. The November through January season is a toss-up among “above,” “below” and “near-normal” precipitation for all of Arizona. However, for the winter seasons, “above normal” is slightly favored for the southern third of the

state (south of the watershed and the Phoenix metro area) for December through February and for all but the northeastern quarter of Arizona during January through March. The most likely category for temperatures is “above normal” for most all of Arizona this fall (Nov.-Jan.) and for the northern half of the state for the winter seasons (Dec-Feb. and Jan.-Mar.).

B. Incidental Take Permit (ITP) Compliance Monitoring

The Roosevelt HCP states that SRP will periodically collect and evaluate information on occupied habitats and population status of flycatchers, clapper rails, cuckoos and bald eagles at Roosevelt Lake to monitor compliance with the ITP. Vegetation monitoring is to be conducted to ensure that adaptive management thresholds or permit limits are not exceeded. In addition, populations of flycatchers, cuckoos and rails will be monitored for ITP compliance and to identify long-term trends using appropriate field survey techniques or protocols.

1. Roosevelt Lake Habitat Monitoring

Obligation: To ensure that permit limits or adaptive management thresholds are not exceeded, SRP will monitor riparian vegetation at the Salt River and Tonto Creek arms of Roosevelt Lake on an annual basis beginning in 2007, continuing for the life of the permit. SRP will use a method to estimate tall dense vegetation likely to be occupied by flycatchers using satellite imagery information (calculations of relative density of vegetation).

2009 Actions: SRP contracted with U. S. Geological Survey, Columbia River Research Laboratory (CRRL) to assist with habitat monitoring at Roosevelt Lake for the past three years. Researcher, Jim Hatten, once again processed satellite imagery and the multi-scaled flycatcher breeding habitat model (“habitat model”) for the areas of interest at Roosevelt Lake. Results are presented in section B.2. of this report.

SRP renewed the agreement with CRRL for an additional three years (through September 2012). Under this new agreement, Hatten will train members of SRP’s Cartographics staff in how to process satellite imagery and run the habitat model. CRRL will be retained as a consultant for the remainder of the contract.

Over the past year, SRP continued to explore methods to refine the model, primarily in improving our ability to differentiate between cells that contain low-growing herbaceous vegetation versus those with tall, dense trees. To date, we have had to check model results either by ground-truthing or my air to delineate herbaceous areas incorrectly identified as breeding habitat. This past year, we investigated whether the cost and logistics of acquiring LIDAR (Light Detection and Ranging) data would provide the topographic and vegetation elevation data necessary to differentiate between these vegetation components. By coupling LIDAR results (topography, vegetation height) with the results of the GIS breeding habitat model, we hope to improve the accuracy of the habitat model, and provide a consistent method of determining trends in habitat

availability. To date, we have obtained a cost estimate from a LIDAR vendor and are planning on running the satellite imagery model and acquiring LIDAR in the summer and fall, respectively, in 2010.

2010 Actions: In 2010, we will develop a bid and contract for the acquisition of LIDAR data. We will also run the GIS breeding habitat model using summer (~June) 2010 imagery. The habitat model results will be paired with LIDAR data to generate a breeding habitat map for the 2010 reporting period. Likely, we will continue to refine and work on the methodology to map and forecast potential breeding habitat in 2011.

Obligation: The extent of cattail marshes will be monitored by helicopter survey each year that more than 3 acres of marsh exist below elevation 2,151'. Yuma clapper rail surveys will be conducted to determine ITP compliance.

2009 Actions: High water levels in the lake eliminated any development of cattail marsh below 2151' in 2009. Clapper rail surveys were not conducted because of the lack of any suitable habitat.

2010 Actions: Lake elevations and development of cattail marsh habitat will be monitored. If more than 3 acres of habitat develop below 2151', SRP will conduct clapper rail surveys.

Obligation: Periodic surveys for flycatchers and cuckoos will be conducted to determine ITP compliance.

2009 Actions: No surveys were conducted by SRP in 2009 because the reservoir was nearly full. However, limited flycatcher surveys were conducted by Tonto National Forest biologists in 2009.

2010 Actions: SRP will initiate surveys when the amount of tall, dense vegetation exceeds 500 acres. Results of habitat monitoring suggest that considerably less habitat existed at the lake in 2009, so SRP will not be conducting flycatcher or cuckoo surveys in 2010.

2. Habitat Monitoring Results

Methods: The multi-scaled habitat model uses a Landsat TM satellite image to identify potential flycatcher breeding habitat using four predictor variables: (1) width of floodplain, extracted from a digital elevation model; (2) relative density and biomass of green riparian vegetation within 900-m² cells, NDVI; (3) amount of densest vegetation within 4.5 ha (11.1 acre) neighborhoods, and (4) variation in vegetation density within 4.5 ha neighborhoods. The GIS-based model produces in a spatially explicit manner the probability of flycatcher breeding site occurrence (1-98%) for each cell.

The output files (ArcView shapefile polygons, grid cells) identify breeding habitat probability classifications (1 through 5) in a summary table of acres within each probability class for the Tonto Creek and Salt River arms. Probability class 1 grid cells identify areas with the lowest probability for locating flycatcher breeding areas, whereas class 5 grid cells

indicate areas with highest probability. The resulting images were field checked by SRP staff from a helicopter. No ground-truthing was conducted this year. We felt we could adequately verify model results from the air.

Model Results: In 2009, CRRL researcher, Jim Hatten, ran the multi-scaled habitat model on the Salt River and Tonto Creek arms of Roosevelt Lake using a Landsat TM satellite image taken on May 31, 2009 at lake elevation 2150.06 feet (Figure 3). These results are compared to results from the June 8, 2008 image when lake elevation was at 2149.17 feet (Table 1).

In the past, we made the decision to consider classes 3 through 5 as potentially occupied habitat because much of class 3 was clustered around classes 4 or 5 cells. Using the class 3 through 5 summary, habitat model results suggest that there were 106 acres more of potentially suitable flycatcher and cuckoo breeding habitat in 2009 than in 2008, even though Roosevelt Lake filled completely in spring 2009.

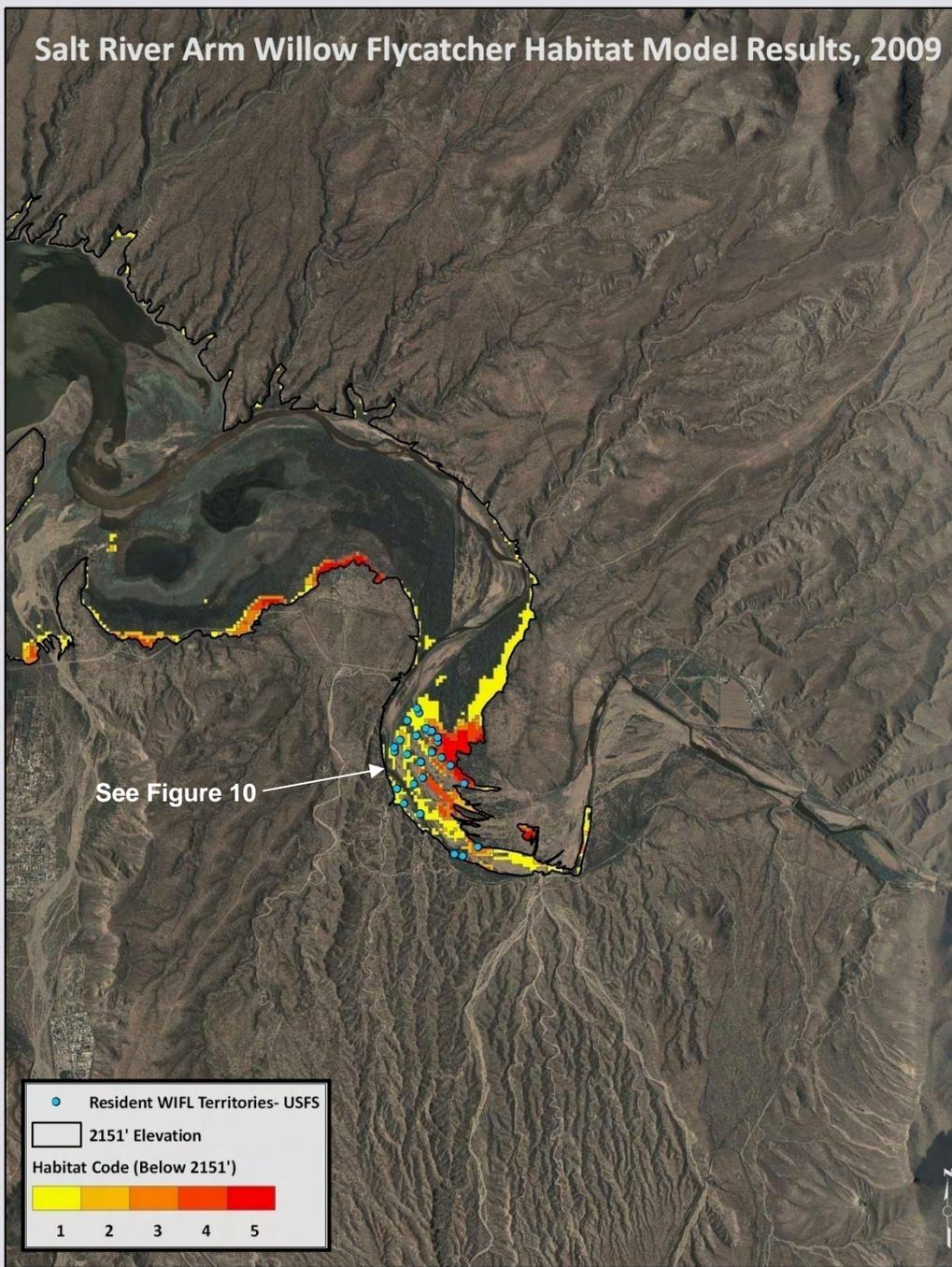
Table 1. Multi-scaled Southwestern willow flycatcher breeding habitat model results, 2008 and 2009

Habitat Probability Class	Acres Below 2151' Elevation					
	Salt Arm		Tonto Arm		Total Acres	
	2008 ¹	2009 ²	2008	2009	2008	2009
1	377.27	279.09	149.41	84.33	526.69	363.42
2	19.6	32.35	10.72	15.15	30.32	47.50
3	15.3	26.95	6.88	13.25	22.18	40.21
4	8.3	28.45	0.71	8.86	9.01	37.31
5	0.85	57.03	0	3.54	0.85	60.57
Total Classes 3 thru 5	24.45	112.43	7.59	25.66	32.04	138.09
Total Classes 4 and 5	9.15	85.48	0.71	12.41	9.86	97.88

¹ 2008 satellite imagery was taken on June 8, 2008 when lake elevation was at 2149.17'.

² 2009 satellite imagery was taken on May 31, 2009 when lake elevation was at 2150.06'. Roosevelt Lake reached its highest elevation on March 8, 2009 at 2151.18'.

Salt River Arm Willow Flycatcher Habitat Model Results, 2009



Tonto Creek Arm Willow Flycatcher Habitat Model Results, 2009

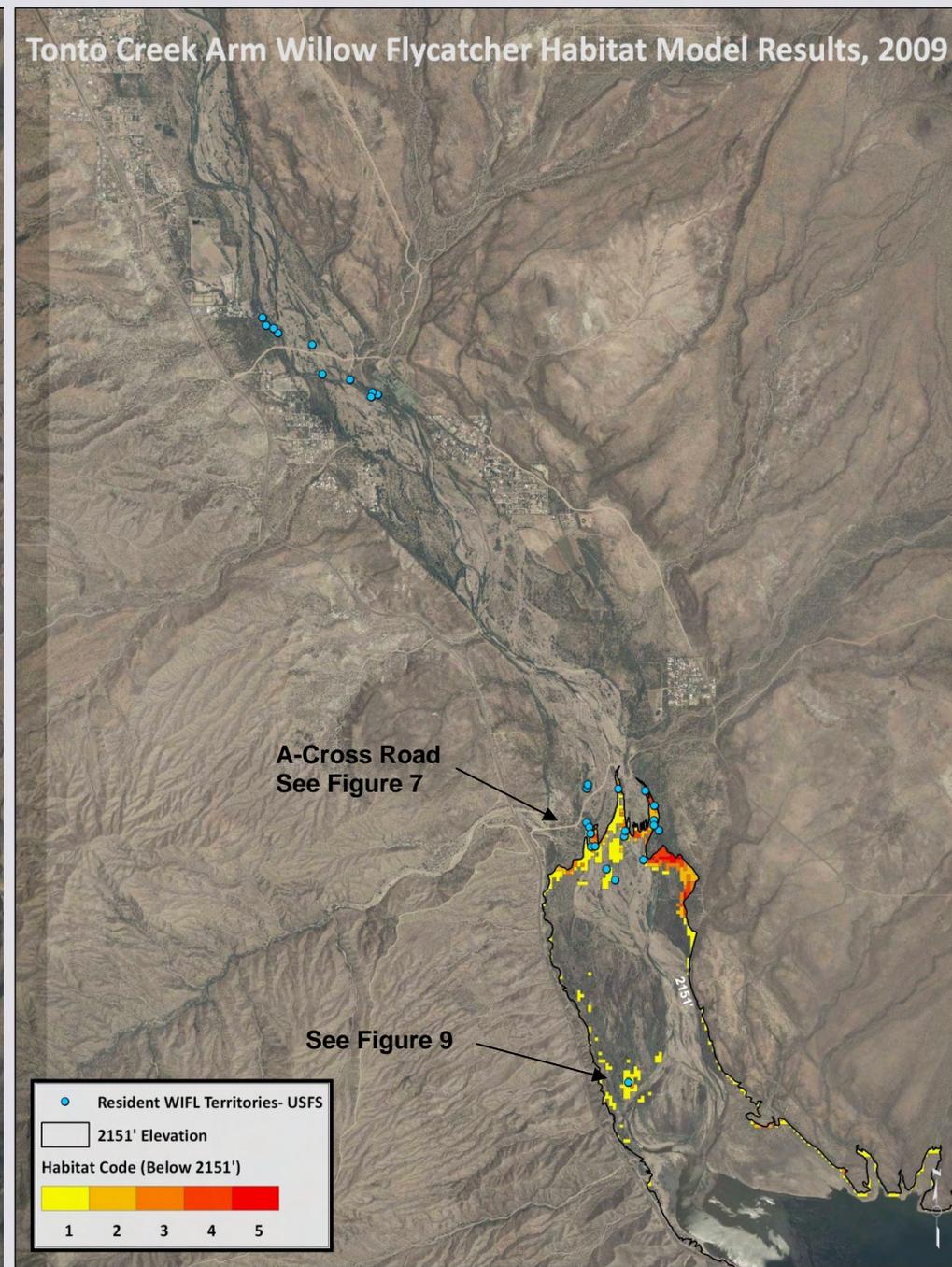


Figure 3. Salt River and Tonto Creek arms of Roosevelt Lake showing 2009 flycatcher habitat model results and 2009 flycatcher territory locations as provided by Tonto Basin Ranger District, Tonto National Forest. Satellite image was taken on May 31, 2009 at lake elevation 2150.06' (99% full).



Figure 4. Vegetation at A-Cross Road, looking downstream toward Roosevelt Lake. The 2151' elevation is just downstream from the road. Photograph was taken on June 29, 2009 at lake elevation 2147.06' (95% full).

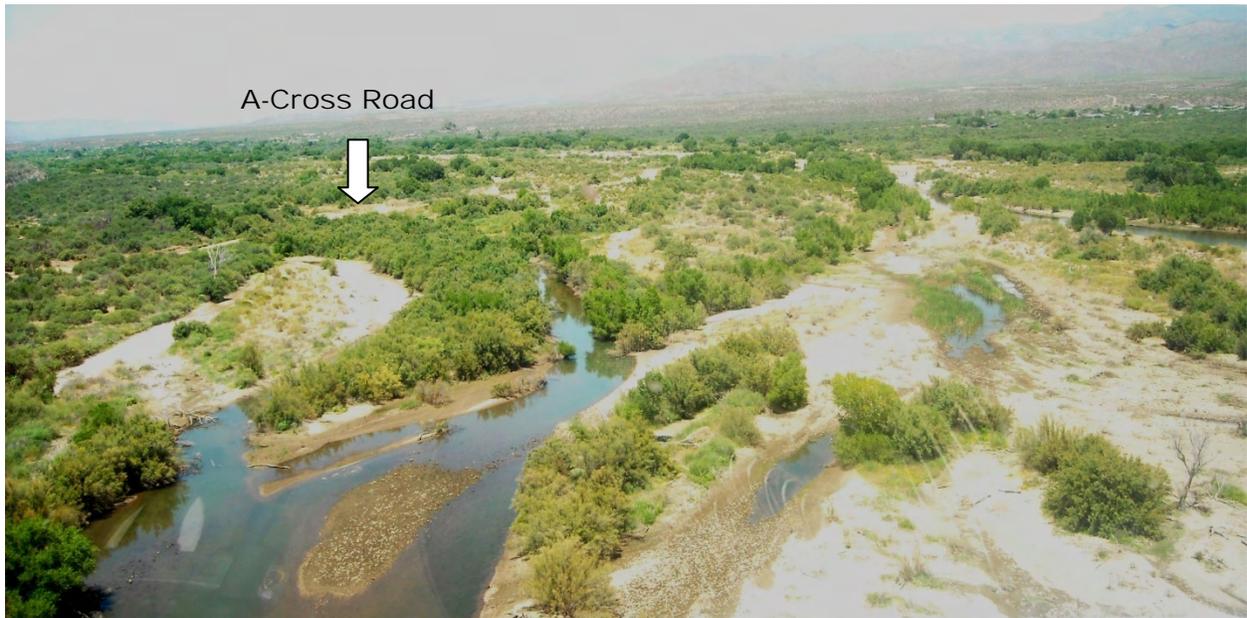


Figure 5. Vegetation at A-Cross Road looking upstream. Photograph taken on June 29, 2009.



Figure 6. Occupied flycatcher habitat at Tonto Creek inlet to Roosevelt Lake. Photograph taken on June 29, 2009 at lake elevation 2147.06'.



Figure 7. Occupied flycatcher habitat at the Salt River inlet (Cottonwood Acres 1) looking upstream. Photograph taken June 29, 2009 at lake elevation 2147.06'.

4. Bald Eagle Program

Obligation: SRP is required to provide annual funding for a pair of seasonal bald eagle nest watchers through an existing Arizona Bald Eagle Nestwatch Program.

