

# Santa Cruz

# RIVER

## RESEARCH DAYS

**APRIL 20–APRIL 21, 2023**

Hybrid In-person and Virtual Event

## RAISING ALL VOICES IN CONSERVATION

Since 2009, when this annual event was launched, the Santa Cruz River has seen many changes. The river has cleaner water, the endangered Gila topminnow is swimming in the river again, new reaches are flowing year-round, and numerous efforts are underway to increase accessibility and improve river conditions where possible. As we celebrate the collaborative efforts that are underway, we recognize that diverse participation and engagement across our communities is needed to ensure long-term stewardship of this valued river.

We are excited to offer real-time English–Spanish translation of presentations and discussions. Speakers and attendees will be able to participate in the event in their preferred language, allowing new opportunities for discovery, networking, and community-building along this international river.

This year's field trip will take place on Friday, April 21. Join a guided tour of Historic Canoa Ranch, a nationally recognized historic conservation park, to learn more about Pima County's natural and cultural resource preservation initiatives.



Photograph by Charlie Alolkoy

### PURPOSE

Santa Cruz River Research Days was founded in 2009 with the goal of sharing experiences and results across diverse institutions and disciplines. Our program is designed to:

- identify new research questions,
- expand the Santa Cruz River research community,
- foster awareness of each other's research and conservation efforts, and
- catalyze new collaborative projects

### 2023 STEERING COMMITTEE

**Sonoran Institute**

Michael Bogan, University of Arizona

Ben Lomeli, Friends of the Santa Cruz River

Tony Palmer, Tumacácori National Historical Park



SONORAN  
INSTITUTE



THURSDAY / APRIL 20, 2023

## morning schedule

<b>8:40 a.m.</b>	Refreshments provided for in-person attendants
<b>8:50 a.m.</b>	<b>ZOOM MEETING OPENS</b>
<b>9:00 a.m.</b>	<b>Welcome</b>
<b>9:10 a.m.</b>	<b>Jacelle Erin Ramon-Sauberan</b> , American Indian Studies, UA <i>Caretakers of the Land: History of Land and Water in San Xavier</i>
<b>9:50 a.m.</b>	<b>Dinah Bear</b> , Attorney and Consultant <i>The Role of Law in Two Major Projects in the Santa Cruz Valley: The Copper World Complex and the Border Wall</i>
<b>10:10 a.m.</b>	<b>BREAK</b>
<b>10:30 a.m.</b> <b>Virtual</b>	<b>Isabella Feldman</b> , Earth Grant Intern, UA <i>A four-year strategy to assess trash make-up, load, and distribution in the Santa Cruz River in Pima County, Arizona</i>
<b>10:50 a.m.</b>	<b>Britsy Lozolla-Rizo &amp; Riley A. Gallagher</b> , School of Natural Resources and the Environment, UA <i>Effects of urbanization on the diet of bobcats on the Santa Cruz River</i>
<b>11:10 a.m.</b> <b>Virtual</b>	<b>Julia Laurenzi</b> , School of Natural Resources and the Environment, UA <i>Effect of treated effluent water introduction on herpetological species richness and abundance</i>
<b>11:30 a.m.</b>	<b>BREAK: LUNCH</b>

## KEYNOTE SPEAKER

**LANE RAMONA SANTA CRUZ**, City of Tucson, Ward 1 Council Member

Lane Ramona Santa Cruz (they/she) is a second-generation Tucsonense, in S-cuk-Son the ancestral lands of the Tohono O'odham and home to the Pascua Yaqui Tribe. Their Indigenous lineage is from Eudeve-Opata pueblos in Sonora, Tarahumara from Chihuahua, and being born and raised on this side of the border. They identify as Chicax/Indigena.





