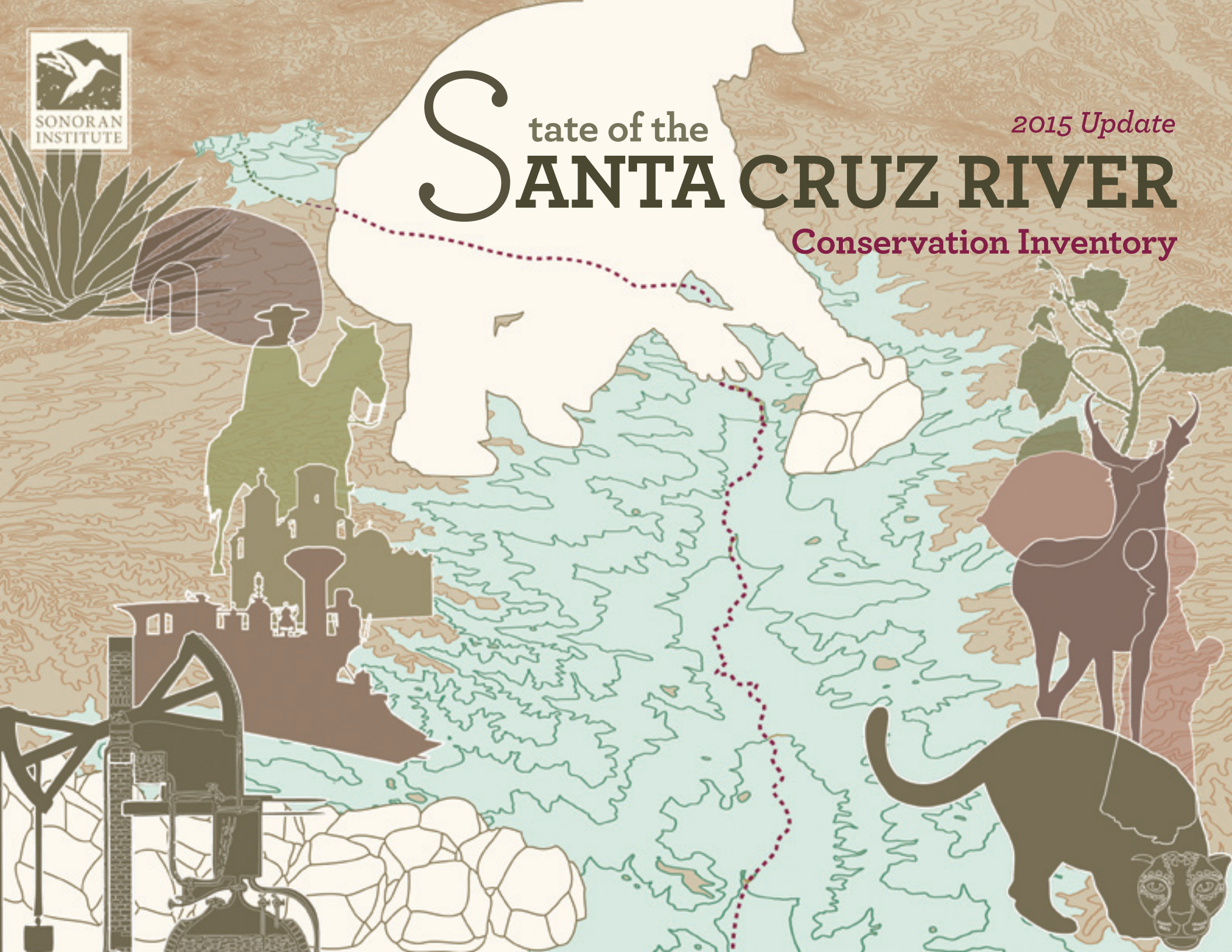




# State of the **SANTA CRUZ RIVER**

*2015 Update*

## *Conservation Inventory*





## Sonoran Institute Mission and Vision

The Sonoran Institute inspires and enables community decisions and public policies that respect the land and people of western North America. Facing rapid change, communities in the West value their natural and cultural resources, which support resilient environmental and economic systems.

Founded in 1990, the Sonoran Institute helps communities conserve and restore those resources and manage growth and change through collaboration, civil dialogue, sound information, practical solutions and big-picture thinking.

Our passion is to help shape the future of the West with:

- Healthy Landscapes that support native plants and wildlife, diverse habitat, open spaces, clean energy and water, and fresh air.
- Livable communities where people embrace conservation to protect quality of life today and in the future.
- Vibrant economies that support prosperous communities, diverse opportunities for residents, productive working landscapes and stewardship of the natural world.

The Sonoran Institute is a nonprofit organization with offices in Tucson and Phoenix, Arizona; Bozeman, Montana; Glenwood Springs, Colorado and Mexicali, Baja California, Mexico.

[www.sonoraninstitute.org](http://www.sonoraninstitute.org)

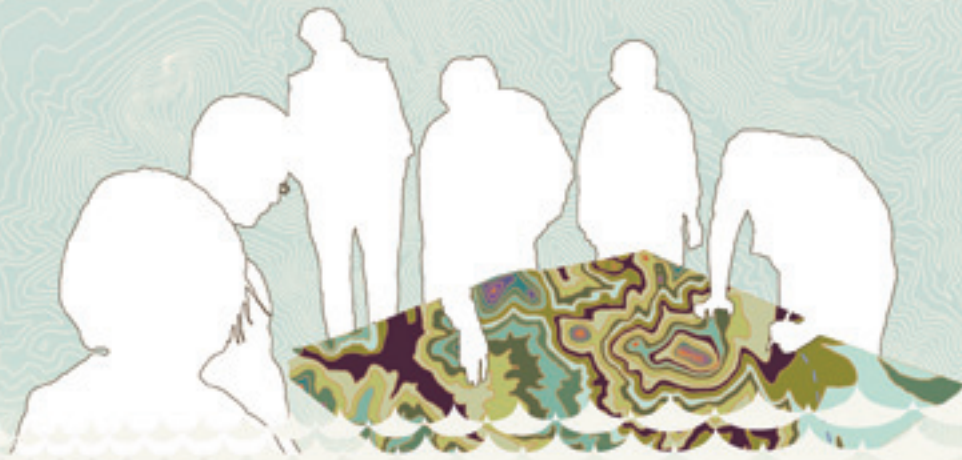




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*State of the Santa Cruz River*—companion document is available at: <http://tiny.cc/scrci>



## Introduction

The Santa Cruz River and other riparian areas in the watershed have long been the backbone of the region's natural and cultural heritage. This rich history is highlighted in the *State of the Santa Cruz River* (available at <http://tiny.cc/scrci>).

This companion document, *State of the Santa Cruz River—Conservation Inventory*, aims to acknowledge the numerous conservation efforts underway throughout the region that promote watershed health as well as protect and restore the river. Understanding the “who”, “what”, and “where” of conservation efforts is crucial to fostering collaboration and ensuring long-term conservation success. Recognizing conservation priorities is also vital to success. This resource compiles the following:

**Who:** different organizations, alliances, and collaborations working in the watershed. If your group or effort is missing, please contact us so we can include your work.

**Conservation Efforts:** the general location and groups implementing restoration, monitoring, or some other conservation activity.

**Conservation Priorities:** the general location and description of collectively identified areas that are of high conservation value.

### HOW WAS THE INVENTORY COMPLETED?

This inventory stems primarily from a binational mapping session held during the Madrean Archipelago Conference in May 2012 (see Santa Cruz River Conservation Symposium, <http://tiny.cc/scrci>). The goals of the mapping session were to identify conservation efforts and conservation priorities. The mapping exercise focused on the southern half of the Santa Cruz River watershed, from the Pima/Pinal County line south into Mexico.

The Sonoran Institute provided draft maps that included points identifying locations of known conservation efforts. Each point was marked with a number that corresponded to a general description of the effort and the lead organizations involved. Participants were asked to comment on existing points and descriptions, as well as draw additional points associated with other conservation efforts. The resulting inventory included the following efforts: land protection, monitoring, research, restoration, coalition or partnership, public utility, education, and inventory. We presented updated versions of these maps at Santa Cruz River Research Days in April 2013. Additional efforts were identified at that time.

To determine conservation priorities, we asked participants to map and describe areas that were of high value. The attendees of the 2012 mapping session identified all the areas in the following maps. The conservation priority map is





preliminary and needs your input. Please contact us to update the map with additional priorities.

As we read in *State of the Santa Cruz River*, natural and cultural resources are inextricably linked along the river channel and throughout the watershed. Therefore, this inventory includes conservation efforts and priorities that relate to both natural and cultural resources. We use the term “cultural” loosely to refer to efforts and priorities that relate more directly to people rather than nature. However, people are part of nature, so this label is subjective. The distinction has relevance on-the-ground, however, as natural and cultural conservation groups often work independently and in different circles. With this inventory, we hope to catalyze new partnerships across sectors or strengthen existing relationships.

## 2015 UPDATE

In partnership with the Santa Cruz Valley Heritage Alliance (SCVHA), this inventory was updated with more than 50 additional cultural efforts and priorities drawn from the preliminary inventory compiled for the *Feasibility Study for a Santa Cruz Valley National Heritage Area* and reviewed by the network of SCVHA partners. Proposed additions were presented at Santa Cruz River Research Days in March 2015 where additional feedback was captured.

