

# WEEKLY WAVE



THE UNIVERSITY OF ARIZONA  
COOPERATIVE EXTENSION

## WATER RESOURCES RESEARCH CENTER



April 12, 2024 / Volume 12, Issue 15

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

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**IN THIS ISSUE:** Water Awareness Festival, Staff Updates, Herman Bouwer Award, APW, Cocoa Production

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“WE ALL  
MUST DO  
OUR PART  
TO  
CONSERVE  
AND  
PROTECT  
OUR MOST  
PRECIOUS  
RESOURCE.”

**WRRC Participates in 2024  
Water Awareness Month Festival**

On April 6, the WRRC hosted a booth at the 2024 Water Awareness Month Festival in Phoenix, organized by the Arizona Department of Water Resources (ADWR). WRRC Associate Director Jamie McEvoy and WRRC Graduate Outreach Assistant Taylor Simmons (pictured above) attended the event and enjoyed interacting with other attendees at the Wesley Bolin Plaza on a sunny Saturday afternoon. Alongside more than 30 water education booths, the WRRC offered giveaways and showcased various outreach initiatives, such as the *Weekly Wave* newsletter, *Arroyo* publication, county-specific Arizona Water Factsheets, and Arizona Water Map Poster. An interactive flipchart captivated some participants. Visitors to the WRRC booth were invited to share their interests in water-related topics that ranged from rainwater harvesting and groundwater recharge to water policy, providing valuable feedback for future outreach initiatives. The 2<sup>nd</sup> annual water awareness event afforded participation from numerous organizations dedicated to providing water education to the public at the city, state, and federal levels. In addition to the WRRC, there was representation from Arizona Project WET, the UArizona Cooperative Extension Master Gardener program, Arizona Department of Environmental Quality, Arizona Department of Forestry and Fire Management, and Arizona State Parks, as well as municipal water providers of Phoenix, Avondale, Glendale, and more. It was terrific to see several former WRRC graduate students at the event. Thank you, ADWR (and partners), for hosting such a well-organized event that helped raise awareness about the importance of protecting water, our state's most precious resource!

[News Story](#)  
[More Info](#)

## EVENTS

### Law of the Colorado River Annual Conference: Planning for Post-2026 Operations in a Drought-Stressed Basin

Dates: May 6–7, 2024

Location: [Embassy Suites by Hilton Denver Downtown](#)  
[1420 Stout St, Denver, CO 80202](#)



Hear all points of view from the Upper and Lower Basins on critical issues along the Colorado River as the guidelines near expiration. **Participants can Earn up to 12 Hours of MCLE Credit, Including One Hour of Ethics, or up to 12 Hours of Engineering Credit.**

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

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### Upcoming WRRC and Co-sponsored Events

- May 7: [NVIS Spring 2024 Seminar: ?Eeltek Waali? \(I'm Reading Country\); 12–1 pm MST](#)
- May 9: [WRRC Water Webinar: Addressing Transboundary Water Issues in the AZ-Sonora Border Region: The Arizona Perspective](#)

### Upcoming External Events

## NEWS

### Former WRRC Grad Student Returns as Project Manager

The WRRC is pleased to announce that former Graduate Research Assistant Garland Speight is officially joining the WRRC staff as a project manager. Speight earned a master's degree in Water, Society, and Policy from the University of Arizona's School of Natural Resources and the Environment.

After earning his undergraduate degree in mechanical engineering from UArizona, Speight worked as a nuclear engineer on spent nuclear fuel disposal and steam plant equipment design. More recently, he worked on water processing technologies for NASA that are now in service on the International Space Station. While pursuing his master's, Speight helped plan the WRRC's annual conference and assisted with Water RAPIDS projects in the towns of Superior and Patagonia. In this new position, he will continue to collaborate with local, state, nonprofit, federal, and industrial partners to help facilitate water resources planning. He will work on leveraging partnerships to bring the latest science and stakeholder engagement techniques to help develop solutions that meet the needs of stakeholders and the environment. Speight is also an avid volunteer, assisting with a Tucson-based mutual aid group and providing technical consulting and facilitation for the Aravaipa Watershed Conservation Alliance. He is a native of Arizona who enjoys spending time with his dog, hiking, camping, reading, and baking. Welcome back to the WRRC team and congratulations, Garland!



### Mark Cross, Past WRRC EAC Chair, Receives Herman Bouwer Award

On Friday, April 5, Mark Cross, a well-known and highly regarded hydrogeologist and long-time member of the Arizona water community, received the Herman Bouwer Award at the 18<sup>th</sup> Biennial Symposium on Managed Aquifer Recharge (BSMAR) conference. The BSMAR conference is held every two years by the Arizona Hydrological Society (AHS) to engage experts on managed aquifer recharge (MAR) research and advancement. The award honors Dr. Herman Bouwer, the former Director of the USDA Water Conservation Laboratory in Phoenix, who was a leading researcher and author on over 300 publications relating to water resources research. Katharine Jacobs, Director of the Center for Climate Adaptation Science and Solutions at the University of Arizona, presented the award to Cross, an Arizona native who continues working with Montgomery and Associates after serving as its president for 13 years. Cross was honored for his work in recharge investigation, groundwater flow modeling, and other MAR research. His involvement with the WRRC includes chairing the WRRC External Advisory Committee (EAC), providing guidance, supporting WRRC programs, and participating in strategic planning efforts.



