

WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**



February 3, 2023 / Volume 11, Issue 5

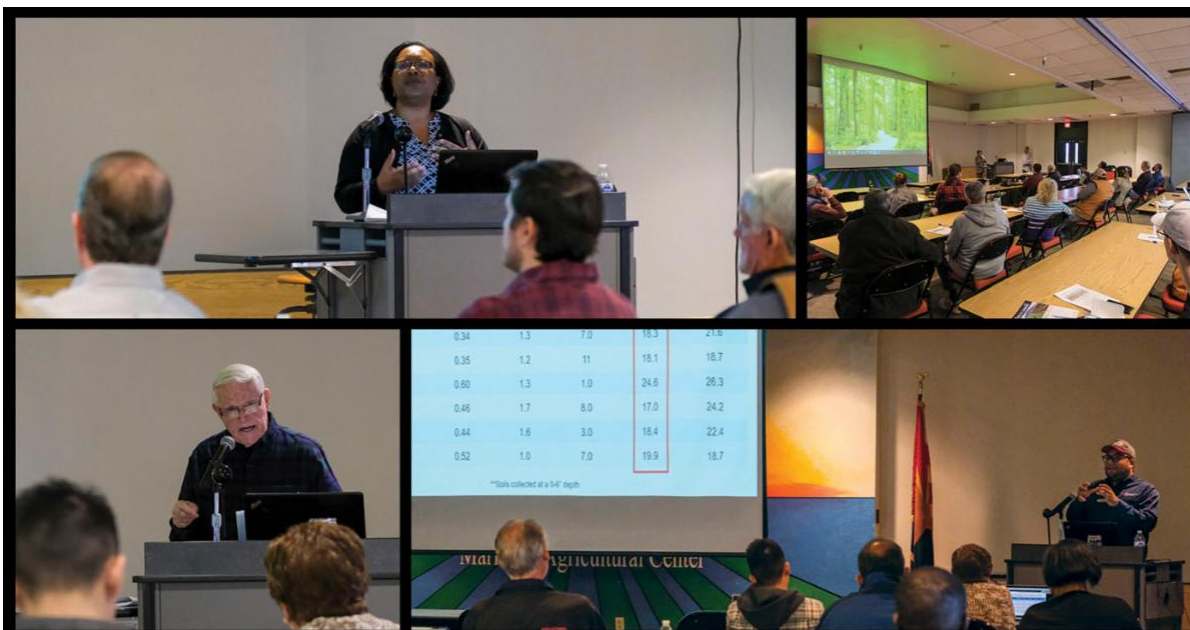
The Water Resources Research Center - a research unit of the [College of Agriculture and Life Sciences](#) and an Extension unit in [UA Cooperative Extension](#) within the Division of Agriculture, Life & Veterinary Sciences & Cooperative Extension. [Land Acknowledgement](#).

[WRRC Office Update](#)

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IN THIS ISSUE: USDA-NIFA, Silent River Recap, AAWWA, Factsheet, Student Worker



USDA-NIFA Project Stakeholders Meet in Arizona

On January 24, UArizona personnel hosted a project report on the Arizona component of the USDA-NIFA project, "Sustaining Groundwater and Irrigated Agriculture in the Southwestern United States Under a Changing Climate." The University of Arizona is partnering with the University of California, Davis and others to conduct a five-year research project on creating modern sustainable irrigated agriculture systems, funded by

the United States Department of Agriculture (USDA). When farmers cannot rely on rain for their crops, as they cannot in Central Arizona, they turn to irrigated systems sourced from groundwater and rivers. However, major water resource issues are increasing for Arizona farmers as drought puts stress on water sources. The project, enabled through a USDA-NIFA grant that started in September 2021, brings together a talented team of interdisciplinary researchers. At the stakeholder meeting, information was shared on the project's vision and scope from Lead Principal Investigators Isaya Kisekka (UC-Davis) and Sharon Megdal (UArizona). Research updates were provided by graduate research associate Simone Williams (UArizona), professor and soil health specialist Debankur Sanyal (UArizona), and agricultural engineer Kelly Thorp (USDA-ARS). Project Advisory Board members Ron Rayner (A Tumbling-T Ranches) and Bryan Hartman (Maricopa-Stanfield IDD) shared their perspectives on farming and water challenges. The meeting concluded with a Q&A. A recording of the meeting is available on the WRRC website.

