

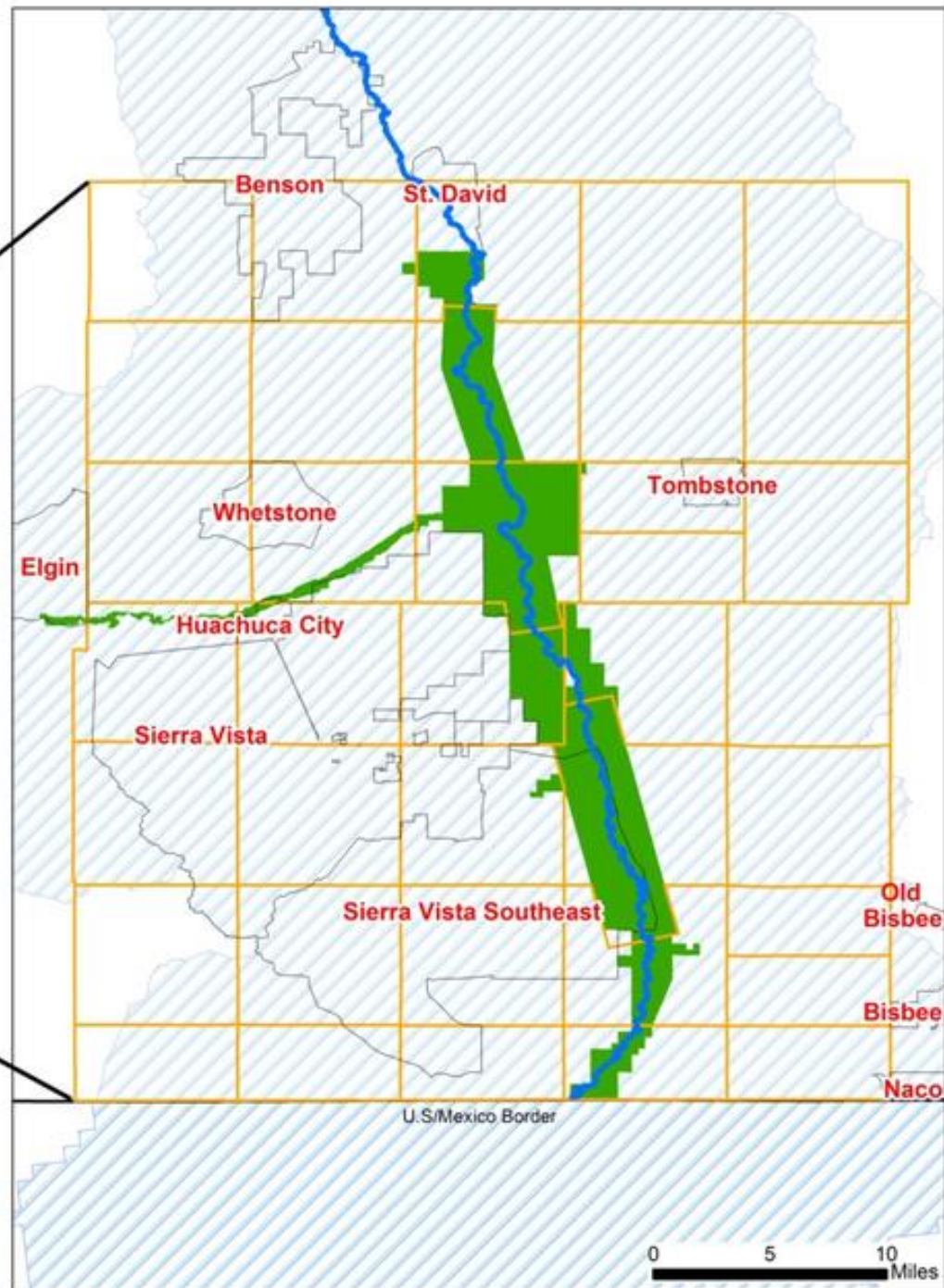
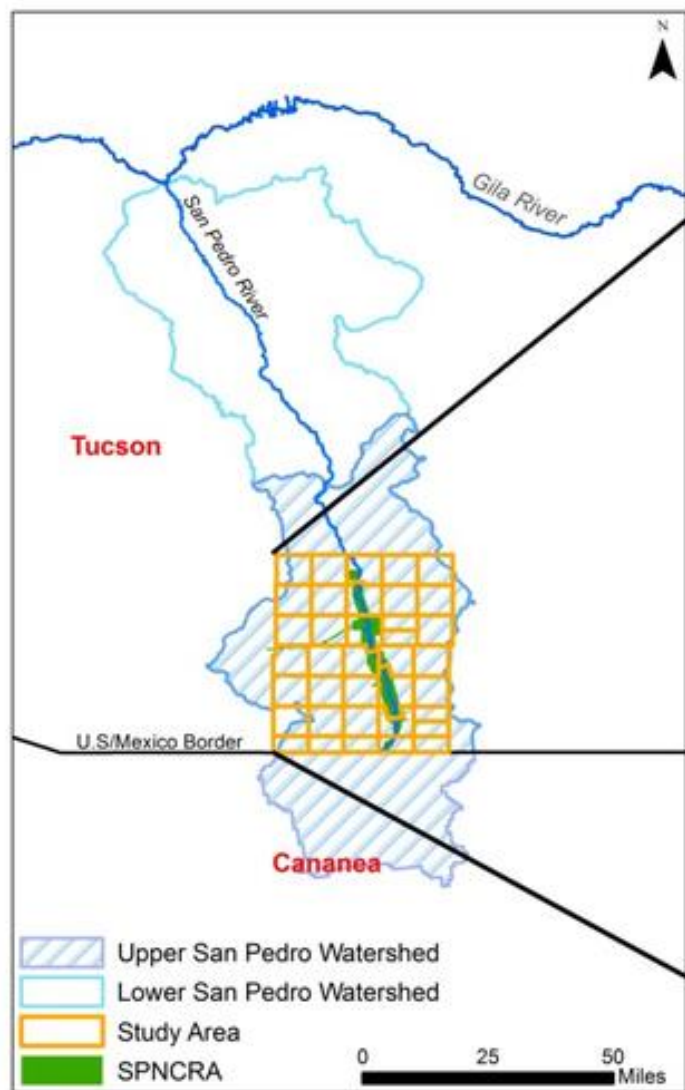


