



MEMORANDUM

Date: May 2, 2024

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: Jan Leshar 
County Administrator

Re: **Support for a Santa Cruz River Urban Wildlife Refuge**

Attached is a letter from Chair Grijalva to U.S. Fish and Wildlife Service Director Martha Williams in support of creating an urban wildlife refuge along the Santa Cruz River. The letter also offers for consideration three properties totaling 630 acres owned by the County's Regional Flood Control District as candidates for an initial based property for the refuge.

In addition, Item 11 on the Board's May 7 agenda is a proclamation proclaiming Friday, May 10, 2024 to be Santa Cruz River Day, and encouraging the community to support designation of this urban wildlife refuge along Santa Cruz River.

JKL/anc

Attachment

c: Carmine DeBonis, Jr., Deputy County Administrator
Francisco García, MD, MPH, Deputy County Administrator and Chief Medical Officer
Steve Holmes, Deputy County Administrator
Nicole Fyffe, Interim Director, Conservation Lands and Resources
Jackson Jenkins, Director, Regional Wastewater Reclamation Department
Victor Pereira, Director, Natural Resources Parks and Recreation
Eric Shepp, Director, Regional Flood Control District
Michael Racy, Racy Associates, Inc.

MAY 02 24 PM 02:58 PC CLK CF BD 

April 30, 2024

Martha Williams, Director
U. S. Fish and Wildlife Service
1849 C Street, N.W.
Washington DC 20240

Re: **Support for Establishing the Santa Cruz River Urban Wildlife Refuge in Tucson and Pima County, Arizona**

Dear Ms. Williams:

Pima County and the Pima County Regional Flood Control District have worked collaboratively over last 25 years to develop and implement our Multi-Species Habitat Conservation Plan (MSCP), which was signed in 2016. This is the regulatory side of our Sonoran Desert Conservation Plan, a locally led and designed plan, informed by science and shaped by extensive public input, to balance conservation of our natural and cultural heritage with continued development. Today I urge you to consider a new partnership; one focused on connecting people to nature, which is the most effective way to build long-term support for conserving these resources.

Those entering the Tucson metro area from the north via Interstate 10 initially see sand and gravel pits, a cement plant, and other industrial uses that line the banks of the Santa Cruz River. To the casual observer, what may not be readily apparent are the many more recent community efforts that are slowly improving stretches of the river, bringing it back to life and bringing the community back to its banks. The popular Loop multi-use trail system, which follows the Santa Cruz for over 20 miles, provides access via numerous trailheads, parks and playgrounds. Restoration projects, completed and underway, are greening up the river, attracting birds, wildlife and people and increasing groundwater recharge. Unique attractions like the Mission Gardens, engage schoolchildren and tourists at the birthplace of Tucson, celebrating thousands of years of human occupation and agriculture.

We want to partner with you in furthering the Biden Administration's American the Beautiful initiative through the establishment of the Santa Cruz River Urban Wildlife Refuge, focused first on Tucson's urban core. **We offer for your consideration three areas along the Santa Cruz River, totaling 630 acres, owned by the Regional Flood Control District as candidates for an initial base property for the refuge.** Descriptions of these properties are attached, and we invite you and your staff to tour these. In return, we understand that establishment of such a refuge will bring new federal resources to our community to conserve additional river properties, to restore and improve existing properties, and to increase programming to connect more people to nature.

The latter is especially important to Pima County in light of our recently adopted Prosperity Initiative policies. Pima County, our cities and towns and tribes, are embarking on a monumental effort to reduce generational poverty and improve community wealth by implementing evidence-based practices across jurisdictions. Research shows that Pima County has one of the lowest rates of economic mobility in the U.S. for low-income children, especially children of color. And we know where children grow up has a causal connection. Access to nature and green spaces is one of several environmental factors that has been found to make a difference, not only in health but in long term prosperity. Neighborhoods up and down the Santa Cruz River in metro Tucson have some of the highest rates of concentrated poverty.

The location of the Regional Flood Control District candidate base properties reflects the opportunity to achieve the dual purpose of enhancing the river and increasing prosperity of the community. Just as the US Fish and Wildlife Service is our partner in conservation, this is an opportunity to expand that partnership to include a new focus on our people. We strongly encourage you to begin the necessary steps to establish the Santa Cruz River Wildlife Refuge and commit to partner with you, our cities and towns up and down the river, and the numerous community organizations to make this refuge a reality.

