

WEEKLY WAVE



THE UNIVERSITY OF ARIZONA
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**



October 27, 2023 / Volume 11, Issue 30

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.](#)

[WRRC Office Update](#)

[Subscribe to the Weekly Wave](#)

[View as Webpage](#)

IN THIS ISSUE: Reflections, Seminar Recap, Benson Community Event, APW, Lower Basin, Tucson One Water

[Be a Supporter](#)



Reflections: Testifying on Reauthorization of the Transboundary Aquifer Assessment Program

On October 25, 2023, I had the honor of presenting testimony on H.R. 5874 at the U.S. House of Representatives Committee on Natural Resources, Subcommittee on Water, Wildlife and Fisheries. H.R. 5874, introduced by Arizona District 6 Representative Juan

Ciscomani, amends the United States-Mexico Transboundary Aquifer Assessment Act by reauthorizing the United States-Mexico transboundary aquifer assessment program. In addition, the bill, co-sponsored by New Mexico District 1 Representative Melanie Stansbury, modifies a restriction on designation of additional transboundary aquifers along the border shared by Arizona and the state of Sonora, Mexico.


Images: Subcommittee on Water, Wildlife and Fisheries legislative hearing, Oct. 25, 2023

[Read More](#)
[Legislative Hearing Video](#)

EVENTS

WRRC 2024 ANNUAL CONFERENCE
Implementing Water Solutions Through Partnerships

SAVE MARCH
THE DATES 12-13



CALL FOR ABSTRACTS

The University of Arizona Water Resources Research Center invites abstracts for conference presentations and posters describing projects that implement solutions to Arizona's water resources challenges.

- **Water and Nature**
- **Infrastructure and Augmentation**
- **Water, Energy, and Food**
- **Other Solutions**

Image: Clayton B. Lyon

ENVS Colloquium Series: The Arizona Water Innovation Initiative: A Thriving Water Future for the Benefit of All of Arizona (WRRC Co-Sponsored Event)

Date: Monday, October 30, 2023
Time: 3:00 pm – 4:00 pm Arizona Time
Location: [Marley 230 and Zoom](#)

Speaker: Dave White, *Director, ASU Global Institute of Sustainability and Innovation*



Dave White will be giving a talk as part of the ENVS Colloquium Series, an event that is being co-sponsored by the WRRC. Dr. White joined Arizona State University in 2001 and has helped lead ASU's evolution into one of the world's leading universities for global impact. He is Associate Vice President of Research Advancement at ASU Knowledge Enterprise. In this capacity, he advances research strategy for the Julie Ann Wrigley Global Futures Laboratory (GFL), which is dedicated to shaping a future in which life thrives on a healthy planet. White also serves as Director of the Global Institute of Sustainability and Innovation, where he coordinates more than 30 research centers,

programs, and projects advancing use-inspired science for the betterment of people and the planet. White is internationally recognized for his contributions to science in support of sustainability. He has published more than 75 peer-reviewed articles advancing numerous fields including water policy, decision science, science and technology studies, sustainability science, and natural resources management.

[More Info](#)

WRRC Water Webinar: Advancing Water Sustainability: A Vision for Research and Engagement at the University of Arizona Water Resources Research Center

Date: Tuesday, October 31, 2023

Time: 12:00 pm – 1:00 pm Arizona Time

Location: [Zoom](#)



Speaker: Jamie McEvoy, PhD, *Associate Professor of Geography, Department of Earth Sciences, Montana State University*

Arizona faces a pressing challenge in ensuring water sustainability for its communities and ecosystems. As a candidate for the Associate Director and Extension Specialist position at the University of Arizona Water Resources Research Center, Dr. Jamie McEvoy will discuss her vision for advancing water sustainability in Arizona through research and engagement. She will provide an overview of her background as a human-environment geographer and discuss key aspects of her previous research on 1) desalination, 2) climate adaptation, 3) nature-based strategies, and 4) ecological drought. Her talk will highlight the research question(s), methodological approach, collaborations and partnerships, funding, and key findings from her research on each of these topics. Additionally, McEvoy will discuss the Arizona water issues that she is most interested in focusing on, including 1) climate-smart agriculture, 2) Tribal water, and 3) groundwater management. She will outline her philosophy for approaching research and engagement on each of these topics, discuss potential collaborations, and identify funding sources to support this vision.