## OVERVIEW OF TERMS

**Santa Cruz River Watershed**—the area encompassed by lands that water runs over, under, or through on its way to the river.

**Riparian**—the plant and animal communities that are associated with water bodies like streams or dependent on sites with year round or seasonal water.

**Restoration**—enhancing the health or integrity of the resources in a particular location.

**Monitoring**—collecting scientific information at regular intervals, as opposed to one time only, in order to understand the status or condition of the resources in a particular location; monitoring data can be used to answer research questions.

**Research**—collecting and analyzing scientific data to answer a specific question about a resource.





## Who is Working in the Region?

Below are the organizations and entities identified in the inventory. Click on the name to visit the organization's website.

[Altar Valley Conservation Alliance](#)

[Anza Trail Coalition](#)

[Archaeology Southwest](#)

[Arizona Aerospace Foundation](#)

[Arizona Game and Fish Department](#)

[Arizona Department of Environmental Quality](#)

[Arizona Native Plant Society, Tucson Chapter](#)

[Arizona Site Stewards](#)

[Arizona State Historic Preservation Office](#)

[Arizona State Land Department](#)

[Arizona State Museum](#)

[Arizona State Parks](#)

[Asociación de Reforestación de Ambos Nogales](#)  
(Association of Reforestation for Ambos Nogales)

[Audubon Arizona](#)

[Buenos Aires National Wildlife Refuge](#)

[Bureau of Land Management](#)

[Bureau of Reclamation](#)

[Catalina State Park](#)

[Cienega Watershed Partnership](#)

[City of Tucson](#)

[Coalition for Sonoran Desert Protection](#)

[Coronado National Forest](#)

[DeGrazia Foundation](#)

[Desert Botanical Garden](#)

[Empire Ranch Foundation](#)

[Frente Cívico Nogalense](#) (non-profit working in Nogales, Sonora, website unavailable)

[Friends of Canoa Ranch](#)

[Friends of the Santa Cruz River](#)

[Friends of Sonoita Creek](#)

[Friends of Tubac Presidio Park and Museum](#)

[Friends of Tucson's Birth Place](#)

[FROG Conservation Project](#)

[National Audubon Society](#)

[Instituto Tecnológico de Nogales](#)

[International Boundary and Water Commission](#)

[Jewish History Museum](#)

[National Fish and Wildlife Foundation](#)

[National Park Service, Sonoran Desert Network](#)



National Park Service, Tumacácori National  
Historical Park

Oro Valley Historical Society

Patronato San Xavier

Pima Association of Governments

Pima Community College

Pima County

Pima County Regional Flood Control District

Pima County Regional Wastewater Reclamation  
Department

San Xavier Co-Op Farm (Tohono O'odham group,  
website unavailable)

Santa Cruz County

Save the Scenic Santa Ritas

Santa Cruz Valley Heritage Alliance

Sky Island Alliance

Sonoran Institute

Sonoran Joint Venture

Southern Arizona Buffelgrass Coordination Center

Southwest Monarch Study

The Archaeological Conservancy

The Hummingbird Monitoring Network

The Nature Conservancy  
[www.nature.org](http://www.nature.org) or <http://azconservation.org>

Tohono O'odham Nation—San Xavier District

Town of Marana

Town of Oro Valley

Town of Sahuarita

Tucson Audubon Society

Universidad de Sonora, Mexico

University of Arizona

University of Arizona, Water Resources  
Research Center

U. S. Army Corps of Engineers

U. S. Fish and Wildlife Service

U. S. Geological Survey

Vail Preservation Society

Vail Unified School District

Watershed Management Group





# Conservation Efforts

## INVENTORY MAPS

The maps on the following pages show the general locations of conservation efforts. Each is marked with a discrete number. We overlaid these numbers on a base map of natural and cultural resources. This base map includes archaeological preserves identified by Santa Cruz Valley Heritage Alliance in the *Feasibility Study for the Santa Cruz Valley National Heritage Area*, historical districts, and protected lands that preserve both natural and cultural resources. For example, Pima County acquired thousands of acres of land specifically to protect ranches, historic sites, and other important cultural and natural resources as part of the Sonoran Desert Conservation Plan (learn more about the plan at: <http://www.pima.gov/cmo/sdcp/index.html>).

The overview map shows the portion of the Santa Cruz River Watershed represented in this inventory and provides the legend for the base map. Maps on the pages immediately following the overview map display the conservation efforts identified in the Tucson and Nogales regions. **Click within the boxes on the overview map to easily navigate to the regional map of interest.**

To study a particular mapped effort, locate the corresponding number, or Map ID, in the list that follows the maps. **Click on the effort icon in the map to easily navigate to the page that includes the corresponding effort description.** Buttons at the bottom of each page will take you back to either regional map.

The description of each **conservation effort** outlines the following:

- Map ID;
- resource type (natural, cultural, or both);

- region or location;
- effort type;
- groups or partners involved;
- activities; and
- timeframe.

The descriptions do not provide exhaustive detail about each conservation effort, but rather a quick reference to help identify potential contacts. However, more information is available for some of the conservation efforts at: <http://www.southwestlearning.org/santacruz>

## WHAT ARE WE MISSING?

We recognize that this inventory is far from complete. We hope this will be a useful reference for the natural and cultural conservation community to learn from each other and better coordinate efforts. We trust that this reference will continue to grow and have designed this publication in such a way to permit easy updates with new information. Currently this resource is a digital publication, but we hope it will evolve into a more interactive tool in the future.

## SUBMITTING NEW INFORMATION

Please submit new information or modifications/updates to existing information in this document to: Claire Zugmeyer at [czugmeyer@sonoraninstitute.org](mailto:czugmeyer@sonoraninstitute.org). Type “Conservation Inventory” in the subject line and we will update the document.

# OVERVIEW MAP



- Historical Districts
- Archaeological Preserves
- Anza Trail Corridor
- Wastewater Treatment Plant
- Flow Direction

## FLOW STATUS\*

- Perennial (year-round)
- Effluent Dominated
- Formerly Perennial
- Seasonal/Intermittent

\*United States – 2010, The Nature Conservancy; Mexico – 2003, Arizona-Sonora Desert Museum

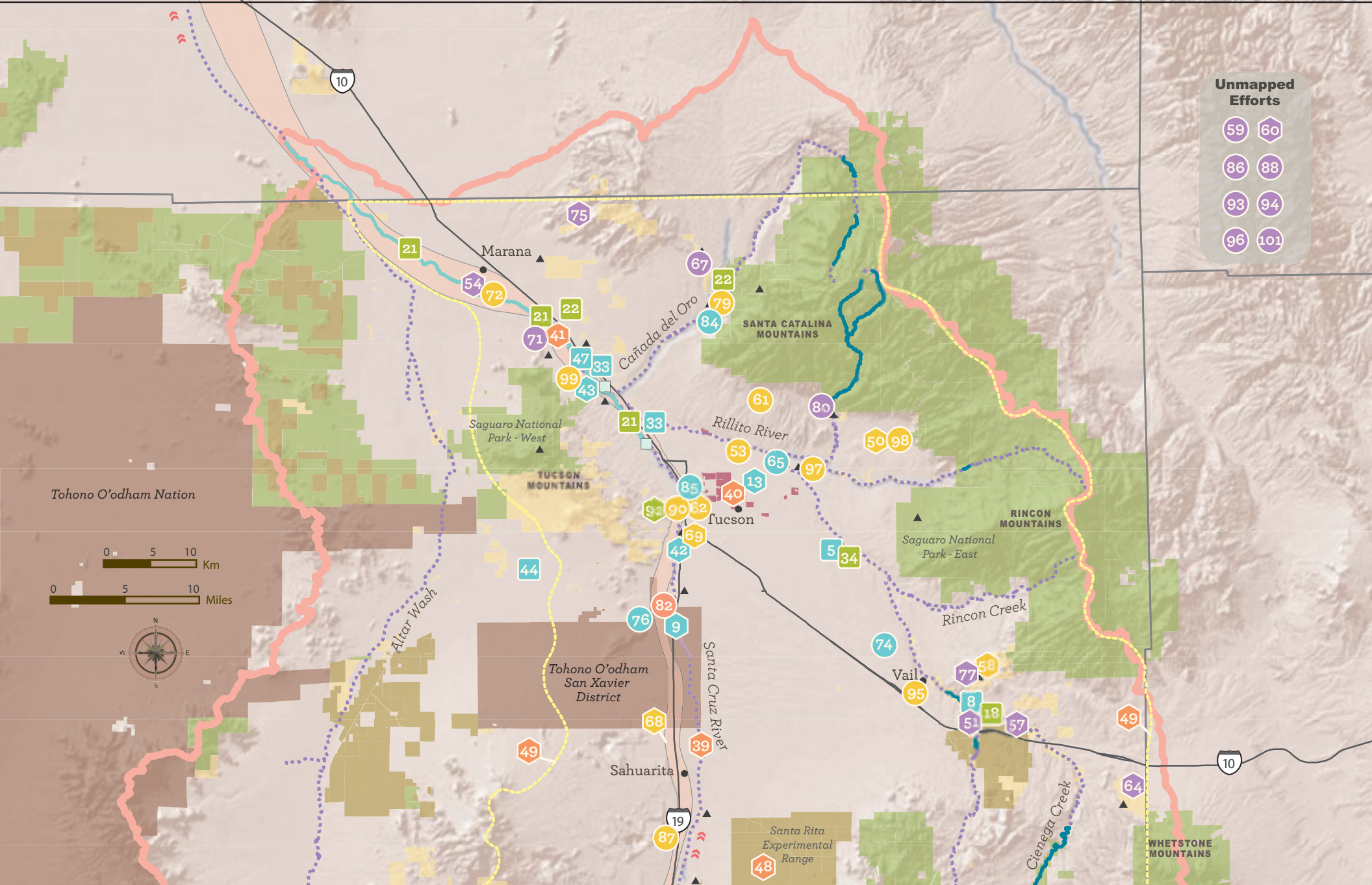
## LAND PROTECTION\*

- U.S. Federal Protection
- U.S. State, Local, Private Protection
- U.S. State, Local, Private – Managed for Conservation