Sincerely,

A handwritten signature in black ink that reads "Adelita S. Grijalva". The script is fluid and cursive, with the first name being the most prominent.

Adelita S. Grijalva
Chair, Pima County Board of Supervisors

Attachments

c: Luke Cole, Sonoran Institute
Mike Quigley, The Wilderness Society
Jan Leshner, Pima County Administrator
Carmine DeBonis, Jr., Deputy County Administrator
Francisco Garcia, MD, MPH, Deputy County Administrator & Chief Medical Officer
Steve Holmes, Deputy County Administrator
Nicole Fyffe, Interim Director, Conservation Lands and Resources
Jackson Jenkins, Director, Regional Wastewater Reclamation Department
Victor Pereira, Director, Natural Resources Parks and Recreation
Eric Shepp, Director, Pima County Regional Flood Control District

Pima County Regional Flood Control District Base Property Candidates for the Santa Cruz River Urban Wildlife Refuge

Today's mostly dry, urbanized Santa Cruz River upstream of downtown Tucson formerly supported perennial river flow, with thick mesquite bosque (forest) filling portions of the mile-wide floodplain. It is also likely that the Santa Cruz River's tributary, the West Branch, was once the main stem of the Santa Cruz River when the floodplain was wide and flat. Known as the birthplace of Tucson, this area is also a significant cultural landscape that warrants additional protection and investment.

In the mid 1800's, the flowing river and shallow groundwater supported agriculture, grain mills, and recreation at the Silverlake Hotel. But beginning in the 1890s, water diversions led to river downcutting on the main stem of the Santa Cruz River. The silty loam soils are highly erodible, subject to headcuts that form deep gullies and loss of overbank flooding. Groundwater pumping further diminished the aquifer such that perennial flow ceased in the late 1940's. River flow now only occurs in response to winter and summer rains, and releases of treated groundwater.

Farms in the historic floodplain were replaced by housing and light commercial development through the late 1970s. Through the 1970's, primitive constructed channel diversions on the West Branch diverted flood flows into the main stem in order to reduce flood risks to agriculture and new residential development. This work inadvertently protected the West Branch channel from the downcutting the Santa Cruz River experienced. In addition, tributary flows from the Tucson Mountains sustains ecosystem functions there for native wildlife. The now ephemeral conditions of the Santa Cruz and West Branch support Sonoran Interior Strand and Sonoran Deciduous Riparian Scrub vegetation communities, plus a large diversity of non-native vegetation. Much of the former-agricultural land bordering the river is denuded.

In 1984, the Regional Flood Control District (District) initiated a flood-prone land acquisition program and continues to acquire flood and erosion prone property from willing sellers along both the main river stem and the West Branch. This has resulted in considerable land holdings in the area, some of which would be appropriate for an Urban Wildlife Refuge. Specific areas are described below with map attachments.

Middle Santa Cruz River Property at Midvale Park

This 307-acre property made up of six parcels is located along and within the Santa Cruz River, approximately 5 miles south of downtown Tucson. Nearby is a large-regional shopping center, Pima Community College's Desert Vista Campus, and residential subdivisions. Major roads to the north, south and east include Irvington Road, Valencia Road and Interstate 19. The property is also accessible via Chuck Huckelberry Loop and Riverpark (Loop). The County-owned Valencia Site, comprised of two archeological sites with documented occupations spanning from 600 B.C. to A.D. 1200, is directly to the east and was determined to be nationally significant when listed on the National Register by the National Park Service.

The property was used for agricultural purposes until the mid-1980's when a developer purchased the land and developed the neighboring Laurel Heights subdivision. The District acquired the property in 2014. In 2017, the District partnered with the local non-profit Watershed Management Group to install water harvesting basins and rock structures on a small portion of the site to slow and infiltrate stormwater draining from the subdivision. Public complaints about excessive off-road vehicle use and illegal dumping prompted the District to install fencing in 2020 and 2022. Since that time, the District has been managing the property for non-native invasive species and maintenance of the water harvesting project area. The

land outside of the water harvesting project area is denuded except for an earthen channel along the eastern boundary. The channel captures stormwater from the subdivision, drains to the north and eventually into the river. Channel vegetation is primarily non-native trees, shrubs and grasses. East of this channel lies a recently constructed section of the Loop. The Loop receives frequent use by cyclists, roller bladers, and walkers. A small public parking lot containing ten parking spaces is located on the north end of the property.

