

## Water

The Foundation for Prosperity and Health Our vision of the future, created through your support



## Message from the CEO and Board Chair

### Every challenge we address today is a step towards the future we envision.

#### Dear Friends,

We are so grateful to you, the Sonoran Institute family of partners, donors, and volunteers. Thank you for making this year one to be proud of.

We are thrilled to introduce this year's Annual Report, which highlights our accomplishments this past year with special emphasis on our work on water. But, with a twist! This report takes us to the year 2040 and sets the scene of how the work we are doing in 2017 is critical to ensuring our region's water future. We often say our work is focused on the future—we will show you how.

As we look at each project we undertake, we like to say, "a river runs through it." Whether it is the mighty and mightily challenged Colorado, the semidry effluent-dependent Santa Cruz, the New River, or the Gila, they inform and inspire our work.

Over the last year, we increasingly focused our work on the nexus between land and water and the significance of looking at water as the lifeblood of natural resource conservation in the North American West.

In Colorado, we launched a new program in partnership with the Lincoln Institute of Land Policy and the Gates Foundation. Resilient Communities and Watersheds and our Water Smart community assistance programs will aid Colorado communities in implementing the Colorado Water Plan.

On both the Upper and Lower Santa Cruz, we continue to work with a range of stakeholders in determining how to

provide water for nature and people to ensure the cultural, ecological, and economic values of our region's longest continually inhabited river.

In the Delta, we surpassed 200,000 trees planted, increasing the area of restored habitat and revitalization of the river. Our expanded Fluye project in Mexicali removed 5,500 tons of trash from two drains, improving community health and opening a pathway for cleaner water to flow to the New River, and ultimately the Salton Sea.

Our river work continues to highlight the importance of maintaining excellent relationships on both sides of the border with a diverse and culturally aware staff and partners. We are committed to being a truly binational organization. More than half our staff is located in Mexicali, where we held our first all-staff retreat in February.

Our Development and Marketing Team is at full staff and moving full steam ahead. Our Endowment Campaign is at 50% of goal, our website continues to bring in new donors, and we are happy to report fundraising was at 108% of goal for the fiscal year.

Thanks to your support—your tweets, your Facebook and Instagram posts, your kind notes, your work in the trenches, your generous financial support, and your confidence in the people of Sonoran Institute and the people of the West—we are looking forward to another great year—a year that will ensure the West's future is conserved for the benefit of all.

Stephanie Sklar CEO

Stephanie Coklar

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It is now 2040. The Colorado River remains the wellspring of drinking water for more than 67 million people throughout the West and source of sustenance for plants and animals all along its 1,450-mile journey to the sea. It continues to irrigate farms and ranches, including some of the most important food producers on the continent. It is plentiful enough to power the homes and businesses of the American Southwest. The Colorado River survives. Your support made this a reality.



## COLORADO The Source

### Colorado renews its dedication to water conservation for the entire West, and it started with you.

Everything that happens downstream of the headwaters of the Colorado River depends on how the people of Colorado manage this life-sustaining resource. In 2017, the future of Colorado's water supply was highly uncertain despite the riches in their backyard. Droughts were longer, wildfires more frequent, river basins over-appropriated, and population was projected to double by midcentury. Without meaningful change, the Colorado Water Plan of 2015 predicted, the state could have a water-supply gap of up to 560,000 acre-feet by 2050—the equivalent of 1.1 million households without water.

In 2040, thanks to our long-term vision, this outlook is brighter. Most Coloradans have come to grips with the fact that their communities are essentially deserts on par with other arid communities. They take pride in knowing that their water stewardship not only helps their own community, but also allows the region to flourish. People throughout the state have replaced their lawns with native shrubs and prairie grass. This new landscape is a badge of pride. Coloradans on both sides of the Rockies have reached consensus on a more equitable sharing of water resources. Recognizing that they depend on each other, the two regions began working, planning, and taking responsibility together.

How did all this happen? It started small. In 2017, our Resilient Communities and Watersheds program held its first workshops with the leaders of six communities to help integrate land-use planning—where and how development should occur—with water management planning. This and other programs trained participants how to become more resilient by working as a collaborative team at the local level, getting buy-in from residents, and teaching others. Colorado has grown water smart.

### This future is not possible without your support in 2017. Here are highlights of what we did this year:

#### **Resilient Communities and Watersheds**

We launched Resilient Communities and Watersheds, a joint program with the Lincoln Institute of Land Policy, and held our first Growing Water Smart workshop in fall 2017 to help communities integrate water sustainability planning with land-use planning. Represented communities included Rico, Fort Collins, Westminster, Pagosa Springs/Archuleta County, Avon/Eagle County, and the North Front Range Metropolitan Planning Organization.

