



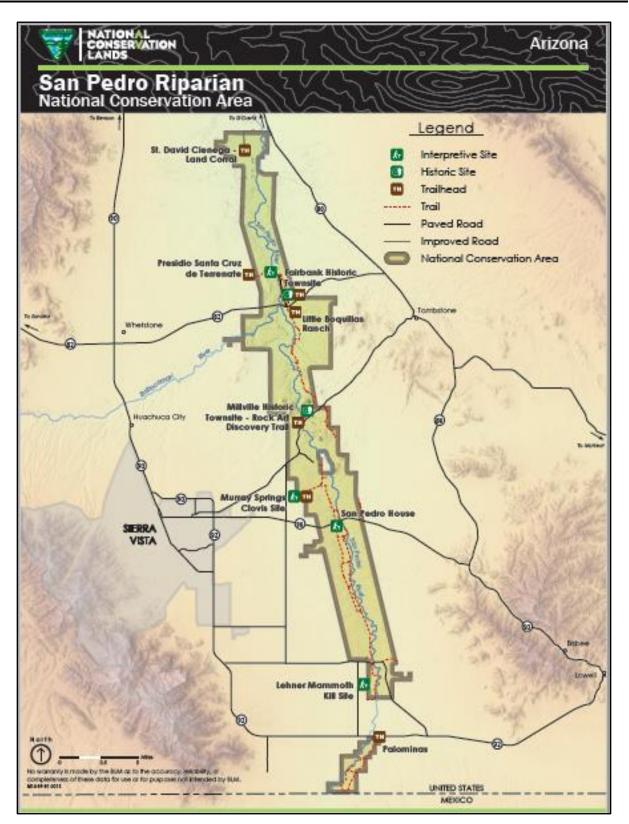
**Arizona** 2023: Annual Manager's Report

# San Pedro Riparian

**National Conservation Area** 



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### Accomplishments

During the week of October 31, 2022, Bureau of Land Management (BLM) and the Friends of San Pedro River (FSPR) hosted 27 Army soldiers from Fort Huachuca, who worked around the San Pedro House, to improve the trail for greater accessibility to be consistent with the Americans with Disabilities Act. The work included moving 15 tons of gravel and leveling the ground.



In Fiscal Year (FY) 2023, the Arizona Conservation Corps (AZCC) left quite an impression on the Conservation Area, spending time improving recreational access. The crew cleared the trail leading to the Fairbank Cemetery Site, installed steps for the Fairbank volunteers to walk up to the open/closed sign, and installed a kiosk.

Next, they constructed steps to improve safe public access to the San Pedro River at both the Charleston and Millville recreational access areas (pictured on right).

In addition, Tucson Field Office (TFO) staff and AZCC crews constructed boundary fencing and installed water gap barrier in the San Pedro Riparian National Conservation Area (Conservation Area). The work had been a daunting task for all as large portions of fence needing repair were in remote locations heavily vegetated with mesquites, white thorn cacti, and traversed deep gullies.

Four BLM volunteers from a local Adopt-a-Trail group joined TFO staff for a site rehabilitation project focused on an area previously disturbed during the



April 2023 Williams Fire. A utility company, conducting emergency repairs, bladed an unauthorized road in a resource sensitive area.

TFO staff and volunteers gathered damaged trees and branches previously cut by fire crews, who responded to the Williams Fire. These were combined with fresh branches pruned from existing vegetation and repurposed on the altered site. Larger vegetation was placed on the downhill slope of the trespass road, to act as a vehicle/pedestrian barrier. The addition of smaller branches was done to reduce soil erosion with grass and small vegetation expected to regenerate within a season. After several hours of work, the team had camouflaged the unauthorized road from public view and made it not passable to vehicles.



### Challenges

The Conservation Area, containing about 43 miles of the upper San Pedro River, was designated by Congress as a National Conservation Area on November 18, 1988. The primary purpose for the designation is to protect and enhance the desert riparian ecosystem, a rare remnant of what was once an extensive network of similar riparian systems throughout the Southwest. The loss of water within the San Pedro River and the loss of habitat for the many animal species that call the corridor home, continues to be a primary challenge. Additional challenges include loss of cultural resources (specifically historical structures) from damage associated with inappropriate recreational use of the landscape, and unpermitted activities.

The BLM is working with partners like the Cochise Conservation and Recharge Network (CCRN), to study local climate impacts and develop plans for landscape level restoration strategies. The CCRN was formed in 2015 to implement projects designed to increase groundwater recharge and protect groundwater resources in the most strategic places. This helps ensure the health of the riparian corridor and secures water for communities.