2009 Actions: A total of \$18,400 was paid to the Arizona Game and Fish Department (AGFD) in 2009 to fund a pair of nest watchers for the breeding season.

2010 Actions: Provide funding to AGFD for a pair of nest watchers.

Obligation: Each year, SRP will assist with three Occupancy and Reproduction Assessment and nest search helicopter events and will provide funding for coordination and attendance by existing bald eagle management personnel.

2009 Actions: SRP provided six flights totaling \$16,200 worth of helicopter service to the AGFD during this period.

2010 Actions: Provide helicopter service as described.

Obligation: SRP will provide a maximum of three annual helicopter flights for rescue or management efforts.

2009 Actions: No rescue efforts occurred during this reporting period.

2010 Actions: Provide rescue efforts as necessary.

Obligation: SRP will develop a coordinated plan with AGFD and FWS to rescue any bald eagles, eggs or nestlings at Roosevelt Lake that may be threatened by rising reservoir levels.

2009 Actions: Completed. Contact list was updated in October 2009.

2010 Actions: Implement plan, if necessary. Update contact list in October 2010.

Table 2. Comparison of bald eagle breeding productivity, 2007 - 2009, Roosevelt Lake

Breeding Area	2007		2008		2009	
	# of Eggs	# Fledged	# of Eggs	# Fledged	# of Eggs	# Fledged
Dupont @ Sierra Anchas	0	0	Unoccupied		Unoccupied	
Pinal	0	0	2+	2	1+	Failed
Pinto	2	0	2+	2	2+	2
Rock Creek	0	0	Failed		Unoccupied	
Tonto	2	2	2+	0	3	3
TOTALS	4	2	6+	4	6+	5

Source: Unpublished data, Southwest Bald Eagle Management Committee, AGFD (2007, 2008, 2009)

2009 Breeding Status: AGFD monitors bald eagle productivity at five breeding areas (BA) associated with Roosevelt Lake. The results of the 2009 breeding season are shown in Table 2. AGFD reported 2009 to be the second best year on record for number of young fledged in Arizona.

E. Tonto Forest Protection Officer (FPO)

Obligation: SRP funds a Forest Protection Officer to protect, enhance and manage habitat at Roosevelt Lake in support of the Roosevelt HCP, including posting and maintaining signs and fences in restricted areas, contacting individuals found in those areas and issuing citations, public education and planning and implementing management activities in regard to threatened and endangered species.

2009 Actions:

Collection Agreement. The Collection Agreement between SRP and the Tonto National Forest for the transfer of funds for the FPO was renewed through September 30, 2014.

Enforcement Activities. Amyann Madara-Yagla, TNF FPO, reported the following activities to SRP for the period from November 1, 2008 through October 31, 2009.

Roosevelt Lake levels reached an all-time high this year, which helped eliminate some illegal access points. Meddler Point was still not an area of huge concern this year. The minimal activity that does occur happens after dark. On average, the FPO found fresh tracks leading into the closure area once or twice a month. The roads in the vicinity of Meddler Point are becoming less passable and seem to be deterring people from driving down into occupied habitat.

Illegal users pushed past boulders placed in Meddler Wash (on the north side of restriction area off Highway 288) to curb illegal vehicle access to the Salt River. Plans will be made to reinforce the barrier.

There is an ongoing problem near Pinto Creek and the Roosevelt Mound. Its proximity to Roosevelt Estates and Resort makes it more accessible to motorized vehicles and therefore difficult to patrol. ATV riders are the primary violators, often running over, removing and breaking signs. The high water level this year has hindered vehicle use in Pinto Creek, but as the water drops, the area is becoming more susceptible to ATV use, thus negatively impacting emergent riparian vegetation.

Madara-Yagla issued 35 citations this year. Fifteen citations were for having campfires during seasonal restrictions. She issued 9 citations to individuals driving into closed areas (ATV Hill, Old Haul Road, 333 Road, Old Canal Road) or for driving off Forest Service roads. She issued 7 tickets and numerous warnings to visitors and campers littering on the river. One ticket was issued to an individual who was relentlessly throwing rocks at a duck in an attempt to kill it. The remaining tickets cited visitors for resource damage, cutting trees without a permit, and fishing without a license.

Bald Eagle. Madara-Yagla worked closely with AGFD-contracted Nestwatchers to ensure protection of the bald eagle nest closure areas at the Tonto and Pinto Breeding Areas, Roosevelt Lake. She also provided transportation and storage of AGFD motorboats during the breeding season.

Bald eagles in the Tonto Breeding Area occupied the one remaining nest in the same tree that they have been previously using. AGFD personnel placed closure buoys around the Tonto nest this year. Three chicks successfully hatched and were monitored until fledging. The Tonto Nestwatchers had many boaters violate the closure. Violations often occurred by fishermen/women who allowed their boats to drift into the buoys. The Gila County Sheriff's Department also assisted with enforcing the closure area. Few other known nesting options are available in the immediate area.

AGFD personnel placed closure buoys around the Pinto nest this year. The pair nested in Cottonwood Acres in the previously occupied tree. Two young successfully fledged. Nestwatchers had few violations. The greatest disturbance to the eagles was gunshots in the vicinity.

Outreach Activities. Madara-Yagla initiated an outreach program with the Dr. Charles A. Bejarano Elementary School ("Bejarano School") in Miami, Arizona. This school has been under-performing at the state level, and this ten week program improves the quality of their education. Many students at this school are economically disadvantaged. Outreach activities included teaching curriculum from Project WET, Project WILD and Focus: Wild Arizona (AGFD) as well as a variety of other novel resources to educate children about natural resources and to complement Arizona's third grade curriculum.

As an end of the year activity, children made posters encouraging forest users to not litter, to recycle, to stay on roads and not to harm habitat or animals. The posters were then placed on information boards at the Roosevelt and Upper Salt River Recreation Areas.

Shannon Torrence, Forest Biologist, and Madara-Yagla coordinated a nature hike at Round Mountain, a local park, with the third grade science club at the Bejarano School. Participants and their families enjoyed hands on butterfly, snake, and lizard catching.

Torrence and Madara-Yagla also held a touch, smell, listen and look table at the school's annual Math and Science night servicing kindergarten to sixth grade. Participants had the opportunity to use their senses of smell, touch, and hearing to identify hidden objects in boxes. They also tried to identify the subject of pictures when only allowed to view part of it. The adults seemed to enjoy the activity as much as the children did.

Approximately 120 Boy Scouts and their families and 50 church members attended environmental education programs throughout the year at developed recreation sites at Roosevelt Lake. Most frequently, groups would participate in a question/answer talk involving local animal furs, skulls, nests and tracks as well as negative animal encounters.

Approximately 20 adults and children attended an evening program held Memorial Day weekend at the Windy Hill Campground. Those that came were treated to pictures of the local flora, fauna and scenery. They were quizzed as the night progressed and there was also ample time for questions and answers throughout the program.

Madara-Yagla, along with three other biologists and one volunteer, conducted flycatcher and cuckoo surveys at Roosevelt Lake and the surrounding vicinity. Surveys identified three new areas that resident flycatchers were occupying and led to the detection of more than nine cuckoos, including one pair that was likely breeding.

FPO activities also included hundreds of campsite visits on the Upper Salt River throughout the year. Many people she contacted once frequented areas now closed to vehicle traffic.

She reports that they are often anxious to know if those areas will ever be opened again. Some think the closures were an improvement and were not surprised due to the abuses the area received. Others remain upset about the restrictions, but have seemingly accepted them. These contacts also allow her an opportunity to educate people about local wildlife, and to enlighten them to the value of resources around them.

F. Rockhouse Riparian Demonstration Project

Obligation: Completed.

2009 Actions:

Operations and Maintenance. SRP continues to contract with Tim Wheeler to conduct irrigation and site maintenance. The irrigation system sustained no major damage from high river flows this past year. In fact, we had to deal with the opposite challenge of irrigating during extremely low flows. It became necessary to extend irrigation sets, manually direct water to trees and conduct selective weed removal to fully cover the fields during these low flow periods.

Irrigation intervals varied depending on rain events, soil moisture levels and temperature, but were performed according to the following general schedule. Last winter, irrigations occurred on a monthly basis. Once the growing season started, irrigations occurred approximately every 10 to 12 days. June was much wetter than normal, spurring hope for a wet monsoon season. But monsoonal storm cells that formed in the area during July and August dropped little rain on the project site. Typically we are able to extend the times between irrigations during monsoon season, but not this year. As we move into the pre-dormancy period, irrigation will occur approximately at 3 week intervals.

Summary Document. SRP contracted with Ada Davis, at Logan Simpson Design, to assist with compiling the history of the Rockhouse Demonstration Project planting. Davis served as project manager for the planting contractor, Native Resources International, for the second through fifth years of planting. She also conducted much of the vegetation monitoring during that period. Davis submitted a draft document to SRP in August 2009.

Flycatcher Surveys. SRP conducted flycatcher surveys for the first time at the Rockhouse site in 2009. Surveys were conducted on May 22 and June 5 using accepted protocol (Sogge et al. 1997). Habitat in fields 1 through 5 was considered to be potentially suitable, but the densest habitat occurred in field 3. Vegetation in the north and south basins was not tall enough yet to be suitable habitat for flycatchers so was not surveyed. No flycatchers were detected during the 2009 breeding season.

Cuckoo Surveys: SRP also conducted initial cuckoo surveys at the site this past summer. Four surveys were conducted between June and September, according to the Halterman et al. (2009) draft protocol. We surveyed the entire site for presence of cuckoos. During the July surveys, we had both audio and visual detections of two cuckoos in Field 1. Cuckoos were heard and seen at the back of Field 3 in all July and August surveys and in Field 5 in early July. We estimate that there were at least 4 cuckoos using the fields this past summer, with a possible pair in Field 1. See Appendix L for the full report with maps.

2010 Actions:

Operations and Maintenance. We will continue with the same general irrigation schedule. General monitoring of tree growth and health will continue. Regular maintenance of the irrigation system will be conducted. We anticipate that we will need to repair and replace some port gates and repair some cracks in the concrete ditch. We will remove vegetation, both mechanically and chemically, from the ditch areas, as necessary.

Summary Document. The document will be finalized in 2010.

Flycatcher and Cuckoo Surveys. A second year of flycatcher and cuckoo surveys will be conducted in 2010.

IV. STATUS OF MITIGATION COMPLIANCE

Obligations: SRP must acquire 2,250 acre-credits by February 2006 including acquisition and management of at least 1500 acres of riparian habitat by fee title or conservation easement, as well as 750 acre-credits of “other” habitat conservation measures.

Table 3. Mitigation property information.

Mitigation Property Name	River System	County	Size (acres)	Ownership	Management
Camp Verde Riparian Preserve	Verde	Yavapai	124	Owned by SRP	SRP
Fort Thomas Preserve	Upper Gila	Graham	1,054	250 acres – Conservation Easement from Phelps Dodge 308 acres – Owned by SRP 496 acres – Owned by USBR	SRP
Adobe Preserve	San Pedro	Pinal	154	Owned by SRP	SRP
Black Farm Preserve	San Pedro	Pinal	137	Owned by SRP	SRP
Stillinger Preserve	San Pedro	Pinal	40	Owned by SRP	SRP
Spirit Hollow Preserve	San Pedro	Pinal	194	144 acres – Owned by SRP 50 acres – Owned by USBR	SRP
San Pedro River Preserve	San Pedro	Pinal	623	TNC with USBR conservation easement	TNC w/ USBR endowment
Arlington Wetland/Cell 4	Lower Gila	Maricopa	5	Owned by AGFD	AGFD under contract to SRP
Rockhouse Demonstration Project	Salt River	Gila	20	Owned by USBR; leased to SRP	SRP

TNC = The Nature Conservancy

Actions: Completed.

SRP has accrued 2,581 acre-credits, as follows.

- 1,842 acres of riparian habitat
- 419 acre-credits for buffer lands and water rights
- 20 acres of created habitat
- 300 acre-credits for Tonto FPO

V. MITIGATION PROPERTIES – Monitoring and Management

A. Monitoring

SRP monitors both the bird species of interest as well as habitat condition on each of the mitigation properties. Monitoring obligations for each property are detailed in the HCP document and are summarized briefly below.

Obligation: Flycatcher, cuckoo and clapper rail populations will be surveyed in the first two years following acquisition of the mitigation site for purposes of establishing a baseline. After that, trend surveys will be conducted every other year on average, but not less than every third year. The specific frequency of survey for each site is to be determined during the annual meeting.

2009 Actions: Flycatcher and cuckoo surveys were conducted on the following SRP-managed mitigation properties in 2009:

- the entire 1,054 acres of the Fort Thomas Preserve plus an additional 150 acres of adjacent lands that were acquired under conservation easement for the Horseshoe-Bartlett HCP. These lands are located on the upper Gila River in Graham County, AZ.
- the 124-acre Camp Verde Riparian Preserve on the Verde River, Yavapai County, AZ.
- The 20-acre Rockhouse Riparian Demonstration Project site.

Clapper rail surveys were conducted in the spring of 2009 by AGFD and SRP biologists. This survey represents the second baseline year for the wetland.

2010 Actions: Bird surveys will not be conducted on mitigation lands in 2010, with the exception of the Rockhouse project site. Tables 4 through 6 provide a summary of years when bird surveys were conducted on Roosevelt HCP mitigation properties, along with projections for 2010 and 2011.

Table 4. Flycatcher survey schedule

	Close of Escrow. Date	2004	2005	2006	2007	2008	2009	2010	2011
SAN PEDRO									
Adobe	Sep-02	BR/GF*	BR/GF			SRP			SRP
Stillinger	Jun-04	BR/GF	BR/GF*	SRP*		SRP			SRP
Spirit Hollow	Jul-04	BR/GF	BR/GF*	SRP*		SRP			SRP
Annex	Dec-06				BR/SRP*	SRP*			SRP
VERDE									
Camp Verde	Jan-04	SRP*	SRP*		SRP		SRP		
GILA									
McEuen	Aug-04		SRP*	SRP*	SRP		SRP		
PD CE	Feb-05		SRP*	SRP*	SRP		SRP		
BR/Hancock	Oct-05			SRP*	SRP*		SRP		
BR/Bellman	Dec-06				SRP*	SRP*	SRP		
ROCKHOUSE	n/a					Evaluation	SRP	SRP	
ROOSEVELT	n/a	BR/GF	BR/GF	BR/GF	TNF	TNF	Limited TNF	TNF?	

* Denotes baseline survey. BR = U.S. Bureau of Reclamation; GF = Arizona Game and Fish Department.

Table 5. Yuma clapper rail survey schedule

	Creation Date	2007	2008	2009	2010	2011
Arlington WMA	Feb-06	SRP/Audubon/ AGFD	SRP/AGFD*	SRP/AGFD*		SRP/AGFD
Roosevelt	n/a				SRP**	SRP**

*Denotes baseline survey. ** if cattail habitat exceeds threshold amount.

Table 6. Yellow-billed cuckoo survey schedule

	Close of Escrow Date	2004	2005	2006	2007	2008	2009	2010	2011
SAN PEDRO									
Adobe	Sep-02	X*	X			X			X
Stillinger	Jun-04		X*	X*		X			X
Spirit Hollow	Jul-04	X*	X*	X		X			X
Smith-Doherty	Dec-06				X*	X*			X
VERDE									
Camp Verde	Jan-04	X*	X*		X		X		
GILA									
McEuen	Aug-04		X*	X*	X		X		
PD CE	Feb-05		X*	X*	X		X		
BR/Hancock	Oct-05			X*	X*		X		
BR/Bellman	Dec-06				X*	X*	X		
ROCKHOUSE	n/a					Evaluation	X	X	
ROOSEVELT	n/a	SRP*	SRP						Unknown

* Denotes baseline survey.

Note: All cuckoo surveys are conducted by SRP or their contractors.

Obligation: Habitat conditions on mitigation properties will be monitored using the following means.

Baseline Inventories. A baseline inventory will be completed for each property within one year of acquisition. This inventory will be used to compare habitat changes over the life of the permit.

Aerial Photography. Aerial photography will be acquired to establish a vegetation/habitat baseline and will be retaken or acquired every 5 years or when vegetation is altered by a catastrophic event.

Permanent Photo Points. Permanent photo points will be established and retaken periodically to monitor habitat condition.

Documentation of Habitat Condition. Habitat conditions in occupied flycatcher, cuckoo and clapper rail habitat will be documented when bird surveys are conducted.

Table 7. Habitat monitoring schedule

	2005	2006	2007	2008	2009	2010
SAN PEDRO						
<i>Adobe</i> Baseline Inventory	Drafted 2003					
Photo points	X	X	X	X	X	
Aerial photos				X		
<i>Stillinger</i> Baseline Inventory	Drafted					
Photo points	X	X	X	X	X	
Aerial photos				X		
<i>Spirit Hollow</i> Baseline Inventory	Drafted					
Photo points	X	X	X	X	X	
Aerial photos				X		
VERDE						
<i>Camp Verde</i> Baseline Inventory	Drafted					
Photo points	X	X	X	X	X	
Aerial photos		X	X			
GILA						
<i>Fort Thomas</i> Baseline Inventory					Draft in review	X
Photo points				X	X	
Aerial photos		X				
ROCKHOUSE						
Summary of Project					Draft in process	X
Photo points	X	X	X	X	X	
Vegetation monitoring	X	X	X	Evaluation	X	
ARLINGTON						
Photo points			X	X	X	
Aerial photos			X			

2009 Actions:

Table 7 summarizes habitat monitoring activities on SRP's mitigation properties from 2005 through 2009 and projections for 2010.

Baseline Inventories. Over the past two years, SRP and contractor, Matthew Turner, have developed a comprehensive draft baseline inventory for the Fort Thomas Preserve. That draft is currently in review at SRP and will be delivered to FWS in January 2010.

Aerial Photography. No new georeferenced aerial photographs were taken in 2009.

Permanent Photo points. Repeat photographs were taken at all permanent photo point locations on all mitigation properties.

Documentation of Habitat Conditions. Habitat conditions were described and photo documented during 2009 flycatcher and cuckoo surveys at the Fort Thomas and Camp Verde Preserve. See full reports in Appendices J and K.

2010 Actions:

Baseline Inventories. The baseline inventory for Fort Thomas will be completed. All other baseline documents will be revisited to finalize and archive them.

Aerial Photography and Photo Points. Photo points and aerial photographs will not be taken in 2010.