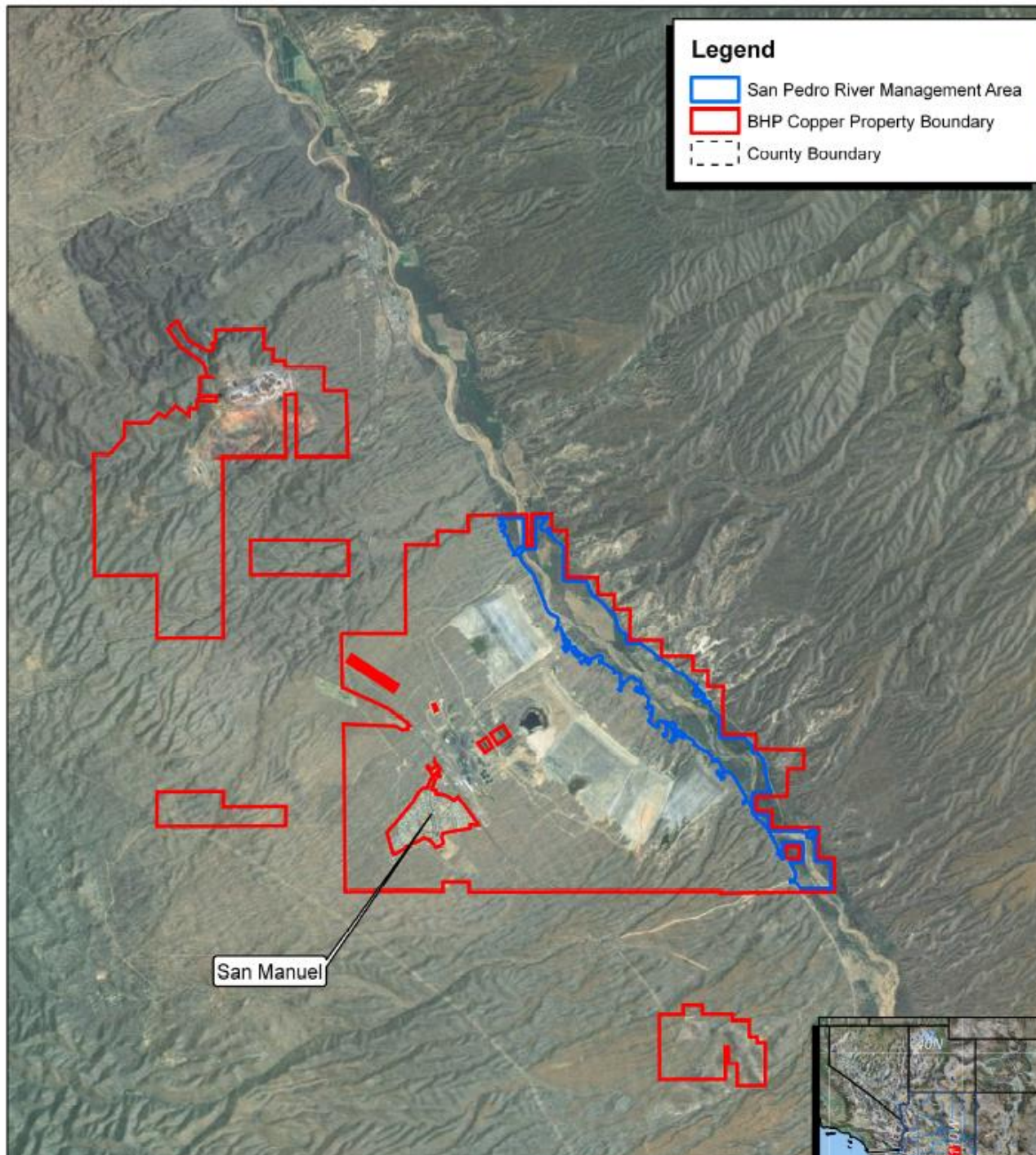
Biological Resource Studies on the San Pedro River