These strategies are not only good for the environment but can also help to mitigate the effects of climate change. In the years ahead, the BLM and its partners will consider many ways of building climate resilience. Some possibilities include:

- 1. Groundwater Recharge
  - Design/Construct the Coyote Wash Stormwater Management, Riverstone Effluent, and Bisbee Effluent Recharge Projects infrastructure such as campsites, outhouses, and parking lots to withstand extreme weather events.
  - Continue the operation, maintenance, and hydrologic monitoring of all existing network sites.
- 2. Water Conservation
  - Implement conservation and watershed health projects.
  - Continue to use groundwater modeling and other tools to evaluate the overall effectiveness of all projects.

### Visitors

In 2023, approximately 178,605 visitors came to the Conservation Area. Visitor data was collected from traffic counters, number of participants attending authorized Special Recreation Permit (SRP) activities, and visitor data provided by the Friends of the San Pedro River (FSPR). Partner data indicated 515 education participants, 1,512 interpretive participants and a total of 11,395 volunteer hours.

The Fairbank Recreation Site is a popular visitor destination. A new post and cable fence was installed to provide visitors an opportunity to safely view the Mercantile building (see below).



### Partnerships

#### FSPR | conserving and sharing the river (sanpedroriver.org)

The Friends of San Pedro Riparian (FSPR) is a non-profit volunteer group that supports the BLM's efforts of public outreach within the community. Their communications strategy addresses social media, publicity, and dissemination of the BLM's conservation message. The Fairbank and San Pedro House visitor contact stations are independently operated and staffed by FSPR volunteers and one paid employee. Throughout 2023, as feasible, FSPR provided outdoor volunteer greeters at the San Pedro House and Fairbank, to provide visitors information about the Conservation Area.

#### Member Agency Profiles | Upper San Pedro Partnership

The BLM participates in the Upper San Pedro Partnership, which is a consortium of federal, state, and local agencies as well as stakeholders and non-profit organizations. Established in 1998, it laid the foundation for water management by building strong hydrologic science to inform decision making.

#### Sky Island Alliance (SIA)

The SIA is a non-profit organization dedicated to conducting science and increasing the knowledge base regarding the ecological diversity of the sky island habitats in Southeastern Arizona.

#### The Nature Conservancy in Arizona

Every year, the BLM partners with The Nature Conservancy for the annual wet-dry walk of the San Pedro River. Since 2007, every mile of the river on the Conservation Area is monitored for perennial water at the driest time of the year (end of June).

#### **Cochise Conservation and Recharge Network**

The mission of the CCRN is to implement a regional network of land and water management projects that result in a healthy watershed, flowing San Pedro River, conservation of water resources, and a vibrant local economy. The CCRN was originally formed in 2015 by the City of Sierra Vista, Cochise County, Hereford Natural Resource Conservation District, and The Nature Conservancy. The City of Bisbee joined in 2016, Fort Huachuca joined in 2021, and the BLM joined in 2022. Other partners besides the BLM include Fort Huachuca, and Arizona Game and Fish Department. Many of these entities also partner with the BLM on projects throughout the San Pedro Watershed.

#### The Fort Huachuca Sentinel Landscape (FHSL)

Designated in 2015, the FHSL encompasses approximately 2.9 million acres of Southeastern Arizona and is a place where conservation, working lands, and national defense interests converge. Collaborative efforts aim to strengthen military readiness, conserve natural resources and habitat, bolster agricultural economies, increase public access to outdoor recreation, and enhance resilience to climate change across the larger landscape.

### The San Pedro Riparian National Conservation Area Memorandum of Understanding (MOU) for Cooperative Monitoring and Management

Signed in 2021, the MOU establishes a robust monitoring and adaptive management framework to ensure land and water management projects are sufficient to meet local water needs and purpose of the Conservation Area.

The Gila District and the TFO hosted interested stakeholders for the annual Conservation Area all partners meeting, to share progress and ask for input on implementation of the 2019 Resource Management Plan (RMP). Leaders of the Uplands, Riparian, and Recreation/Cultural Working Groups provided updates on the work done in the past year to implement the RMP and further conservation values.

### Science

On Friday, June 9, 2023, BLM staff and contractors conducted riparian vegetation monitoring on the Conservation Area, to help with the Palominas reaches. This monitoring data will feed into a model which will inform the condition of the riparian vegetation on the San Pedro and water needs of the riparian area.

The assessment model allows riparian ecosystem changes from increasing or decreasing water availability to be diagnosed by measuring hydrologically sensitive vegetation traits. The underlying physical processes that drive the assessment model are the hydrologic thresholds of the dominant vegetation types in the ecosystem. The assessment emphasizes plant functional groups and structural traits, rather than species.