Documentation of Habitat Conditions. Documentation of habitat conditions typically coincide with bird surveys. See Tables 4 through 6 for time schedule.

B. Monitoring Results

Flycatcher and cuckoo surveys were conducted by SRP biologists at the Camp Verde Riparian Preserve and by EcoPlan biologists, under contract to SRP, at the Fort Thomas Preserve. Table 8 provides a summary of flycatcher and cuckoo survey results for 2009, along with results from some of the more recent surveys from previous years. Results of surveys conducted in 2009 are highlighted in yellow. A discussion of survey and monitoring results for each mitigation property follows. The full survey reports can be found in Appendices J and K.

Clapper rail surveys were conducted by AGFD and SRP biologists at the Arlington Wetlands site. Although SRP is only obligated to conduct surveys for clapper rails in cell 4 at the wetlands, we continue to coordinate our efforts with AGFD in order to minimize harassment to the species. Because of this, the multi-species marsh bird survey protocol is used, which may underestimate the actual number of clapper rails at a site (Burger 2009). The 2008 and 2009 surveys serve as our baseline years for the wetland. Section 3, below, provides a summary of clapper rail survey results for 2009.

Table 8. Summary of flycatcher and cuckoo survey results, 2005 through 2009 for the Camp Verde Riparian Preserve and the Fort Thomas Preserve.

Wildlife Preserves	Year	Flycatcher				Cuckoo	
		Territories	Adults	Nests Found	Pairs	Detections and/or Estimated Pairs	Evidence of Breeding
Camp Verde	2005	0	0	0	0	6	Likely
	2007	0	0	0	0	4 2 pairs	Possible
	2009	1	1	0	0	19 3 pairs	Yes
McEuen/PD/Hancock	2006	59	108	38	49	1	Possible
Bellman	2008	11	22	8	11	36 5-7 pairs	Unconfirmed
Fort Thomas (entire)	2007	56	103	52	47	76	Yes
	2009	86	159	77	73	86 5-7 pairs	Possible

1. Flycatcher Surveys

a. Fort Thomas Preserve

Surveys were conducted on 1,054 acres of the Fort Thomas Preserve. All habitat deemed suitable for migrating and breeding flycatchers was surveyed following accepted protocol (Sogge et al. 1997). Habitat was considered unsuitable if the canopy was open and the vegetation was sparse.

A total of 159 resident adult flycatchers (73 pairs and 13 unpaired males) were detected at 86 territories (Table 8), along with 77 nests, 13 of which were second nesting attempts. An additional 19 non-resident flycatchers were detected. No banded birds were detected. See Appendix J for the full report.

An additional 150 acres of adjacent SRP mitigation lands for the Horseshoe-Bartlett HCP (“Fort Thomas HB Preserve”) were also surveyed but flycatchers and cuckoos found on that acreage are not reported in Table 8. See Table 9 for full results.

Flycatcher territories were found in exotic-dominated, native-dominated, and mixed native-exotic stands with an average canopy height of approximately 8 meters. All flycatcher nests except one were found in tamarisk; the one exception was located in a Fremont cottonwood. Nest heights ranged from 7 to 20 feet (2 to 6 meters) with an average nest height of 12 feet (3.67 meters).

Table 9. Summary of flycatcher territories for SRP mitigation lands, Fort Thomas, AZ, 2009.

Study Area	Resident WIFLs	Pairs	Territories	Nests	Non-resident WIFLs
Fort Thomas Preserve	159	73	86	77 ¹	19
Fort Thomas HB Preserve	14	6	8	5	0
Total	173	79	94	82	19

¹Includes 13 second nesting attempts.
Source: Dockens and Ashbeck (2009)

Flycatcher territories were located along the main Gila River channel, along an old oxbow of the Gila River, and along irrigation return ditches. There are a number of irrigation return ditches that run from the adjacent agricultural fields into the river bottom. These ditches shunt excess water from the flood-irrigated fields back to the river channel so they flow only when fields are being irrigated. Water levels in the Gila River fluctuated throughout the year, running high earlier in the season and slowly dropping with occasional increases in flow due to rain events upstream of the study area.

Flycatcher Nest Searching. Nest searching was conducted at both study areas to determine the impact of brown-headed cowbirds (BHCO) parasitism on flycatchers in the overall study area. Nest searching involved locating and checking a minimum of 10 active nests with known contents during each survey period (SRP 2005). Nest searching activities were conducted using a modified form of the protocol outlined by Rourke et al. (1999). As nests were found, nesting stage was determined. Once a nest was determined to be beyond the building stage, the contents were checked for evidence of parasitism (i.e., BHCO eggs or nestlings).

Although 82 flycatcher nests were located during surveys, only 73 nests were used for purposes of estimating parasitism rates because the contents of 9 nests were never confirmed. Of the 73 nests with known contents, parasitism was documented in 10 nests. The parasitized nests were dispersed throughout the preserve, although six of the 9 were in the southern portion of the preserve.

Table 10. BHCO parasitism rates by study area, Fort Thomas, Arizona, 2009.

Study Area	Parasitism Rate ¹
Fort Thomas Preserve	12.9% (9/70)
Fort Thomas HB Preserve	33.3% (1/3)
Total	13.7% (10/73)

¹Data correspond to percent parasitism followed by (number of parasitized nests/number of nests).
Source: Dockens and Ashbeck (2009)

The parasitism rate of nests with known contents (i.e., number of nests parasitized divided by the total number of nests monitored) was 13.7 percent (Table 10). This rate falls below both the management strategy threshold of 30% (SRP 2005) and the flycatcher recovery plan threshold of 20% (FWS 2002b). Therefore, SRP's BHCO management activities will remain at the Tier 1 level, focusing on local habitat improvement (SRP 2005).

Table 11. *BHCO* parasitism rates, per survey period, Fort Thomas, Arizona, 2009.

Study Area	Survey Period ^{1,2}		
	1	2	3
Fort Thomas Preserve	14.3% (1/7)	15.4% (8/52)	0.0% (0/11)
Fort Thomas HB Preserve	—	33.3% (1/3)	—
Total	14.3% (1/7)	16.4% (9/55)	0.0% (0/11)

¹Data correspond to percent parasitism and (number of parasitized nests/number of nests); “—” = no nests were found.

²Survey periods are as follows: 1 = May 15–May 30, 2 = June 1–June 21, and 3 = June 22–July 17.

Source: Dockens and Ashbeck (2009)

b. Camp Verde Riparian Preserve

Flycatcher surveys were conducted on the 124-acre Camp Verde Riparian Preserve, which is located within the town of Camp Verde, Yavapai County, AZ. The property is situated downstream from the I-17 bridge and straddles the Verde River for nearly a mile. The river flows perennially through this reach. All habitat deemed suitable for migrating and breeding flycatchers was surveyed. Habitat was considered unsuitable if vegetation was sparse, was far from surface water or was lacking moist soils. Three surveys were conducted according to accepted protocol (Sogge et al. 1997) on May 28, June 8, and June 22, 2009.

Because Arizona State Parks Board (ASPB) owns property just downstream from SRP’s land, we coordinated with ASPB biologists on areas to be surveyed and exchanged information after each survey period.

After more than 20 hours of survey time, we determined that one territory with one male was on the Preserve. No mate was observed. However, ASPB biologists documented a pair of flycatchers just downstream from this location, and we could hear that flycatcher calling while surveying on the Preserve. The territory on the Camp Verde Preserve was located in a patch of Goodding’s willow trees surrounded by a beaver pond, beaver runs and marshy areas. See Appendix K for the full report with maps showing the territory location.

Figure 8. Flycatcher singing from dead willow branch, Camp Verde Riparian Preserve.





Figure 9. Flycatcher territory at Camp Verde Riparian Preserve.

2. Cuckoo Surveys

a. Fort Thomas Preserve

Surveys were conducted by EcoPlan biologists in all areas containing suitable habitat for migrating and breeding cuckoos. Four surveys were conducted between June and September, according to the Halterman et al. (2007) protocol. In addition, incidental cuckoo calls were noted anytime researchers were in the field, i.e. during flycatcher surveys and nest searching. These detections were used to assist with estimates of breeding status and overall numbers. See Appendix J for the full report.

Sixty-six total cuckoo detections were recorded for the Fort Thomas Preserve over four separate protocol surveys (Table 12). Twenty incidental detections were also recorded. Based on an examination of cuckoo detection records made during the four surveys in 2009, potential repeat detections during separate surveys, incidental detections recorded throughout the summer, behavioral observations, and the geographical spread of detections throughout the study area, an estimated 5 to 7 pairs were present.

Table 12. Cuckoo detections by survey period, Fort Thomas Preserve, Arizona, 2009.

Survey Period	Incidental Detections	Survey Detections
1 (6/10–6/30)	12	19
2 (7/1–7/21)	8	16
3 (7/22–8/11)	0	18
4 (8/12–9/2)	0	13
Total Birds Detected	20	66

While the majority of detections occurred in native-dominated and mixed native–exotic stands, detections were also recorded in exotic-dominated habitat. The average canopy height

of areas with detections was 25 feet (8 meters). Patches with detections were near either the main Gila River channel, along irrigation return ditches, or both.

b. Camp Verde Riparian Preserve

SRP biologists conducted four surveys for yellow-billed cuckoos at the Camp Verde Riparian Preserve during the 2009 breeding season. Surveys were conducted on June 22, July 10, July 30 and August 13 using the Halterman et al. (2009) draft protocol. Nineteen cuckoo detections were recorded over the season, including one fledgling. Based on our evaluation of cuckoo detections, number of cuckoos counter-calling, behavioral observations and the geographical distribution of detections across the study area, we estimate that 2 or 3 pairs were present within the Preserve boundaries and one pair was present on the adjacent private property.



Figure 10. An example of cuckoo habitat at the Camp Verde Riparian Preserve

All cuckoo detections occurred in native-dominated riparian vegetation composed primarily of Fremont cottonwoods and Goodding's willows, with some tamarisk present. The average canopy height is about 40 feet (12 meters). See Appendix K for the full report.

3. Yuma Clapper Rail Surveys

a. Arlington Wetlands, Arlington Wildlife Area (AWA)

A multi-species marsh bird survey protocol was conducted at the Arlington Wildlife Area wetlands in 2009 on April 13 and May 31. Surveys were conducted by Lesly Swanson and Ruth Valencia, SRP, and Mark Stewart, AGFD. Sites were surveyed for Least bittern, Sora, Virginia rail, and Yuma clapper rail. Surveyors also recorded all Pied-billed grebes, Common moorhens and American bittern detected. Although the multi-species approach was used, SRP's interest is solely in detections of Yuma clapper rails.



Figure 11. Arlington Wetland – SRP Cell 4, May 31, 2009.

The 2009 survey recorded 3 clapper rails at the 4 wetland cells. None were detected in the SRP cell during protocol surveys. However, clapper rails were detected in the SRP cell this year during several other visits. Tom Hildebrandt, AGFD Region IV Wildlife Manager, reported watching a family group of five rails, two adults and three juveniles, move from the adjacent cell one to cell four, the SRP cell.

Other species detected during surveys include Virginia rails, American coots, Common moorhens, and a Pied-billed grebe.

C. Management Obligations

The primary goal for management of these properties is to provide ecological and conservation benefits to the flycatcher, cuckoo, clapper rail and bald eagle. SRP focusing our management activities on minimizing or eliminating identified threats to riparian habitat, such as wildfire, groundwater pumping, surface water depletion, trespass livestock grazing, cowbird parasitism and vandalism. We also take actions to enhance the quality of habitat on a property or reverse past damage, where warranted.

General management activities required for each property are listed below:

- SRP will identify a manager for all acquired properties.
- A management plan will be developed for each property within one year of acquisition in coordination with FWS and will be updated annually.
- Management activities identified in the management plan will be implemented, including construction and maintenance of boundary fencing and development of wildlife abatement plans.
- Cowbird management will occur on properties that are agreed to by SRP and FWS during the annual Roosevelt HCP meeting.

- Conservation easements will be placed on all riparian habitat and other land used for mitigation to ensure permanent protection, management and monitoring of these lands consistent with the provisions of the Roosevelt HCP. The holder of the conservation easement will be an agency or organization acceptable to FWS.

Table 13. Status of management obligations for mitigation properties

Mitigation Area	Site Manager	Mgmt Plan	Fire Plan Status	Fencing	Water Rights	Conservation Easement
Adobe	SRP - contractor	C	C	C	In process	
Black Farm	SRP - contractor	C	C	C	In process	
Spirit Hollow	SRP - contractor	C	C	C	NR	Completed, USBR
Spirit Hollow Annex	SRP - contractor	C	Update	C	NR	n/a, USBR land
Stillinger	SRP - contractor	C	C	Partial	NR	
Camp Verde Riparian	SRP - contractor	C	C	C	NR	
Fort Thomas	SRP - contractor	Draft completed		Partial	NR	Partial
Rockhouse	SRP - contractor			C	C	n/a, USBR land
Arlington Wetland	AGFD	AGFD	AGFD	C	C	n/a
San Pedro Preserve	TNC	C	C	C	In Process	Completed

C = Completed; NR = Not required; n/a = Not applicable to the HCP; TNC = The Nature Conservancy

1. Summary of General Management Actions

2009 Actions:

Site Management. All mitigation properties were managed by SRP using contract labor, except for the Arlington wetland site, which was managed and operated by AGFD, and the San Pedro River Preserve, which is owned and managed by The Nature Conservancy (TNC).

In December 2008, SRP completed a cooperative agreement with TNC for mitigation site maintenance and field management. Under this agreement, TNC will provide staff to conduct regular patrol and maintenance duties on the Fort Thomas Preserve and four San Pedro mitigation properties (Adobe, Black Farm, Stillinger, and Spirit Hollow/Spirit Hollow Annex). SRP will continue to provide management oversight on the properties to ensure

compliance with the HCP by coordinating closely with TNC's Lower San Pedro Program Manager and a lead staff member who will have primary responsibility for the implementation of tasks and duties on these properties. The lead staff person is to reside at Black Farm under a lease arrangement.

We initiated implementation of the agreement in May 2009 with TNC's hiring of Dan Wolgast as the lead staff person for SRP's properties. TNC staff from the Aravaipa Preserve will assist Wolgast with patrol and maintenance of the Fort Thomas Preserve. Additional TNC staff will be used when necessary. Occasional use of SRP employees or outside contractors for major construction projects is anticipated. TNC is in the process of hiring the Lower San Pedro Program Manager position, which has been vacant since March 2009.

Management Plans. All management plans have been drafted and are revisited annually. See Appendix B for updated management activity implementation matrices.

Site Maintenance. The following activities have been conducted on each property:

- Properties are patrolled regularly to deter trespass by people, vehicles and livestock; to identify and eliminate fire hazards; to identify any management issues that may need to be addressed; and, to monitor general habitat conditions and stream flow.
- Fences and gates are patrolled and repaired when necessary to maintain a secure boundary.
- If trespass livestock are present, we work to get them removed from the property and we attempt to find where they entered the property and repair any fence line breach.
- Weed management and control are on-going activities. We use both chemical and mechanical methods to minimize the problem. Use of mowers and brushcutters is preferred, but use of herbicides and pre-emergents is sometimes necessary. Weedy plants are prolific in areas of previous disturbance, such as old agricultural fields or pastures. Because of the lack of rain this past year, weed growth was not as vigorous as last year, but what grew became very dry later in the season.
- Site managers identify and eliminate potential fire hazards on a regular basis. Much of this is accomplished with weed management efforts. All contractors and SRP employees working on the properties are familiarized with fire abatement and response protocols.

Cowbird Management. All cowbird management activities remain at the Tier 1 level, as described in SRP's cowbird management plan (SRP 2005). Tier 1 activities include:

- Fencing riparian areas to exclude livestock to prevent the formation of trails and to eliminate grazing pressure on riparian habitat.
- Revegetating or allowing natural recovery of trails and livestock- or human-disturbed areas.
- Minimizing human activity on the mitigation properties and limiting activities to small areas away from riparian zones.

Water Rights. There has been no activity taken by the Arizona Department of Water Resources on SRP's application to sever and transfer water rights from agricultural fields on the Black Farm and Adobe preserves.

Conservation Easements. There has been no activity by SRP in 2009 regarding placement of conservation easements on mitigation properties.

Building Community Support. SRP staff members have been actively involved with the Lower San Pedro Partnership, a group comprised of representatives from Resolution Copper, BHP Billiton, Arizona Audubon, The Nature Conservancy, USBR, AGFD, Asarco and others to discuss and coordinate conservation efforts within the Lower San Pedro River corridor.

SRP staff met with AGFD representatives to discuss the results of the natural resource damage settlement against Asarco, LLC. AGFD stands to gain lands and water rights on the San Pedro River when Asarco emerges from bankruptcy. Those lands lie adjacent to several of SRP's mitigation lands near the confluence with Aravaipa Creek.

SRP is also actively involved in watershed issues on the Verde River in support of our mitigation property there. Regular participation and support of community groups, such as Verde Watershed Association, Arizona State Parks Foundation and Verde Citizen's Alliance are on-going.

In the Safford Valley, SRP's involvement has primarily been with landowners and agencies immediately adjacent to our mitigation lands. However, we are working to expand our participation in local watershed groups and community efforts in the future.

Research. In 2009, SRP provided \$10,000 in funds to Dr. Gabrielle Katz, Appalachian State University, to continue collecting data along permanent vegetation transects on the lower San Pedro River.

2010 Actions:

Site Maintenance: Regular patrols of properties and fence lines will continue weekly, on average. All other activities listed in 2009 actions will continue into 2010.

Site Management. SRP will coordinate with TNC's new Lower San Pedro Program Manager and will operate under terms of the new cooperative agreement for the San Pedro and Gila River mitigation properties. We anticipate all other management arrangements will remain the same for 2010.

Water Rights. In light of State of Arizona budget cuts, we do not expect to see much progress on severance and transfer of water rights. SRP will continue to work cooperatively with other conservation landowners on water rights issues and to protect SRP's water rights interests associated with Roosevelt HCP mitigation on the San Pedro and Verde rivers.

Building Community Support. SRP will continue to coordinate conservation efforts with AGFD after Asarco lands are transferred. Participation in the Lower San Pedro Partnership and Verde River organizations will continue.

SRP/USBR Fire Management Planning. SRP will work cooperatively with USBR to develop a fire management plan for the Fort Thomas Preserve and to incorporate USBR's lands into the Spirit Hollow Preserve fire plan.