#### **Climate Change Resilience**

Our updated Resilient Communities Starter Kit provides guidelines for communities that are ready to build climate change resilience and are looking for a place to begin. Updates include new case studies, strategies, and worksheets that communities can use for both do-it-yourself and facilitated workshops.

#### **Exploratory Scenario Planning**

Our Exploratory Scenario Planning workshops help communities identify a range of possible scenarios that they may face in the future, and guide them in determining the best preparation strategies. We held workshops with the Keystone Policy Center and the City and County of Denver, resulting in action plans that will inform growth and planning in the decades ahead in the nation's fastest-growing region.



"Becoming water smart is a process that starts with raising awareness, consensus and capacity for the collective planning and action that can bring the entire Colorado River basin into balance. Together we'll develop leadership and exchange best policies and practices to create a healthy, prosperous future for people and nature."

# ARIZONA Oases in the Desert

### Restoring and protecting heritage rivers helps Arizona's communities thrive, and it started with you.

It's been over a century since groundwater pumping dried up the natural, year-round flows of the Santa Cruz River. But living in downtown Tucson in 2040, you'd never know it. Now, the river is central to Tucson's vitality—and to the everyday lives of people like Emily, who grew up in Tucson when the Santa Cruz was a sandy channel, dusty and overlooked except when draining monsoon floods. She remembers visiting the library in Marana, to see the Living River of Words Art and Poetry Contest exhibit that her kids were a part of, and being surprised to learn that the river flowed right behind the library.

It just wasn't something many people were conscious of all those years ago. But education programs like the Living River of Words, sponsored by the Sonoran Institute, and their *Living River* reports raised awareness about the river. Higher-quality treated wastewater (effluent) resulting from upgrades to Pima County's wastewater treatment facilities created a healthier habitat. Documenting these improvements, *Living* 

*River* helped build a framework for people and organizations to collaborate on the river's restoration.

As the community's appreciation for the Santa Cruz and understanding of effluent grew, so did interest in more accessibility and enthusiasm for efforts like Agua Dulce: The Santa Cruz River Heritage Project, Tucson Water's initiative to redirect surplus effluent to provide river flows through downtown. Thanks to these year-round flows, Emily can now stroll a few blocks to bring her grandchildren to a natural area that has exploded with life. From The Loop paralleling the river, they enjoy watching herons and Gila topminnow that teem in the narrow channel. Resting in the shade of the cottonwood and willow gallery lining the river's edge, the kids search for frogs. Some days they have a picnic lunch on the riverbank with many local business employees, and in the evenings they might practice yoga in the riverside park, eat at the busy outdoor cafes, or do their shopping. She can't imagine Tucson without the Santa Cruz.

### This future is not possible without your support in 2017. Here are highlights of what we did this year:

#### The Valley of the Sun

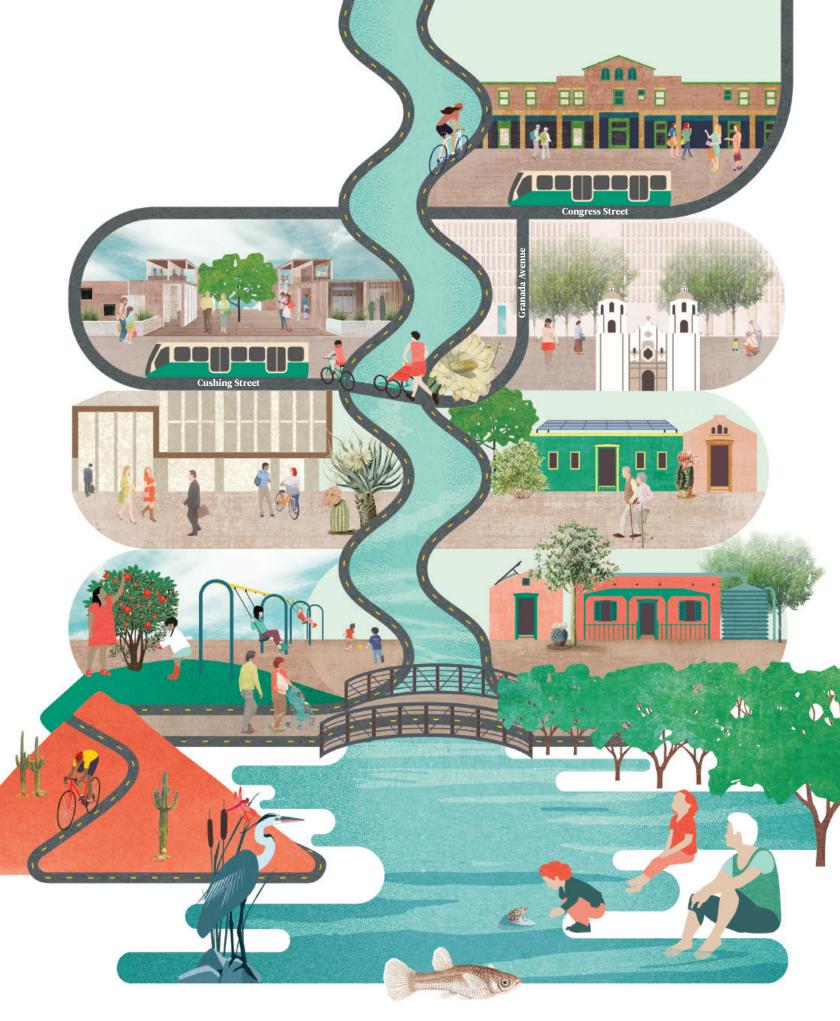
We are helping lead the Maricopa County Regional Open Space Strategy (ROSS). Our goal is to keep Phoenix's economy booming but also ensure the Valley of the Sun is known throughout the West as a premier hiking and outdoor adventure destination. Our work in the White Tank Mountains is a model for responsible growth and development—ROSS grows this vision valley-wide.