Dixie State University
PlattEnvironmental@gmail.com







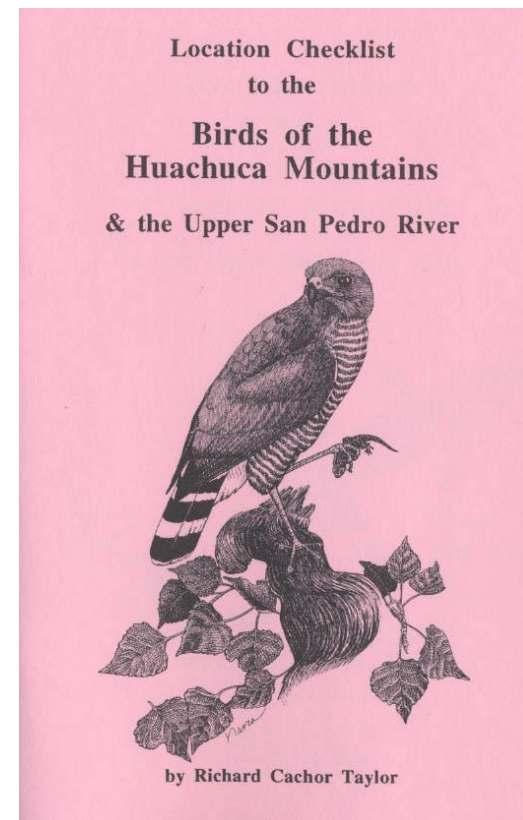
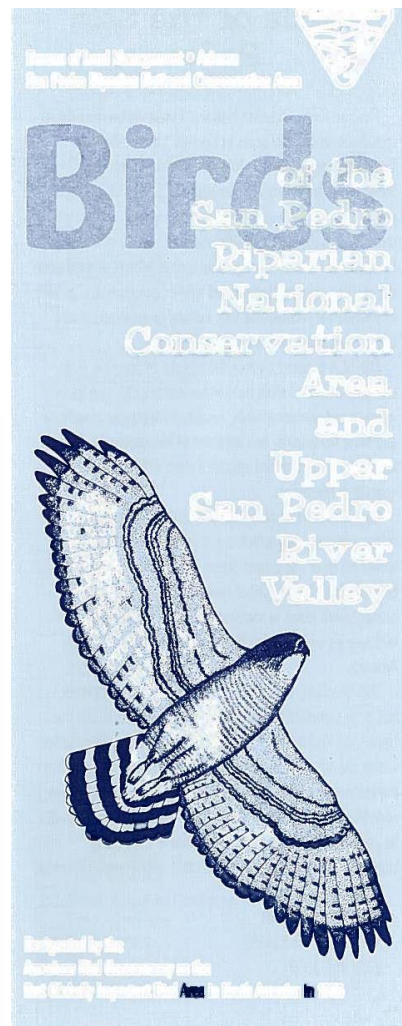
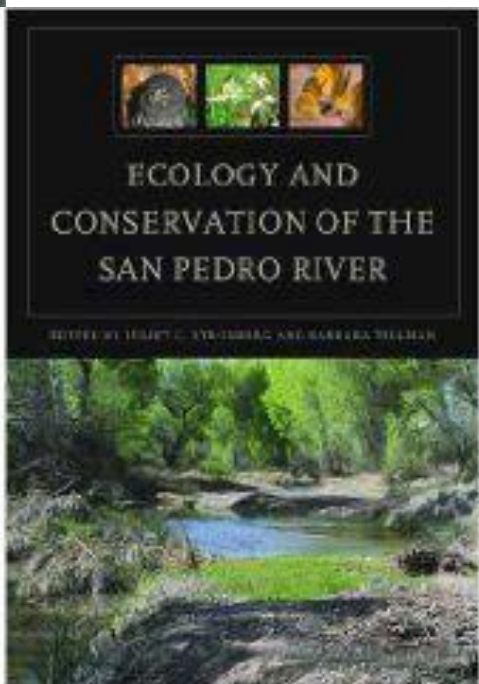
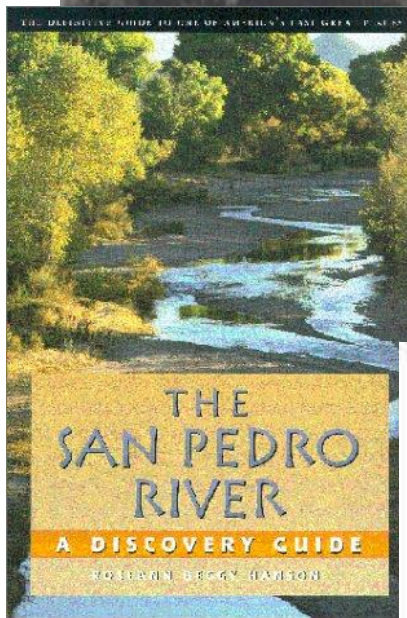
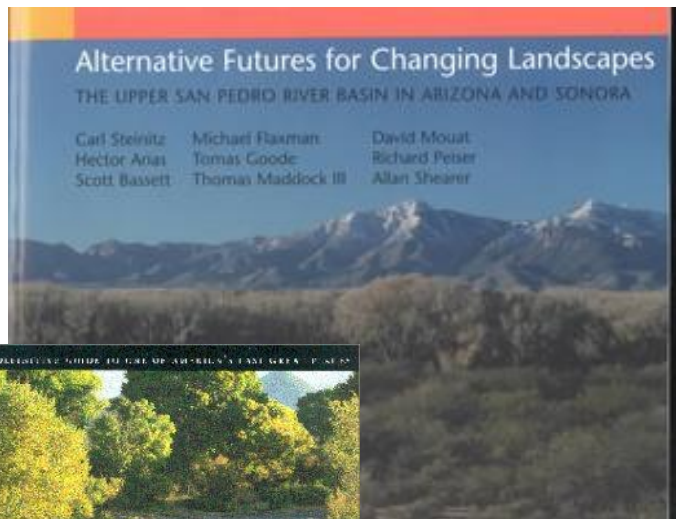