2. Management Actions Specific to Mitigation Properties

The following section addresses actions taken to meet management objectives as described in the management plan for each Preserve. A brief description of current habitat conditions on each property is presented, followed by a summary of specific management actions accomplished in 2009 and a discussion of proposed actions for 2010.

a. Adobe Preserve, San Pedro River, Pinal County

Habitat Conditions: Habitat conditions on the Adobe Preserve remain much the same as in 2008. This reach of the river still supports a diverse Fremont cottonwood-Goodding's willow riparian forest community exhibiting an array of habitat types from open patches of sandy/cobbly alluvium to well developed gallery forests. The gallery forest is dominated by an even-aged stand of Goodding's willows, representing a few major recruitment events that occurred in the early to mid-1990s. Over the past few years, flood events deposited large amounts of sediment under these trees. Some tree mortality has occurred opening the canopy and allowing for the growth of understory vegetation in some areas.

We have observed surface flows in this reach of the river all year. The seep area along the eastern edge of the channel has exhibited surface water or very moist soils all year. Much of this surface flow may be the result of strong precipitation events in the Aravaipa watershed that have occurred over the past few years in both the summer and winter rainy seasons.

2009 Actions:

Trespass/Vandalism. Minimal disturbance occurred this past year from human or vehicular trespass. No acts of vandalism were reported.

Trespass Livestock. Periodic occurrences of trespass livestock still occur, but at much reduced levels. Neighboring ranchers are more willing to work with us on timely removal. Fences need regular maintenance, but no large-scale replacement was necessary this year.

Invasive Weed Control. Some portions of the terrace were mowed to knock weeds back but their occurrence was much reduced this year due to lack of rainfall in both winter and summer seasons. Activities were focused on keeping roads open and mowing areas of densest growth. Russian thistle (*Salsola iberica*), pigweed (*Amaranthus* sp.) and non-native thistles have been the most prolific species on this property.

2010 Actions:

Trespass/Vandalism/Livestock. SRP will continue to work cooperatively with USBR, TNC, AGFD and other conservation landowners along the river to reduce occurrences of trespass livestock grazing along the river. SRP will also continue to notify and work with

neighboring ranchers to promptly remove their livestock. Fortification of fences is an on-going activity. We will continue to explore options with our neighbors to reduce the amount of fencing in the river. There may be new opportunities once Asarco lands transfer to AGFD.

Invasive Weed Control. SRP will continue to investigate options to reduce tumbleweeds and promote native grasses on terraces. A combination of mowing and seeding will be explored in coming years. We will investigate permaculture type approaches to seeding native plants because there is no source of supplemental water on the terrace. These activities are not considered to be a priority at this time.

b. Black Farm Preserve, Aravaipa Creek, Pinal County

Habitat Conditions: This is the third year that native grasses have received no supplemental water. Very little rain fell at the farm during the summer monsoon. Grasses are extremely dry and many plants may not recover. Stands of four-wing saltbush have emerged on the western end of the property. Galleta and alkali sacaton have become more prevalent in the fields, while occurrence of sideoats and plains bristlegrass have begun to diminish.

Portions of the fields were mowed last winter/spring to reduce tumbleweed. We will not be mowing this fall because of dry field conditions and lack of growth on grasses.

2009 Actions:

Water Rights. See section C.1. above.

Infrastructure. The field office is now being used as a residence for the TNC Preserve Manager in charge of SRP's San Pedro and Fort Thomas properties. Gates were installed at the east and west ends of the entrance road to increase security at the site.

Invasive Weed Control. Control of Russian thistle and other weeds was primarily done by mechanical means this year. Both tractor and ATV mowers were used along with brushcutters and shovels to remove weeds and unwanted plants in and along the edges of fields.

2010 Actions:

Native Grasses. We will monitor the native grasses to see how well they recover from this extremely dry year. If mortality appears to be high, we will consider applying additional seed to the fields. However, we will not be irrigating the fields so any application of seed will need to be timed to take advantage of increased soil moisture from rain events.

Invasive Weed Control. SRP will continue to monitor fields for presence of tamarisk, Russian thistle and other unwanted plants. We will use mechanical or chemical removal methods as necessary.

c. Stillinger Preserve, San Pedro River, Pinal County

Habitat Conditions: Conditions on this reach of the river tend to be quite variable. In some years, water is deep and ponded due to beaver activity and a sediment jam

downstream at the confluence with Putnam Wash. In other years, the river is narrow and shallow. In 2009, high water conditions persisted throughout the breeding season. The river appeared to be ponded, running wide and slow. Beavers were present in the area.

2009 Actions:

Trespass Livestock. Periodic livestock grazing occurs on the property when the river bed dries out enough to allow them access. SRP has been working with neighbors to minimize impacts from livestock. Neighbors have constructed some new fences to constrain livestock movements. One thing that helped this year was the lack of any large, sustained flood events. Most cross-river fences held throughout the season.

Access Issues. We met with SRP Land Dept. staff to discuss ways of securing access from the east (right) bank.

Coordination Efforts. Some of the lands that AGFD is trying to acquire lie adjacent to this property. Depending on the outcome of their efforts, a number of options for increasing the protection of this property may arise. SRP initiated discussions with AGFD about this area.

2010 Actions:

Trespass Livestock Grazing. We will continue to work cooperatively with property neighbors to minimize impacts from livestock grazing.

Fencing: Fences will be constructed around the southwestern property boundary and reconstructed around the west bank of the river. We will need to secure access from the east side before we can get fencing materials in to secure that side, unless conditions dry out.

Access: SRP will continue to explore alternative access to the property from the east.

d. Spirit Hollow Preserve and USBR Annex, San Pedro River, Pinal County

Habitat Conditions: This reach of the river did not experience any significant flood events this past year. Monsoon precipitation was minimal and surface flows throughout the summer were low. The main channel switched to the middle of the river in 2008 and remained there in 2009, with multiple overflow channels persisting. Tamarisk and seep willow saplings that grew into dense, almost impenetrable patches along channel edges over the past few years were dry and stressed at the end of the summer. However, moist soils and small pools persisted in the deepest portions of the main channel.

The mesquite bosque on the west (left) terrace is recovering well from previous human and livestock impacts. Perennial grasses have returned in the understory and are proliferating. Portions of the east (right) terrace that burned in 2003 are returning to a mixed tamarisk-mesquite community with an understory of pigweed.

Vegetation on the Annex property has recovered significantly from pre-fencing conditions. Even though this is a relatively dry portion of the river, the past few years of flood flows seem to have rejuvenated much of the vegetation. That, in addition to much

reduced (if not eliminated) grazing pressure, appears to have significantly improved the habitat.

2009 Actions:

Trespass Livestock, ATVs and Fencing. The property remained mostly free of livestock, except for short term trespass situations. Only minor fence repairs were necessary this past year.

2010 Actions:

Baseline Inventory. Baseline inventory will be updated to include acreage acquired by USBR.

Wildfire Abatement. SRP will work with USBR on updating the fire management plan for the Annex property.

Invasive Weed Control. As time and resources allow, we would like to begin treatments on the area of the east terrace that was burned in 2003. A plan will be developed and submitted to FWS for review prior to any work being done. Before the fire, this terrace was dominated by cottonwood and mesquite trees. It is converting to a tamarisk-dominated community. We are considering the manual removal of tamarisk (cut and stump treat) to allow for the development of a mesquite bosque.

e. Camp Verde Riparian Preserve, Verde River, Yavapai County

Habitat Conditions: This reach of the river did not experience any large or scouring floods in 2009. The mature Fremont cottonwood gallery forest continues to thrive over large portions of the property, but some tree mortality was noted. Coyote willow, seepwillow, Goodding's willow and Fremont cottonwood saplings continue to mature along the edges of the active channel. A few Russian olive trees are also present. A number of beaver dams, runs and pools are found throughout the downstream end of the property, creating large marshy areas. Terraces remain dominated by exotic weedy annuals. However, because of drier conditions in 2009, their growth was much reduced.

2009 Actions:

Bird Survey Coordination. SRP coordinated flycatcher survey activities in the I-17 to Black Bridge reach of the Verde River with the Arizona State Parks biologist. This allowed us to begin to get a slightly better understanding of flycatcher activity in the corridor. Our hope is to expand this cooperative effort in the future, but prospects are not promising with recent ASPB staffing cutbacks.

Trespass/Vandalism. Malicious trespass has been minimal this past year. There has been some horse trail-riding along the south (right) terrace and through the river bottom. Activity seems to be coming from downstream private and Forest Service lands. "No Trespassing" signs were posted at areas where horses were accessing the property. Impact appears to be minimal.

Hunting. SRP posted the area closed to hunting during the breeding season but left it open from November to April for elk bow-hunting at the request of neighbors and AGFD. Hunters continue to construct tree stands on live cottonwood trees, leave hunting blinds, equipment and litter on the property. We discussed this at length with AGFD and have come to no satisfactory result. We saw a few deer and elk in the river bottom this past summer. If we find that hunters continue to behave in a disrespectful manner on the property, we will consider closing it to all hunting. This may not eliminate the behavior, but it would give SRP the option of prosecuting a hunter for trespassing – an option that we do not have at this time.

Invasive Weed Control/ Wildfire Abatement. The area adjacent to I-17 is mowed twice a year to reduce fire potential. Mowing occurs after annual plants become dry. SRP crews applied an herbicide and pre-emergent to a strip along the left terrace because of a proliferation of kochia and other weedy plant species.

Kochia and other exotic annual weeds are found throughout the channel bottom and terraces. We have investigated a number of control measures, but have found no way to eliminate these species from the property. We believe that widespread and repeated herbicide applications would be detrimental to the area and we are uncertain whether we could get native species to establish without supplemental water. SRP does not have a water right associated with this property.

Coordination with Neighbors and Community: SRP remains active in supporting river conservation, research and educational efforts in the Verde Valley. Some of the activities we participated in this past year include the following.

- A field trip to the property was scheduled for participants of the Arizona Riparian Council's Annual Meeting.
- SRP allowed a group of biologists to use the property as a field training site for a Riparian Assessment protocol.
- SRP was a sponsor of the Verde Valley Birding and Nature Festival and led a field trip to the property.
- SRP sponsored and participated in the Camp Verde Canoe and Kayak Challenge.
- SRP volunteers participated in a river clean-up in Camp Verde.
- SRP had an educational booth at Verde River Days.
- SRP's property manager, Dick Hauser, maintains regular contact with neighbors and community members. He is able to resolve most issues at this level.

2010 Actions:

Trespass/Vandalism. We will continue to patrol the property and work with the community to minimize and/or eliminate instances of trespass or vandalism.

Hunting. We will monitor hunting impacts and activities through the winter and make a decision next spring whether to continue with the current situation or close the area to hunting. SRP will talk to AGFD and neighbors prior to making a change.

Invasive Weed Control/Wildfire Abatement: We will continue to maintain a mowed corridor adjacent to Interstate 17 and to patrol the area to identify and minimize fire

hazards. A combination of mowing and herbicide application may be used on the north (left) terrace to minimize weed growth.

We will continue to investigate ways of reducing kochia and other invasive weeds on terraces. We are also investigating the feasibility of cutting and stump treating Arundo, Russian olive, Siberian elm and Ailanthus on the property.

Coordination with Neighbors and Community: SRP will continue to coordinate with local community leaders and citizens' groups, ASP, AGFD, Prescott National Forest, TNC and neighbors to ensure that the ecological goals for the property are met. We plan to participate again in the Verde Valley Birding and Nature Festival in April 2010 and at Verde River Days in September 2010. SRP will participate in the Verde Front Planning Project, an effort to develop recreational opportunities in the Verde Valley from the top of Mingus Mountain to the Verde River, sponsored by the Prescott National Forest, ASP, City of Cottonwood, Town of Clarkdale and Yavapai County.

f. Fort Thomas Preserve, Gila River, Graham County

Habitat Conditions: Vegetation on this parcel is comprised of a patchwork of dense tamarisk stands and mixed native and exotic riparian vegetation (Fremont cottonwood, Goodding's willow, coyote willow, tamarisk, seep willow). Several large stands of Fremont cottonwood-Goodding's willow gallery forest occur on this parcel. Large patches of coyote willow occur along edges between dense vegetation and open riparian strand. The river flows continuously in this reach except for short periods during the growing season when water is diverted to agricultural fields. When that occurs, channel pools still contain water but riffles are dry. Flycatcher territories tend to be found near water, either along the river channel or along irrigation return ditches.

As noted in the section on flycatcher survey results, all but one of the flycatcher nests found were located in tamarisk. SRP remains concerned about impacts to the flycatcher population on this Preserve should tamarisk beetles (*Diorhabda* sp.) be transported to the area. Last February, SRP personnel attended the Tamarisk Coalition Conference in Reno, Nevada. We intend to stay apprised of the latest information on tamarisk beetle biology and range.

2009 Actions:

Baseline Inventory. SRP contracted with Matthew Turner to draft a baseline inventory for the properties. The baseline survey has been drafted and is being reviewed.

Management Plan. The draft Management Plan was completed and is in review.

Site Management. As of May 2009, property patrol and maintenance is being shared between the TNC Preserve Manager stationed at Black Farm and TNC staff from their eastern Aravaipa Preserve. SRP met with TNC staff on site in June and again in September to familiarize them with the properties and neighbors and to discuss maintenance and management issues. Jeff Conn, BLM biologist, joined us for both meetings.

Property Boundaries and Fencing. SRP's Survey Dept. is in the process of correcting an error in the property surveys for the parcels purchased from McEuen, Hancock and Bellman.

Trespass Livestock: In May 2009, flycatcher surveyors reported trespass cattle on one of the conservation easement properties that lies adjacent to BLM lands. It was unclear as to whether cattle were accessing the river bottom through a breach in the allotment fence on BLM land or through a gate left open on the easement property. Cattle browsed a stand of young cottonwood trees. SRP contacted both BLM and FWS because of the potential for nesting flycatchers in the area. Cattle were out of the river and the gate was closed when SRP and BLM personnel checked the site in June. Nearest flycatcher territories on SRP conservation lands were about 500 feet (150 m) away. No parasitism was reported in any of the nests found on this property. SRP checked the site again in September to determine damage to the young cottonwoods. Coyote willow had grown so dense and tall at the site that we could not walk through, but we could see cottonwoods growing up through the coyote willow. It appeared that the cottonwoods were healthy and had grown to a height of approximately 7 to 8 feet tall.

SRP and TNC staff met with Conn again in September to discuss opportunities for cooperative efforts in maintaining fences along the BLM allotment boundary on the right terrace.

Coordination with Neighbors and Community. Freeport-McMoran (FMI) has a new Lands Manager, Bob Bigando. SRP contacted Bigando to discuss the conservation easement properties.

Wildfire Response Plan. Henry Messing, USBR, has been working on compiling information for the joint Wildfire Response Plan.

2010 Actions:

Baseline Inventory and Management Plans. The draft plans will be sent to FWS and USBR for review and comment.

Wildfire Response Plan. SRP will work with USBR, FMI, BLM, ASLD and the Fort Thomas Fire Department to develop a wildfire response plan for the Preserve lands.

Fencing: SRP will fence the outer boundaries of the USBR parcels after survey corrections are completed. The terrace area on the northeast corner of the northernmost conservation easement parcel will also be fenced along the property boundary line. SRP and contractors will continue to coordinate with BLM to secure the river bottom from trespass livestock.

Coordination with Neighbors: SRP intends to meet with Bob Bigando, FMI Lands Manager, to coordinate activities. Adjacent landowners/lessees will be contacted prior to fence installations.

g. Created Wetland, Arlington Wildlife Area (AWA)

Habitat Conditions: Vegetative cover of emergent marsh vegetation has continued to increase to about the 95% stage. A couple of small open areas remain, perhaps due to soils or other conditions, adding to the overall habitat diversity. Water levels have been

continuously managed to supply two to eight inches of gently flowing water across the floor of the cell. This has led to good plant vigor and much wildlife use.

2009 Actions:

Operational Status. The period November 1, 2008 to October 30, 2009 represents the third full season of operational activities for the SRP Yuma clapper rail habitat cell. Highlights for the year include installation of a water erosion prevention structure at the inlet valve, weed management activities, and regular wellness checks at the habitat cell to determine any necessary maintenance and to orient visitors to the purpose of the habitat feature and appropriate conduct when present.

Generally the features and infrastructure of the designed habitat seem to be working satisfactorily with only minor maintenance/enhancements required.

Annual Meeting. SRP met with AGFD in February 2009 to review the previous year's budget and operational activities and to set activities for the coming year.

2010 Actions:

Annual Meeting. SRP and AGFD will meet in January-February 2010 to discuss operational activities and budgetary needs for the coming year. Any significant changes in operations will be reported to FWS at that time.

VI. MANAGEMENT AND COORDINATION

Obligation: SRP will establish a full-time staff position in its Environmental Services Department to manage and coordinate implementation of the Roosevelt HCP. The person filling this position will be required to have previous experience with management of biological resource issues. The primary responsibility of this staff position will be to ensure that the Roosevelt HCP is fully implemented including all adaptive management, monitoring and reporting measures.

Actions: The full-time position was filled by Ruth Valencia.

VII. PERMANENT NON-WASTING FUND

Obligation: No later than 5 years after the ITP is issued, SRP will ensure that permanent funding is available to meet its continued obligations under the Roosevelt HCP.

Actions: Completed. Irrevocable grantor trust was funded in May 2008.