The channel is comprised of Sonoran Interior Strand and Sonoran Deciduous Riparian Scrub vegetation communities, including a small population of native arrowweed (*Pluchea sericea*), a plant that was historically common along the river.

Portions of the property are subject to flooding. Occasionally the District requires access to maintain floodplain and erosion hazard areas, including but not limited to erosion repair, sediment removal, or maintenance of existing flood control infrastructure. A high voltage power line and a paved road easement crosses one of the parcels. The City of Tucson plans to build a vehicle bridge and bank protection across the river at Drexel Road, which is tentatively scheduled for construction in Fiscal Year 2026/27. The District has plans and funding programed to rehabilitate the Loop from Irvington to Drexel on the east bank of the Santa Cruz River, as well as funds programed for the design and construction of a new section of the Loop from Drexel to Valencia along the east bank.

Restoration and recreational opportunities include:

- Removal of non-native invasive species.
- Restoration of native plants to the floodplain overbank and denuded areas.
- Installation of Monarch Waystations and/or a pollinator garden.
- Installation of water harvesting basins and natural channel design features, when not in conflict with cultural resources.
- Repairing erosion using techniques that protect and preserve cultural resources.
- Abandoning existing road easement.
- Installing access control infrastructure to restrict vehicular access.
- Identifying and designating a trail system, as well as closing and restoring all unnecessary social trails.
- Installing interpretive signage.
- Recreational and educational programming.

Paseo de las Iglesias

This 1.5 mile long, 230 acre property is comprised of 26 parcels along a wide section of the Santa Cruz River, approximately 2 miles south of downtown Tucson, and east of the I-10/I-19 interchange, south of Silverlake Road, and north of Ajo Road.

Adjacent mixed-use development includes single family homes, light industrial/commercial, and two mobile home parks. The property includes the Santa Cruz and Julian Wash connection of the Loop.

There is a high voltage electrical substation on the southwest corner of the project. The retired Ryland landfill is located within the project area. Several private properties west of Paseo de las Iglesias still retain equestrian and backyard livestock uses.

In the early 2000s the District partnered with the U.S. Army Corps of Engineers on Santa Cruz River ecosystem restoration feasibility studies. Based on site conditions and benefits analysis, the preferred

concept informed the District's Paseo de las Iglesias multi-purpose ecosystem restoration project plan. Voter-approved bonds funded the design and construction, and in 2015 the District completed the project. https://www.youtube.com/watch?v=YAycYx0_jd4 Unstable riverbanks were repaired for public safety. Multi-use trail construction connected a former 1.5-mile Loop trail gap and eastward connection to Julian Wash. On either side of the incised river channel, 100-acres of water harvesting improvements were installed on terraces and historic floodplain. Reclaimed water irrigation supported the installation of over 10,000 container plants, plus diverse seed mix of locally native vegetation. A pre-existing ephemeral pond that supports six species of native toads was enlarged. Project design and construction actions prioritized protection of pre-existing ecosystem resources for native wildlife. Construction staff all received Environmental Awareness training, not limited to cultural resources, vulnerable wildlife, and invasive plants. Burrowing owls were relocated, and later successfully reintroduced. Herpetofauna salvage/translocation and novel wildlife fencing fostered preservation of slower moving species, including an urban population of regal horned lizard. Lizard recovery and bird monitoring showed improved species diversity and abundance compared to unrestored similar riparian habit in Tucson.

The District partners with Pima County Natural Resource Parks and Recreation for maintenance, including prioritized invasive plant control. There are Loop trail parking nodes on east and west sides of the project near Silverlake Road, with shade structures, interpretive signage, and a public restroom. Part of the area is leased to the Community Food Bank Milpitas Garden. Tucson Audubon is undertaking a grant funded saguaro introduction experiment in a portion of the project area.

Restoration and recreational opportunities include:

- Removal of prioritized non-native invasive species.
- Installation of thermally buffered bat house on a maintenance building
- Repair and maintenance of novel predator-resistant wildlife fencing
- Installation of predator-resistant wildlife fencing along I-19 right of way
- Identifying need and locations for ATV exclusion fencing
- Risk analysis related to optional trail connection to West Branch Preserve
- Re-initiate citizen or professional vegetation and wildlife monitoring
- Recreational and educational programming.

