



A LIVING RIVER

"Let us make our future now, and let us make our dreams tomorrow's reality."

—Malala Yousafzai

The river has provided life-sustaining water to humans for more than 12,000 years, a fact that can be hard to believe when we look at much of the river today. This endangered waterway is not yet lost; it is a Living River, and can be brought back to the vitality of its rich history to once again support the people, agriculture, and nature of our region. Through our dedication the river will be a ribbon of life again—refreshing and welcoming in an arid landscape.

With its headwaters in Arizona's spectacular San Rafael Valley, the Santa Cruz flows south into Sonora, Mexico, makes a horseshoe bend and runs back again into Arizona near Nogales. The river crosses the international border twice. From Nogales, the river flows intermittently past rural communities, through the Tohono O'odham Nation, passing historic missions, diverse Tucson neighborhoods, and both new housing and the agricultural heritage of Marana, uniting many along its course north toward the Gila River.

OUR OPPORTUNITY

In recent decades, the introduction of effluent (highly treated wastewater) from facilities in Santa Cruz and Pima Counties provides approximately 35 miles of perennial flows. Upgrades made in the last decade have improved water quality, and native fish (including

the endangered Gila topminnow), birds, reptiles, vegetation, and people are all returning to the river. These gains are seen in beautiful flowing sections, which point the way to our bright future.

Over the last decade, downtown Tucson has also come back to life. The area is full of energy—restaurants and bars, museums and yoga, theater and music, food trucks and festivals bring people to live, work and play. The Loop, some of which runs along the riverbanks, provides one of the largest recreational amenities in the region. And the recent UNESCO City of Gastronomy designation, based on our rich agricultural and culinary history, has turned the city into a destination.

Soon, Tucson Water may reintroduce treated effluent in the river through downtown. This effort, dubbed the Heritage Waters Project, will help reconnect Tucson to its birthplace by bringing water near the original Presidio and Convento. With Caterpillar's headquarters, shopping, dining, mixed-income housing, and sustainable transit being built along the Santa Cruz near downtown, the river is set to be the hub of Tucson's 21st Century economy. We see the transformation sparking pride and spurring additional economic development, and connection to nature and community, which residents and businesses have long hoped for.

The flowing stretch in Santa Cruz County supports a cottonwood-willow forest (a very rare forest type in North America) within the unique and extraordinary Sonoran desert. Here, the river historically provided for strong communities of ranchers and farmers, and now contributes to the success of the Tumacácori National Historic Park and the Anza Trail as important recreation and birding sites. The growing tourism and service industries complement those still working the land, and add to prosperity for the region.

Sonoran Institute has over 25 years of experience working on the Santa Cruz River in the US and Mexico. The benefits of having steady effluent to restore the natural river ecosystem provide much needed community and economic benefits that are not secondary to environmental benefits—they are equally integral to our vision. Restoring the river as a source of community pride, connection, and as an economic asset will realize this effort's "triple bottom line."

CHALLENGES TO OUR RIVER AND OUR COMMUNITIES

"It's supposed to be hard. If it were easy, everyone would do it."

—Tom Hanks; A League Of Their Own

Once free-flowing, the Santa Cruz River is now dry in most stretches except during major storms. It often looks nothing like its historical photos—it is a sandy channel with fewer cottonwoods and willows than in the past, and the banks have been engineered to protect homes from flood events. As communities grow the river provides drinking water and irrigation, further reducing surface flows. Because of these changes, people have largely stopped identifying as communities built around the river.

The greatest challenge to the Santa Cruz River today is maintaining the water that remains. Longer droughts, rising temperatures and intense competition for water threaten limited supplies. Southern Arizona has a growing population and a rebounding economy, which both increase water use. The amount of effluent going into the river is also at risk because local, state, and federal jurisdictions all influence how treated effluent is used, and how water owners are credited. There is no guarantee that effluent will remain in the river unless changes are made.

Near the border, Mexico has full rights to retain all the wastewater that is currently sent to the US, more than two-thirds of the annual volume in this stretch. Construction and expansion of water treatment facilities in the state of Sonora could lead to less water released in the river. Without a binational agreement, this water could be diverted and result in the collapse of the riparian ecosystem in Santa Cruz County.

HOW WE WILL ACHIEVE OUR VISION

Sonoran Institute's unique history of collaboration, and working at the nexus of commerce, community and conservation make this vision possible. We will create opportunities for children to play and learn at the river and for locals and visitors alike to bike, walk and enjoy the Santa Cruz—activities that increase health and social connection. We will work with community groups to see how the river can meet their needs. A clean, shady riverbank can be the perfect space for outdoor classes, pop-up vintage sales, small concerts and festivals. Volunteer clean-up days and tree plantings will introduce neighbors to one another. As people reconnect to the river, a widespread awareness of its value will create a constituency for support for policies that link the condition of the Santa Cruz River to community health and prosperity.

We will reform the technicalities of water credits and international agreements through the processes we developed and have proven through our work on Colorado River issues. Our track record is strong. We will restore flows that replenish the aquifer and lush, green vegetation, wildlife and people will thrive.





OUR FOUR GOALS

- **1.** To Retain surface water while preserving existing natural and community values along the Santa Cruz River corridor.
- **2.** To Restore watershed conditions within riparian and upland areas across the Santa Cruz River that provide a variety of human and ecosystem benefits.
- **3.** To Revitalize the corridor by maximizing community and economic benefits provided by the Santa Cruz River.
- **4.** To Reconnect the community to the Santa Cruz River to increase their appreciation and enjoyment while cultivating broad stewardship and support for the resource.

THE COST

July 2018-June 2020 • \$1.5 million

YOUR SUPPORT

We've spent over 25 years working on the Santa Cruz River, on both sides of the border. We're in it for the long haul. To ensure the future of the river we need everybody in our region, from all sectors of our communities, to join us. Like you, we dream of a healthy, more prosperous community. Now is the best chance to turn the Santa Cruz River into a strong, beautiful and resilient source of pride, powerful enough to drive a regional economy.

Every person in our region needs to play a role. We have to fight for it. So, visit the river, make a connection, and then get involved. Donate today. Spread the word and become an advocate for our Living River. The ribbon of life that has sustained our region for millennia can flow again with your support.

Learn more: SONORANINSTITUTE.ORG/SANTACRUZ

The Sonoran Institute connects people and communities to the natural resources that nourish and sustain them. We work at the nexus of commerce, community and conservation to help people in the North American West create the communities they want to live in.

For more than two decades the Sonoran Institute has been the most visible and active conservation organization working along the Santa Cruz River. Our efforts have extended to both sides of the US/Mexico border and included addressing water quality challenges, land use and development patterns, riparian and upland ecology and infrastructure development.

Photos: Bill Hatcher Sonoran Institute, 2018 (front, interior left, right); Pima County (back)

