

Santa Cruz RIVER RESEARCH DAYS

BUILDING ON SUCCESSSES

APRIL 29–MAY 1, 2025

Hybrid In-person and Virtual Event

**Pima Community College—Downtown Campus
1255 N. Stone Ave. Tucson, AZ 85709**

Last year, the Santa Cruz River ranked #4 on the “America’s Most Endangered Rivers of 2024” list. While alarming, this heartening recognition highlights recent progress. However, its recovery is tenuous, requiring continued commitment to sustain the conditions that have enabled its resurgence. Since 2009, there have been numerous improvements in water quality, the return of an endangered species, removal of non-native plants, building of new community parks, and more.

What lies ahead is unknown, but we’re not past all challenges to protect this important river. We strive to maintain our momentum and build on past success. This year we’re highlighting many diverse accomplishments, the lessons learned, and demonstrating how collective efforts work together to inform the future of the river.

It takes everyone’s efforts to protect this river and surrounding watershed that is the foundation of our region’s natural and cultural heritage. By coming together in person and virtually, sharing in English and in Spanish, we coordinate our efforts and help unify the Santa Cruz River community.



Photograph by Michael T. Bogan

PURPOSE

Santa Cruz River Research Days began 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

2025 STEERING COMMITTEE

Sonoran Institute

Michael T. Bogan, University of Arizona

Ben Lomeli, Friends of the Santa Cruz River

Tony Palmer, Tumacácori National Historical Park



**SONORAN
INSTITUTE**

TUESDAY APRIL 29, 2025

all day schedule

12:30 PM	Check-in and Refreshments
12:50 PM	Zoom meeting opens
1:00 PM	WELCOME
1:10 PM	Eric Aldrich , Pima Community College Welcome
1:20 PM	KEYNOTE Dr. Maria-Elena Giner, P.E. , United States Commissioner of the International Boundary and Water Commission Adriana Reséndez Maldonado , Commissioner of the Mexican Section of the International Boundary and Water Commission (CILA)
2:00 PM	Luke Cole , Sonoran Institute <i>Innovative Litter Trap in Nogales, AZ Protects the Santa Cruz River</i>
2:20 PM	Wildlife at Tumacácori National Historical Park— Video
2:25 PM	BREAK
2:40 PM	Nichole Engelmann , US Fish and Wildlife Service — Virtual Presenter <i>Partnerships Along the River</i>
3:00 PM	Charles Hofer , US Fish and Wildlife Service — Virtual Presenter <i>River of Refuge</i>
3:20 PM	Michael Mulcahy , University of Arizona Jacelle Ramon-Sauberan , Tohono O'odham Community College <i>No place for Isolation; Living in the Desert</i>
3:40 PM	Anna Costa , Pima County Conservation Lands and Resources <i>Reflecting on Water: Education and Connection at the Santa Cruz River</i>
4:00 PM	Jacqueline Bruhn, Margaret Wilch , University of Arizona <i>BIORETS: a K-12 teacher training program to enhance science education, student research, and community engagement along the Santa Cruz River</i>
4:20 PM	Learning the Stories of the Santa Cruz River Mr. Acuña, BIORETS— Video
4:30 PM–5:30 PM	SOCIAL HOUR—Brother John's, 1801 North Stone Ave, Tucson

KEYNOTE SPEAKERS

DR. MARIA-ELENA GINER, P.E.

Dr. Maria-Elena Giner, P.E., was appointed in August 2021 to serve as the United States Commissioner of the International Boundary and Water Commission, United States and Mexico. Dr. Giner previously served as General Manager of the Border Environment Cooperation Commission (BECC), an institution that developed environmental infrastructure along the U.S.- Mexico border in association with the North American Development Bank. During her tenure at the BECC, she focused on policies that addressed U.S.- Mexico cooperation on water, energy, and climate change. With the support of the BECC staff, she led the development and financing of \$9 billion in environmental infrastructure, benefitting about 100 communities and over 10 million residents. Dr. Giner's education includes a Bachelor of Science in Civil Engineering from Loyola Marymount University, a Master of Business Administration from the University of Texas at El Paso, and a Ph.D. in Public Policy from the University of Texas at Austin. She is also a registered professional engineer, and first-generation college graduate.



ADRIANA RESÉNDEZ MALDONADO

Adriana Reséndez Maldonado is the first woman to hold the position of Commissioner of the Mexican Section of the International Boundary and Water Commission (CILA). She has 25 years of experience at the International Boundary and Water Commission in the areas of Operation and Engineering, as Principal Engineer for Operations, and as Deputy Director of the Colorado River in the Engineering Department. During her career within the Commission, she has participated in the negotiation of several Commission Minutes, as well as in joint inter-institutional and binational coordination for the development of key projects in the US-Mexico border region. She holds a Bachelor's degree in civil engineering and master's studies in Hydraulic Resources in Arid Regions, with a specialization in water use and quality, from the Autonomous University of Chihuahua.