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

WRRC Water Webinar: Capacity, Performance, and Collaborative Planning in Water Governance

Date: Thursday, November 2, 2023

Time: 12:00 pm – 1:00 pm Arizona Time

Location: [Zoom](#)



Speaker: Emily V. Bell, PhD, *Assistant Professor of Public Administration and Policy, School of Public and International Affairs, University of Georgia*

Public water systems (PWSs)—facing pressures from climate and land-use changes—must adapt to ensure continued safe and secure supply to customers. The ability to provide consistent and safe water supply is determined by PWSs' internal capacity and

the collaborative approaches used to address water resource challenges that span service area boundaries. Quality collaboration needs to reflect diverse representation and interests. This WRRC Water Webinar presentation will discuss what motivates actors to come “to the table” before examining tools that can be used to evaluate representation in decision-making, as well as the capacity and performance of PWSs. The discussion will conclude with considerations for Arizona’s water supply future as this relates to agriculture, urbanization, and energy.

[Register Here](#)

[More Info](#)

Upcoming WRRC Water Webinars

Nov 28: [WRRC Water Webinar: 104\(b\) Student Research Presentations](#)

Nov 30: [WRRC Water Webinar: 104\(b\) Student Research Presentations](#)



Upcoming WRRC Co-Sponsored Events

Nov 5: [Native Voices in Film: Celebrating Indigenous Ingenuity and Resilience](#)

Nov 7: [NVIS Fall 2023 Seminar: From Metal Mining to Data Mining: How Indigenous Data Governance Supports Indigenous Sovereignty Within an Open Science Ecosystem](#)

Dec 5: [NVIS Fall 2023 Seminar: Culture, Education, and Water Sovereignty in Southern California Tribal Communities](#)

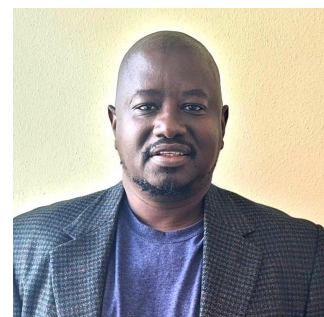
Other Events

Nov 6–7: [Tribal Water Law Conference](#)

NEWS

WRRC Water Webinar Features Vision for Arizona Water Management

On Monday, October 23, Abu Mansaray presented his vision for empowering water management in Arizona for a WRRC Water Webinar. Mansaray is a candidate for the Associate Director and Extension Specialist position at the WRRC. His presentation outlined his personal story, examples of his work in his current role as Research Program Manager at the Oklahoma State University Water Resources Research Center, and his goals for contributing to the WRRC. Growing up in a rural community in Sierra Leone that lacked water infrastructure, Mansaray humorously yet truthfully referred



to himself and his peers as “child water resource managers.” He described this relationship with water as what led him towards the study of environmental chemistry and environmental science with a focus on water. As a water professional, he has engaged in remote sensing research that addresses water quality in agricultural watersheds, GIS-based groundwater monitoring to address vulnerabilities of groundwater supplies and threats, and water projections modeling using climate impact models. His goal with a position at the WRRC includes securing extramural funding to support the training and development of the next generation of water professionals, conducting water sustainability research, and utilizing existing WRRC resources to deepen collaboration across Arizona.