\*Mexican landownership differs, conservation status unknown





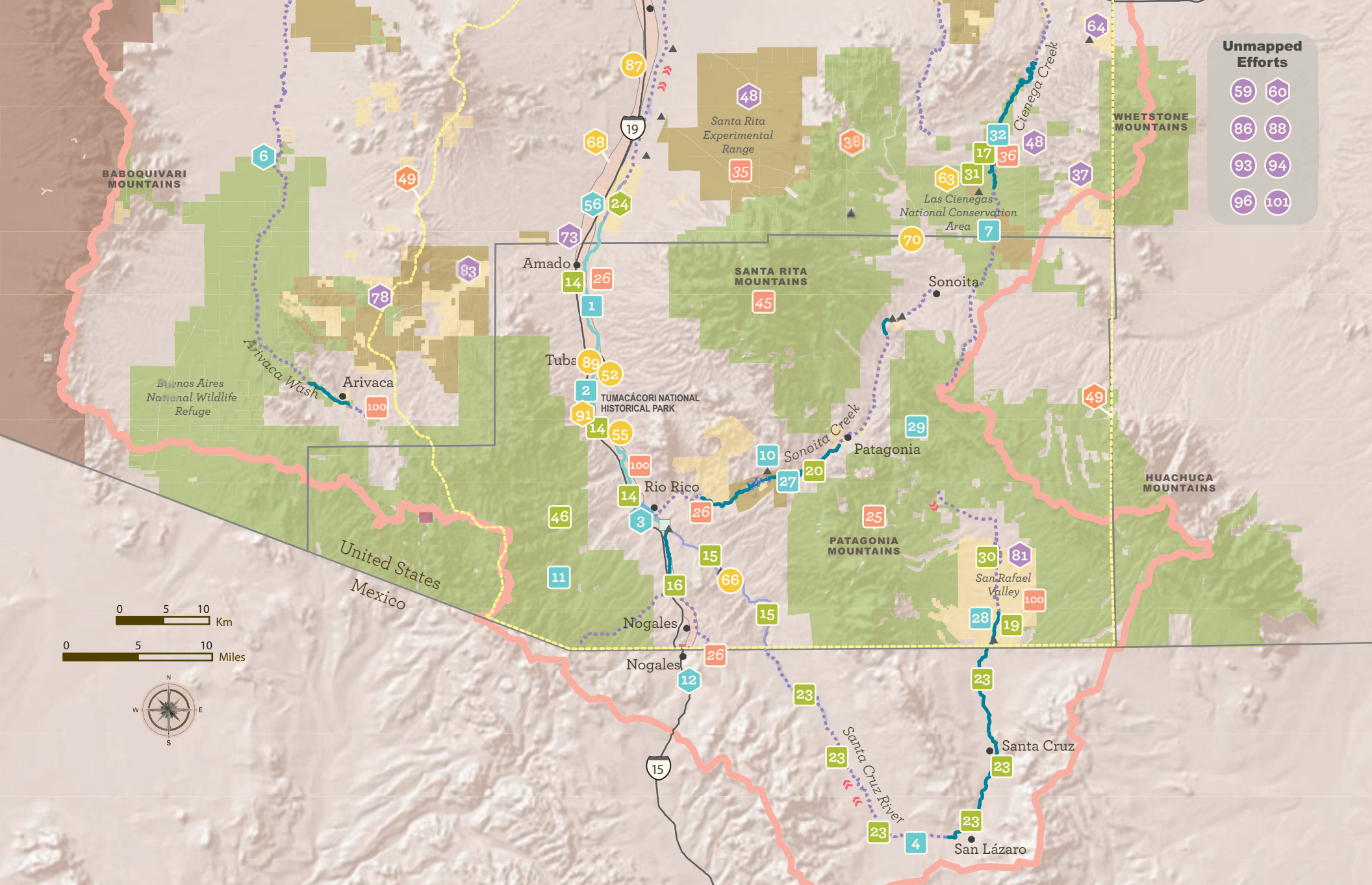


## SANTA CRUZ RIVER WATERSHED TUCSON REGION

### EFFORTS LEGEND

	Natural		Restoration		Interpretation
	Cultural		Monitoring		Land Protection
	Natural and Cultural		Other		





# SANTA CRUZ RIVER WATERSHED NOGALES REGION

**EFFORTS LEGEND**

- Natural
- Cultural
- Natural and Cultural

- Restoration
- Monitoring
- Other

- Interpretation
- Land Protection



# CONSERVATION EFFORTS DESCRIPTIONS

1

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Esperanza Ranch  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Tucson Audubon Society  
**ACTIVITIES:** Restoration of riparian vegetation along the river  
**TIMEFRAME:** Active

2

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Tumacácori National Historical Park  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** National Park Service, Sonoran Institute  
**ACTIVITIES:** Restoration of riparian vegetation along the river; cottonwood/ willows in area that burned, water harvesting to encourage restoration of mesquite bosque in old agricultural field  
**TIMEFRAME:** Active

3

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Guy Tobin Trailhead  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Friends of the Santa Cruz River, Santa Cruz County, Watershed Management Group,  
**ACTIVITIES:** Stormwater mitigation and erosion control; use of Zuni bowl and one rock check dams to slow runoff and reduce erosion along river near trailhead  
**TIMEFRAME:** Complete

4

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** San Lázaro  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Sky Island Alliance, Sonoran Institute  
**ACTIVITIES:** Restoration of riparian vegetation in San Lázaro, Mexico with pole plantings; fencing to reduce impacts of grazing in riparian corridor  
**TIMEFRAME:** Complete

5

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Atturbury Wash  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Sonoran Institute, Tucson Audubon Society, University of Arizona Water Resources Research Center, Watershed Management Group  
**ACTIVITIES:** Conserve to Enhance pilot site, restoration of riparian vegetation and rainwater harvesting  
**TIMEFRAME:** Complete

6

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Altar Valley  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Altar Valley Conservation Alliance, Buenos Aires National Wildlife Refuge, Sky Island Alliance  
**ACTIVITIES:** Stream/wash restoration and erosion mitigation; prescribed fires for grassland restoration  
**TIMEFRAME:** Active

7

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Las Cienegas National Conservation Area—Empire Ranch  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Arizona Game and Fish Department, Bureau of Land Management, Pima County, National Audubon Society, National Fish and Wildlife Foundation (NFWF), Sky Island Alliance  
**ACTIVITIES:** Erosion control, wash restoration, sustaining grasslands and their species (NFWF Sky Island Grassland Initiative); black tailed prairie dog; brush treatment/removal; wildlife friendly fencing  
**TIMEFRAME:** Active

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[RETURN TO NOGALES REGION MAP](#)

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**RESOURCE TYPE:** Natural**REGION/LOCATION:** Cienega Creek Natural Preserve**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Cienega Watershed Partnership, FROG Conservation Project, Pima County, Sonoran Institute, University of Arizona**ACTIVITIES:** Buffelgrass and invasive species removal, frog restoration, bat habitat restoration**TIMEFRAME:** Active

9

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Martinez Hill**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Tohono O'odham Nation—San Xavier District**ACTIVITIES:** Restoration of cottonwood/willow riparian vegetation along river at the Wa:k Hikdan cultural site**TIMEFRAME:** Active

10

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Sonoita Creek**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Arizona Game and Fish Department, U. S. Fish and Wildlife Service**ACTIVITIES:** Restoration of native fish populations in select areas**TIMEFRAME:** Active

11

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Peña Blanca**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Arizona Department of Environmental Quality, Arizona Game and Fish Department**ACTIVITIES:** Water quality mitigation; native frog restoration—bullfrog removal to benefit leopard frogs**TIMEFRAME:** Complete

12

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Nogales, Sonora**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Arizona Department of Environmental Quality, Asociación de Reforestación de Ambos Nogales, Frente Cívico Nogalense, Instituto Tecnológico de Nogales, International Boundary Water Commission, Sonoran Institute, University of Arizona, U.S. Geological Survey, Watershed Management Group**ACTIVITIES:** Water quality and stormwater run-off mitigation through installation of composting toilets and both passive and active rainwater harvesting infrastructure**TIMEFRAME:** Complete

13

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Tucson**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Sonoran Institute, University of Arizona Water Resources Research Center, Watershed Management Group**ACTIVITIES:** Urban stormwater run-off mitigation—green streets and green neighborhoods; Conserve to Enhance pilot program; water harvesting demonstration sites**TIMEFRAME:** Active