Images: Jake Kerr, UArizona ENVS

- [View the Recording](#)
- [Meeting Info](#)
- [Project Info](#)
- [UArizona ENVS Story](#)
- [Arizona Republic News Story](#)
- [Maricopa Agricultural Center](#)
- [UC Davis Agricultural Center](#)

EVENTS

WRRC 19th Annual Chocolate Fest

Date: Friday, February 10, 2023

Time: 3:30 pm – 5:00 pm Arizona Time

Location: [350 North Campbell Ave, Tucson AZ](#)

Please join us on Friday, February 10 from 3:30 to 5:00 PM for the WRRC's annual Chocolate Fest. This year, we are thrilled to be hosting this fun event in person at the WRRC's offices! There will be real chocolate for all those who can attend in person. Weather permitting, it will be an indoor-outdoor event. The agenda this year is simple: gather with friends and colleagues, enjoy chocolate treats, and see the winning photographs from our 2022 Annual Photo Contest. In keeping with tradition, this year's celebration will be a chocolate potluck. Start thinking about what you would like to bake, concoct, purchase, or brew, then bring your favorite divine chocolate delectation to share. For those who want to tune in remotely, the program and photos will stream online through Zoom. We look forward to seeing you on February 10 at the first in-person Chocolate Fest since 2020!



- [Register to Attend In Person](#)
- [Register to Attend Via Zoom](#)
- [More Info](#)

WRRC Brown Bag Webinar: A Living River – The Santa Cruz River from Mexico to Marana

Date: Wednesday, February 15, 2023
Time: 12:00 pm – 1:15 pm Arizona Time
Location: [Webinar Only](#)



Speakers:

Luke Cole PhD, *Director, Santa Cruz River Program, Sonoran Institute*

Madeleine Oliver, *Program Manager, Sonoran Institute*

Claire Zugmeyer, *Ecologist, Sonoran Institute*

The Santa Cruz River has long been the backbone of the region’s natural and cultural heritage. Although the river has changed since humans first arrived in the region 12,000 years ago, the river still exists and is a “living” entity that continues to support wildlife and communities along its course. Throughout Arizona, the release of effluent maintains flows of many river reaches. The Santa Cruz River is fortunate to have three stretches with effluent flows—one near Nogales in Santa Cruz County and two near Tucson in Pima County. Annual Living River reports communicate conditions in these stretches of the Santa Cruz River by presenting data on indicators of river health with easy-to-follow text and engaging graphics. This long-term monitoring program and communication tool is a key element of Sonoran Institute’s Santa Cruz River Program and makes use of diverse data sets collected by multiple agencies, serving as an important baseline of scientific information for river management decisions while also providing community members with approachable information about their local river.

Image: Wikimedia Commons

[Register Here](#)
[More Info](#)

Upcoming Events

Feb 22 at 12:00 pm: [WRRRC Seminar Series: Universal Access to Clean Water for Tribal Communities](#)

Mar 16 at 12:00 pm: WRRRC Seminar Series: Water in Cochise County: Challenges and Solutions – Save the Date!

Mar 29 at 12:00 pm: WRRRC Seminar Series: Geophysical Imaging as a Tool for Groundwater Management: Rosemary Knight, Professor of Geophysics, Stanford University – Save the Date!

MARK YOUR CALENDARS!

WRRRC
2023
ANNUAL
CONFERENCE

JULY
11-12

Photo: Kim Holmes - Reflective Morning 2021
Green Valley - WRRRC Photo Contest

NEWS



WRRC Webinar: A Story of Swimming and Colorado River Conditions

On January 26, the WRRC hosted a webinar, titled “Silent River: Adventure Swimming and Stories of Water,” with speakers Matthew Moseley, CEO of Ignition Strategy Group and long-distance swimmer, and Matt Rice, Senior Director of the Southwest Program for American Rivers. The two Matts collaborated on a short film, *Silent River*, documenting Moseley’s record-breaking swim down the Green River to its confluence with the Colorado River. However, the plan to swim the 52-mile distance from Mineral Bottom to the confluence was foiled by drought, and Moseley was only able to actually swim 39.6 of those miles due to low flow in the river. Rice, who accompanied Moseley’s swim from a canoe, commented that Moseley’s inability to complete the full 52 miles created a more impactful film by calling attention to the severity of the drought. Webinar attendees viewed the 13-minute film before hearing from the two speakers, who shared their experiences on the river during the swim and their concerns about our water future. Moseley’s parting comment was that water is “the most critical issue of our time. It’s not oil, it’s not gold, it’s going to be water.” The film is free to view on YouTube, and a recording of the webinar is available on the WRRC website.