- [View the Recording](#)
- [More Info](#)
- [Oklahoma Water Resources Center](#)

Water Resilience Event Held in Benson

On October 19, in partnership with the Cochise County Cooperative Extension Water Wise program, the WRRC hosted a community event and dinner in Benson, AZ. The program, titled *Building Benson Water Resilience*, covered ways in which water availability in Cochise County’s arid climate has shaped agriculture, land and water management, and conservation strategies. Speakers were local residents presenting on regenerative agriculture and groundwater use myths and best practices. In addition, local organizations were present including the Nature Conservancy and Kartchner Caverns State Park. Following the presentations, a panel discussion sparked engaging conversations, collaborations, and strategies to adapt to complex local water challenges. Hosted at the Cochise College Benson Center, the event was well-attended, with excellent food provided by the Benson High School Culinary Program. A recording of the event will be posted soon on the WRRC website.



[More Info](#)



Arizona Water Festivals: The Mountain Series

Arizona Project WET answered the call of the mountains, with Arizona Water Festivals in Flagstaff, Payson, Prescott, and Verde Valley. The first in the series was the 17th Annual Flagstaff Water Festival (AWF). On September 26, thirty teachers from ten schools brought 646 students to the AWF! Flagstaff has a distinctly collaborative model thanks to a long-standing partnership with NAU’s Department of Education. Each year, NAU pre-service teachers train with APW and then facilitate water-centered activities for young festivalgoers. This time, 82 undergraduate volunteers engaged knowledgeable fourth graders during rotations that modeled the Arizona water cycle, watersheds, groundwater, conservation technology, and use/sustainability. Emily Melhorn of the

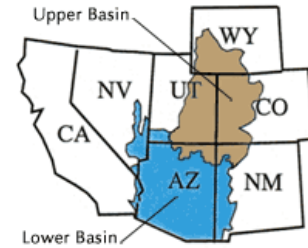


Flagstaff Water Conservation Division said, “The Water Festival is an integral part of the City of Flagstaff’s strategy to educate our younger community members on the importance of water and protecting our watershed so that our homes can continue to thrive in the future for their benefit.”

[Read More](#)

Lower Basin States Commit to Colorado River Conservation

Arizona, California, and Nevada are on track to voluntarily conserve more than 1 million acre-feet of water in the Colorado River system by the end of 2023 through their combined conservation efforts. In a joint press release, the three states highlight some of the conservation efforts employed to meet this goal. For example, Arizona is conserving nearly 345,000 acre-feet of water this year through the Intentionally Created Surplus (ICS) program and other agreements. California is seeing the lowest rate of water deliveries from the Colorado River since 1949 due, in part, to efforts to limit water use for grass. Nevada has implemented a range of water efficiency measures such as pool size limits and decorative grass replacement requirements, helping to reduce the state’s consumption of Colorado River water by 41% since 2002. All told, in 2023, consumptive use in the Lower Basin states is expected to be the lowest it has been since 1984, at around 5.8 million acre-feet. The states express their hope that these conservation efforts will help provide some stability to the Colorado River system through 2026 while the Bureau of Reclamation develops new operating guidelines for it.



[More Info](#)
[ICS Program](#)

Tucson City Council Passes One Water 2100 Plan

On October 17, the Tucson City Council approved the One Water 2100 Plan, which will guide the city’s long-range strategies for water resources, water infrastructure, and conservation practices over the next 77 years. The plan, developed by Tucson Water with input from the community, includes, among others, two ambitious features: the treatment of wastewater for drinking (known as direct potable reuse) and large-scale capture of stormwater to boost the city’s water supply. The Arizona Department of Environmental Quality is currently working on regulations for the treatment of wastewater for drinking and plans to have final adoption by the end of 2024. Under the One Water 2100 Plan, Tucson will also be gradually installing smart water meters in homes and businesses, which will allow utilities to monitor water use remotely and could help detect water leaks as they happen. In a video announcing the plan, WRRRC Director Sharon B. Megdal stated, “I think what One Water means is that we are going to have reliability into the future through water supply diversification, innovative infrastructure, and conservation.”