#### **Community Engagement**

With the proposed Interstate 11 coming to Wickenburg, Arizona, we showed once again that our community engagement works. Bringing together community members, business leaders, and elected officials, we led a visioning process that built consensus around an improved plan. Changes will preserve critical resources like the majestic Hassayampa River and ensure that local businesses thrive.

#### The Gila Topminnow

The endangered Gila topminnow are increasing in number since they reappeared in 2015 in the Santa Cruz River. Four other fish species have been observed as conditions for aquatic wildlife improve in the river. Indicators of increased groundwater recharge are also being seen. These highlights and other results are detailed in our annual Living River report.



"To have this native species back is a big deal. The topminnow's reappearance is an indication that we have a functioning ecosystem and are doing good things with our water."

## DELTA A River Connects

Reconnecting to water inspires the next generation of conservation leaders in the Delta, and it started with you.

In 2040, Marianna is an ecologist overseeing habitat restoration along the Río Hardy, a tributary of the Colorado River in the Delta that suffered from salty agricultural runoff. Thanks to increased flows of effluent periodically coming from Las Arenitas, an artificial treatment wetland designed by the Sonoran Institute, the volume and quality of the water have improved enough to keep Marianna's crew busy. Native cottonwood and willow trees have made a comeback, as have the fish populations that were once abundant enough to support the entire Cucapah tribe. More water brings increased river recreation and eco-tourism, raises property values, and boosts local employment. Perhaps most importantly, the pulse flows through the Hardy and into the Colorado River have brought the Delta's endangered estuary back from the brink by allowing the river to connect to the sea—not constantly, but enough to allow for the mixing of fresh and salt water that provides critical

habitat for many species and a spawning ground for shrimp and corvina, both important for the local fishing industry.

As a fourth grader in 2017, Marianna visited the Laguna Grande Restoration Area on a field trip with Sonoran Institute's environmental education program. The experience of connecting with nature, with the Colorado River, changed her life. She brought this newfound wonder and environmental consciousness back to her family, who became active in local clean-water efforts, including Sonoran Institute-led Mexicali Fluye projects to clear trash and debris from the agricultural drainage canal in their barrio. Sonoran Institute's programs awoke a passion in many of the thousands who actively participate in the Delta's restoration. Some, like Marianna, have become community leaders, scientists, elected officials, and activists who will shape the future of the Delta.

"They've accomplished things in the Delta that I would never have thought could be accomplished."

Steve Nelson | U.S. Bureau of Land Management and U.S. Forest Service (Retired)