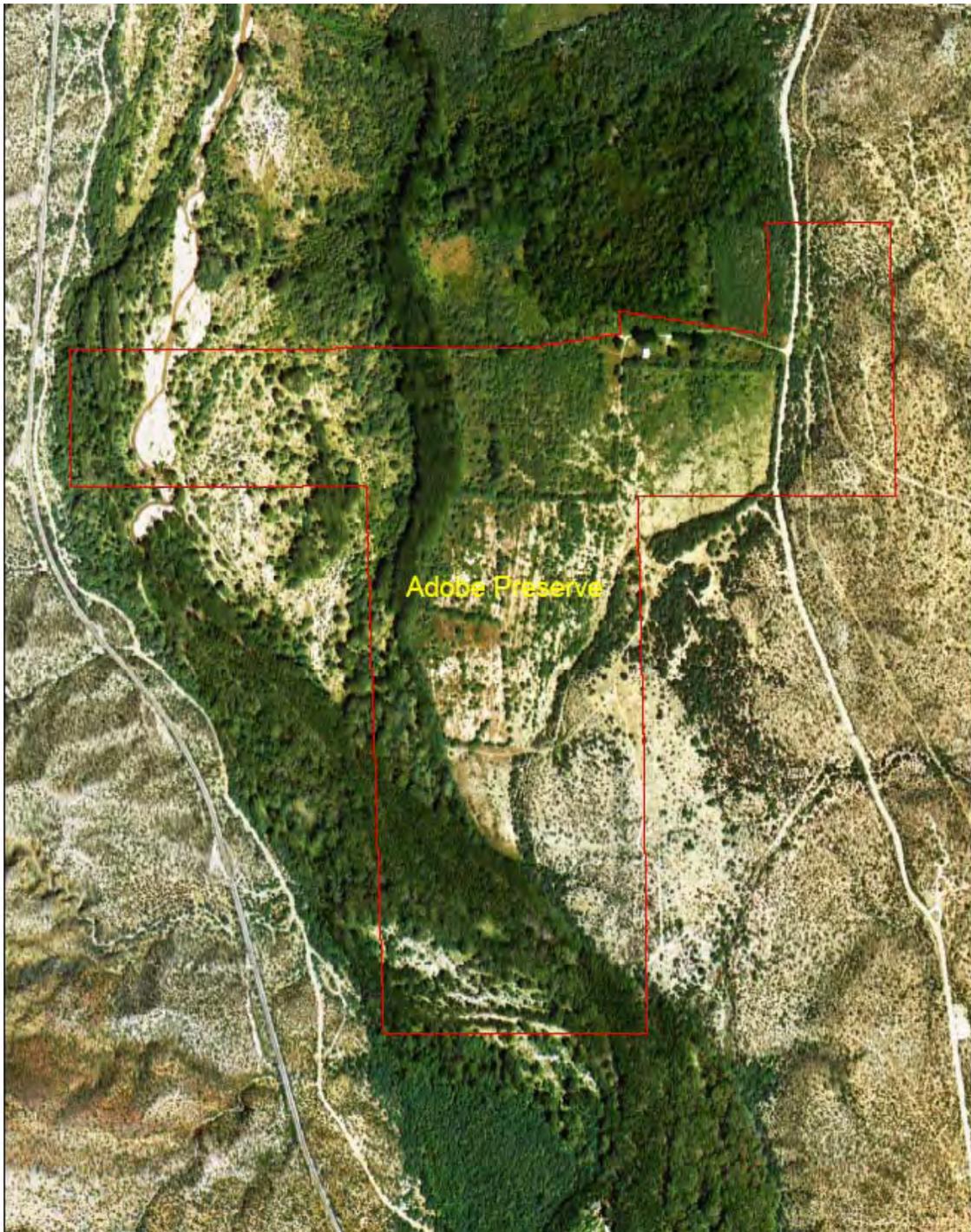
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APPENDIX A

**AERIAL PHOTOGRAPHS
OF
MITIGATION PROPERTIES**

**ADOBE PRESERVE, SAN PEDRO RIVER, PINAL COUNTY, AZ
153 ACRES**



Aerial photo taken September 2008

Property boundaries overlaid on aerial photographs are approximate due to slight distortions on the aerial photography

BLACK FARM PRESERVE, ARAVAIPA CREEK, PINAL COUNTY, AZ
137 ACRES



Aerial photo taken September 2008

Property boundaries overlaid on aerial photographs are approximate due to slight distortions on the aerial photography

STILLINGER PRESERVE, SAN PEDRO RIVER, PINAL COUNTY, AZ
40 ACRES

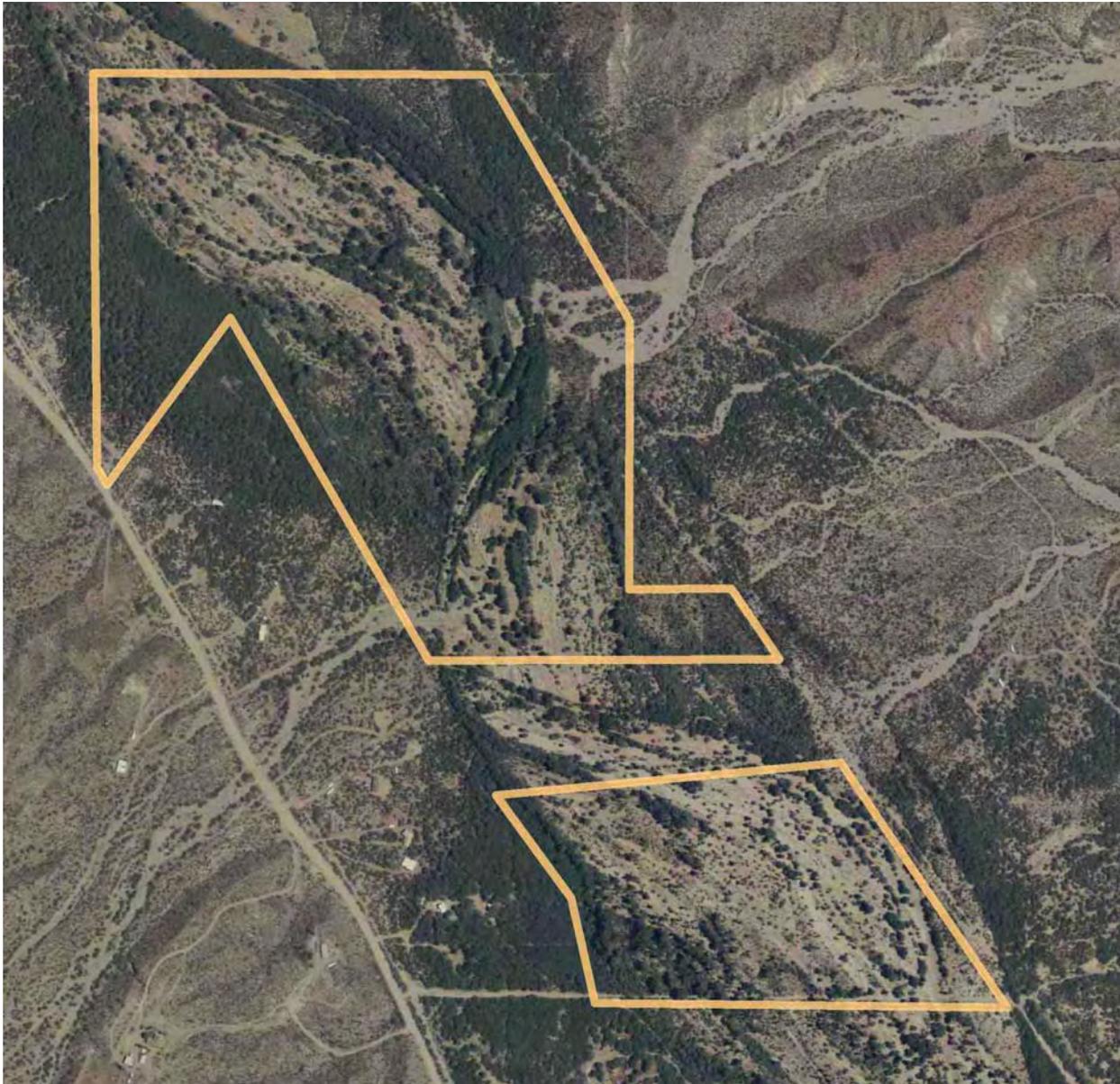


Aerial photo taken September 2008

Property boundaries overlaid on aerial photographs are approximate due to slight distortions on the aerial photography

SPIRIT HOLLOW PRESERVE and ANNEX, SAN PEDRO RIVER, PINAL COUNTY, AZ

144 ACRES

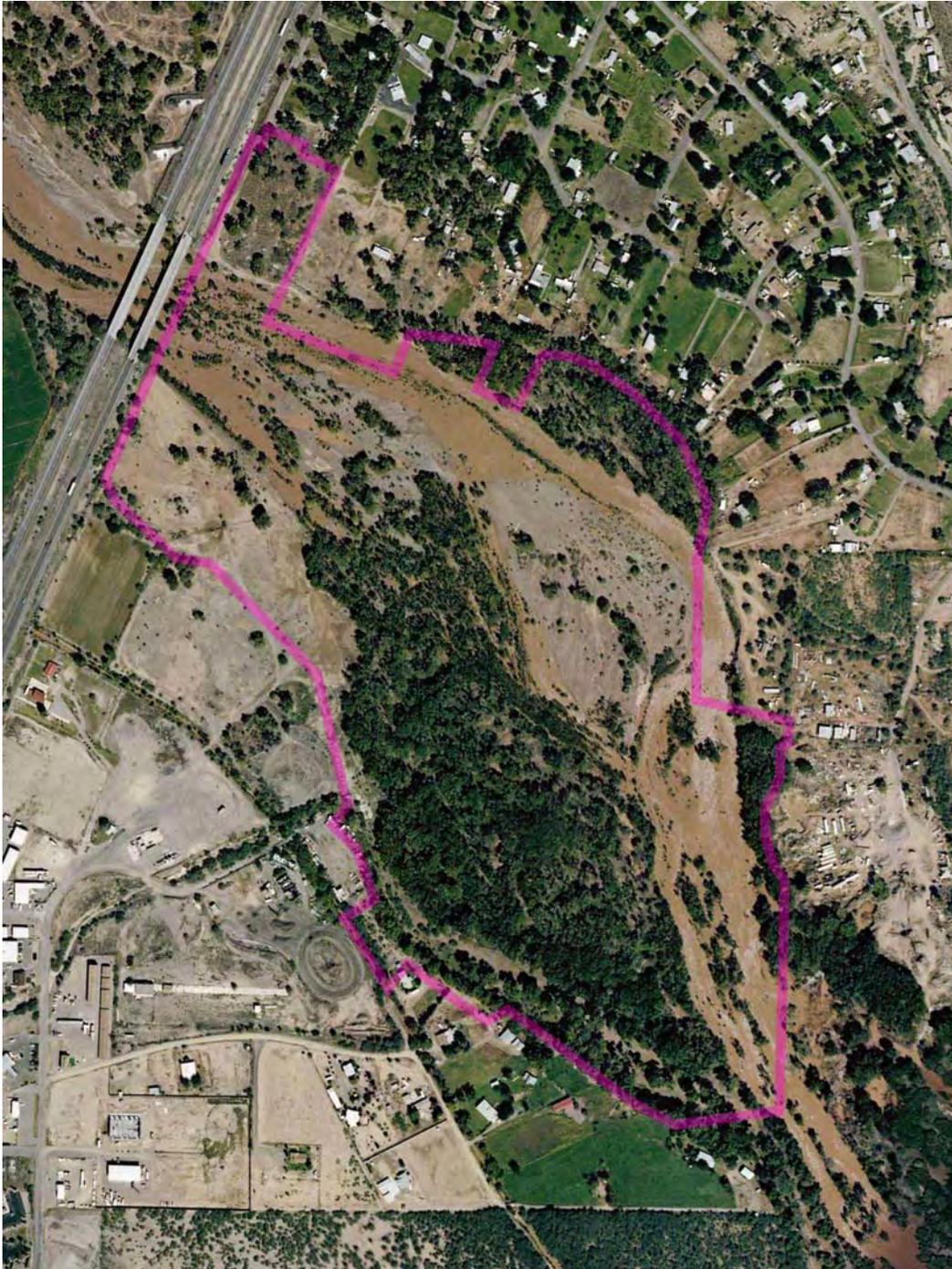


Aerial photo taken in 2007

Property boundaries overlaid on aerial photographs are approximate due to slight distortions on the aerial photography

**CAMP VERDE RIPARIAN PRESERVE, VERDE RIVER, YAVAPAI
COUNTY, AZ**

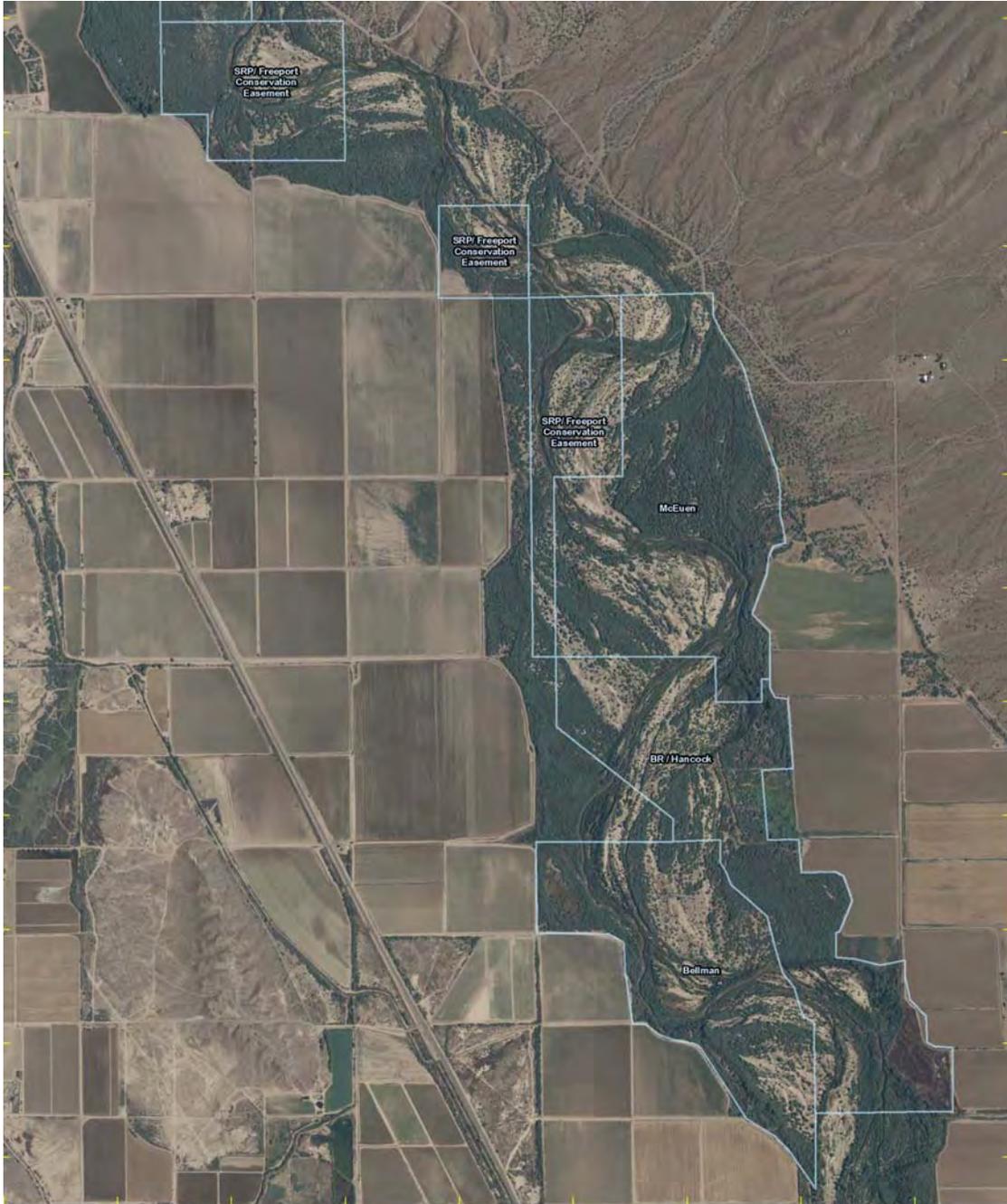
124 ACRES



Aerial photo taken in summer 2004.

Property boundaries overlaid on aerial photographs are approximate due to slight distortions on the aerial photography

**FORT THOMAS PRESERVE
GILA RIVER, GRAHAM COUNTY, AZ
1,054 ACRES**



Aerial photo taken June 2006

Property boundaries overlaid on aerial photographs are approximate due to slight distortions on the aerial photography.

APPENDIX B

MANAGEMENT ACTIVITY IMPLEMENTATION MATRICES

ADOBE PRESERVE – Management Activity Implementation Matrix

MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
Baseline Inventory and Management Plan			
Baseline Inventory	Completed		SRP Env. Svc.
Management Plan	Completed		SRP Env. Svc.
Water Rights and Use:			
Submit water rights claim form to ADWR	Completed		SRP Water Rights
Complete the transfer of water rights on property, except for domestic use	In process	Pending ADWR action	SRP Water Rights
Cowbird Management:			
Apply nest searching protocol	Completed	First applied to surveys in 2008	SRP
Livestock grazing and recreational disturbance:			
Remove all trespass livestock	On-going	Patrol conducted regularly	SRP contractor Livestock owner(s)
Fire Management:			
Develop a fire management plan in coordination with fire management agencies	Completed	October 2004	SRP Env. Svc. Contractors
Send fire plan to response agencies; maintain close coordination with wildfire response agencies	Update local contact	April 2010	SRP Env. Svc. SRP contractor
Patrol site regularly to identify and eliminate potential fire hazards; clearing, mowing, etc.	On-going	Conducted weekly, on average	SRP contractor
Fencing and Gates:			
Conduct regular fence patrol to check for breaches. Inspect fence line after every flood event.	On-going	Conducted weekly, on average	SRP contractor

MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
Restoration of Upland Fields:			
Develop a plan to begin restoration of upland fields	Pending	June 2010	Env. Svc. SRP contractor
On-Site Management			
Maintain and repair existing fences and roads	On-going	As needed	SRP contractor
Conduct general maintenance	On-going	As needed	SRP contractor
Invasive Plant and Animal Control:			
Survey the property to determine presence and extent of invasive elements	Completed	October 2008	Env. Svc. Contractor
Develop plan to minimize or eliminate problem species	Pending	See "Restoration of upland fields"	Env. Svc. SRP contractor
Facilities Management:			
Implement actions for domestic well	On hold	TBD	SRP Env. Svc. Contractor
Conservation Easement:			
Locate an entity to hold the conservation easement	On hold	TBD	Env. Svc. Land
Community Support:			
Contact neighbors, maintain working relationships	On-going	On-going	SRP SRP contractor

BLACK FARM PRESERVE – Management Activity Implementation Matrix

MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
Baseline Inventory and Management Plan:			
Finalize baseline inventory	Completed		Env. Svc.
Finalize management plan and distribute to cooperators	Completed		Env. Svc.
Water Rights and Use:			
Submit water rights claim form to ADWR	Completed		SRP Water Rights
Complete the transfer of water rights on property, except for domestic use	Pending	TBD by ADWR	SRP Water Rights
Cease irrigation of fields	Completed	March 2007	SRP
Fire Management:			
Develop a fire management plan in coordination with fire management agencies	Completed	October 2004	Env. Svc. Contractor
Patrol site regularly to identify and eliminate potential fire hazards	On-going	Conducted weekly, on average	SRP contractor
Make initial contact with local fire-fighting org. and wildfire response agencies; send copies of plan	Update local contact info	April 2010	Env. Svc. SRP contractor
Familiarize SRP employees with protocols	On-going	As necessary	Env. Svc.
Restoration of Upland Fields:			
Plant native grasses and forbs on 101 acres of agricultural fields	Completed	September 2005	Agric. contractor SRP contractor
Seed 20 acres at southeast corner of property	Pending	April 2010	SRP contractor
On-Site Management:			
Hire a property maintenance technician	Completed		Env. Svc.
Patrol property and fence lines	On-going	Weekly, on average	SRP contractor
Conduct general maintenance activities	On-going	As necessary	SRP contractor

BLACK FARM (cont'd.)

MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
Invasive Plant Control:			
Conduct mechanical removal of weeds from agricultural fields seeded with native grasses; contact SRP to coordinate need for herbicide spraying	On-going	On-going	SRP SRP Groundwater SRP contractor
Coordination with Neighbors and Community:			
Coordinate activities with adjacent landowners	On-going		Env. Svc.

SPIRIT HOLLOW PRESERVE – Management Activity Implementation Matrix

MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
Baseline Inventory and Management Plan			
Baseline Inventory – add new properties	Pending	TBD – following closing on new parcel	SRP Env. Svc.
Management Plan – add new properties	Completed	TBD – following closing on new parcel	SRP Env. Svc.
Cowbird Management:			
Apply nest searching protocol	Completed	First applied in 2008	SRP Env. Svc. Cooperators
Livestock grazing and recreational disturbance:			
Remove all trespass livestock	On-going	As necessary	SRP contractor Livestock owner(s)
Wildfire Abatement:			
Develop a fire management plan in coordination with fire management agencies	Completed	October 2004	SRP Env. Svc. Contractors
Patrol site regularly to identify and eliminate potential fire hazards; clearing, mowing, etc.	On-going	Conducted weekly, on average	SRP contractor
Make initial contact and maintain close coordination with wildfire response agencies, send plan	Update local contact info	March 2005, on-going	SRP Env. Svc. SRP contractor
Update fire plan to include USBR lands and protocols	Pending	October 2010	SRP Env. Svc. USBR
Fencing:			
Conduct regular fence patrol to check for breaches. Inspect fence line after every flood event.	On-going	Conducted weekly, on average	SRP contractor

SPIRIT HOLLOW (cont'd.)

MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
On-Site Management			
Hire a property maintenance technician	Completed		SRP Env. Svc.
Maintain and repair existing fences and roads	On-going	As needed	SRP contractor
Conduct general maintenance	On-going	As needed	SRP contractor
Invasive Plant and Animal Control:			
Survey the property to determine presence and extent of invasive elements	Completed	September 2008	Env. Svc. Contractor
Develop plan to treat burned area on right terrace	Pending	September 2010	Env. Svc. Contractor
Conservation Easement:			
Complete conservation easement	Completed	October 2006	Env. Svc.
Community Support:			
Contact neighbors, maintain working relationships	On-going	On-going	SRP Env. Svc.

STILLINGER PRESERVE – Management Activity Implementation Matrix

MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
Baseline Inventory and Management Plan			
Baseline Inventory	Completed	September 2005	SRP Env. Svc.
Management Plan	Completed	September 2005	SRP Env. Svc.
Cowbird Management:			
Apply nest searching protocol	Completed	First applied in 2008	SRP Env. Svc. Cooperators
Livestock grazing and recreational disturbance:			
Remove trespass livestock	On-going	On-going	SRP contractor Livestock owner(s)
Wildfire Abatement:			
Develop a fire management plan in coordination with fire management agencies	Completed	October 2004	SRP Env. Svc. Contractors
Patrol site regularly to identify and eliminate potential fire hazards; clearing, mowing, etc.	On-going	Conducted weekly, on average	SRP contractor
Make initial contact and maintain close coordination with wildfire response agencies, send plan	Update local contact info	March 2005, on-going	SRP Env. Svc. SRP contractor
Fencing:			
Conduct regular fence patrol to check for breaches;	On-going	Conducted weekly, on average	SRP contractor
Maintain and repair existing fences and gates	On-going	As needed	SRP contractor
Construct fences on southwestern corner of property; repair fences on left bank.	Pending	December 2010	SRP contractor

STILLINGER PRESERVE (cont'd.)

MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
On-Site Management			
Hire a property maintenance technician	Completed		SRP Env. Svc.
Conduct general maintenance	On-going	As needed	SRP contractor
Invasive Plant Control:			
Survey the property to determine presence and extent of invasive elements	Not necessary at this time		Env. Svc. Contractor
Develop plan to minimize or eliminate problem species	Not necessary at this time		Env. Svc. Contractor
Conservation Easement:			
Locate an entity to hold the conservation easement	On hold	TBD	Env. Svc. Land
Community Support:			
Contact neighbors, maintain working relationships	On-going	On-going	SRP contractor SRP Env. Svc.

CAMP VERDE RIPARIAN PRESERVE – Management Activity Implementation Matrix

MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
Baseline Inventory and Management Plan			
Baseline Inventory	Completed	September 2005	SRP Env. Svc./Contractor
Management Plan	Completed	September 2005	SRP Env. Svc./Contractor
Cowbird Management:			
Apply nest searching protocol	n/a	No wifl nests in 2009.	SRP Env. Svc. Cooperators
Livestock grazing and recreational disturbance:			
Minimize human, vehicular and livestock trespass	On-going	On-going	SRP contractor Livestock owner(s)
Wildfire Abatement:			
Develop a fire management plan in coordination with fire management agencies	Completed	December 2004	SRP Env. Svc. Contractors
Patrol site regularly to identify and eliminate potential fire hazards; clearing, mowing, etc.	On-going	Conducted weekly, on average	SRP contractor
Make initial contact and maintain close coordination with wildfire response agencies, send plan	Completed	On-going	SRP Env. Svc. SRP contractor
Mow vegetation to create fire break along I-17 boundary	On-going as necessary	After each winter and monsoon rainy seasons	SRP
Boundary Issues / Fencing:			
Install wildlife friendly barbed wire fencing along the southern boundary of property.	Completed	December 2004	Contractor
Conduct regular fence patrol to check for breaches. Inspect fence line after every flood event.	On-going	Conducted weekly, on average	SRP contractor

CAMP VERDE RIPARIAN PRESERVE (cont'd.)

MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
Boundary Issues/Fencing (cont'd.)			
Install signage at I-17 bridge and along fence lines	Completed	July 2005	Env. Svc., Contractor
On-Site Management			
Hire a property maintenance technician	Completed		SRP Env. Svc.
Maintain and repair existing fences and roads	On-going	As needed	SRP Env. Svc.
Conduct general maintenance	On-going	As needed	SRP Env. Svc. Contractors
Conservation Easement:			
Locate an entity to hold the conservation easement	On hold	TBD	Env. Svc. Land
Community Support:			
Contact neighbors, maintain working relationships	On-going	On-going	SRP Env. Svc.
Information display and trip at Verde Birding Festival	Annually	April 2010	SRP Env. Svc.
Information display at Verde River Days	Annually	September 2010	SRP Env. Svc.
Verde River Planning w/ TNC , ASPB and USFS	On-going	On-going	SRP Env. Svc.

FORT THOMAS PRESERVE - Management Activity Implementation Matrix

MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
Baseline Inventory and Management Plan			
Baseline Inventory	Draft in review	February 2009	SRP Env. Svc./Contractor
Management Plan	Draft completed	November 2008	SRP Env. Svc./Contractor
Cowbird Management:			
Test nest searching protocol	Completed	2006 and 2007 breeding season	SRP Env. Svc. Contractor
Conduct nest searching protocol	Completed	2009 breeding season	SRP Contractor
Livestock grazing and recreational disturbance:			
Install signage to deter human and vehicular trespass	Completed	September 2008	SRP Env. Svc.
Wildfire Abatement:			
Develop a fire management plan in coordination with fire management agencies and USBR	Initiated	October 2010	SRP Env. Svc. USBR
Patrol site regularly to identify and eliminate potential fire hazards; clearing, mowing, etc.	On-going	Conducted weekly, on average	SRP contractor
Make initial contact and maintain close coordination with wildfire response agencies	Initiated		SRP Env. Svc. SRP contractor
Send copies of fire management plan to fire management agencies	Not started	After completion of plan	SRP Env. Svc.
Boundary Issues / Fencing:			
Evaluate the property to determine fencing, signage and access needs	Completed	June 2007	SRP
Install fencing, signage on Hancock, Bellman boundary	Initiated	October 2010	SRP
On-Site Management			
Hire a property maintenance technician	Completed	March 2004	SRP Env. Svc.
Maintain and repair existing fences and roads	On-going	As needed	SRP Env. Svc.

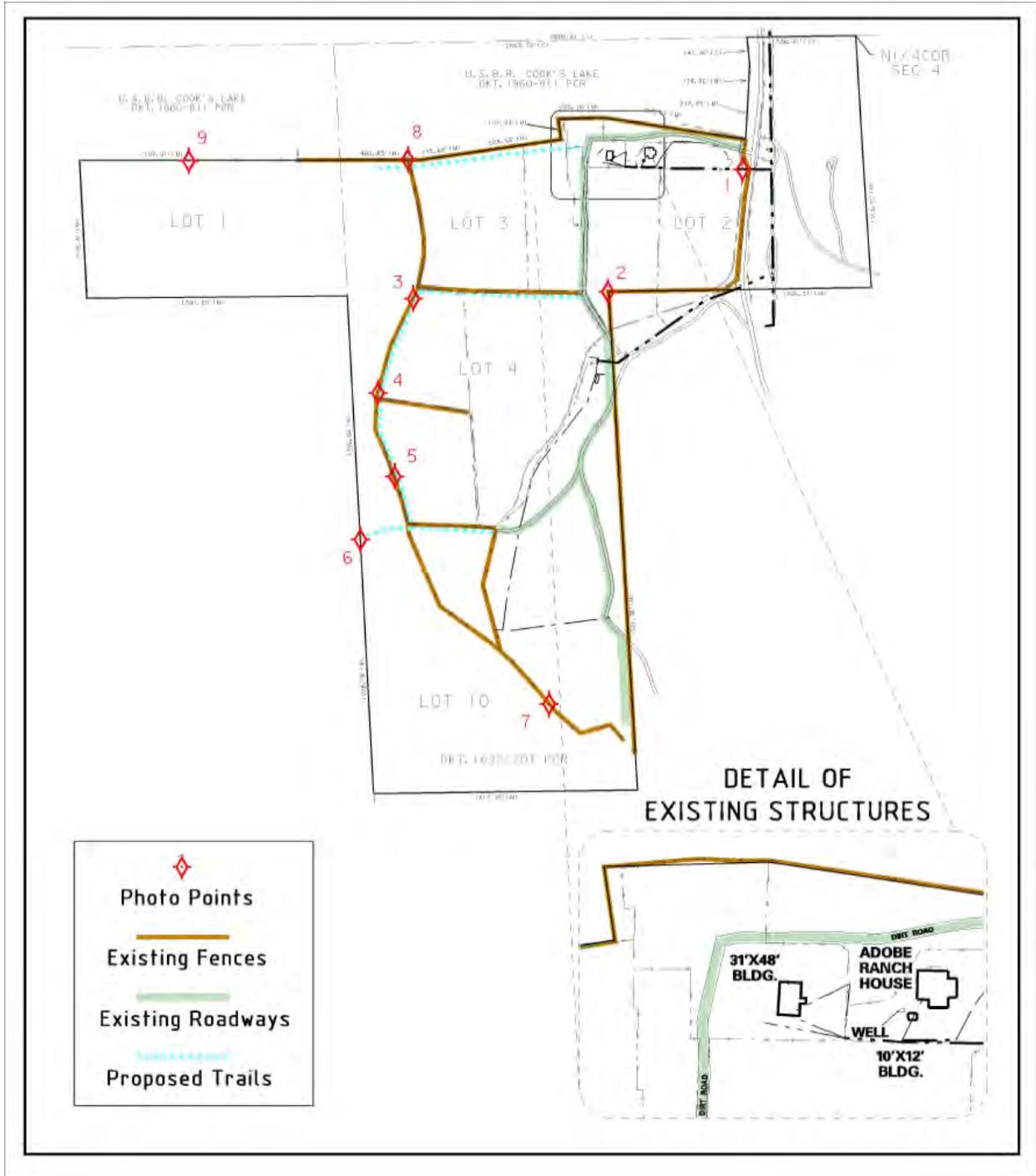
MANAGEMENT ACTIONS	STATUS	TARGET DATE	DEPARTMENT
On-Site Management (cont'd.)			
Conduct general maintenance	On-going	As needed	SRP Env. Svc. SRP contractor
Conservation Easement:			
Locate an entity to hold the conservation easement	On hold	TBD	Env. Svc. Land
Community Support:			
Contact neighbors, maintain working relationships	On-going	On-going	SRP Env. Svc.