# afternoon schedule

<b>12:30 p.m.</b>	<b>KEYNOTE: Council Member Lane Ramona Santa Cruz</b> , City of Tucson Ward 1 <i>Tributaries of a Dynamic City</i>
<b>1:20 p.m.</b>	<b>BREAK</b>
<b>1:40 p.m.</b> <b>Virtual</b>	<b>Mariana Mateos</b> , Department of Ecology and Conservation Biology, Texas A&M University <i>Preliminary results of field surveys of the endangered Rio Concepcion Topminnow (Guatopote del Concepción), Poeciliopsis jackschultzi</i>
<b>2:00 p.m.</b>	<b>Robert Villa</b> , Tucson Herpetological Society/The Desert Laboratory on Tumamoc Hill <i>Let Toads Toad!</i>
<b>2:20 p.m.</b>	<b>Brian Gill</b> , School of Natural Resources and the Environment, UA <i>Invertebrate community responses to drying, flooding, and channel maintenance in the Santa Cruz River Heritage Project</i>
<b>2:40 p.m.</b>	<b>Ethan R. Wright</b> , Biodiversity Knowledge Integration Center, ASU <i>Notes on adult feeding and behavior of Tegrodera aloga (Skinner, 1903) (Coleoptera: Meloidae)</i>
<b>3:00 p.m.</b>	<b>Jennifer Becker &amp; Chase Vorin</b> , Pima County Regional Flood Control District & Harris Environmental Group <i>From Bulldozers to Burrows: Methods of Urban Lizard Salvage Ahead of Construction disturbance in the Santa Cruz River Basin</i>
<b>3:20 p.m.</b>	<b>BREAK</b>
<b>3:40 p.m.</b>	<b>Jennifer MacFarland</b> , Tucson Audubon Society <i>Urban Engagement for Bird Conservation Along the Santa Cruz River</i>
<b>4:00 p.m.</b>	<b>Michael Bogan, Rebecca Lipson, &amp; Margaret Wilch</b> , University of Arizona & Southern Arizona Regional Science and Engineering Fair (SARSEF) <i>BIORETS Santa Cruz: a new immersive teacher training program focused on water resources and biodiversity along the river</i>
<b>4:20 p.m.</b>	<b>Abigail Kahler &amp; Eve Halper</b> , University of Arizona & Bureau of Reclamation <i>Development of an interactive web-based GIS application for exploring the surface water modeling results of the Lower Santa Cruz River Basin Study: A Resource Assistant Internship</i>
<b>4:40 p.m.</b>	<b>Tony Figueroa</b> , Tucson Audubon Society <i>Stinknet: Stopping the Spread along the Santa Cruz</i>
<b>5:00 p.m.</b>	<b>End of Day 1</b>





# all day schedule

FRIDAY APRIL 21, 2023

8:40 a.m.	Refreshments provided for in-person attendants
8:50 a.m.	<b>ZOOM MEETING OPENS</b>
9:00 a.m.	<b>Welcome</b>
9:10 a.m.	<b>KEYNOTE: Emma Robbins</b> , Navajo Water Project <i>Arts, Community, and Water</i>
10:00 a.m.	<b>BREAK</b>
10:20 a.m.	<b>Courtney Kaufman</b> , Pima County Regional Wastewater Reclamation Department <i>Pima County Regional Wastewater Reclamation Department: Santa Cruz River Sampling and Observations</i>
10:40 a.m.	<b>Laura Palacios</b> , School of Information, UA <i>Tree-Based Machine Learning Technology for remote, real-time Escherichia coli level prediction in the Upper Santa Cruz River</i>
11:00 a.m.	<b>Damian Rawoot</b> , The Nature Conservancy <i>The evolving role of area-based conservation: a case study from the Sonoita Creek watershed</i>
11:20 a.m.	<b>Francesca Claverie</b> , Borderlands Restoration Network <i>Flora Fronteriza: Native Plant Restoration in the Arizona/Sonora borderlands</i>
11:40 a.m.	<b>Bridgette Crosby</b> , True Nature Media <i>Bleeding the Colorado River</i>
12:00 p.m.	<b>BREAK: LUNCH</b> (plus travel to Historic Canoa Ranch, transportation not provided)
1:30 p.m.	<b>Tour of Historic Canoa Ranch</b>
3:30 p.m.	Research Days concludes. Thank you for participating!

## KEYNOTE SPEAKER

**EMMA ROBBINS**, Navajo Water Project, Executive Director

Emma Robbins is a Diné artist, activist, and community organizer. As Executive Director of the Navajo Water Project, she creates infrastructure that brings clean running water to the one in three Navajo families without it. Robbins is the founder of The Chapter House, an Indigenous women-led community arts space. All her work is centered around education, Indigenization, and community collaboration.







# THANK YOU TO OUR 2023 SPONSORS

Bobcat (*Lynx rufus*) photograph by Florence McGinn

## Event Sponsors



## Supporting Sponsors



FRIENDS OF THE SANTA CRUZ RIVER



TUCSON WATER

Special thanks to Planet Women, the Historic Canoa Ranch, and Pima County Natural Resources, Parks and Recreation for their support of Santa Cruz River Research Days.





# Growing Green

Tucson Electric Power's renewable energy resources are fueling our cleaner, greener grid – from southeast Tucson, where energy storage joins 314,000 new solar panels, to the New Mexico grasslands, where 62 giant wind turbines produce clean power.

These and other clean energy projects have more than doubled our use of wind and solar power over the last year, as we work to cut carbon emissions by 80 percent by 2035.



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# Restore the future



"A river doesn't just carry water, it carries life."

—Amit Kalantri



Endangered Gila Topminnow has returned to Santa Cruz now that water is flowing. Photo by Dennis Caldwell.



## Creating a stronger community, together.

Cox is proud to make meaningful partnerships throughout our communities.

We proudly support the Sonoran Institute's Santa Cruz River Research Days.



SONORAN INSTITUTE

**SONORAN INSTITUTE**, a non-profit organization, is working to make the Santa Cruz River a living, flowing river and the foundation of community health and prosperity from Mexico to Marana. Since 1990, the Sonoran Institute's mission has been to connect people and communities with the natural resources that nourish and sustain them.

## DONATE TO SONORAN INSTITUTE



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