West Branch of the Santa Cruz

This 1.3 mile long, 93-acre property is comprised of 22 parcels along the West Branch Santa Cruz River, located 0.4 miles upstream of the confluence with the Santa Cruz River, 2 miles south of downtown Tucson, south of Silverlake Road, east of Mission Road.

Adjacent development includes single family homes, apartments, and two mobile home parks. Primitive paths and maintenance routes receive daily uses by equestrians, neighbors, and occasional unpermitted ATVs. Several private properties around the West Branch retain equestrian and backyard livestock land use.

In 2001 the District created the 72-acre West Branch Preserve, per mitigation conditions of a U.S. Army Corps of Engineers permit for construction of bank protection downstream (offsite). Compliance rules are provided in a Specific Management Plan with stated goal to preserve, protect, and improve the natural floodplain functions and habitat quality.

The District manages the property to eradicate prioritized invasive species, mitigate habitat loss associated with our current mega-drought, and reduce deleterious floodplain de-watering. In 2004,

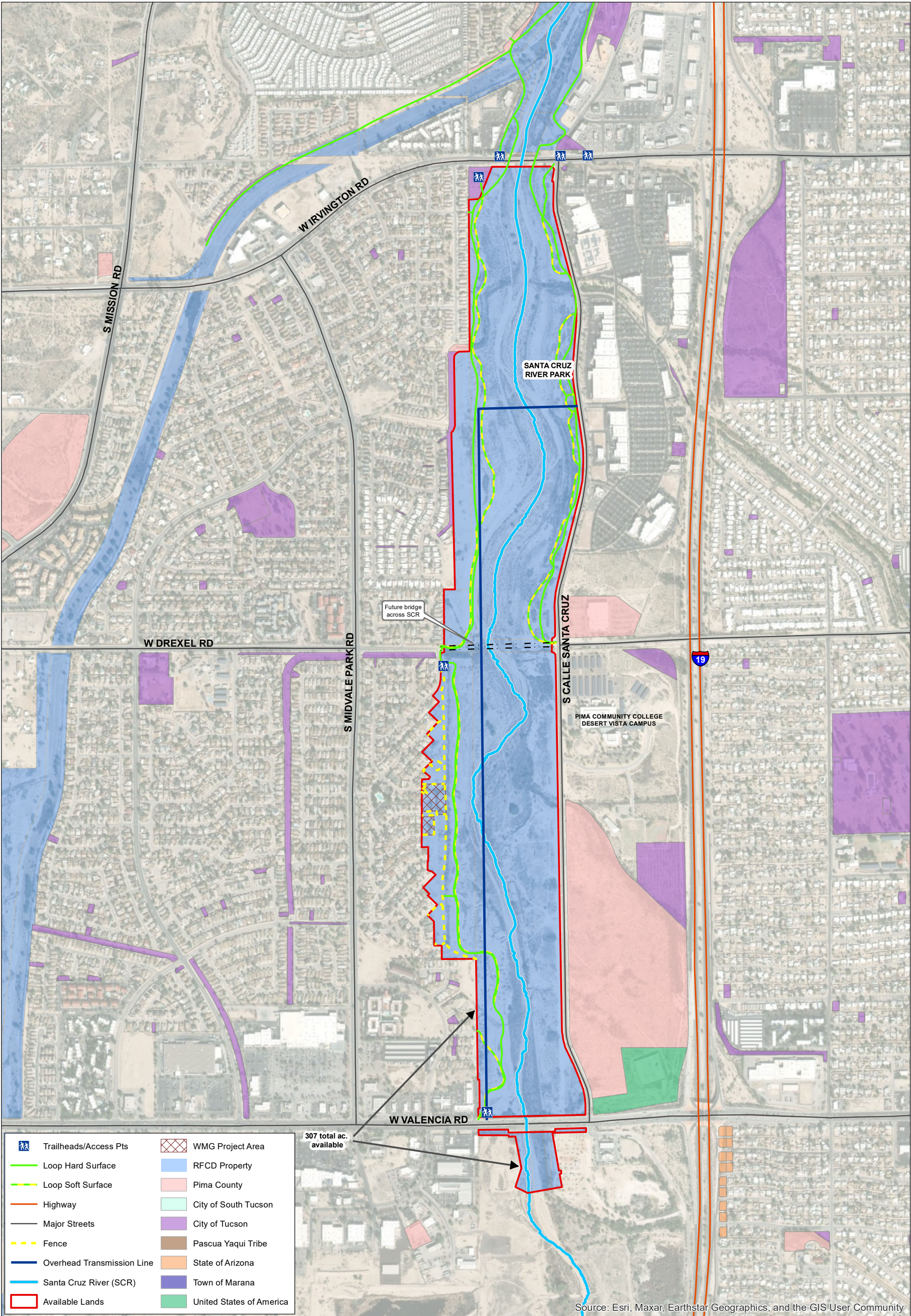
reclaimed irrigation was extended upstream in response to significant die-back of riparian vegetation. In 2009, a failed grade control structure was replaced to protect from headcut migration upstream. In 2012, 7-acres of water harvesting earthworks and a new ephemeral toad breeding pond was built to retain overbank floodwater and support new riparian vegetation adjacent an area of stream bank collapse. In 2022, eroding channel banks were repaired, 10-acres of water harvesting earthworks were installed and native seed was applied to protect a pre-existing native toad breeding pond, and foster improved shelter conditions for the native Narrow-mouthed Toad.