14

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Santa Cruz River—Rio Rico to Amado**EFFORT TYPE:** Monitoring**GROUPS/PARTNERS:** Arizona Department of Environmental Quality (ADEQ), Bird Works (BW), Friends of the Santa Cruz River (FOSCR), National Park Service (NPS), Sonoran Institute (SI), Sky Island Alliance (SIA), NPS Sonoran Desert Network (NPS SODN), Tucson Audubon Society (TAS), U. S. Geological Survey (USGS)**ACTIVITIES:** ADEQ—water quality; BW—birds; FOSCR—water quality, fish; NPS—water quality; SI—riparian veg; SIA—mammal tracking; NPS SODN—water quality, riparian condition; TAS—birds; USGS—stream flow**TIMEFRAME:** Active[RETURN TO TUCSON REGION MAP](#)[RETURN TO NOGALES REGION MAP](#)



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**RESOURCE TYPE:** Natural**REGION/LOCATION:** Santa Cruz River—Int'l Border to Rio Rico**EFFORT TYPE:** Monitoring**GROUPS/PARTNERS:** Friends of the Santa Cruz River (FOSCR), Sonoran Institute (SI), U. S. Geological Survey (USGS)**ACTIVITIES:** FOSCR—water quality; SI—riparian vegetation; USGS—stream flow**TIMEFRAME:** Active

16

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Nogales Wash / Potrero Creek**EFFORT TYPE:** Monitoring**GROUPS/PARTNERS:** Arizona Department of Environmental Quality (ADEQ), Friends of the Santa Cruz River (FOSCR), U. S. Geological Survey (USGS)**ACTIVITIES:** ADEQ—water quality; FOSCR—water quality, fish; USGS—stream flow**TIMEFRAME:** Active

17

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Las Cienegas National Conservation Area—Cienega Creek**EFFORT TYPE:** Monitoring**GROUPS/PARTNERS:** Arizona Game and Fish Department (AGFD), Bureau of Land Management (BLM), Cienega Watershed Partnership (CWP), FROG Conservation Project (FCP), National Audubon Society (NAS), Sky Island Alliance (SIA), The Nature Conservancy (TNC), University of Arizona (UA), U. S. Geological Survey (USGS)**ACTIVITIES:** BLM, TNC—fish, targeted riparian species, birds, riparian vegetation, stream flow, ground water, and channel morphology; AZGD, SIA—mammals; CWP, FCP—fish and targeted riparian species; USGS—stream flow**TIMEFRAME:** Active

18

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Cienega Creek Natural Preserve**EFFORT TYPE:** Monitoring**GROUPS/PARTNERS:** Bureau Reclamation (BOR), Cienega Watershed Partnership (CWP), Pima Association of Governments (PAG), Pima County Regional Flood Control District (PCRFCD), Sky Island Alliance (SIA), Sonoran Institute (SI), Southern AZ Buffelgrass Coordination Center (SABCC), University of Arizona (UA)**ACTIVITIES:** PAG, CWP, PCRFCD—aquatic and riparian monitoring; SIA—mammal tracking; PC, SI, SABCC, UA—Buffelgrass, BOR—annual fish surveys 2 reaches**TIMEFRAME:** Active

19

**RESOURCE TYPE:** Natural**REGION/LOCATION:** San Rafael Valley**EFFORT TYPE:** Monitoring**GROUPS/PARTNERS:** Arizona Game and Fish Department, U.S. Fish and Wildlife Service**ACTIVITIES:** Fish surveys**TIMEFRAME:** Active

20

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Sonoita Creek**EFFORT TYPE:** Monitoring**GROUPS/PARTNERS:** Arizona Game and Fish Department (AGFD), Friends of Sonoita Creek (FOSC), Hummingbird Network (HN), The Nature Conservancy (TNC)**ACTIVITIES:** AGFD, TNC—aquatic and riparian monitoring; FOSC, HN—hummingbird monitoring**TIMEFRAME:** Active[RETURN TO TUCSON REGION MAP](#)[RETURN TO NOGALES REGION MAP](#)

21

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Santa Cruz River—Tucson  
**EFFORT TYPE:** Monitoring  
**GROUPS/PARTNERS:** Pima County—Regional Flood Control District, Regional Wastewater Reclamation Department, and Office of Sustainability and Conservation  
**ACTIVITIES:** Aquatic and riparian monitoring  
**TIMEFRAME:** Active

22

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Catalina—Tortolita Mountains Corridor  
**EFFORT TYPE:** Monitoring  
**GROUPS/PARTNERS:** Sky Island Alliance  
**ACTIVITIES:** Mammal tracking  
**TIMEFRAME:** Active

23

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Santa Cruz River—Sonora  
**Effort type:** Monitoring  
**GROUPS/PARTNERS:** Sonoran Joint Venture, Sonoran Institute, Universidad de Sonora  
**ACTIVITIES:** Aquatic and riparian monitoring—water quality, vegetation, birds at 9 sites along the river; groundwater/well water quality at three sites  
**TIMEFRAME:** Complete

24

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Canoa Ranch  
**EFFORT TYPE:** Monitoring  
**GROUPS/PARTNERS:** Pima County Office of Sustainability and Conservation  
**ACTIVITIES:** Channel morphology/riparian vegetation through repeat photography on historic ranch  
**TIMEFRAME:** Complete

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25

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Patagonia Mountains  
**EFFORT TYPE:** Research  
**GROUPS/PARTNERS:** U.S. Geological Survey  
**ACTIVITIES:** Understanding relationship between geology, water quality, and mining in the Patagonia Mountains and Sonoita Creek  
**TIMEFRAME:** Active

26

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Santa Cruz River and Sonoita Creek  
**EFFORT TYPE:** Research  
**GROUPS/PARTNERS:** U.S. Geological Survey  
**ACTIVITIES:** Mapping quaternary geology between and including Nogales, Sonora and Amado, including Sonoita Creek Drainage  
**TIMEFRAME:** Active

27

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Sonoita Creek at Patagonia Lake  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Tucson Audubon Society  
**ACTIVITIES:** Fence out and provide water for removal of cattle along Sonoita Creek inlet to Patagonia Lake  
**TIMEFRAME:** In development

28

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** San Rafael Valley  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Arizona Game and Fish Department, U. S. Fish and Wildlife Service  
**ACTIVITIES:** Fish and aquatic habitat restoration, removal of invasive species, native aquatic vertebrate restoration (gila topminnow, gila chub, Chiricahua leopard frog, state threatened species)  
**TIMEFRAME:** Active and in development

[RETURN TO NOGALES REGION MAP](#)



29

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Red Rock Canyon  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Arizona Game and Fish Department  
**ACTIVITIES:** Fish and aquatic habitat restoration, removal of non-natives  
**TIMEFRAME:** In development

30

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** San Rafael Important Bird Area  
**EFFORT TYPE:** Monitoring  
**GROUPS/PARTNERS:** Tucson Audubon Society, Audubon Arizona, Rocky Mountain Bird Observatory  
**ACTIVITIES:** Bird monitoring, recognition of important habitat for birds or Important Bird Area  
**TIMEFRAME:** Active

31

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Las Cienegas National Conservation Area—Empire Ranch  
**EFFORT TYPE:** Monitoring  
**GROUPS/PARTNERS:** Bureau of Land Management, The Nature Conservancy  
**ACTIVITIES:** Grassland response to brush treatment; rainfall monitoring  
**TIMEFRAME:** Active

32

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Las Cienegas National Conservation Area—Cienega Creek  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Arizona Department of Water Resources, Arizona Game and Fish Department, Bureau of Land Management, Cienega Watershed Partnership, FROG Conservation Project, National Audubon, University of Arizona, U. S. Fish and Wildlife Service  
**ACTIVITIES:** Aquatic and threatened/endangered species restoration, stream channel restoration, wetland restoration  
**TIMEFRAME:** Active

33

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Santa Cruz River—through Tucson  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Pima County  
**ACTIVITIES:** Water quality and wetland habitat in the effluent dependent reach  
**TIMEFRAME:** Active

34

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Atturbury Wash  
**EFFORT TYPE:** Monitoring  
**GROUPS/PARTNERS:** Tucson Audubon Society  
**ACTIVITIES:** Bird monitoring  
**TIMEFRAME:** Active

35

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Santa Rita Experimental Range  
**EFFORT TYPE:** Research/Outreach  
**GROUPS/PARTNERS:** University of Arizona  
**ACTIVITIES:** Ecological function—water, energy, carbon cycle; community outreach regarding conservation of wildlife and vegetation  
**TIMEFRAME:** Active

36

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Las Cienegas National Conservation Area—Cienega Creek  
**EFFORT TYPE:** Inventory  
**GROUPS/PARTNERS:** Desert Botanical Gardens  
**ACTIVITIES:** Locate and map wetland; identify water sources with isotope analysis  
**TIMEFRAME:** Active

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[RETURN TO NOGALES REGION MAP](#)

37

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Sands Ranch**EFFORT TYPE:** Land Protection**GROUPS/PARTNERS:** Pima County**ACTIVITIES:** One of the many historic ranch properties purchased in the Cienega Basin as part of the Sonoran Desert Conservation Plan; management includes monitoring and restoration**TIMEFRAME:** Active

38

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Santa Rita Mountains**EFFORT TYPE:** Coalition**GROUPS/PARTNERS:** Save the Scenic Santa Ritas**ACTIVITIES:** Protecting the Santa Rita and Patagonia mountains from development and environmental degradation—focused on Rosemont mine**TIMEFRAME:** Active