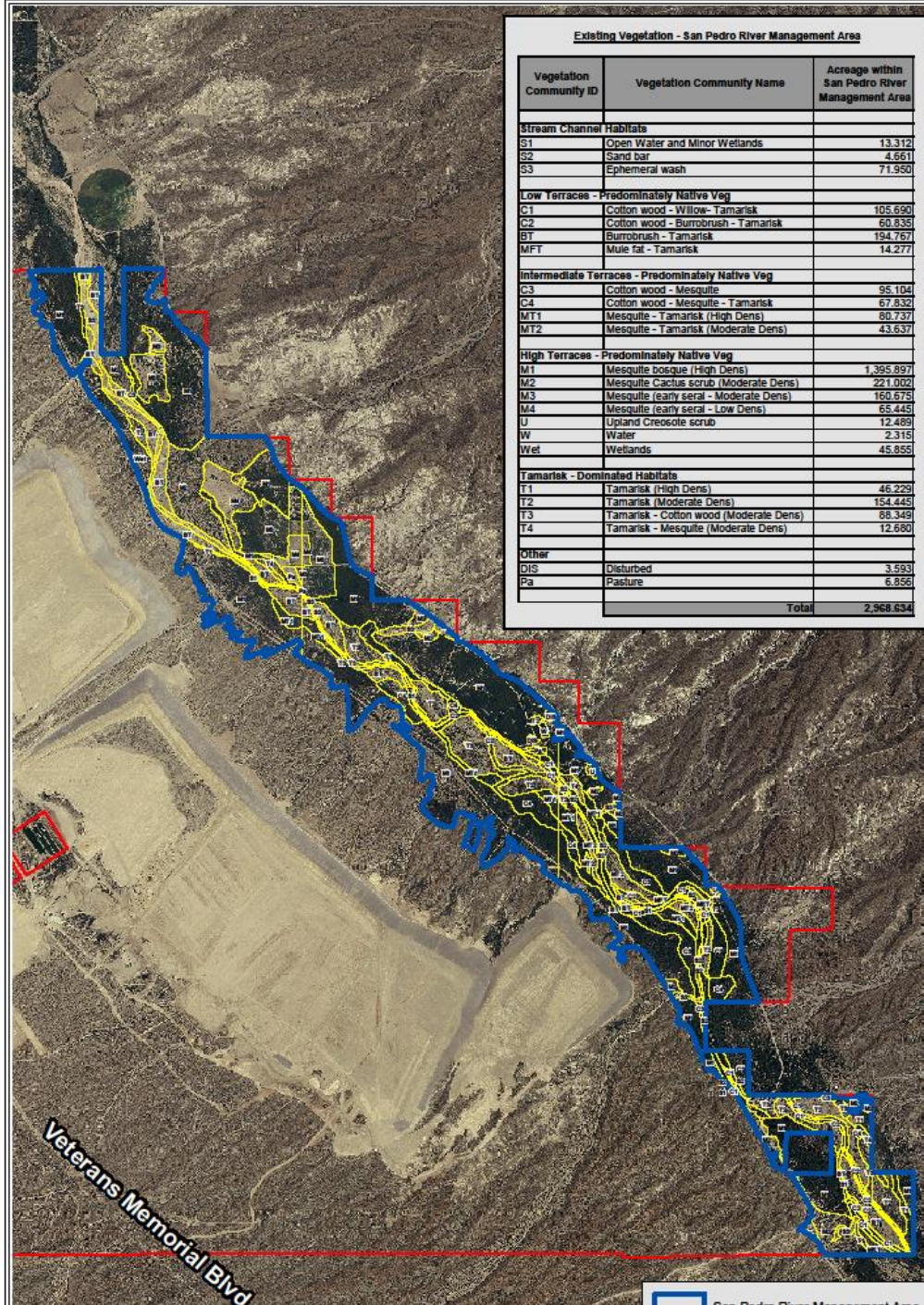








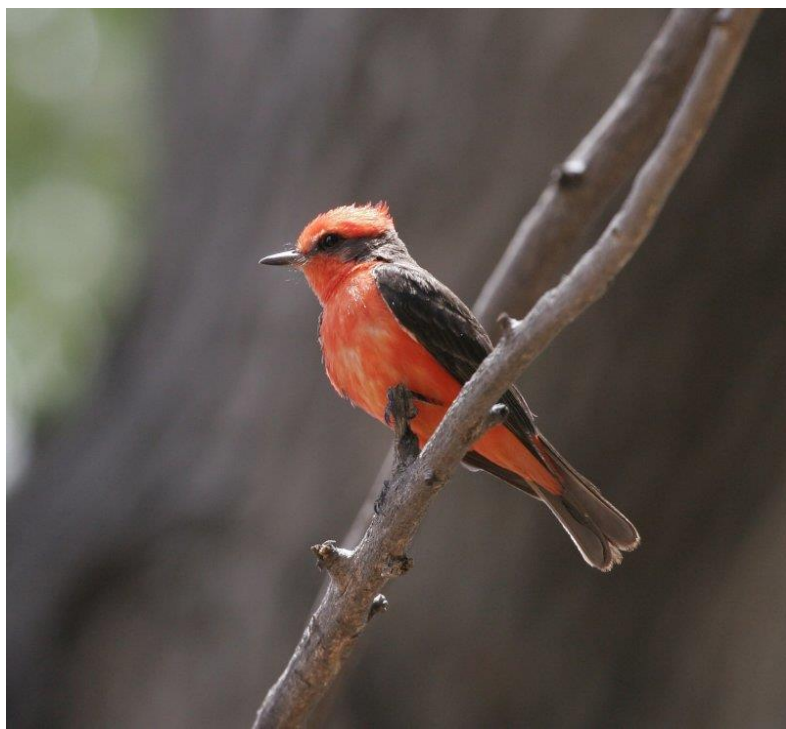




Existing Vegetation - San Pedro River Management Area

Vegetation Community ID	Vegetation Community Name	Acreage within San Pedro River Management Area
Stream Channel Habitats		
S1	Open Water and Minor Wetlands	13.312
S2	Sand bar	4.661
S3	Ephemeral wash	71.950
Low Terraces - Predominately Native Veg		
C1	Cotton wood - Willow - Tamarisk	105.690
C2	Cotton wood - Burrobush - Tamarisk	60.835
BT	Burrobush - Tamarisk	194.767
MFT	Mule fat - Tamarisk	14.277
Intermediate Terraces - Predominately Native Veg		
C3	Cotton wood - Mesquite	95.104
C4	Cotton wood - Mesquite - Tamarisk	67.832
MT1	Mesquite - Tamarisk (High Dens)	80.737
MT2	Mesquite - Tamarisk (Moderate Dens)	43.637
High Terraces - Predominately Native Veg		
M1	Mesquite bosque (High Dens)	1,395.897
M2	Mesquite Cactus scrub (Moderate Dens)	221.002
M3	Mesquite (early seral - Moderate Dens)	160.678
M4	Mesquite (early seral - Low Dens)	65.445
U	Upland Creosote scrub	12.489
W	Water	2.315
Wet	Wetlands	45.855
Tamarisk - Dominated Habitats		
T1	Tamarisk (High Dens)	46.229
T2	Tamarisk (Moderate Dens)	154.445
T3	Tamarisk - Cotton wood (Moderate Dens)	88.349
T4	Tamarisk - Mesquite (Moderate Dens)	12.680
Other		
DIS	Disturbed	3.593
Pa	Pasture	6.856
Total		2,968.634