*Image: Shawn Calendine / AHS. Mark Cross with three of the four past Herman Bouwer Award recipients (Mario Llurio, Robert Rice, and David Pyne).*





## Make a Splash in Tucson by Teaching Local 4<sup>th</sup> Graders About Water

Arizona Project WET wants your support at upcoming [Water Festivals!](#) Join the fun by volunteering on [April 25 at James Kreigh Park](#) and on [May 8 at Lakeside Park](#) in Tucson, AZ. Dive into this awesome field trip by registering [here](#) or contacting Zakkai ([zakkaim@arizona.edu](mailto:zakkaim@arizona.edu)) for the inside scoop.



### [Volunteer Info](#)

## Climate Change Impacting West African Cocoa Production

Cocoa production is struggling as environmental conditions in northwestern Africa are influenced by climate change. As reported by the Guardian and a Circle of Blue analysis, heatwaves, drought, and crop disease along with changing El Niño conditions have reduced the cocoa supply by 0.5 million tonnes from the normal yearly yield. This reduced yield has put cocoa at an all-time high price, more than \$10,000 per tonne. Chocolate companies, like Nestlé and Lindt & Sprüngli, say potential rise in the price of finished consumer chocolate products is likely to come. However, this change in the chocolate market will not provide any increased income to cacao farmers. Indirect selling through third-party industries limits cash flow to the farmers directly. Without more money for the farmers, there is less investment in fertilizers or other agricultural improvements in the region. Ghana and Ivory Coast, some of the world's leading cacao producers, continue to face this battle as production has been declining for the past three years. Research is underway to find more drought-resistant varieties of coffee, tea, bananas, and other crops grown in the region.



- [The Guardian Article](#)
- [West Africa Heatwaves & Climate Change](#)
- [Circle of Blue](#)

## WATER JOBS & OTHER OPPORTUNITIES

- Watershed Management Group [Grant-Funded Internships](#) (multiple positions)

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

# NOTICES, PUBLICATIONS & MEDIA

## From the WRRC

### **Call for Submissions: Special Issue in Agricultural Water Management Journal**

The editors of *Water Scarcity Solutions for Irrigated Agriculture in the Warming Western U.S.* invite submissions to this special issue of the journal *Agricultural Water Management*. This collection calls for research-informed solutions that can relieve pressure on the West's water resources while maintaining the viability of agriculture in the region while fostering a transition to sustainable practices. Contact Noah Silber-Coats ([noahsc@nmsu.edu](mailto:noahsc@nmsu.edu)) with any questions. The Manuscript Submission Deadline is August 15, 2024, but articles are published as they are ready, so the issue deadline does not affect the publication date of individual contributions. [More Info](#)

### **Invitation to Participate in Cooperative Extension Listening Sessions**

The University of Arizona Cooperative Extension needs your help! Extension is seeking public input to help guide future work throughout the state. Eight listening sessions will be held across the state, with food provided. Dates and locations are listed on the [Extension website](#), with several coming up in April. Six sessions will be open to the public and two are reserved for UArizona campus collaborators. These are regional events, and we hope that you will attend to share your thoughts and hear the perspectives of others. [More Info](#)

## Other Sources

### **ADWR Informal Public Meeting: Proposed Rulemaking for Alternative Path to Designation of 100-year Assured Water Supply**

The Arizona Department of Water Resources (ADWR) will hold a series of informal public meetings to present information and accept comments on a proposed rulemaking for an Alternative Path to Designation of a 100-year Assured Water Supply. The first meeting will be held on April 22, both in person and virtually. [More Info](#)

### **WaterReuse Arizona 2024 Scholarship**

WaterReuse Arizona will award two scholarships of \$3,000 each to Arizona university and college students. The purpose of this award is to encourage full-time students with a focus on wastewater reclamation, water reuse, and/or desalination. The scholarships will be awarded at the 2024 Arizona Water Reuse Symposium in Flagstaff, Arizona. Scholarship applications are due June 5, 2024. [More Info](#)

### **Student Travel Awards for UCOWR/NIWR/AWRA Conference**

The National Institutes of Water Resources (NIWR) is again sponsoring travel awards for students (undergraduate or graduate) to attend the joint Universities Council on Water Resources (UCOWR)/NIWR/AWRA [conference](#) from September 30–October 2, 2024, in St. Louis, Missouri. To qualify for the travel award, students must [submit an abstract](#) (either poster or presentation) for the conference. Two awardees per NIWR region will be chosen at random, with awards ranging from \$1,200 to \$2,500. For more information and to enter the drawing, visit the [submission form](#). The deadline to submit the form is Friday, May 3, at 4:00 pm. Please contact Mike Dietz ([michael.dietz@uconn.edu](mailto:michael.dietz@uconn.edu)) with any questions.