39

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Sahuarita—treatment plant**EFFORT TYPE:** Public Utility**GROUPS/PARTNERS:** Town of Sahuarita**ACTIVITIES:** Wastewater treated from Rancho Resort and Rancho Sahuarita**TIMEFRAME:** Active

40

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Tucson**EFFORT TYPE:** Education/Research**GROUPS/PARTNERS:** Watershed Management Group**ACTIVITIES:** Soil Stewards—piloting site-based composting toilets along with comprehensive soil education series**TIMEFRAME:** Active

41

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Santa Cruz River—Tucson**EFFORT TYPE:** Coalition/Planning**GROUPS/PARTNERS:** City of Tucson, Pima County Regional Flood Control District**ACTIVITIES:** Management plan for Lower Santa Cruz River to maintain/protect riparian corridor**TIMEFRAME:** In development

42

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Paseo De Las Iglesias**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Pima County Regional Flood Control District, U. S. Army Corps of Engineers**ACTIVITIES:** Restoration of vegetation along on Santa Cruz River between Ajo Road and 29th Street, water harvesting and flood control, development of river park paths and neighborhood paths, interpretive signage regarding cultural and natural resources of the site**TIMEFRAME:** Active

43

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Corazón de los Tres Rios Del Norte**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Pima County Regional Flood Control District**ACTIVITIES:** Idea of using old gravel pit and area around three rivers as recreation/economic development zone with recharge facility**TIMEFRAME:** In development

44

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Black Wash**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Pima County Regional Flood Control District, Pima County Regional Wastewater Reclamation Department**ACTIVITIES:** Use of treatment plants for restoration**TIMEFRAME:** Unknown[RETURN TO TUCSON REGION MAP](#)[RETURN TO NOGALES REGION MAP](#)

45

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Santa Rita Mountains  
**EFFORT TYPE:** Research  
**GROUPS/PARTNERS:** Borderlands Jaguar, U. S. Geological Survey  
**ACTIVITIES:** Camera traps and phenology, comparing phenology and fire pattern to animal observations  
**TIMEFRAME:** Active

46

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Tumacácori foothills  
**EFFORT TYPE:** Monitoring  
**GROUPS/PARTNERS:** University of Arizona—Brian Powell  
**ACTIVITIES:** Bird surveys in oak woodland (1997-1998)  
**TIMEFRAME:** Complete

47

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Santa Cruz River near Cortaro Road  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** Arizona Native Plant Society—Tucson Chapter  
**ACTIVITIES:** Restoration of riparian vegetation along the river, seeding, native trees/shrubs, removal of buffelgrass  
**TIMEFRAME:** Active

48

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Southeastern Pima County  
**EFFORT TYPE:** Land protection/Coalition  
**GROUPS/PARTNERS:** Coalition for Sonoran Desert Protection, The Nature Conservancy, Sonoran Institute, and others  
**ACTIVITIES:** Areas with efforts to attain permanent protection of state trust lands for conservation via ballot initiative  
**TIMEFRAME:** Active

49

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Santa Cruz Valley—U.S. portion  
**EFFORT TYPE:** Coalition  
**GROUPS/PARTNERS:** Santa Cruz Valley Heritage Alliance  
**ACTIVITIES:** Effort to give the Santa Cruz Valley federal recognition as a National Heritage Area  
**TIMEFRAME:** Active

50

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Agua Caliente Ranch, Roy P. Drachman Agua Caliente Park, Pima County  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** Pima County  
**ACTIVITIES:** Listed on National Register; historic sites, hiking trails, picnic areas, visitor center, environmental education programs  
**TIMEFRAME:** Active

51

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Bar V Ranch, Davidson Canyon  
**EFFORT TYPE:** Land Protection  
**GROUPS/PARTNERS:** Pima County  
**ACTIVITIES:** 1,700 acres of private land and 12,600 acres of leased state trust land, purchased for open space and wildlife corridor conservation  
**TIMEFRAME:** Complete

52

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Barrio de Tubac Archaeological Preserve  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** The Archaeological Conservancy  
**ACTIVITIES:** Listed on National Register; Spanish colonial archaeological site preserving the remains of the original Tubac townsite, including residence foundations, plaza, refuse area, and partial irrigation ditch  
**TIMEFRAME:** Active

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53

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Binghampton Rural Historic Landscape (Brandi Fenton Park)**EFFORT TYPE:** Interpretation**GROUPS/PARTNERS:** Pima County**ACTIVITIES:** About 427 acres of land listed on National Register of Historic Places, a first in Pima County; Brandi Fenton Memorial Park developed with historical preservation and interpretation as a primary goal**TIMEFRAME:** Active

54

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Bojórquez-Aguirre Ranch**EFFORT TYPE:** Land Protection**GROUPS/PARTNERS:** Town of Marana**ACTIVITIES:** Remnants of the Bojórquez-Aguirre Ranch to be preserved and interpreted as part of a planned park**TIMEFRAME:** In Development

55

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** San Cayetano de Calabazas, Tumacácori National Historical Park**EFFORT TYPE:** Interpretation**GROUPS/PARTNERS:** Tumacácori National Historical Park**ACTIVITIES:** Ruins of the mission compound and church**TIMEFRAME:** Active

56

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Canoa Ranch Conservation Park**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Pima County, Friends of Canoa Ranch**ACTIVITIES:** Preservation and rehabilitation of historic buildings, ranchland conservation, environmental education; listed on National Register**TIMEFRAME:** Active

57

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Cienega Creek Natural Preserve**EFFORT TYPE:** Land Protection**GROUPS/PARTNERS:** Pima County, Regional Flood Control District**ACTIVITIES:** Most noted for its ecological significance and scenic beauty as a desert riparian oasis, contains a number of historic and pre-historic cultural resource sites**TIMEFRAME:** Complete

58

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Colossal Cave Mountain Park**EFFORT TYPE:** Interpretation**GROUPS/PARTNERS:** Pima County**ACTIVITIES:** Listed on National Register of Historic Places**TIMEFRAME:** Active

59

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Dairy Site, Marana**EFFORT TYPE:** Land Protection**GROUPS/PARTNERS:** The Archaeological Conservancy**ACTIVITIES:** unknown beyond protection**TIMEFRAME:** Complete

60

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Dakota Wash**EFFORT TYPE:** Land Protection**GROUPS/PARTNERS:** Pima County**ACTIVITIES:** Important complex of several ancient Hohokam villages near the West Branch of the Santa Cruz River occupied from A.D. 450 to A.D. 1150; significant cultural resource containing dense deposits of buried cultural materials important to understanding the prehistory of the Tucson Basin**TIMEFRAME:** Complete[RETURN TO TUCSON REGION MAP](#)[RETURN TO NOGALES REGION MAP](#)

61

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** DeGrazia Chapel  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** DeGrazia Foundation  
**ACTIVITIES:** National Historic Landmark  
**TIMEFRAME:** Active

62

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** El Tiradito (Wishing Shrine)  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** City of Tucson  
**ACTIVITIES:** Listed on National Register of Historic Places  
**TIMEFRAME:** Active

63

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Empire Ranch, Las Cienegas National Conservation Area  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** Bureau of Land Management, Empire Ranch Foundation  
**ACTIVITIES:** Preservation of the ranch buildings, enhancement of educational and recreational opportunities  
**TIMEFRAME:** Active

64

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Empirita Ranch, Pima County  
**EFFORT TYPE:** Land Protection  
**GROUPS/PARTNERS:** Pima County  
**ACTIVITIES:** 2,700 acres preserved, including a High Sensitive Archaeological Zone associated with Wakefield Canyon Wash; old “cowboy house” at the primary ranch headquarters dating back to the 1880’s completely restored in 2009  
**TIMEFRAME:** Complete

65

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Fort Lowell/Hardy Site, Fort Lowell Park  
**EFFORT TYPE:** Restoration  
**GROUPS/PARTNERS:** City of Tucson, Pima County  
**ACTIVITIES:** Public park with rich archaeological prehistoric site, historic Fort Lowell, including three 1873 Officers’ Quarters buildings  
**TIMEFRAME:** In Development

66

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Los Santos Ángeles de Guevavi Mission, Tumacácori National Historical Park  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** Tumacácori National Historical Park  
**ACTIVITIES:** Ruins of the mission church  
**TIMEFRAME:** Active

67

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Honey Bee Village  
**EFFORT TYPE:** Land Protection  
**GROUPS/PARTNERS:** Pima County, Oro Valley  
**ACTIVITIES:** Hohokam village, with a cluster of 19 large mounds surrounding a plaza, a ballcourt, and a special-use walled enclosure; the 13-acre core is preserved  
**TIMEFRAME:** In Development

68

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Juan Bautista de Anza National Historic Trail  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** National Park Service, Pima County, Town of Marana, Anza Trail Coalition of Arizona  
**ACTIVITIES:** Historic landmarks, trail conservation, environmental and historic interpretation  
**TIMEFRAME:** Active

69

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Julian Wash Natural and Cultural Resources Park**EFFORT TYPE:** Interpretation**GROUPS/PARTNERS:** City of Tucson**ACTIVITIES:** Multi-use trail and interpretive signage about prehistoric Native American archaeological site named after the adjacent Julian Wash, and the former St. Luke's Orphanage formerly at this location**TIMEFRAME:** Active