### This future is not possible without your support in 2017. Here are highlights of what we did this year:

#### Connecting the River to the Sea

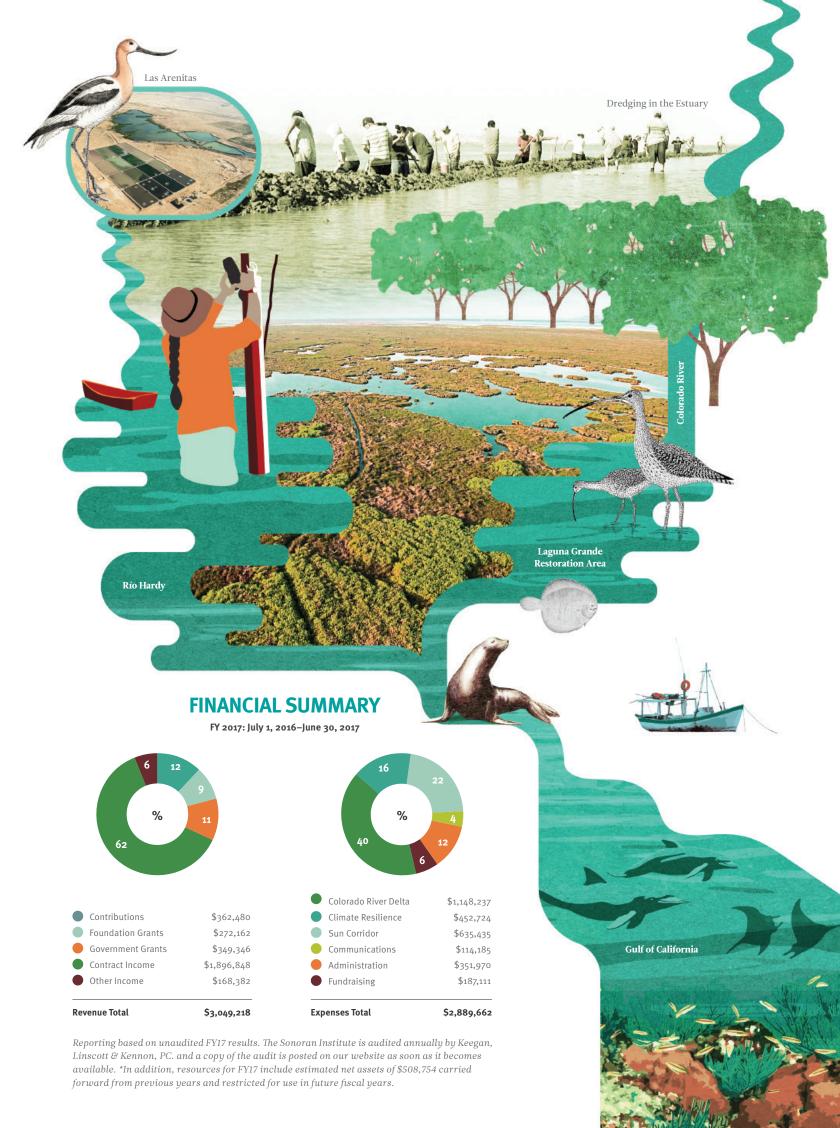
By delivering 4,000 acre-feet of water to the upper estuary, we demonstrated that, for a few months of the year, we can connect the lower 50 miles of the Colorado River with the sea. We also restored connectivity along seven river miles across the sandbar, resulting in the first gravity flow of river water across the sandbar since 2000.

#### **Educating to Inspire**

Our environmental education program connects children and adults with the Colorado River and spreads the word about the importance of our Delta restoration efforts. We engaged 2,000 more people through classroom programs, restoration site visits, and Family Saturday programs at the Laguna Grande Restoration Area.

#### **Restoring Riparian Habitat**

While restoring an additional 100 acres of riparian habitat in the Laguna Grande Restoration Area in the Mexicali Valley, we reached a milestone—surpassing 200,000 trees planted at the site. Laguna Grande, covering five river miles, is the largest and most dense riparian habitat along the Colorado River in Mexico.



### **Thank You**

### Because of you, we were able to help make our communities a success in 2017—and because of you, they will continue to be successful in 2040.

The Sonoran Institute is grateful to all our donors for their support. Please note, these contributions reflect contributions for the period July 1, 2016 through June 30, 2017. We apologize for any errors or omissions.

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The Sonoran Institute's mission is to connect people and communities with 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 build the communities they want to live in while preserving the values which brought them here. We envision a West where civil dialogue and collaboration are hallmarks of decision making, where people and wildlife live in harmony, and where clean water, air, and energy are assured.

#### WHERE WE WORK

Colorado River Basin Desert Southwest Rocky Mountains

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Plants of Colorado (page 5): Bee balm (Monarda fistulosa); Wild cherry (Prunus virginiana); Common yarrow (Achillea millefolium); Blackeyed Susan (Rudbeckia hirta);

Animals of the Delta (page 9): American avocet (*Recurvirostra americana*); Long-billed curlew (*Numenius americanus*); Anchovy (*Anchoa mundeoloides*); Mazatlan sole (*Achirus mazatlanus*); Sea Lion (*Zalophus californianus*); Bottlenose dolphin (*Tursiops*)