APPENDIX C

PHOTO POINT MONITORING RESULTS

ADOBE PRESERVE

Photo Point Locations Adobe Preserve



Adobe Preserve Photo Point Record
Photo Point 1- View 1



October 9, 2003



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 1- View 2



October 9, 2003



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 2- View 1



October 9, 2003



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 2- View 2



October 9, 2003



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 3- View 1



October 9, 2003

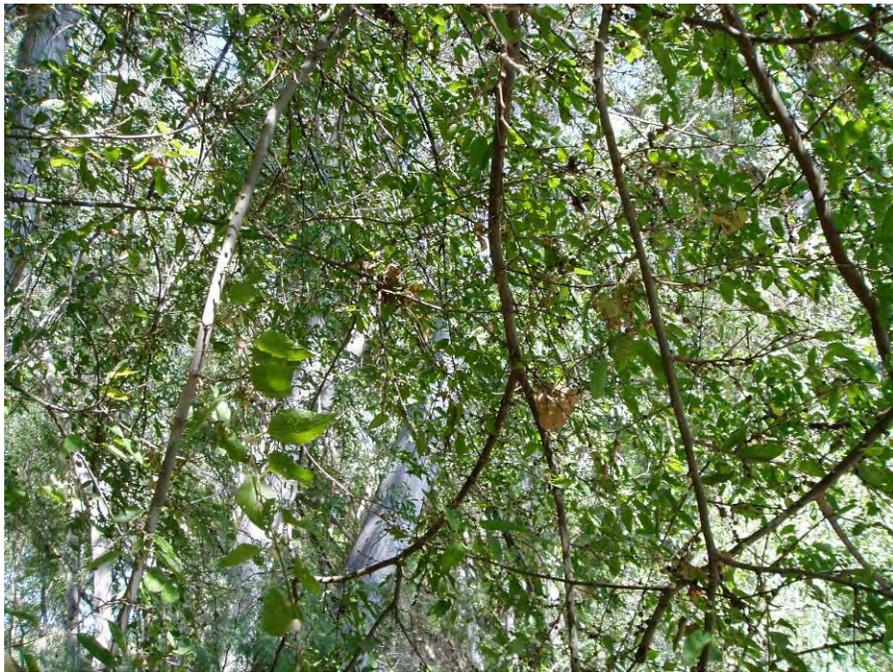


September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 3- View 2



October 9, 2003



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 3- View 3



October 9, 2003



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 4- View 1



October 9, 2003



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 4- View 2



October 9, 2003



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 5- View 1



October 9, 2003



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 6- View 1



October 9, 2003



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 6- View 2



October 9, 2003



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 7- View 1



October 9, 2003

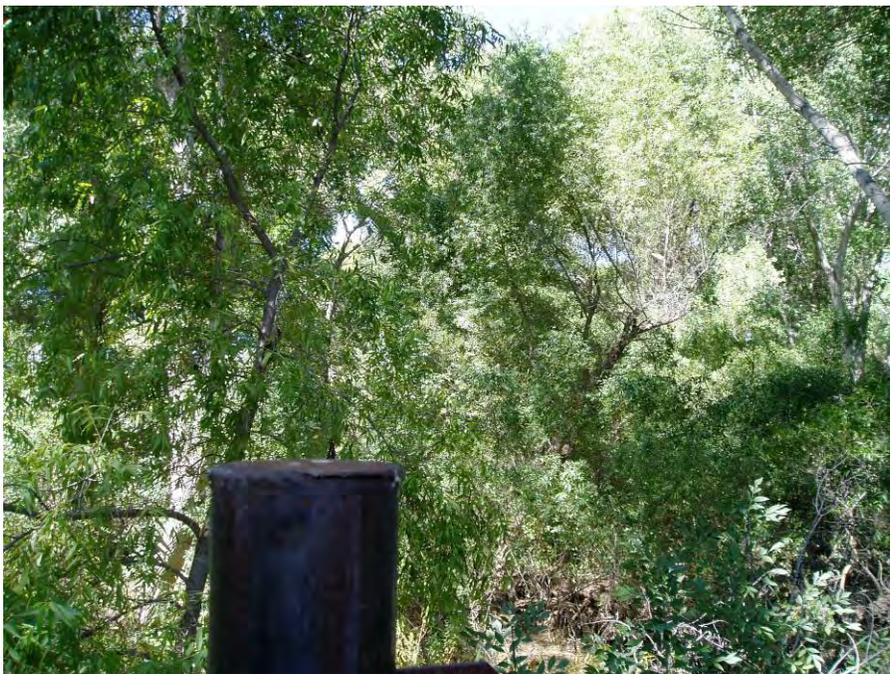


September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 8- View 1



October 20, 2004



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 8- View 2



October 20, 2004

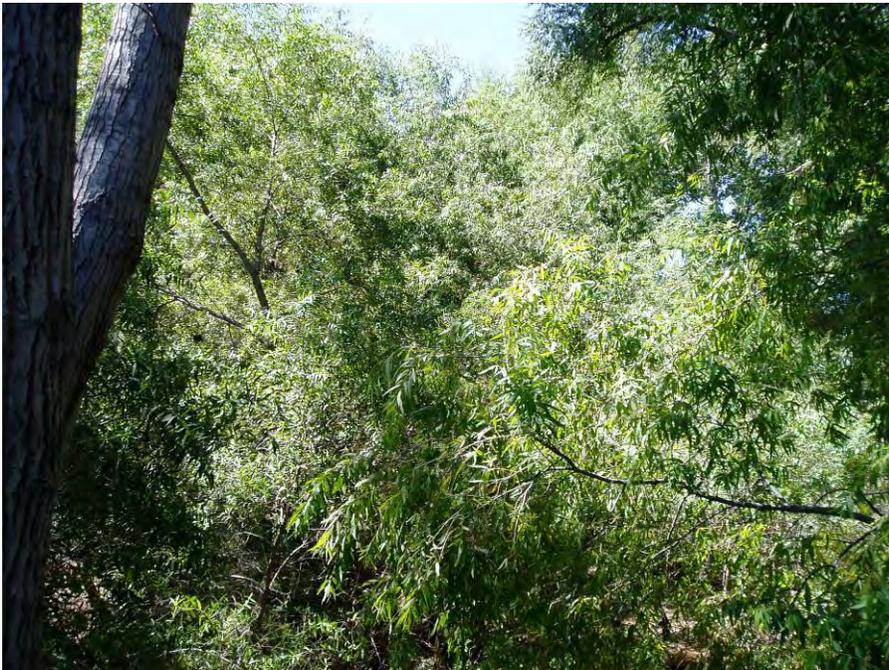


September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 8- View 3



October 6, 2005



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 9- View 1



October 20, 2004



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 9- View 2



October 20, 2004



September 17, 2009

Adobe Preserve Photo Point Record
Photo Point 9- View 3



October 20, 2004



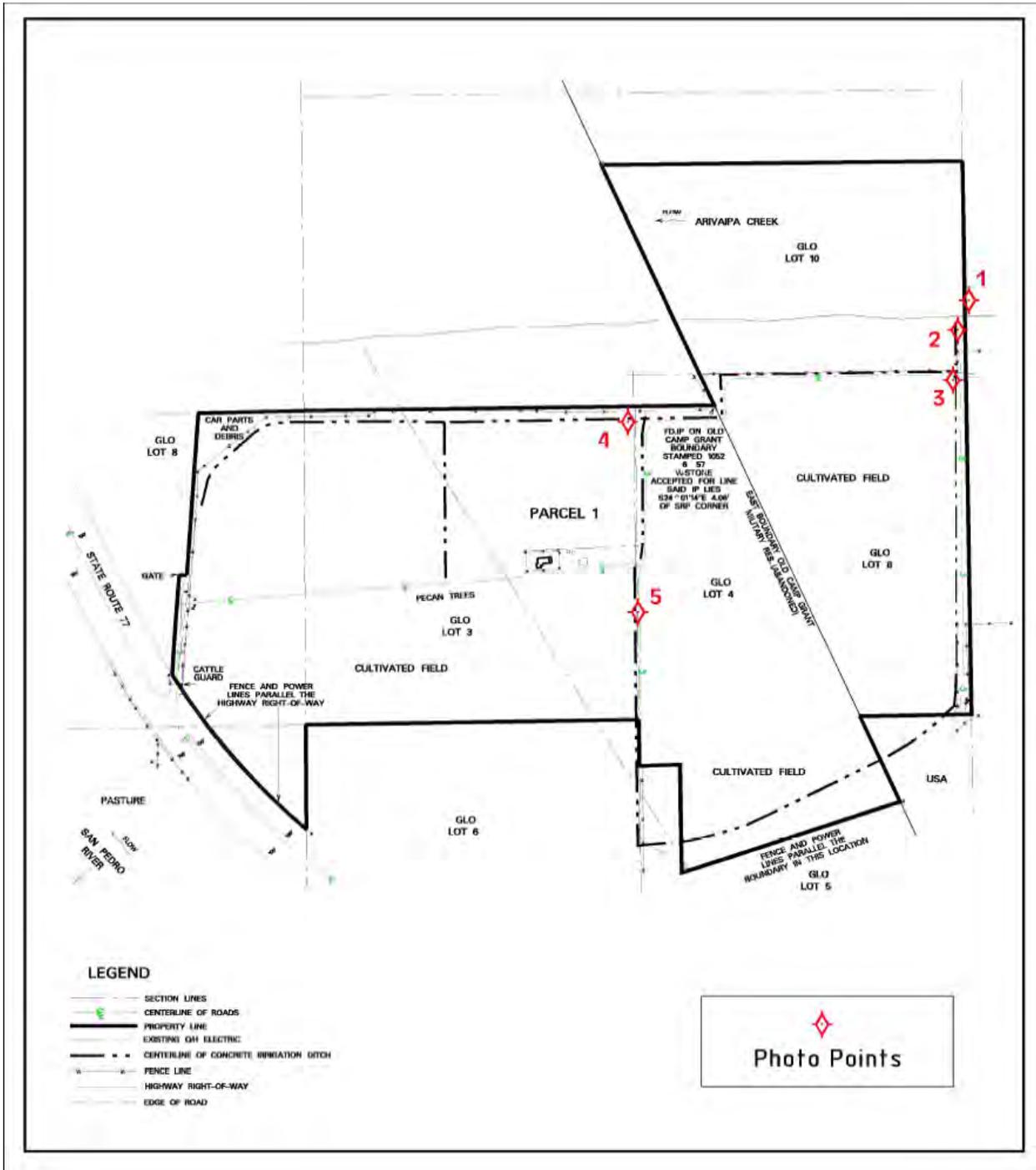
September 17, 2009

APPENDIX D

PHOTO POINT MONITORING RESULTS

BLACK FARM PRESERVE

Photo Point Locations Black Farm Preserve



Black Farm Preserve Photo Point Record
Photo Point 1- View 1



June 17, 2004



September 17, 2009

Black Farm Preserve Photo Point Record
Photo Point 1- View 2



June 17, 2004



September 17, 2009

Black Farm Preserve Photo Point Record
Photo Point 2- View 1



June 17, 2004



September 17, 2009

Black Farm Preserve Photo Point Record
Photo Point 2- View 2



June 17, 2004



September 17, 2009

Black Farm Preserve Photo Point Record
Photo Point 3- View 1



June 17, 2004



September 17, 2009

Black Farm Preserve Photo Point Record
Photo Point 3- View 2



June 17, 2004



September 17, 2009

Black Farm Preserve Photo Point Record
Photo Point 3- View 3



June 17, 2004



September 17, 2009

Black Farm Preserve Photo Point Record
Photo Point 4- View 1



June 17, 2004



September 17, 2009

Black Farm Preserve Photo Point Record
Photo Point 4- View 2



June 17, 2004



September 17, 2009

Black Farm Preserve Photo Point Record
Photo Point 5- View 1



June 17, 2004



September 17, 2009

Black Farm Preserve Photo Point Record
Photo Point 5- View 2



June 17, 2004



September 17, 2009

Black Farm Preserve Photo Point Record
Photo Point 5- View 3



June 17, 2004



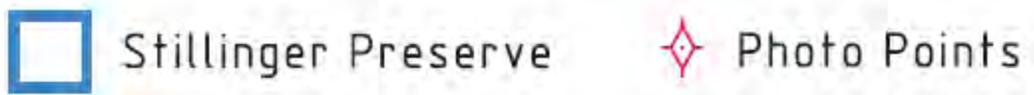
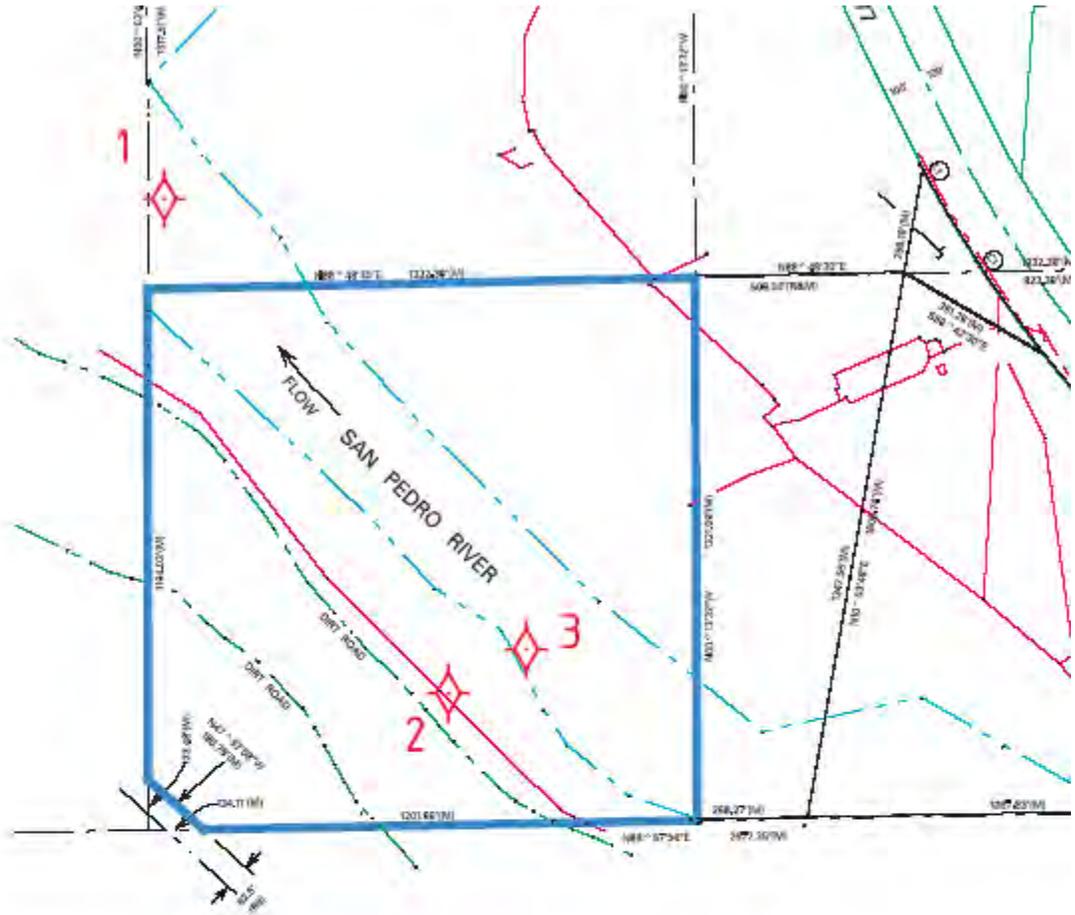
September 17, 2009

APPENDIX E

PHOTO POINT MONITORING RESULTS

STILLINGER PRESERVE

Photo Point Locations Stillinger Preserve



Stillinger Property Photo Point Record
Photo Point 1- View 1



June 21, 2005 *** Located off property; near edge of active channel***



October 1, 2009

Stillinger Property Photo Point Record
Photo Point 1- View 2



June 21, 2005



October 1, 2009

Stillinger Property Photo Point Record
Photo Point 1- View 3



June 21, 2005



October 1, 2009

Stillinger Property Photo Point Record
Photo Point Established in 2006
Photo Point 1B-1



October 19, 2006 *** Located on property corner ***



October 1, 2009

Stillinger Property Photo Point Record
Photo Point Established in 2006
Photo Point 1B-2



October 18, 2006



October 1, 2009

Stillinger Property Photo Point Record
Photo Point 1B-3



October 19, 2006



October 1, 2009

Stillinger Property Photo Point Record
Photo Point 2- View 1



June 21, 2005



October 1, 2009

Stillinger Property Photo Point Record
Photo Point 2- View 2



June 21, 2005

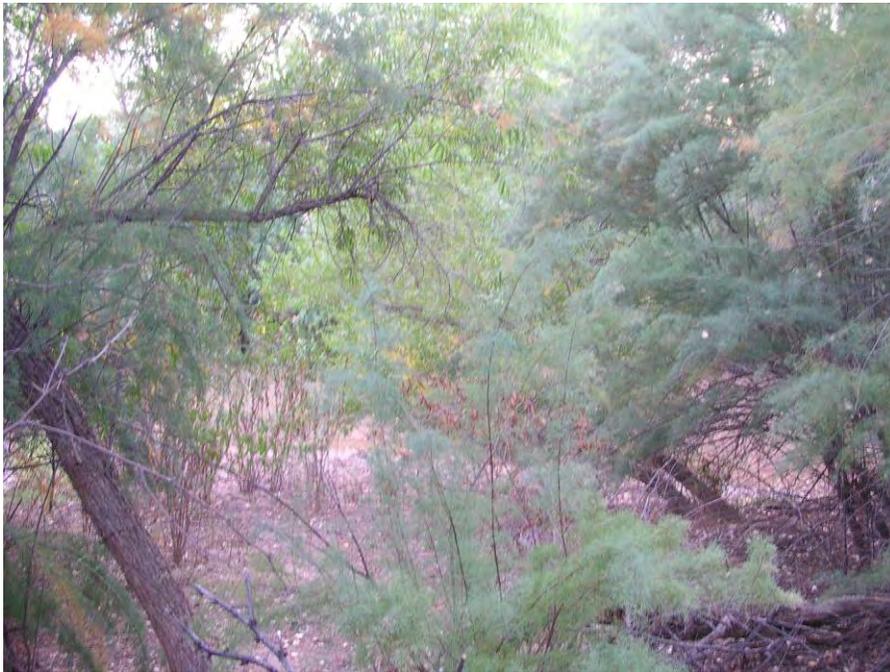


October 1, 2009

Stillinger Property Photo Point Record
Photo Point 3- View 1



June 21, 2005

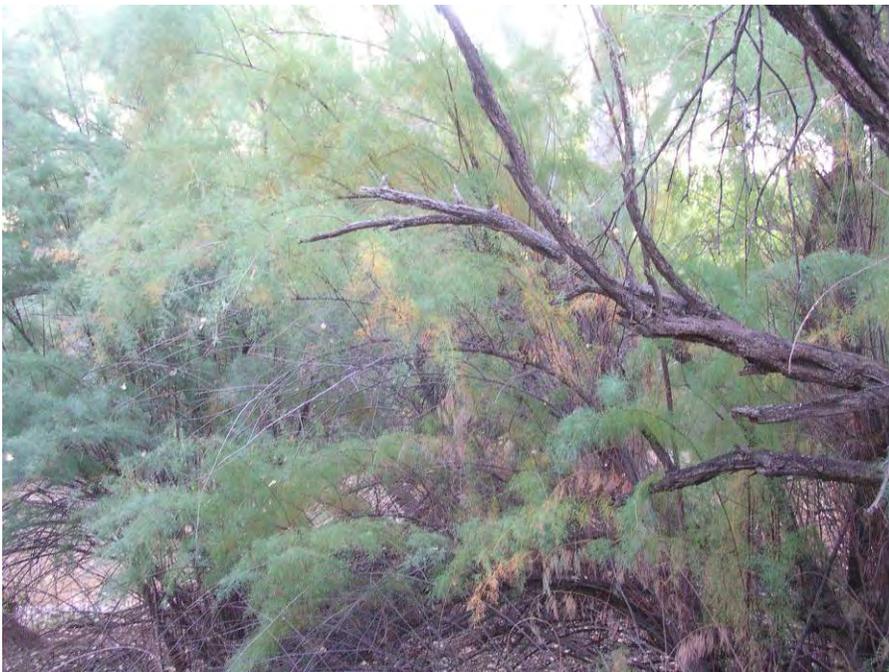


October 1, 2009

Stillinger Property Photo Point Record
Photo Point 3- View 2



June 21, 2005



October 1, 2009

Stillinger Property Photo Point Record
Photo Point 3- View 3



June 21, 2005



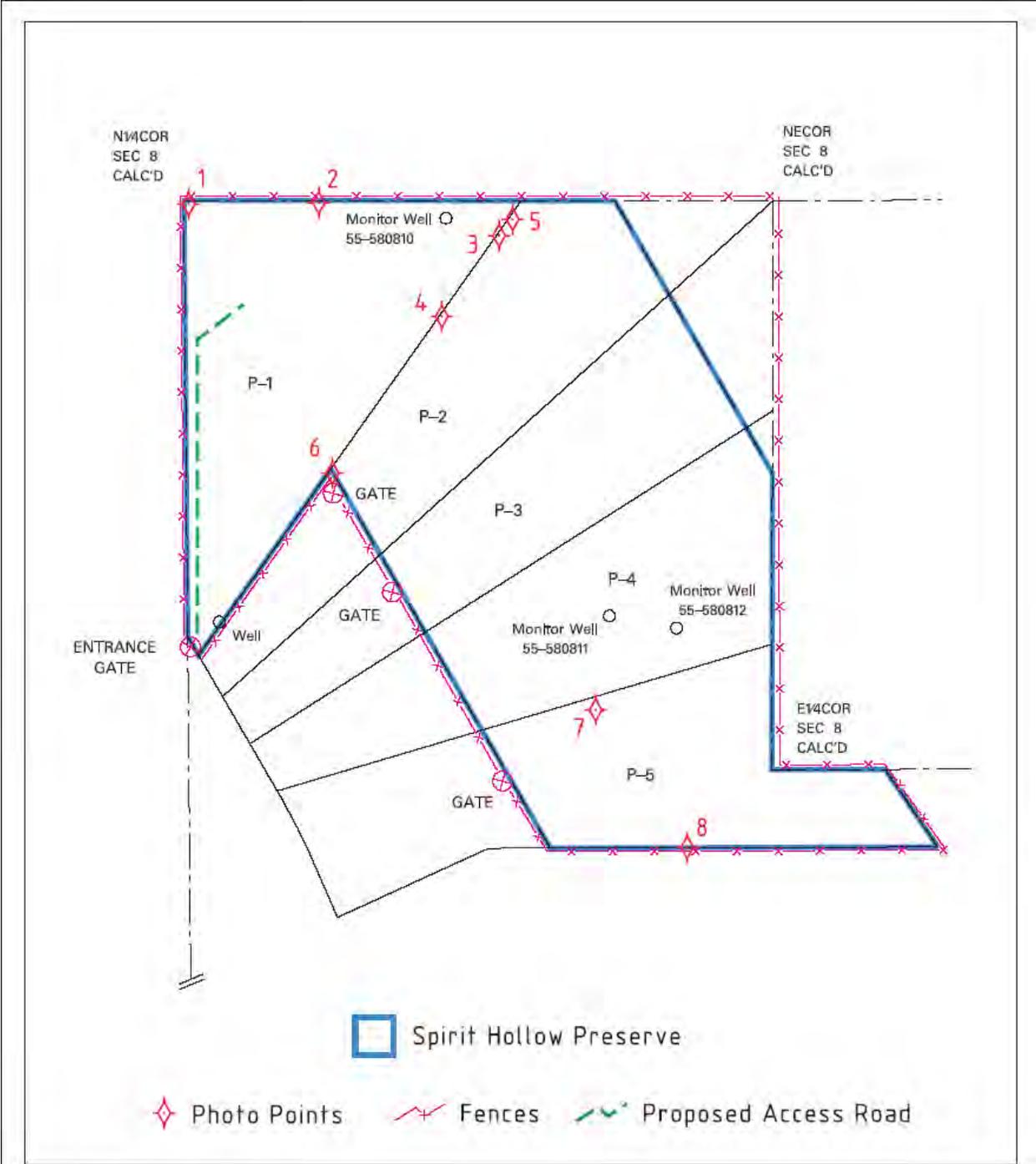
October 1, 2009

APPENDIX F

PHOTO POINT MONITORING RESULTS

SPIRIT HOLLOW PRESERVE

Photo Point Locations Spirit Hollow Preserve



T10S R18E, Sections 8 & 9

Spirit Hollow Preserve Photo Point Record
Photo Point 1- View 1



September 21, 20



September 24, 2009 (date on photo is incorrect)