In the future, it is anticipated that vegetation data collection and functional condition analysis for the Conservation Area will be periodically repeated to determine trends in riparian health and guide adaptive management. This information will be used to support decision making associated with the *Cooperative Monitoring and Management of the San Pedro Riparian National Conservation Area and Surrounding Areas within Cochise County, Arizona*, MOU that was signed by the BLM, U.S. Army Garrison Fort Huachuca, Cochise County, and the City of Sierra Vista in September of 2021.



### **Climate Impacts**

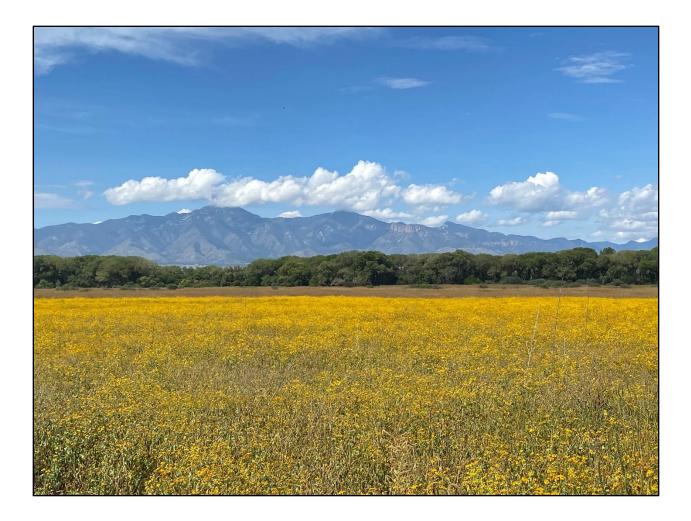
Drought conditions continued within the Conservation Area. The San Pedro Riparian area has experienced rising temperatures due to climate change leading to more frequent and intense heatwaves, which stresses the vegetation and wildlife dependent on the riparian corridor. Higher temperatures also increased evaporation rates, leading to reduced surface water availability in the river and its surrounding ecosystem. Invasive species are becoming more pronounced in areas where the soils have been disturbed further exacerbating the impact on the San Pedro River corridor. Climate changes are causing a shift in the distribution and abundance of plant and animal species within the riparian corridor. Twenty-five years of annual wet-dry mapping indicates that most reaches are stable, however, overall, the total wet miles have declined with the Conservation Area.

## **Climate Resiliency**

A basis for resiliency in the Conservation Area is the ongoing collaborative action with local, state, and federal agencies and partner organizations. The parties continue to work in identifying a monitoring framework that can be used to (1) objectively assess trends in relevant hydrological, biological, and ecological conditions in reference to recent conditions; (2) determine whether the cumulative actions being undertaken by the parties are objectively working to maintain or improve trends towards meeting the MOU Objectives over time; and (3) inform potential responses and adjustments to their collaborative actions accordingly. This directly ties back to the Resource Management Plan objectives relative to health of the overall riparian ecosystem and shared goals and mutual interests detailed within the Conservation Area Cooperative Plan. There is a focus on current and future riparian ecosystem health of the Conservation Area, the data required to define riparian health over time, previous studies, and analyses, and estimated annual costs. BLM has moved Inflation Reduction Act funds to USGS to assist in development of a transboundary model to help inform the integrated groundwater/surface water model being developed for the San Pedro River corridor.

### Social and Environmental Justice

Consultation with 12 federally recognized tribes is maintained on a consistent basis to ensure that proposed uses and enhancements are carefully analyzed with tribal viewpoints incorporated into the decision-making process. This includes all livestock grazing, recreational opportunities, wildlife enhancements, and cultural resource use and protection. All of these have a positive impact to the local area. Environmental justice approaches in the Conservation Area includes measures that enhance the resilience of nearby communities to these climate-related challenges supporting climate adaptation strategies through numerous water recharge projects.



### Events

Team Gila conducted its All-Hands Annual Gathering on March 15, 2023. Approximately 65 employees from the Gila District Office, Safford Field Office and TFO converged at the San Pedro House Recreational Site. The gathering was the first in many years and it was timely based on the large numbers of employees recently hired throughout the district. Team members spent time getting to know one another through numerous teambuilding activities, and networking. Managers took time to reflect and thank employees for all the district's accomplishments in the previous year and their continued work in this year.



The TFO hosted a National Public Lands Day Event at the San Pedro House Recreation Site at the request of the Girls Confidence Camp. BLM staff shared personal stories about who they are and what they do for public lands. Participants engaged in educational activities then went for a walk on nearby trails, where kids can be kids and the resource can speak for itself.



### San Pedro Riparian

#### **National Conservation Area**

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