70

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Kentucky Camp, Santa Rita Ranger District, Coronado National Forest**EFFORT TYPE:** Interpretation**GROUPS/PARTNERS:** Coronado National Forest**ACTIVITIES:** Historic mining and ranching site; preservation of historic buildings and overnight use with a permit**TIMEFRAME:** Active

71

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Los Morteros**EFFORT TYPE:** Land Protection**GROUPS/PARTNERS:** Pima County**ACTIVITIES:** Prehistoric Hohokam village, currently managed as Open Space and as a Cultural Resources Conservation Area; comprehensive Management Plan is also slated for development**TIMEFRAME:** In Development

72

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Marana Heritage Park, Marana**EFFORT TYPE:** Interpretation**GROUPS/PARTNERS:** Town of Marana**ACTIVITIES:** Park is envisioned as a place where Marana's heritage is displayed through a demonstration farm, water features, marketplace and equine facilities**TIMEFRAME:** In Development

73

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Marley Ranch**EFFORT TYPE:** Land Protection**GROUPS/PARTNERS:** Pima County**ACTIVITIES:** Initial purchase included the more biologically sensitive parcels totaling 6,337 acres of fee lands straddling the foothills of the Sierrita Mountains and the north flank of the Cerro Colorado Mountains; prehistoric rock shelters, pictographs, petroglyph sites and village sites (likely Hohokam) are reported to exist on Marley Ranch**TIMEFRAME:** Complete

74

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Marsh Station Foreman House**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Vail Preservation Society, Vail Unified School District**ACTIVITIES:** Rehabilitation of 1915 house**TIMEFRAME:** In Development

75

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** McKenzie Ranch**EFFORT TYPE:** Land Protection**GROUPS/PARTNERS:** Pima County**ACTIVITIES:** Acquisition of historic ranch lands in the Cienega Valley-Empire Ranch Reserve**TIMEFRAME:** Complete

76

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Mission San Xavier del Bac**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Patronato Mission San Xavier del Bac**ACTIVITIES:** Exterior restoration and rehabilitation of the mission and interior art preservation; listed as National Historic Landmark**TIMEFRAME:** Active[RETURN TO TUCSON REGION MAP](#)[RETURN TO NOGALES REGION MAP](#)



77

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Posta Quemada Ranch  
**EFFORT TYPE:** Land Protection  
**GROUPS/PARTNERS:** Pima County  
**ACTIVITIES:** Includes site of historic Mountain Springs Hotel, Stage Station, and National Mail Stagecoach route, and Hohokam bedrock mortar site  
**TIMEFRAME:** Complete

78

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Rancho Seco  
**EFFORT TYPE:** Land Protection  
**GROUPS/PARTNERS:** Pima County  
**ACTIVITIES:** 37,000-acre property is one of several working ranches owned by the County in the Altar Valley and Upper Santa Cruz Valley; known archaeological and historic sites indicate prehistoric use of the land between A.D. 900 and A.D. 1450  
**TIMEFRAME:** Complete

79

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Romero Ruin, Catalina State Park  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** Coronado National Forest, Catalina State Park, Archaeology Southwest  
**ACTIVITIES:** Remains of a Hohokam Indian village occupied between A.D. 500 and A.D. 1450, one of the largest and most significant archaeological sites within the northern Tucson Basin, covering 15 acres on a ridge overlooking Sutherland Wash; remains of more recent structures built by rancher Francisco Romero also visible  
**TIMEFRAME:** Active

80

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Sabino Canyon Ruin, Pima County  
**EFFORT TYPE:** Land Protection  
**GROUPS/PARTNERS:** Pima County  
**ACTIVITIES:** Large settlement occupied by Hohokam Indians between A.D. 1100 and A.D. 1350  
**TIMEFRAME:** Active

81

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** San Rafael State Natural Area  
**EFFORT TYPE:** Land Protection  
**GROUPS/PARTNERS:** Arizona State Parks  
**ACTIVITIES:** Currently NOT open to public; preserves a native grassland area that has not suffered problems of shrubs and cactus invasion, nor has been taken over by exotic plant species that affect so much of this vegetation type elsewhere in Arizona and the Southwest; ranch headquarters designated as a National Historic District in 2008; territorial style ranch house, built in 1900, is over 9,000 square feet  
**TIMEFRAME:** Complete

82

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** San Xavier District  
**EFFORT TYPE:** Conservation Farm  
**GROUPS/PARTNERS:** San Xavier Co-Op Farm  
**ACTIVITIES:** Conservation, education, and distribution of traditional O'odham crops  
**TIMEFRAME:** Active

83

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Sopori Ranch  
**EFFORT TYPE:** Land Protection  
**GROUPS/PARTNERS:** Pima County  
**ACTIVITIES:** 4,135 acres protecting several wildlife movement corridors between the numerous Sky Island mountain ranges in the area, reducing threats to groundwater pumping along Sopori Wash, and preserving the history, culture, and economic traditions of this important place  
**TIMEFRAME:** Complete

84

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Steam Pump Ranch**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Oro Valley, Pima County, Oro Valley Historical Society, Archaeology Southwest**ACTIVITIES:** Sixteen acre property listed on the National Register of Historic Places; ranch buildings have undergone significant rehabilitation for public access**TIMEFRAME:** In Development

85

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Stone Avenue Temple**EFFORT TYPE:** Restoration**GROUPS/PARTNERS:** Jewish History Museum**ACTIVITIES:** Built in 1910, was the first Jewish house of worship established in the Arizona Territory; listed in on the National Register of Historic Places**TIMEFRAME:** Active

86

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Sutherland Wash Rock Art District**EFFORT TYPE:** Land Protection**GROUPS/PARTNERS:** Coronado National Forest**ACTIVITIES:** Listed on National Register**TIMEFRAME:** In Development

87

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Titan Missile Silo**EFFORT TYPE:** Interpretation**GROUPS/PARTNERS:** Arizona Aerospace Foundation**ACTIVITIES:** Preserved Titan II missile site, officially known as complex 571-7; all that remains of 54 Titan II missile sites on alert across the United States from 1963 to 1987; listed on National Register; National Historic Landmark**TIMEFRAME:** Active

88

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Torres Blancas, Green Valley**EFFORT TYPE:** Land Protection**GROUPS/PARTNERS:** The Archaeological Conservancy**ACTIVITIES:** Hohokam village site**TIMEFRAME:** Complete

89

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Tubac Presidio State Historic Park**EFFORT TYPE:** Interpretation**GROUPS/PARTNERS:** Arizona State Parks, Friends of Tubac State Park**ACTIVITIES:** Listed on National Register; preservation of ruins of the Presidio San Ignacio de Tubac and various other buildings**TIMEFRAME:** Active

90

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Tucson Origins Heritage Park, (Mission San Agustin and Mission Garden)**EFFORT TYPE:** Interpretation**GROUPS/PARTNERS:** Pima County, City of Tucson, Friends of Tucson's Birthplace**ACTIVITIES:** Twenty-two acre plan for a historically re-created mission, gardens, and cultural center, to be situated near the base of "A" Mountain**TIMEFRAME:** In Development

91

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Tumacácori Mission, Tumacácori National Historical Park**EFFORT TYPE:** Interpretation**GROUPS/PARTNERS:** Tumacácori National Historical Park**ACTIVITIES:** Protection of ruins of three Spanish mission communities located along the river, two of which are National Historic Landmark sites; also contains the 1937 Tumacácori Museum building**TIMEFRAME:** Active[RETURN TO TUCSON REGION MAP](#)[RETURN TO NOGALES REGION MAP](#)

92

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Tumamoc Hill Desert Laboratory  
**EFFORT TYPE:** Monitoring  
**GROUPS/PARTNERS:** University of Arizona, Pima County  
**ACTIVITIES:** Ecological and archaeological reserve with ongoing monitoring of natural and cultural resources; listed on National Register; National Historic Landmark  
**TIMEFRAME:** Active

93

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** University Indian Ruin Archaeological Research District  
**EFFORT TYPE:** Land Protection  
**GROUPS/PARTNERS:** University of Arizona  
**ACTIVITIES:** Prehistoric archeological village, as well as a historic complex of archeological research facilities constructed in the 1930s; consists of a large Classic period Hohokam village, occupied primarily between A.D. 1150 and A.D. 1450  
**TIMEFRAME:** Active

94

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Upper Davidson Canyon Foothills Archaeological District  
**EFFORT TYPE:** Land Protection  
**GROUPS/PARTNERS:** Bureau of Land Management  
**ACTIVITIES:** Unknown beyond protection  
**TIMEFRAME:** Complete

95

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Vail Store and Post Office  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** Vail Preservation Society  
**ACTIVITIES:** Store and post office from 1908 listed on National Register of Historic Places in 2009  
**TIMEFRAME:** Complete

96

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Valencia Site and Valencia Vieja  
**EFFORT TYPE:** Land Protection  
**GROUPS/PARTNERS:** Pima County, Archaeology Southwest, Pima Community College  
**ACTIVITIES:** Listed on National Register of Historic Places; 67-acre large prehistoric Hohokam settlement, one of the best preserved in the City of Tucson; preserved portion represents core, where major ceremonial ballcourt is located, along with many large plazas and middens, and as many as two thousand domestic houses  
**TIMEFRAME:** Complete