Spirit Hollow Preserve Photo Point Record
Photo Point 1- View 2



September 21, 2005

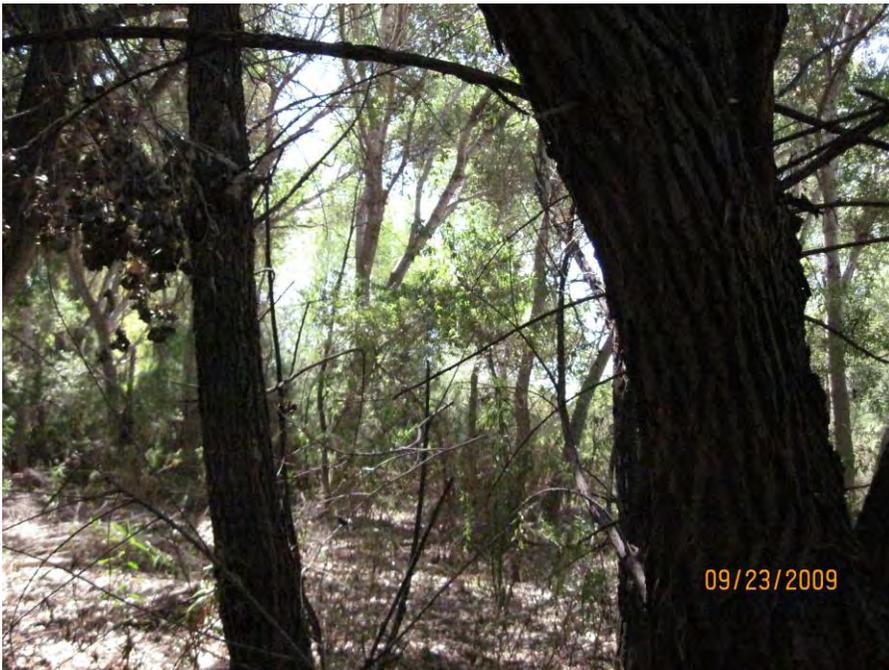


September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 2- View 1



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 2- View 2



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 2- View 3



September 21, 2005

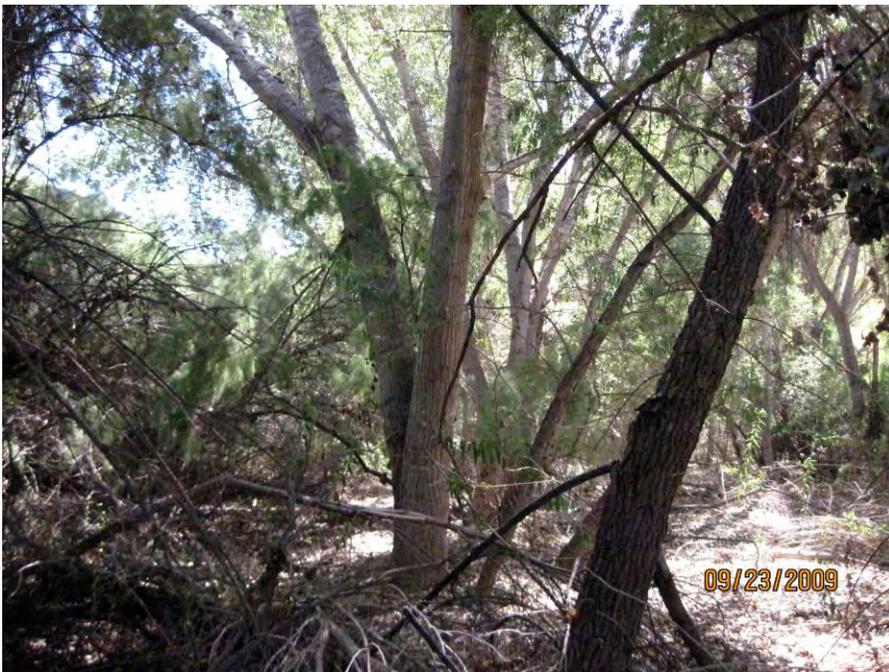


September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 2- View 4



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 2- View 5



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 3- View 1



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 3- View 2



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 3- View 3



September 21, 2005

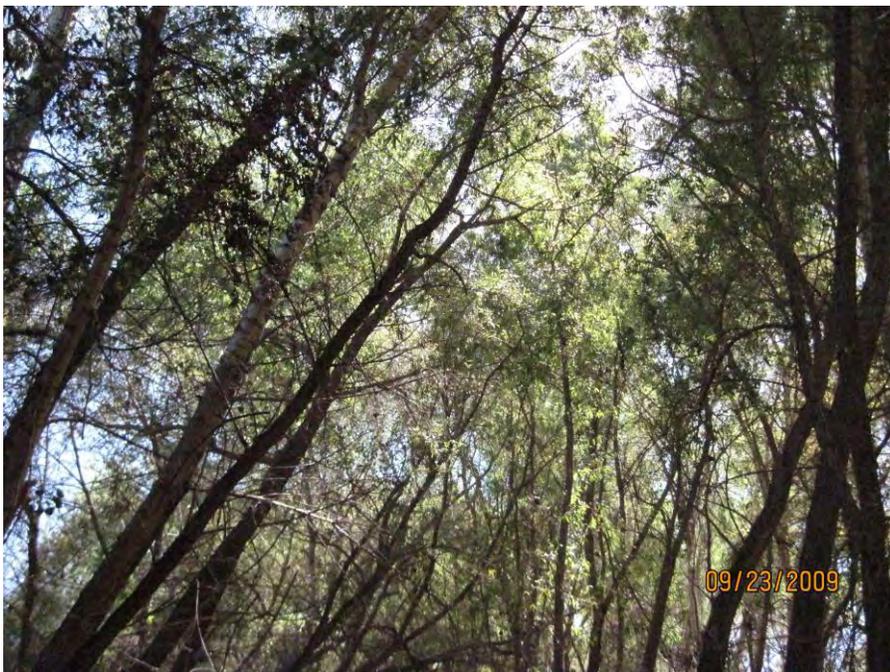


September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 3- View 4



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 3- View 5



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 3- View 6



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 4- View 1



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 4- View 2



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 4- View 3



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 4- View 4



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 5- View 1



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 5- View 2



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 5- View 3



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 5- View 4



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 6- View 1



September 21, 2005

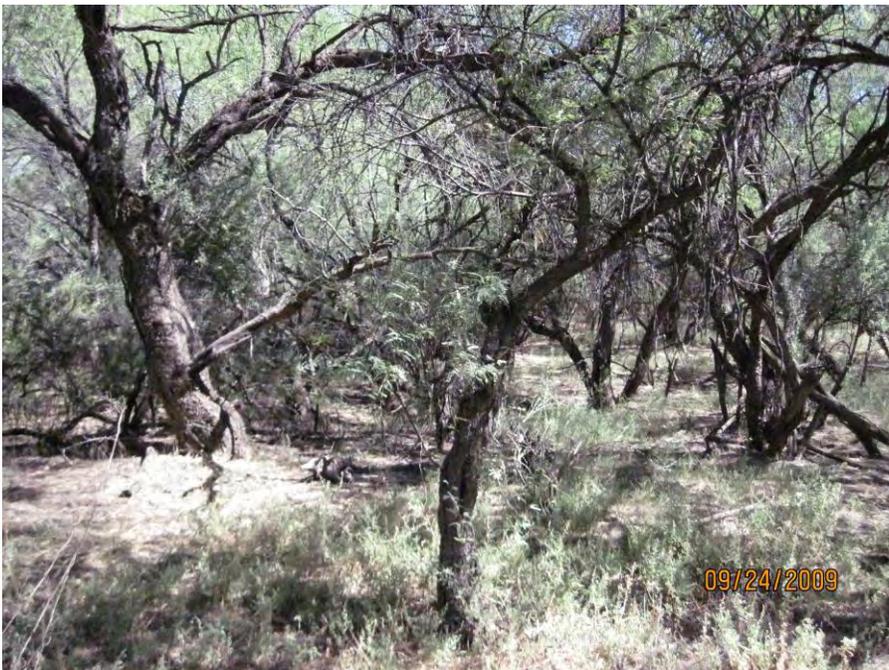


September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 6- View 2



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 6- View 3



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 7- View 1



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 7- View 2



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 8- View 1



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 8- View 2



September 21, 2005



September 24, 2009

Spirit Hollow Preserve Photo Point Record
Photo Point 8- View 3



September 21, 2005



September 24, 2009

APPENDIX G

PHOTO POINT MONITORING RESULTS

CAMP VERDE RIPARIAN PRESERVE

Camp Verde Riparian Preserve Photo Point Record
Photo Point 1- View 1



June 7, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 1- View 2



June 7, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 1- View 3



June 7, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 1- View 4



June 7, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 2- View 1



June 7, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 2- View 2



June 7, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 2- View 3



June 7, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 2- View 4



June 7, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 3- View 1



June 7, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 3- View 2



June 7, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 3- View 3



June 7, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 3- View 4



August 10, 2007 (photo point was moved from 2005 location)



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 4- View 1



August 25, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 4- View 2



August 25, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 4- View 3



August 25, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 5- View 1



August 25, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 5- View 2



August 25, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 5- View 3



August 25, 2005

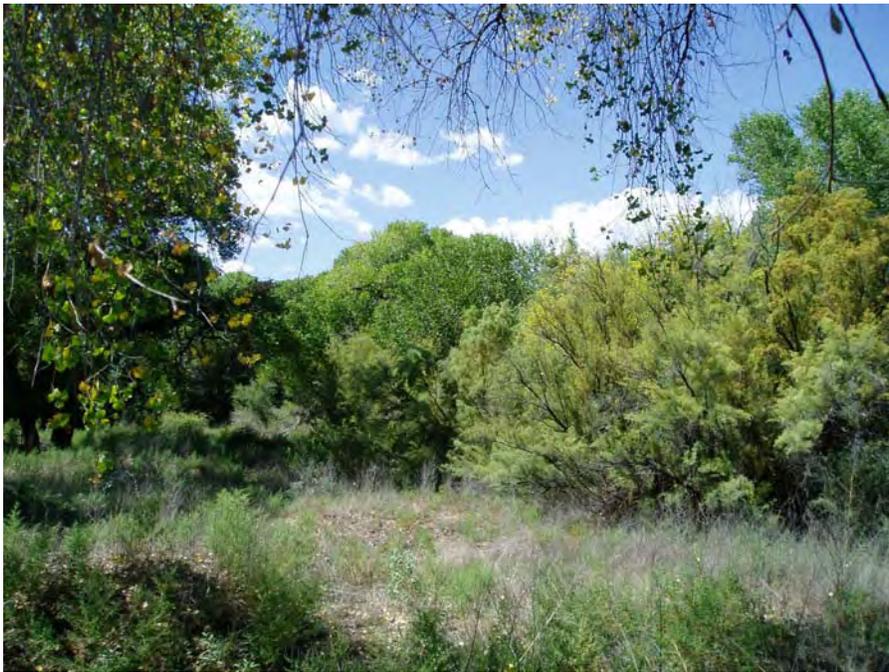


September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 6- View 1



August 25, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 6- View 2



August 25, 2005



September 16, 2009

Camp Verde Riparian Preserve Photo Point Record
Photo Point 6- View 3



August 25, 2005



September 16, 2009

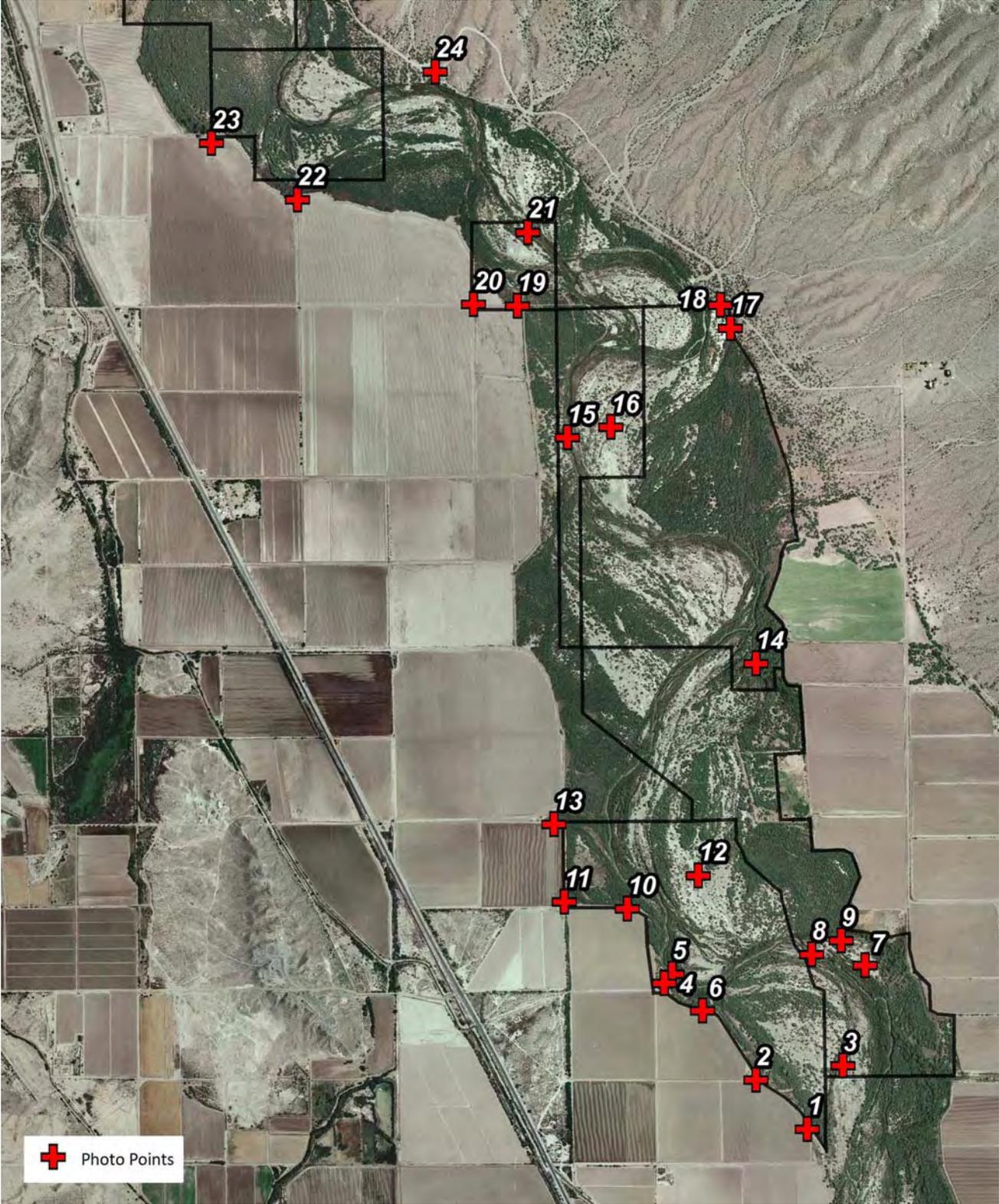
APPENDIX H

PHOTO POINT MONITORING RESULTS

FORT THOMAS PRESERVE

Photo Point Locations Fort Thomas Preserve

Photo point locations appearing on this map were established to document conditions during the baseline survey. Only select photo points were retaken in 2009. Additional photographs of site conditions are included in Appendix J at the end of the flycatcher and cuckoo survey report.



Fort Thomas Preserve

Photo Point 7



September 30, 2009



September 30, 2009

Fort Thomas Preserve

Photo Point 9



September 30, 2009

Photo Point 18

Northeast corner of SRP fee parcel looking Southwest



September 30, 2009

Fort Thomas Preserve

Photo Point 19 – Tail water ditch



September 30, 2009

Photo Point 20 taken from edge of vegetation



September 30, 2009

Fort Thomas Preserve

Photo Point 20 taken from edge of vegetation



September 30, 2009

West of Photo Point 24 within boundaries of northernmost parcel



September 30, 2009

Fort Thomas Preserve

West of Photo Point 24 within boundaries of northernmost parcel



September 30, 2009

Photo Point 24



September 30, 2009

APPENDIX I

PHOTO POINT MONITORING RESULTS

ROCKHOUSE PROJECT

Photo Point Locations
Rockhouse Project



Rockhouse Photo Point Record
Photo Point 1- View 1



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 1- View 2



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 1- View 3



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 1- View 4



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 2A- View 1



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 2A- View 2



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 2A- View 3



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 2A- View 4



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 2A- View 5



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 2A- View 6



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 2A- View 7



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 2B- View 1



October 13, 2005



September 11, 2009

Rockhouse Photo Point Record
Photo Point 2B- View 2



October 13, 2005



September 11, 2009

Rockhouse Photo Point Record
Photo Point 3- View 1



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 3- View 2



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 3- View 3



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 4- View 1



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 4- View 2



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 4- View 3



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 4- View 4



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 4- View 5



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 4- View 6



October 13, 2005



September 11, 2009

Rockhouse Photo Point Record
Photo Point 5- View 1



May 3, 2004



September 11, 2009

Rockhouse Photo Point Record
Photo Point 5- View 2



May 3, 2004



September 11, 2009