REX SCOTT

Rex Scott, District 1 Supervisor and Chair of the Pima County Board of Supervisors, was first elected to represent District 1 in 2020 and was re-elected in 2024. Supervisor Scott grew up in Athens, Ohio and earned two bachelor's degrees from Ohio University, which is in Athens. In 1991, Supervisor Scott moved to Pima County to take a position teaching social studies at Flowing Wells Junior High School, one of three schools in District 1 that he served during his career as a public-school educator. In 2000, he began his 19-year career as an administrator working in both middle and high schools in District 1. Supervisor Scott has been married to a fellow career educator since 1994 and they are the parents of adult twins.



morning schedule

9:00 AM	Check-in and Refreshments
9:20 AM	Zoom Webinar opens
9:30 AM	WELCOME
9:45 AM	KEYNOTE Rex Scott , District 1 Supervisor and Chair of the Pima County Board of Supervisors
10:00 AM	Janice Hughes , Nanda Srinivasamurthy , Mathew Lutheran , Pima County <i>Santa Cruz River Flood Control District Projects Construction Update</i>
10:20 AM	Jessica A. Moreno , Coalition for Sonoran Desert Protection <i>Bridging the Great Sonoran Desert Divide: Building on Past Success to Protect Connectivity for Wildlife in the Tucson-Tortolita Mountain Wildlife Linkage in Tucson, Arizona</i>
10:40 AM	Kimberly Baeza , Pima County Regional Wastewater Reclamation Department <i>Rewatering the Santa Cruz River in Green Valley</i>
11:00 AM	Educators Explore the Santa Cruz River, BIORETS 2024—Video
11:05 AM	BREAK
11:20 AM	Angel Breault , Tucson Clean & Beautiful, Rebecca Perez , The Wilderness Society <i>Days of Connection—the intersection of community change, place making, and environmental action</i>
11:40 AM	Becky Fitzpatrick , Watershed Management Group <i>Arundo donax, Removal and Restoration of Tanque Verde Creek, Tucson, AZ</i>
12:00 PM	Tony Figueroa , Tucson Bird Alliance <i>Stewards of the Santa Cruz—Preserving Habitat with Invasive Species Management</i>
12:20 PM	BREAK LUNCH



afternoon schedule

1:20 PM	Alanna Fulkerson , Texas A&M University—Virtual Presenter <i>Fish surveys of the Mexican side of the Santa Cruz River and the neighboring Rio Concepcion with environmental DNA: an update</i>
1:40 PM	Matthew Mayer , University of Arizona <i>Gila Topminnow (<i>Poeciliopsis occidentalis</i>) Demographics and Morphology (2016–2024) in the Santa Cruz River, Arizona</i>
2:00 PM	Meet the turtles of the Santa Cruz River—Video
2:05 PM	BREAK
2:20 PM	Meredith Willmott , University of Arizona <i>Hopping on the Santa Cruz: novel aquatic adaptations in a terrestrial insect group</i>
2:40 PM	Scully Young , University of Arizona <i>Impacts of drying and flooding on aquatic invertebrates in four reaches of the Santa Cruz River</i>
3:00 PM	Catlow Shipek , Watershed Management Group <i>Developing a Local Drought Response Coordination Framework</i>
3:20 PM	Ms. Becker's Summer on the Santa Cruz with BIORETS—Video
3:25 PM	BREAK
3:40 PM	Nicole Richards , University of Arizona <i>Assessing Trash Accumulation in Tributaries of the Santa Cruz River to Inform Mitigation Strategies</i>
4:00 PM	Jacob Taylor , University of Arizona <i>Trash Tracking Transformed: Enhancing Environmental Monitoring with Data Innovation</i>
4:20 PM	Emily M. Waggoner , University of Arizona <i>Plastics, Pollutants, and Microbial Life in the Santa Cruz River</i>
4:40 PM	Santa Cruz River Poetry
5:00 PM	Wrap up and reminder about field trip

THURSDAY MAY 1, 2025

9:00 am to 12:00 pm

FIELD TRIP: TUBAC NATURE CENTER HABITAT RESTORATION PLAN

Join a guided tour to see first-hand the work being done to enhance a stretch of the Santa Cruz River in Tubac. Tubac Nature Center, Tucson Bird Alliance, local landowners, and other community partners are working to remove non-native species, provide new wildlife habitat, and create an enhanced community space that celebrates the plants and wildlife of the Santa Cruz River. Come learn about the progress to date, complexities of restoration work, lessons learned, and what the future could include. This work is being funded in part by Santa Cruz Valley National Heritage Area. Limited to 20 attendees and transportation not provided.



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**Santa Cruz Valley
National Heritage Area**



TUBAC NATURE CENTER



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CAS102IN: Environmental Explorations

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CAS111: Sustainable Cities & Societies
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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.

Follow Sonoran Institute on any
of our social media channels!



In less than a year, WIFA awarded \$200 million in grants to save **5.5 million acre-feet** of water.

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