97

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Vista del Rio Cultural Resources Park  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** City of Tucson, Archaeology Southwest  
**ACTIVITIES:** Four-acre property that preserves partial remains of a large prehistoric Hohokam Village occupied between A.D. 1000 and A.D. 1150; archeological features, a walking path, and a quiet sitting area  
**TIMEFRAME:** Active

98

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Whiptail Ruin, Roy P. Drachman Agua Caliente Park  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** Pima County  
**ACTIVITIES:** Hohokam village from about A.D. 1150 and A.D. 1250  
**TIMEFRAME:** Active

99

**RESOURCE TYPE:** Cultural  
**REGION/LOCATION:** Yuma Wash Site, Marana  
**EFFORT TYPE:** Interpretation  
**GROUPS/PARTNERS:** Town of Marana  
**ACTIVITIES:** Large Hohokam settlement established some time after A.D. 750 and inhabited to the end of the Hohokam period  
**TIMEFRAME:** Complete

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100

**RESOURCE TYPE:** Natural

**REGION/LOCATION:** Various locations in Upper Santa Cruz Watershed

**EFFORT TYPE:** Research/Outreach

**GROUPS/PARTNERS:** Southwest Monarch Study

**ACTIVITIES:** Researching migration and breeding patterns of monarch butterflies in Arizona and the Southwestern United States; describes migration and breeding patterns, encourages conservation, and provides meaningful projects for citizen scientists of all ages

**TIMEFRAME:** Active

101

**RESOURCE TYPE:** Cultural

**REGION/LOCATION:** Marana Mound

**EFFORT TYPE:** Land Protection

**GROUPS/PARTNERS:** Arizona State Museum, Arizona State Land Department, Pima County, Arizona State Historic Preservation Office, Arizona Site Stewards

**ACTIVITIES:** Listed as an acquisition priority in the 2015 Pima County Open Space Bound Initiative, large amount of land west of the Tortolita Mountains is required for preservation and also includes an ironwood forest; ultimately an excellent site for research and interpretation of one of the best preserved Hohokam towns in southern Arizona

**TIMEFRAME:** Active

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# Conservation Priorities

## INVENTORY MAPS

The maps on the following pages show the general locations of priorities. Each is marked with a discrete number. We overlaid these numbers on a base map of natural and cultural resources. This base map includes archaeological preserves identified by Santa Cruz Valley Heritage Alliance in the *Feasibility Study for the Santa Cruz Valley National Heritage Area*, historical districts, and protected lands that preserve both natural and cultural resources. For example, Pima County acquired thousands of acres of land specifically to protect ranches, historic sites, and other important cultural and natural resources as part of the Sonoran Desert Conservation Plan (learn more about the plan at: <http://www.pima.gov/cmo/sdcp/index.html>).

The overview map shows the portion of the Santa Cruz River Watershed represented in this inventory and provides the legend for the base map. Maps on the pages immediately following the overview map display the priorities identified in the Tucson and Nogales regions. **Click within the boxes on the overview map to easily navigate to the regional map of interest.**

To study a particular priority, locate the corresponding number, or Map ID, in the list that follows the maps. **Click on the priority icon in the map to easily navigate to the page that includes the corresponding priority description.** Buttons at the bottom of each page will take you back to either regional map.

The description of each **conservation priority** outlines the following:

- Map ID;
- resource type (natural, cultural, or both);
- region or location; and
- brief justification explaining why the area is of high value.

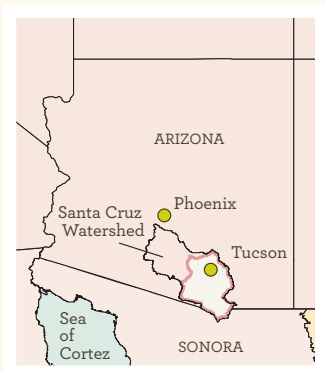
## WHAT ARE WE MISSING?

We recognize that this inventory is far from complete. We hope this will be a useful reference for the natural and cultural conservation community to learn from each other and better coordinate efforts. We trust that this reference will continue to grow and have designed this publication in such a way to permit easy updates with new information. Currently this resource is a digital publication, but we hope it will evolve into a more interactive tool in the future.

## SUBMITTING NEW INFORMATION

Please submit new information or modifications/updates to existing information in this document to: Claire Zugmeyer at [czugmeyer@sonoraninstitute.org](mailto:czugmeyer@sonoraninstitute.org). Type “Conservation Inventory” in the subject line and we will update the document.

# OVERVIEW MAP



- Historical Districts
- Archaeological Preserves
- Anza Trail Corridor
- Wastewater Treatment Plant
- Flow Direction

## FLOW STATUS\*

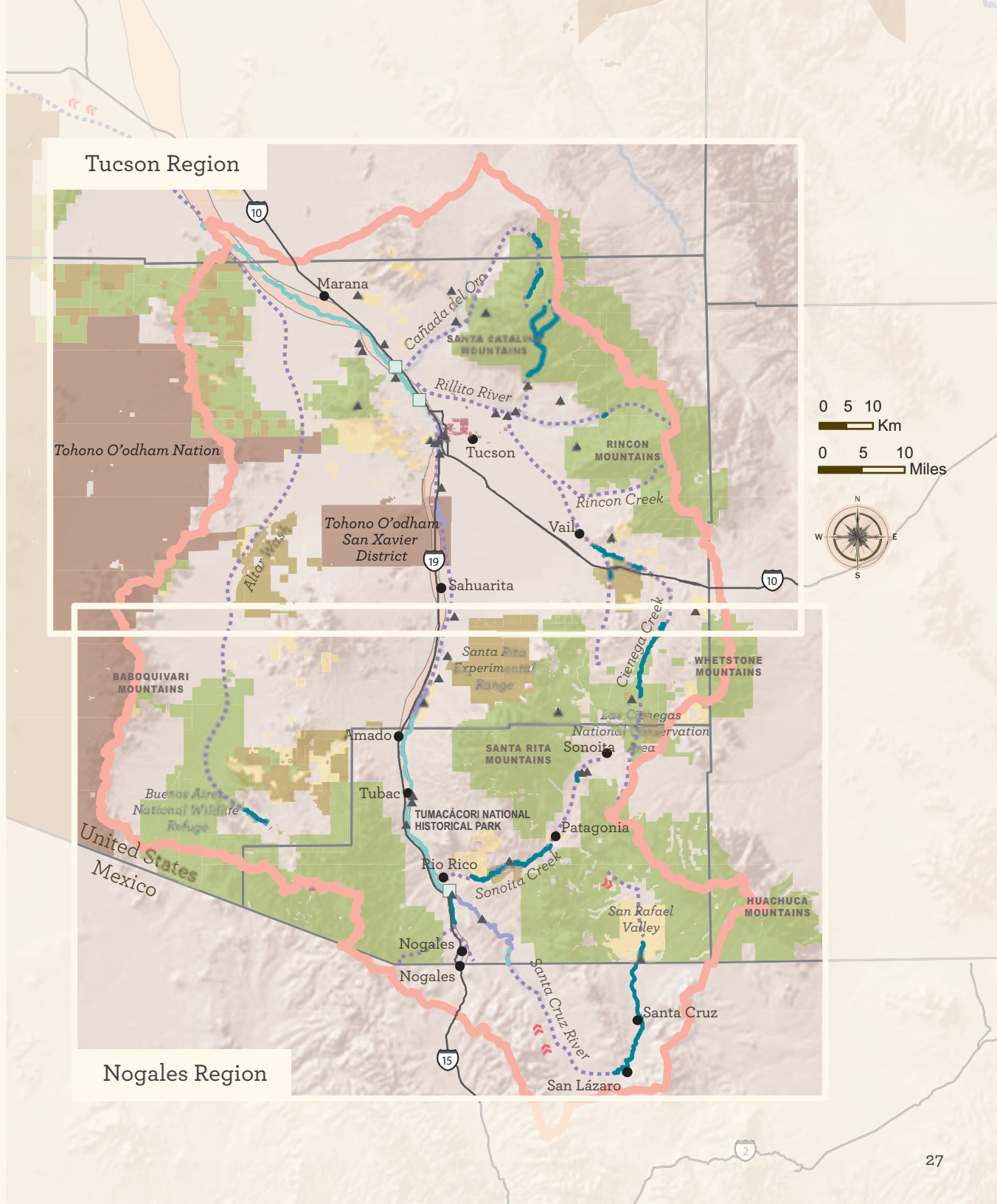
- Perennial (year-round)
- Effluent Dominated
- Formerly Perennial
- Seasonal/Intermittent

\*United States – 2010, The Nature Conservancy; Mexico – 2003, Arizona-Sonora Desert Museum