- [View the Recording](#)
- [Watch the Film](#)
- [More Info](#)

Women in Water and Agriculture Meet in Tempe

On January 31, women working in water and agriculture came together to support and celebrate their participation in work traditionally dominated by men. The WRRC was represented by three staff members: Research/Outreach Program Officer Susanna Eden, Post-Doctoral Researcher Valerisa Joe-Gaddy, and Communications Coordinator Jessie Hampton, who drove together from Tucson to attend the Arizona Association of Women in Water and Agriculture (AAWWA) annual meeting at the SRP PERA Training & Conference Center in Tempe. The program featured prominent women from across the state speaking on current challenges. The morning keynote address by Kathleen Ferris, ASU Kyl Center Senior Research Fellow and former Director of the Arizona Department of Water Resources (ADWR), was followed by panel discussions from women with experience in the legislative and agricultural fields. Talks from Kristen Johnson, ADWR River Management Section Manager, and Kathryn Sorensen, Kyl Center Director of Research, offered the latest information on the state of the Colorado River and shortage-related challenges for municipal water providers. The program ended with an address by Joanna Allhands, writer and editor at The Arizona Republic newspaper, focused on getting the story straight on the complicated topic of water and agriculture. Speakers shared stories of leadership, adaptability, and perseverance, reiterating the importance of both water and agriculture for Arizona’s future and urging the audience to look to collaboration, innovation, and solution-based thinking.



Image: Zoe Scott, WRRC and Maricopa Agricultural Center staff at the AAWWA Annual Meeting.

Left to Right: Valerisa Joe-Gaddy, Natalie Brassill, Jessie Hampton, Susanna Eden, Taylor Janiec, Zoe Scott, Channah Rock.

[More Info](#)



ARIZONA WATER FACTSHEETS

Did You Know?

Water use in the Phoenix area is approximately the same today as it was in 1985—even with an additional 3 million people—due to innovative water management and policy. To further strengthen local water resilience, the City of Phoenix revised its Drought Management Plan and Water Use Reduction Guidelines in 2021. This document provides a framework for the city's drought mitigation measures. Along with four reduction stages corresponding to drought status and shortage, the city also outlines proactive strategies such as outreach tactics, conservation methods, rebates, and penalties for water misuse. To learn more about water demand and drought mitigation measures in Maricopa County, check out the Maricopa County Water Factsheet!



Image: City of Phoenix

[Maricopa County Water Factsheet](#)

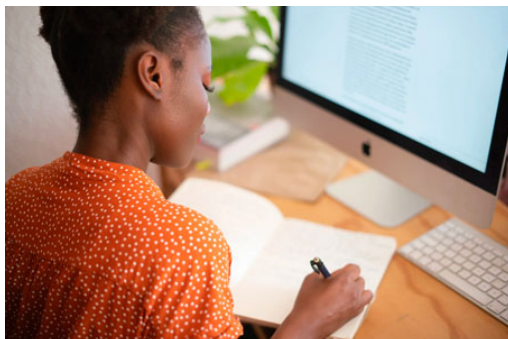
WRRC Seeks Hourly Student Assistant

The UArizona Water Resources Research Center is seeking a student with interest and experience in writing about water and/or environmental topics to assist with outreach communication. View the full position description at the link below. Applicants are encouraged to visit the [WRRC website](#) for more information on WRRC programs and activities. Interested students should send a statement of interest, writing sample, and resume including the names and contact information of two references to Jessie Hampton at jessiehampton@arizona.edu. Accepting applications until the position is filled.



Image: Liza Summer - pexels.com

[More Info](#)



WRRR 104 GRANTS

Water Scarcity and Availability • Water-Related Hazards and Climate Variability • Water Quality
Water Policy, Planning, and Socioeconomics
Ecosystem and Drainage Basin Functions •
Water Technology and Innovation • Workforce
Development and Water Literacy.