# CALENDAR ANNOUNCEMENTS

- **Apr 15:** [AHS 2024 Avery Intern Scholarship – Application Deadline](#)

- [Apr 15: AHS Annual Academic Scholarships – Application Deadline](#)
- [Apr 15: ENVS Colloquium — ENVS Undergraduate Presentations](#)
- [Apr 16–17: NGWA Conference: Groundwater in the PFAS Era: Stressors, Protection, & Compliance](#)
- [Apr 18: Kasser Joint Institute Call for Preproposal for Ideas and Solutions Targeting Food, Water, and Energy Security Challenges – Submission Deadline](#)
- [Apr 18: Spring 2024 Tumamoc Talk: The Science and Wonder of Arizona Lighting – Ron Holle](#)
- [Apr 22: ADWR Informal Public Meeting: Proposed Rulemaking for Alternative Path to Designation of 100-year Assured Water Supply](#)
- [Apr 22: ENVS Colloquium — Dr. Beth Marlowe \(Quest Diagnostic Labs\)](#)
- [Apr 23: Special Loft Cinema Screening of Regenerative Farming Documentary “Common Ground,” Featuring a Post-film Discussion With Local Experts and Activists](#)
- [Apr 23: Arizona Project WET 2023–24 Roosevelt Water Festival](#)
- [Apr 23–25: 97<sup>th</sup> Annual AZ Water Conference & Exhibition Annual AZ Water Conference & Exhibition](#)
- [Apr 23–26: Southwest Agroforestry Action Network Fifth Annual Conference](#)
- [Apr 24–26: Santa Cruz River Research Days](#)
- [Apr 25: Arizona Project WET 2023–24 Amphi-Tucson Water Festival](#)
- [Apr 29: AAWWA Colorado River Modeling 101 Webinar](#)
- [Apr 29: AWRA/UCOWR/NIWR 60<sup>th</sup> Anniversary Joint Water Resources Conference – Abstract Deadline](#)
- [Apr 29: ENVS Colloquium — Dr. Jen McIntosh \(UArizona\)](#)
- [Apr 30: Arizona Project WET 2023–24 Bisbee Water Festival](#)
- [May 1: AWRA 2024 Awards Program – Nomination Deadline](#)
- [May 2: Arizona Project WET 2023–24 Apache Junction Water Festival](#)
- [May 3: NIWR/UCOWR Travel Award Program 2024 – Application Deadline](#)
- [May 6–7: Law of the Colorado River Annual Conference: Planning for Post-2026 Operations in a Drought-Stressed Basin](#)
- [May 7: NVIS Spring 2024 Seminar: ?Eeltek Waali? \(I'm Reading Country\); 12–1 pm MST – Co-sponsored by the WRRRC](#)
- [May 7–8: Rural Water Association of Arizona 2024 Annual Spring Conference](#)
- [May 8: Arizona Project WET 2023–24 TUSD Water Festival 3](#)
- [May 9: WRRRC Water Webinar: Addressing Transboundary Water Issues in the AZ-Sonora Border Region: The Arizona Perspective](#)
- [May 9: Arizona Project WET 2023–24 White Mountain Apache Tribe Water Festival 3](#)
- [May 15: Sonoran Soirée: A Conservation Benefit](#)
- [May 22: AAWWA Colorado River Update](#)
- [Jun 1: 2024 Central Arizona Project Award for Water Research — Abstract Deadline](#)
- [Jun 3: US Bureau of Reclamation Water Conservation Field Services Program Funding Opportunity – Application Deadline](#)
- [Jun 5: Watereuse Arizona 2024 Scholarship – Application Deadline](#)
- [Jun 10–13: AWWA 2024 Annual Conference & Expo \(ACE24\): Transforming Our Water Future](#)
- [Jun 17–20: 3<sup>rd</sup> International Groundwater-Agriculture Conference: Toward Sustainable Groundwater in Agriculture - Linking Science and Policy](#)
- [Jul 28–30: 2024 Arizona Water Reuse Symposium](#)
- [Aug 8–9: Arizona Water Law Conference: In the Eye of the Storm](#)
- [Aug 15: Agricultural Water Management Journal Special Issue: Water Scarcity Solutions for Irrigated Agriculture in the Warming Western US –](#)

[Manuscript Submission Deadline](#)

- **Sep 30–Oct 2:** [AWRA/UCOWR/NIWR 60<sup>th</sup> Anniversary Joint Water Resources Conference](#)

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

[Contact us here](#)