The area is fenced to prevent vehicle egress, with one parking node off Mission Road in the center of the area. Preserve rules signage is maintained at all access points, and neighborhood outreach has been used effectively to correct wildcat trails or other inappropriate land use.

Restoration and recreational opportunities include:

- Removal of non-native invasive species.
- Repairing erosion using techniques that preserve natural and cultural resources.
- Installing flood gates at Enchanted Hills Wash culverts to restrict ATV access.
- Partnership in development of educational “nature center” and caretaking agreement
- Risk analysis related to optional trail connection to Loop at Paseo de las Iglesias
- Re-initiate citizen or professional vegetation and wildlife monitoring
- Recreational and educational programming.

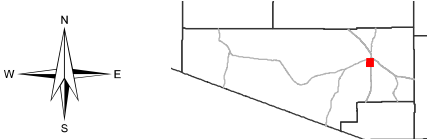
Maps Attached



Pima County Regional Flood Control District
201 N. Stone Ave - 9th Floor
Tucson, Arizona 85701-1797
(520) 724-4600, FAX: (520) 724-4621
<http://www.rfcd.pima.gov>

Midvale Park Property
Page 3 of 3

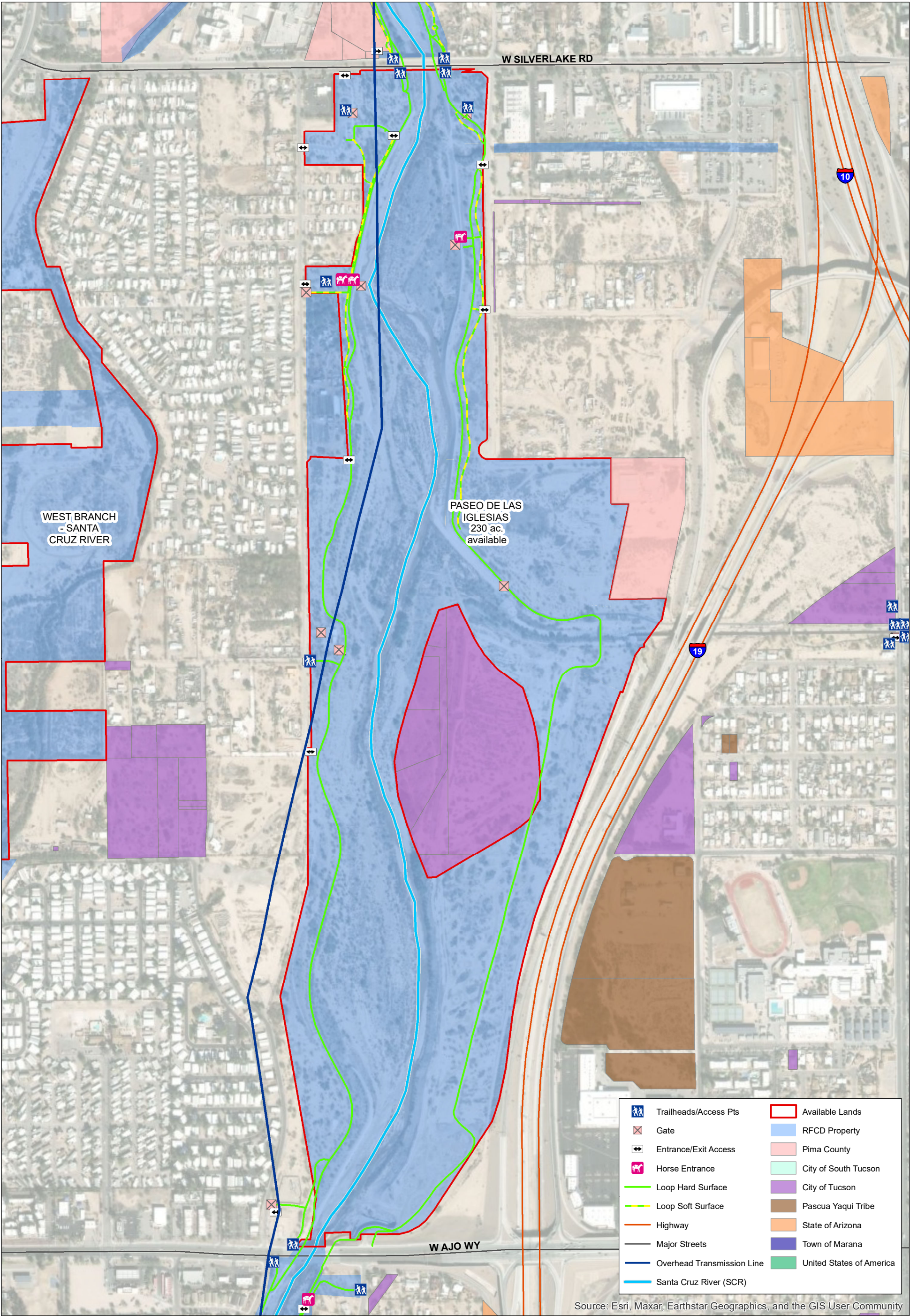
1 inch = 1,000 feet



Date: 4/26/2024

The information depicted on this display is the result of digital analyses performed on a variety of databases provided and maintained by several governmental agencies. The accuracy of the information presented is limited to the collective accuracy of these databases on the date of the analysis. The Pima County Regional Flood Control District makes no claims regarding the accuracy of the information depicted herein.

This product is subject to the GIS Division Disclaimer and Use Restrictions.



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

\\central.pima.gov\GIS\Departments\Projects\ISD\rache\NFyffe\SCR Urban Wildlife Refuge\SCR_map2_PaseoDeIglesias_NEW

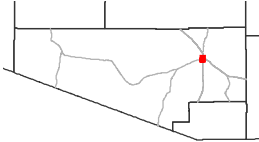
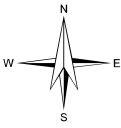


Pima County Regional Flood Control District
201 N. Stone Ave - 9th Floor
Tucson, Arizona 85701-1797
(520) 724-4600, FAX: (520) 724-4621
<http://www.rfcd.pima.gov>