San Pedro River Management Area



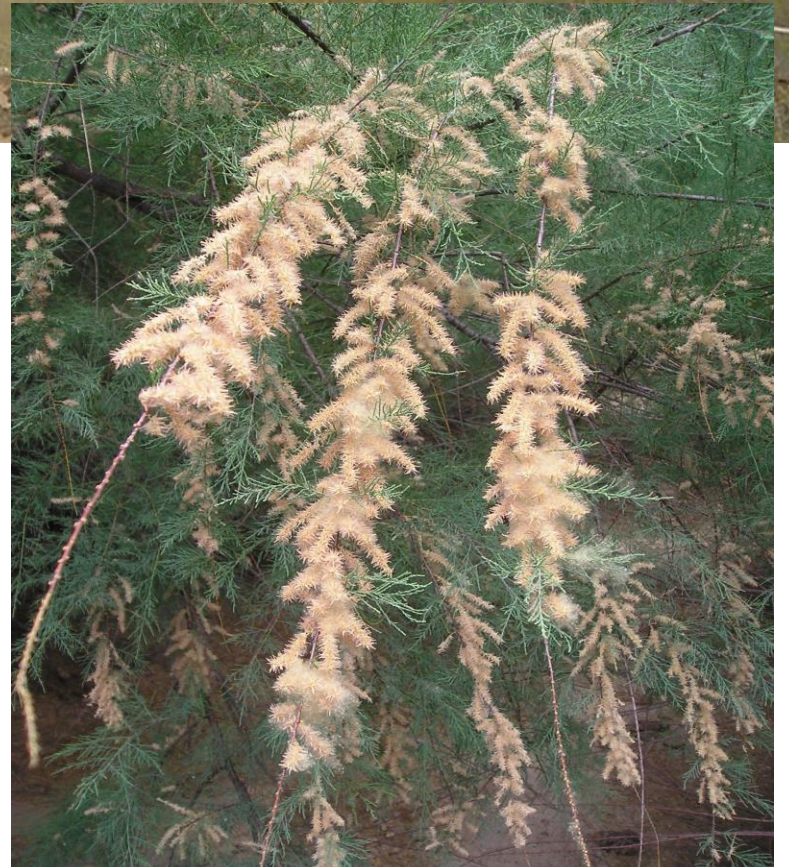




REPTILES AND AMPHIBIANS CAPTURED DURING SURVEYS

Common Name	Scientific Name	Native/Non-Native	Location
Amphibians			
 American bullfrog	(<i>Rana catesbeiana</i>)	Non-Native	River, Farm Pond
Lowland leopard frog	(<i>Rana yavapaiensis</i>)	Native	River, Farm Pond
Woodhouse's Toad	(<i>Bufo woodhousii</i>)	Native	River, Farm Pond
Reptiles			
Ornate tree lizard	(<i>Urosaurus ornatus</i>)	Native	Uplands adjacent to river
Western whiptail	(<i>Aspidoscelis tigris</i>)	Native	Uplands adjacent to river
Western diamondback rattlesnake	(<i>Crotalus atrox</i>)	Native	Uplands adjacent to river
Variable sandsnake	(<i>Chilomeniscus stramineus</i>)	Native	Upland desert habitat
California kingsnake	(<i>Lampropeltis getulus californiae</i>)	Native	Adjacent to river
Sonoran gophersnake	(<i>Pituophis catenifer affinis</i>)	Native	Along road
Checkered gartersnake	(<i>Thamnophis marcianus</i>)	Native	Uplands
 Sonora mud turtle	(<i>Kinosternon sonoriense</i>)	Native	River and farm pond
Spiny softshell	(<i>Apalone spinifera</i>)	Non-Native	River







NATIVE AND NON-NATIVE FISH SPECIES DOCUMENTED IN THE SAN PEDRO RIVER MAIN STEM FROM BEFORE 1840 THROUGH 2005

Species		Earliest Specimen Record or Probable Occurrence Due to Later Records	Most Recent Specimen Record
Native Taxa			
Colorado pikeminnow	(<i>Ptychocheilus Lucius</i>)	Pre-1840	Pre-1840
Razorback sucker	(<i>Xyrauchen texanus</i>)	Pre-1840	1841–1860
Flannelmouth sucker	(<i>Catostomus latipinnis</i>)	Pre-1840	1841–1860
Gila chub	(<i>Gila intermedia</i>)	Pre-1840	1901–1920
Desert pupfish	(<i>Cyprinodon macularius</i>)	Pre-1840	1941–1960
Speckled dace	(<i>Rhinichthys osculus</i>)	Pre-1840	1961–1980
Roundtail chub	(<i>Gila robusta</i>)	Pre-1840	1961–1980
Loach minnow	(<i>Tiaroga cobitis</i>)	Pre-1840	1961–1980
Spikedace	(<i>Meda fulgida</i>)	Pre-1840	1961–1980
Gila topminnow	(<i>Poeciliopsis occidentalis</i>)	Pre-1840	1941–1960
Sonora sucker	(<i>Catostomas insignis</i>)	Pre-1840	2001–2005
Longfin dace	(<i>Agosia chrysogaster</i>)	Pre-1840	2001–2005
Desert sucker	(<i>Pantosteus clarki</i>)	Pre-1840	2001–2005
Non-Native Taxa			
Common carp	(<i>Cyprinus carpio</i>)	1881–1900	2001–2005
Black bullhead	(<i>Ameiurus melas</i>)	1921–1940	2001–2005
Green sunfish	(<i>Lepomis cyanellus</i>)	1921–1940	2001–2005
Western mosquitofish	(<i>Gambusia affinis</i>)	1941–1960	2001–2005
Rainbow trout	(<i>Oncorhynchus mykiss</i>)	1961–1980	1961–1980
Goldfish	(<i>Carassius auratus</i>)	1961–1980	2001–2005
Fathead minnow	(<i>Pimephales promelas</i>)	1961–1980	2001–2005
Yellow bullhead	(<i>Amerius natalis</i>)	1961–1980	2001–2005
Channel catfish	(<i>Ictalurus punctatus</i>)	1961–1980	2001–2005
Bluegill	(<i>Lepomis macrochirus</i>)	1961–1980	1981–2000
Largemouth bass	(<i>Micropterus salmoides</i>)	1961–1980	2001–2005
Brook trout	(<i>Salvelinus fontinalis</i>)	1961–1980	1961–1980
Threadfin shad	(<i>Dorosoma petenense</i>)	1961–1980	1961–1980
Red shiner	(<i>Cyprinella lutrensis</i>)	1981–2000	2001–2005
Redear sunfish	(<i>Lepomis microlophus</i>)	1981–2000	1981–2000

SOURCE:

Arizona State University, 2002. Lower Colorado River Basin Fish Database (CONFSHES). Tucson, AZ.

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SOURCE:







Typical cuckoo, thick-billed kingbird, habitat
in young cottonwoods

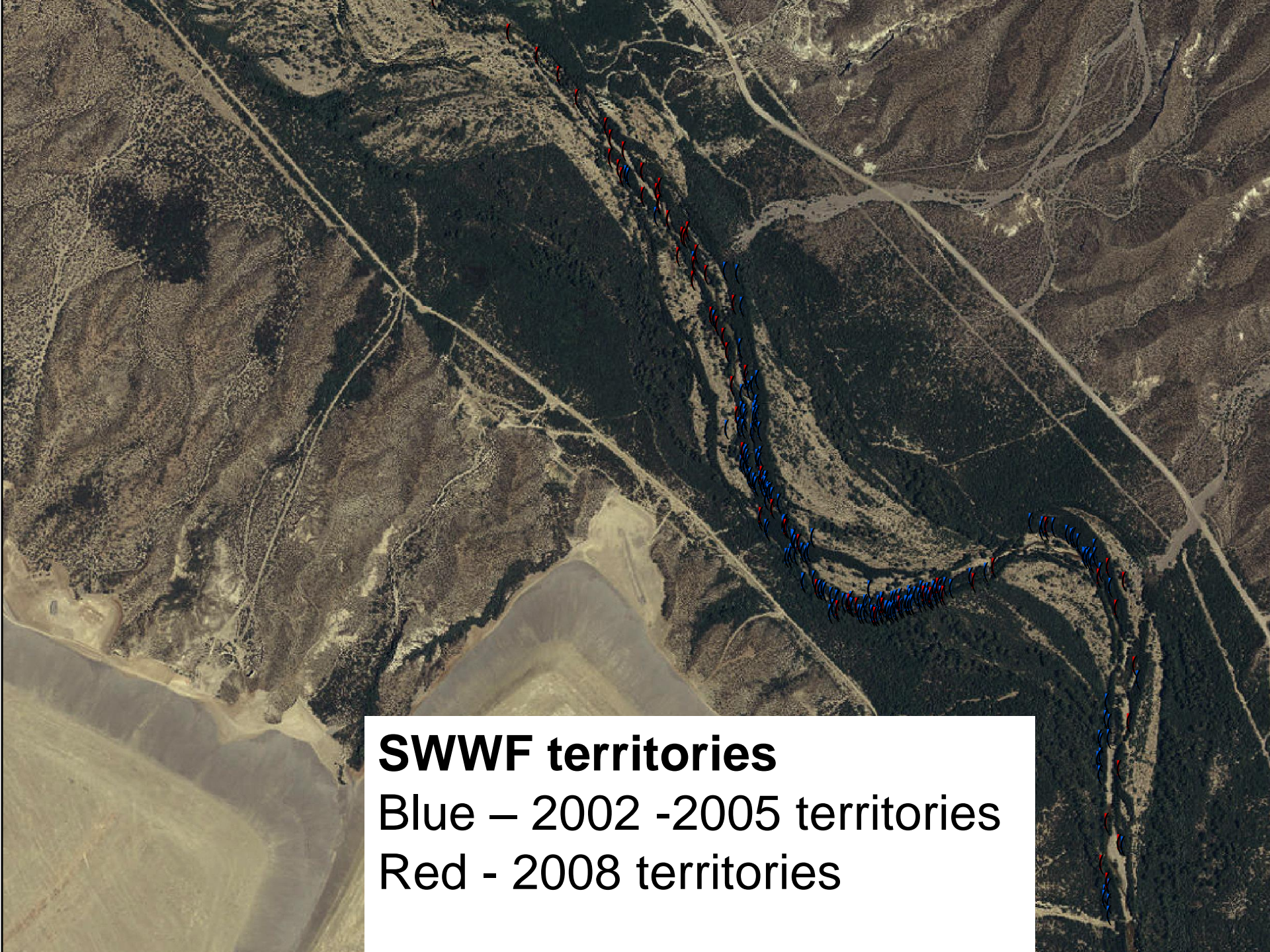


10 breeding territories of
Yellow-billed cuckoo





**72 pair of Southwestern willow flycatcher,
158 individual birds**



SWWF territories

Blue – 2002 -2005 territories

Red - 2008 territories



Grey Hawk

Black Hawk

Zone-tailed Hawk

Coopers Hawk

Mississippi Kite

Swainson's Hawk

Kestrel

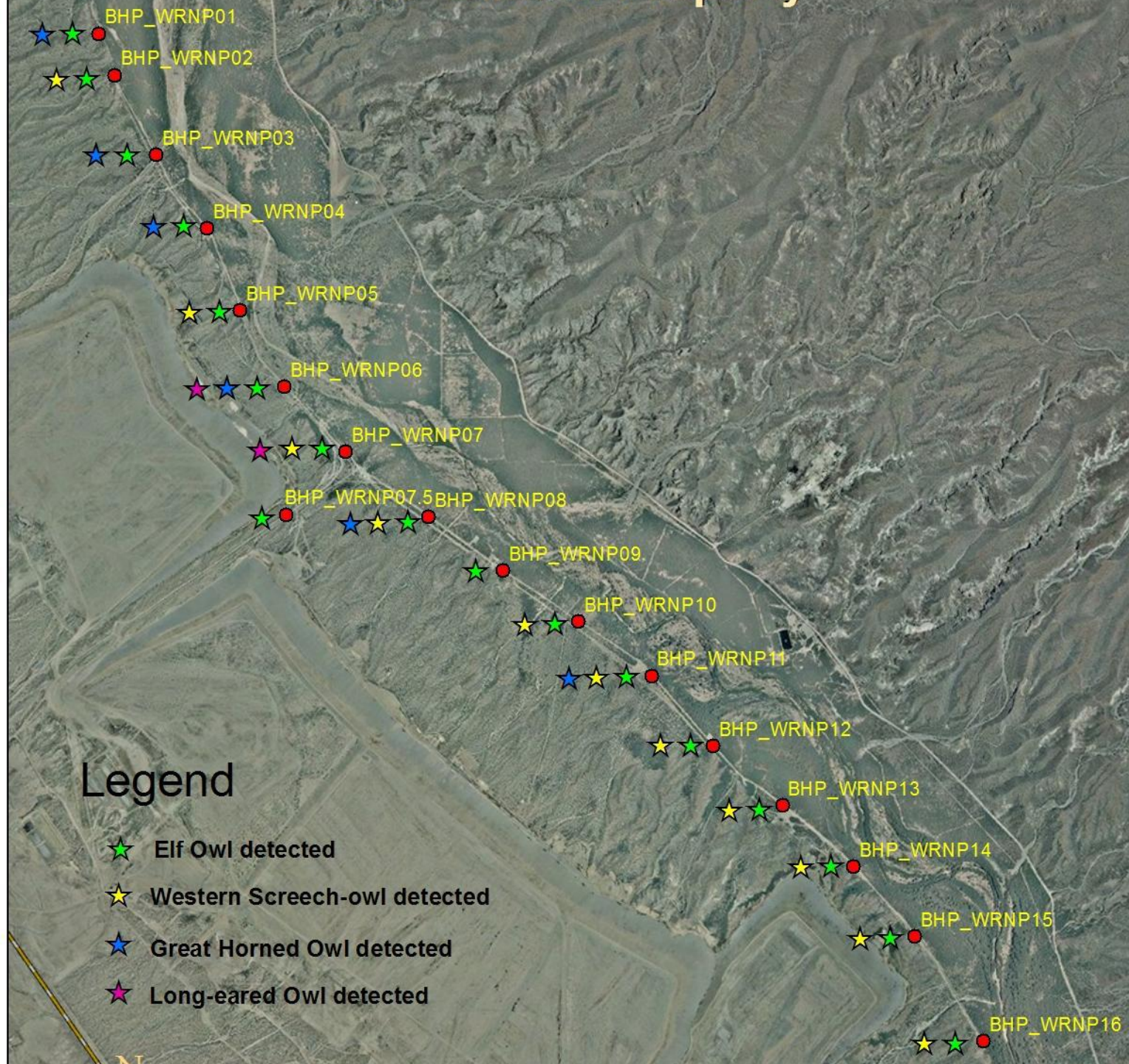
Red-tailed Hawk

Golden Eagle

Prairie Falcon

Peregrine Falcon

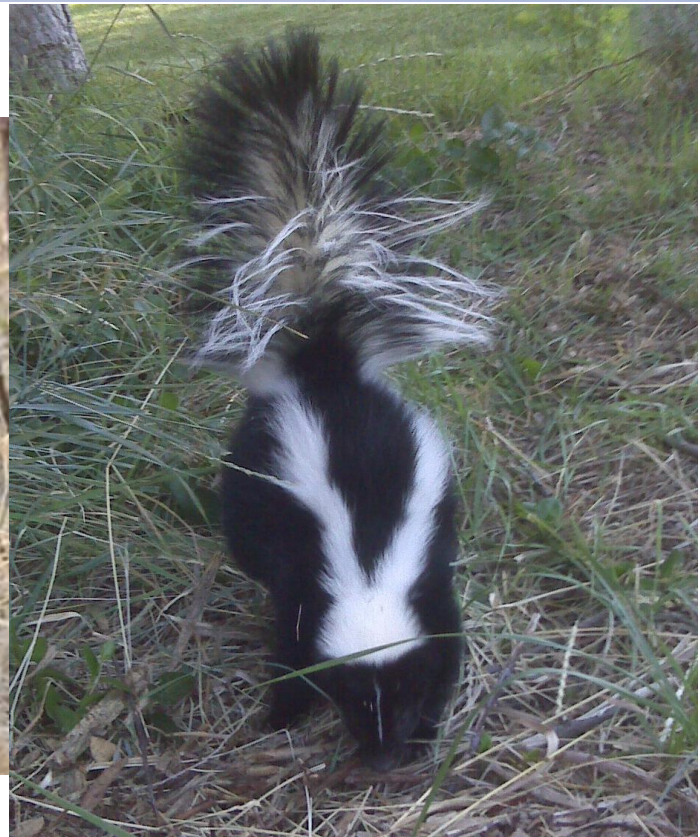


























A silhouette of a bird, possibly a crow or raven, perched on the top of a tall, thin, dark structure. The background is a warm, orange-hued sky, suggesting a sunset or sunrise. In the lower foreground, there are silhouettes of bare trees and cacti.

Identified Management Issues:

Cattle

ATV Trespassing

Water Security

Invasive plants and vertebrates

A red, rectangular sign with rounded corners lies on a parched, cracked surface of dry earth. The sign is oriented diagonally, with its top-left corner pointing towards the upper left of the frame. The text on the sign is white and reads "PRIVATE PROPERTY" on the top line, "NO TRESPASSING" on the second line, and "VIOLATORS" and "BE PROSEC" on the third and fourth lines respectively. The ground around the sign is a mix of dark brown soil and light-colored, irregularly shaped rocks and pebbles. The harsh sunlight creates deep shadows, emphasizing the texture of the cracked earth and the weathered surface of the sign.

PRIVATE PROPERTY
NO TRESPASSING
VIOLATORS
BE PROSEC



Cattle grazing along the San Pedro River in Arizona in 1984 (top). Cattle were removed from this site in 1988; by 1998, much of the riparian vegetation was restored (bottom).





Thank you

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