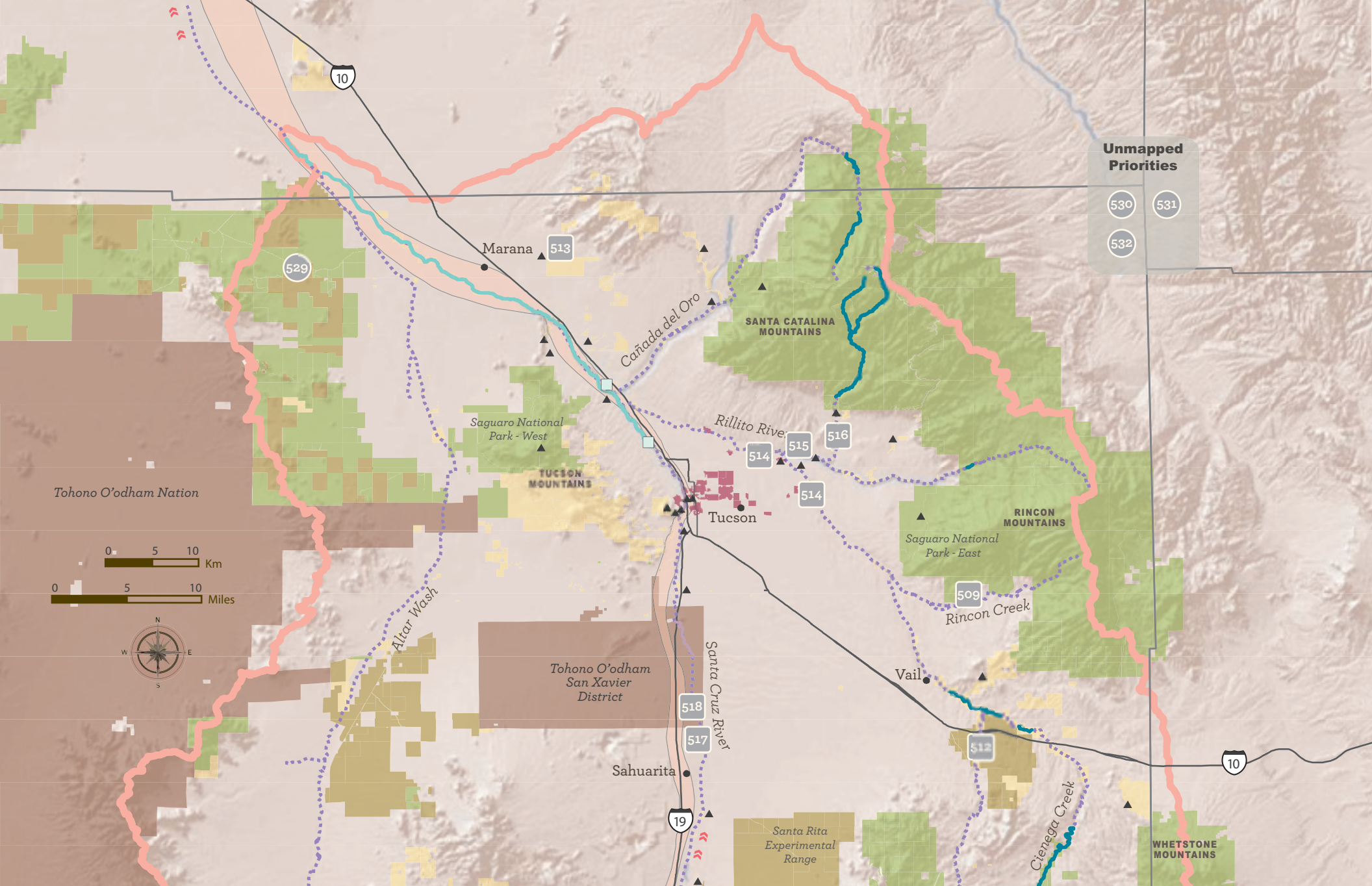
## LAND PROTECTION\*

- U.S. Federal Protection
- U.S. State, Local, Private Protection
- U.S. State, Local, Private – Managed for Conservation

\*Mexican landownership differs, conservation status unknown







# SANTA CRUZ RIVER WATERSHED TUCSON REGION

**PRIORITIES LEGEND**

- Natural
- Cultural
- Natural and Cultural





## SANTA CRUZ RIVER WATERSHED NOGALES REGION

### PRIORITIES LEGEND

- Natural
- Cultural
- Natural and Cultural

# CONSERVATION PRIORITIES DESCRIPTIONS

501

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** San Rafael Valley—State Natural Area  
**DESCRIPTION:** Perennial flows and associated riparian habitat

502

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** San Rafael Valley  
**DESCRIPTION:** Valley recognized as one of best remaining grassland landscapes in region

503

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Santa Cruz River—San Lázaro  
**DESCRIPTION:** Perennial flow, high diversity of riparian species (riparian obligates and birds)

504

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Patagonia Mountains  
**DESCRIPTION:** Priority area with a wildlife corridor from Mexico through Patagonia Mountains up to Cienega Watershed

505

**RESOURCE TYPE:** Natural and Cultural  
**REGION/LOCATION:** Santa Cruz River—Mexico uplands  
**DESCRIPTION:** Subwatershed of the Yaquis with high biodiversity

506

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Sonoita Creek—Tributaries  
**DESCRIPTION:** Restored habitats for native fish—Coal mine Creek and Fresno Creek, tributaries to Sonoita Creek below Patagonia Lake

507

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Sonoita Creek—Headwaters  
**DESCRIPTION:** Headwater springs for Sonoita Creek (Willow, Cottonwood, and Monkey Spring)

508

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Santa Cruz River—“Paredes”  
**DESCRIPTION:** Perennial flow and associated habitat, Paredes is a monitoring site

509

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Rincon Creek  
**DESCRIPTION:** Rincon Creek is an important tributary to Cienega Creek and Pantano Wash; Rincon Creek headwaters are protected in Saguaro National Park, but lower reaches are getting increasingly subdivided into ranchettes, reducing connectivity for plants and animals south to the Santa Ritas and southeast to the Whetstones

510

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Las Cienegas National Conservation Area  
**DESCRIPTION:** Considered best example of habitats/communities formerly typical of Tucson – e.g. riparian areas with frogs and fish

511

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Sonoita Plains  
**DESCRIPTION:** High value for conservation because of grasslands and grassland-dependent species

512

**RESOURCE TYPE:** Natural  
**REGION/LOCATION:** Davidson Canyon  
**DESCRIPTION:** Outstanding Water of Arizona, critical habitat for wildlife

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513

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Tortolita Fan**DESCRIPTION:** Tortolita Fan preservation area is high value habitat and currently preserved

514

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Tucson bridges**DESCRIPTION:** Bridges in Tucson that are roosting habitat for bats

515

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Swan Wetlands**DESCRIPTION:** Swan Wetlands preservation and restoration project

516

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Sabino Canyon**DESCRIPTION:** High value area that could be higher if groundwater pumping were turned off

517

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Pima Mine Road Bridge near Sahuarita**DESCRIPTION:** Great bat habitat and Town of Sahuarita plans to rebuild this bridge in the distant future

518

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Sahuarita Central Arizona Project (CAP)**DESCRIPTION:** High value with groundwater recharge from CAP

519

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Arivaca Creek Cienega**DESCRIPTION:** Cienega at the headwaters of Arivaca Creek

520

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Buenos Aires National Wildlife Refuge**DESCRIPTION:** Multiple arroyos with high value bob white quail habitat that is/was eroding

521

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Arivaca Creek**DESCRIPTION:** Major riparian corridor

522

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Tumacácori National Historical Park—Guevavi**DESCRIPTION:** Federal protection of historic artifacts and ruins, discussions with City of Nogales about possible expansion that would include conservation easement

523

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Tumacácori National Historical Park—Calabazas**DESCRIPTION:** Federal protection of historic artifacts and ruins, area could be expanded in terms of land area by working with Nogales municipality

524

**RESOURCE TYPE:** Natural**REGION/LOCATION:** Tumacácori Wilderness**DESCRIPTION:** Proposed wilderness area (Atascosa and Tumacácori Mountains), oak woodlands, grasslands, pinyon/juniper up to Ponderosa pine on peaks

525

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Las Lagunas**DESCRIPTION:** Natural wetland on private property with historical, ecological, and recreational values; being developed as a community environmental and heritage education facility

526

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Tumacácori National Historical Park**DESCRIPTION:** Federal protection of historic artifacts, ruins, and river ecosystem (only reach of river with federal protection); Important Bird Area, mature cottonwood/willow[RETURN TO TUCSON REGION MAP](#)[RETURN TO NOGALES REGION MAP](#)

527

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Green Valley Wastewater Treatment Plant**DESCRIPTION:** Run by Pima County—possible recharge basins offer potential resource

528

**RESOURCE TYPE:** Natural and Cultural**REGION/LOCATION:** Santa Cruz River—effluent dependent reach**DESCRIPTION:** Ecosystem services of the river from Rio Rico north of the Nogales wastewater treatment plant

529

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Los Robles Archaeological District**DESCRIPTION:** Nearly 13,000 acres and contains over 100 historic and prehistoric archaeological sites, including the Los Robles Platform Mound Community and a trincheras; added to the National Register of Historic Places in 1989

530

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Marana Mound**DESCRIPTION:** Urban development and largescale agriculture have partly destroyed almost all large Hohokam towns in southern Arizona, Marana Mound is an exception as it has never been plowed or otherwise developed; spans over 3 km<sup>2</sup> on the west side of the Tortolita Mountains and includes platform mound from 1100 A.D., over 40 associated residential compounds, a single prehistoric canal to the Santa Cruz River, and rare dog burial site

531

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Rincon Mountain Foothills Archaeological District**DESCRIPTION:** Listed on the National Register for protection of important cultural resources

532

**RESOURCE TYPE:** Cultural**REGION/LOCATION:** Sutherland Wash Archaeological District**DESCRIPTION:** Listed on the National Register for protection of important cultural resources[RETURN TO TUCSON REGION MAP](#)[RETURN TO NOGALES REGION MAP](#)

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## Conservation Priorities