Paseo de las Iglesias

Page 2 of 3

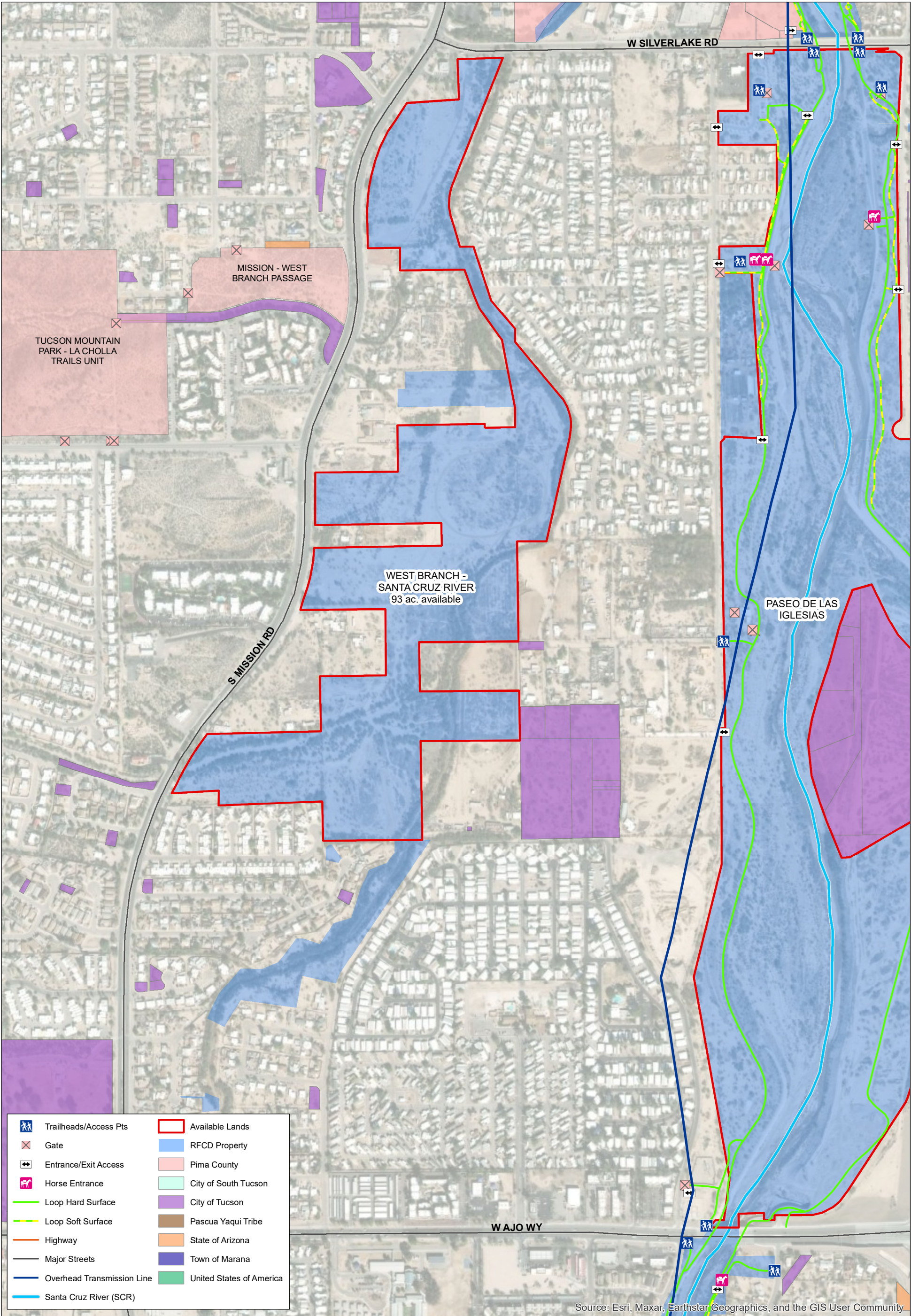
1 inch = 600 feet



The information depicted on this display is the result of digital analyses performed on a variety of databases provided and maintained by several governmental agencies. The accuracy of the information presented is limited to the collective accuracy of these databases on the date of the analysis. The Pima County Regional Flood Control District makes no claims regarding the accuracy of the information depicted herein.

This product is subject to the GIS Division Disclaimer and Use Restrictions.

Date: 4/26/2024

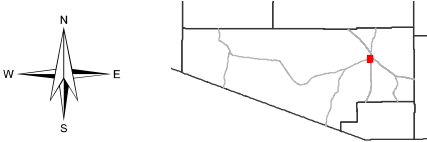


Pima County Regional Flood Control District
201 N. Stone Ave - 9th Floor
Tucson, Arizona 85701-1797
(520) 724-4600, FAX: (520) 724-4621
<http://www.rfcd.pima.gov>

West Branch - Santa Cruz River

Page 1 of 3

1 inch = 600 feet



Date: 4/26/2024

The information depicted on this display is the result of digital analyses performed on a variety of databases provided and maintained by several governmental agencies. The accuracy of the information presented is limited to the collective accuracy of these databases on the date of the analysis. The Pima County Regional Flood Control District makes no claims regarding the accuracy of the information depicted herein.

This product is subject to the GIS Division Disclaimer and Use Restrictions.