[MORE INFO](#)

WATER JOBS

- ADEQ [Multiple Positions](#)
- ADWR [Multiple Positions](#)
- Bureau of Reclamation [Civil Engineer](#)
- USDA-NRCS [Natural Resource Specialist \(Water Resources Planning Specialist\)](#)

Please visit [WRRC's website](#) for a complete listing of water jobs & opportunities.

ANNOUNCEMENTS

- **Feb 3:** [Indigenous Resilience Center – Dr. Andrew Curley “De-Colonizing the Colorado River: Can We Re-Think Our Relationship with Water?”](#)
- **Feb 4:** [Indigenous Health: Connecting with Wellbeing and Community Day](#)
- **Feb 6:** [Instream Flow and Water Level Conservation Center – Comment Period Deadline](#)
- **Feb 6-7:** [Groundwater Resources Association of California Conference: Climate Resilient & Sustainable Remediation](#)
- **Feb 7:** [Environmental Research with Tribal Communities – 6-Part Training](#)
- **Feb 9:** [Southeast Arizona Citizens Forum Meeting](#)
- **Feb 10:** [WRRC 19th Annual Chocolate Fest and Announcement of 2022 Photo Contest Winners](#)
- **Feb 10:** [SBS Community Classroom Master Class Sustainability & Urban Architecture Series: Tucson: How a Desert City Became a Leader in Green Infrastructure Masterclass](#)
- **Feb 10:** [ADWR Water Awareness Month 2023 Kick-Off Festival – Registration Deadline](#)
- **Feb 15:** [Arizona Water Protection Fund Commission Public Hearing](#)
- **Feb 15:** [WRRC Seminar Series: A Living River – The Santa Cruz River from Mexico to Marana](#)
- **Feb 15:** [Call for Papers: JCWRE Special Issue on Undergraduate Research and Education – Submission Deadline](#)
- **Feb 16:** [A Meeting of Sacred Waters 2023](#)
- **Feb 16:** [Santa Cruz River Research Days – Call for Abstracts Deadline](#)
- **Feb 18:** [AHS Tucson Chapter: Mission Garden, Mission San Agustín, and S-cuk Son Tour](#)
- **Feb 21:** [WRRC 2023 Annual Conference: What Can We Do? Solutions to Arizona’s Water Challenges – Solutions Proposal Deadline](#)
- **Feb 22:** [WRRC Seminar Series: Universal Access to Clean Water for Tribal Communities](#)
- **Feb 22:** [104\(b\) Grant Program – Proposal Submission Deadline](#)
- **Feb 23:** [AZ Conservation Professional Training: Residential Water Use and Field Training](#)
- **Feb 23-24:** [2023 Family Farm Alliance Annual Conference: “A Wake Up Call for America: Why Farms, Water and Food Matter”](#)
- **Feb 24:** [2023 Land and Water Summit – Registration Deadline](#)
- **Feb 26:** [2023 WaterReuse Symposium – Advance Registration Deadline](#)
- **Mar 1:** [NVIS Seminar Series: Ruth Plenty Sweetgrass-She Kills presents "Food Sovereignty for the Mandan, Hidatsa, and Arikara People"](#)
- **Mar 1:** [104\(g\) Grant Program – Proposal Submission Deadline](#)

- **Mar 1:** [Tucson AHS Chapter 2023 Halpenny Intern Scholarship – Application Deadline](#)
- **Mar 1:** [Babbitt Center Dissertation Fellowship Program – Application Deadline](#)
- **Mar 1-3:** [2023 Land and Water Summit](#)
- **Mar 2-4:** [2023 Native Women in Agriculture & Natural Resources Symposium](#)
- **Mar 2-7:** [2023 American Indian Higher Consortium Conference](#)
- **Mar 5-8:** [2023 WaterReuse Symposium](#)
- **Mar 6:** [2023 AHS Symposium – Call for Abstracts Deadline](#)
- **Mar 6-7:** [Arizona Viticulture Strategic Planning Summit](#)
- **Mar 6-8:** [Growing Water Smart: Integrated Water and Land Use Planning Workshop](#)
- **Mar 9-10:** [Sustainable Water Investment Summit](#)
- **Mar 11:** [Sustainable Landscapes Expo](#)
- **Mar 13-17:** [UC Davis Soil & Water Assessment Tool \(SWAT\) Model Training Course](#)
- **Mar 16:** [WRRC Seminar Series: Water in Cochise County: Challenges and Solutions – Save the Date!](#)
- **Mar 22-24:** [2023 Annual Native FEWS Gathering](#)
- **Mar 29:** [WRRC Seminar Series: Geophysical Imaging as a Tool for Groundwater Management; Rosemary Knight, Professor of Geophysics, Stanford University – Save the Date!](#)
- **Apr 1:** [ADWR Water Awareness Month 2023 Kick-off Festival](#)
- **Apr 3:** [Rodney Blaine Lewis Scholars Award – Application Deadline](#)
- **Apr 5:** [NVIS Seminar Series: Staci Emm & Reginald Premo](#)
- **Apr 17-20:** [90th Annual Western Snow Conference](#)
- **Apr 20-21:** [Santa Cruz River Research Days](#)
- **Apr 24-25:** [NGWA Conference: Managed Aquifer Recharge: Unleashing Resiliency, Protecting Groundwater Quality Conference](#)
- **May 3:** [NVIS Seminar Series: Chantel Harrison \(Diné\) & Jaymus Lee \(Diné\) Present “Community Engaged Indigenous Hydroponics and Greenhouse Project”](#)
- **May 5:** [32nd Desert Horticulture Conference](#)
- **May 7-10:** [National Association of Environmental Professionals \(NAEP\) 2023 Conference](#)
- **May 8-9:** [Water for Food Global Conference: Cultivating Innovation: Solutions for a Changing World](#)
- **May 9-11:** [96th Annual AZ Water Conference & Exhibition](#)
- **May 18-19:** [CLE International's Law of the Colorado River 23rd Annual Conference: The Next Century of River Policy](#)
- **May 19:** [NAMWUA Water Utility Leadership Forum](#)
- **Jun 13-15:** [UCOWR/NIWR 2023 Annual Water Resources Conference](#)
- **Jun 15-16:** [2023 Next Generation Water Summit](#)
- **Jul 11-12:** [WRRC 2023 Annual Conference: What Can We Do? Solutions to Arizona's Water Challenges – Save the Date!](#)
- **Jul 17-19:** [AWRA 2023 Summer Conference: Connecting Land & Water for Healthy Communities](#)

OTHER NOTICES

Advanced Smartscape: Urban Forest Management

Enhance your knowledge & skills in urban tree work! Registration is open for the UArizona Maricopa County Cooperative Extension 2023 Advanced Smartscape: *Urban Forest Management* course. Classes will take place on Tuesdays and Wednesdays, March 15, 21, 22, and 28, from 3:00 pm to 6:00 pm. Due to the rapid pace of the classes, completion of Smartscape is a prerequisite to register for the course. The course builds upon the basic Smartscape experience by offering in-depth training for landscape professionals on

the selection, installation, and aspects of maintenance of trees and large shrubs. [More Info](#)

New Explainer from Know Your Water News

The Colorado River has again dominated headlines with a [six-state letter](#) sent to the Bureau of Reclamation on January 30. That letter was in response to Reclamation's public scoping process for a Supplemental Environmental Impact Statement (SEIS) that intends to supplement the 2007 Interim Guidelines (part of the [Law of the River](#)). Know Your Water News created an explainer to delve into the basics of this federal process and explain new terminology. [More Info](#)

AHS Tucson Chapter - Judges Needed for SARSEF

Each year the Tucson Chapter and the AHS Foundation participate in the Southern Arizona Regional Science and Engineering Fair (SARSEF) as sponsored award judges, giving \$25 to \$100 checks for hydrology science projects to grades K–12. These monetary awards are generously provided by AHS, AHSEF, and the Central Arizona Project (CAP). If you are available to judge a grade group in this fun and beneficial event to encourage future budding hydrologists, please contact David Barnes at SARSEF@azhydrosoc.org no later than **Tuesday, February 28**.

Do you have a story idea, water job announcement, or event to share?

[Contact us here](#)