- [Tucson One Water](#)
- [Press Release](#)

- [Youtube Video](#)

WATER JOBS

- City of Phoenix Water Services Department [Conservation Coordinator - Principal Planner](#)
- USDA-NRCS [Civil Engineer \(Hydraulics/Hydrologic\)](#)

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



ANNOUNCEMENTS

- **Oct 27:** [Arizona Water Protection Fund Fiscal Year 2024 Grant Applications – Deadline to Submit Public Comments](#)
- **Oct 30:** [UNMC Research Seminar: Drought and Public Health: A Roadmap for Advancing Engagement and Preparedness](#)
- **Oct 30:** [ENVS Colloquium Series: The Arizona Water Innovation Initiative: A Thriving Water Future for the Benefit of All of Arizona – Co-sponsored by the WRRC](#)
- **Oct 31:** [City of Tucson Urban Heat Island Workshop: Hot Topics / Cool Solutions](#)
- **Oct 31:** [WRRC Water Webinar: Advancing Water Sustainability: A Vision for Research and Engagement at the University of Arizona Water Resources Research Center](#)
- **Nov 1:** [Arizona Sustainability Alliance 2023 Sustainability Celebration: Tree Equity](#)
- **Nov 2:** [WRRC Water Webinar: Capacity, Performance, and Collaborative Planning in Water Governance](#)
- **Nov 2:** [Driving Towards Sustainable Water Management: Challenges and Strategies for Water Utilities](#)
- **Nov 2:** [CAP Public Policy Committee Meeting](#)
- **Nov 2:** [CAP Board Meeting](#)
- **Nov 3:** [Estrella Mountain Regional Park Pollinator Garden Planting Event](#)
- **Nov 4:** [Tree Planting Event at City of Tempe Public Schools](#)
- **Nov 5:** [Native Voices in Film: Celebrating Indigenous Ingenuity and Resilience](#)
- **Nov 5–9:** [AWWA Water Quality Technology Conference](#)
- **Nov 6–7:** [Tribal Water Law Conference](#)
- **Nov 6–8:** [AWRA 2023 Annual Water Resources Conference](#)
- **Nov 6–9:** [Amsterdam International Water Week 2023](#)

- **Nov 7:** [NVIS Fall 2023 Seminar: From Metal Mining to Data Mining: How Indigenous Data Governance Supports Indigenous Sovereignty Within an Open Science Ecosystem – Co-sponsored by the WRRC](#)
- **Nov 14–16:** [US Water Alliance One Water Summit 2023](#)
- **Nov 16:** [ASU Flow 2023: A Water Year Event for Researchers and Practitioners](#)
- **Nov 22:** [BSMAR18 – Abstract Submission Deadline **EXTENDED!**](#)
- **Nov 27:** [Equity in STEAM Initiative 3.0 – Application Deadline](#)
- **Nov 28:** [WRRC Water Webinar: 104\(b\) Student Research Presentations](#)
- **Nov 30:** [WRRC Water Webinar: 104\(b\) Student Research Presentations](#)
- **Dec 5:** [NVIS Fall 2023 Seminar: Culture, Education, and Water Sovereignty in Southern California Tribal Communities – Co-sponsored by the WRRC](#)
- **Dec 5–7:** [AWWA North American Water Loss Conference & Exposition](#)
- **Dec 11–15:** [AGU23: Wide. Open. Science](#)
- **Dec 13–15:** [2023 Colorado River Water Users Association \(CRWUA\) Annual Conference](#)
- **Dec 15:** [WRRC 2023 Photo Contest: Water Scarcity & Extreme Weather – Submission Deadline](#)
- **Dec 30:** [Water Quality Research Foundation – Poster Submission Deadline](#)
- **Jan 1, 2024:** [RiversEdge West 2024 Conference – Poster Presentation Abstract Deadline](#)
- **Jan 8, 2024:** [NGWA Conference: Groundwater in the PFAS Era: Stressors, Protection, & Compliance – Abstract Submission Deadline](#)
- **Jan 9, 2024:** [Desert Agriculture Research Symposium on Soil Health](#)
- **Jan 22–24, 2024:** [Growing Water Smart: Integrated Water and Land Use Planning Workshop](#)
- **Feb 2, 2024:** [David R. Maidment Award for Exemplary Contributions to Water Resources Data and Information Systems – Nomination Deadline](#)
- **Feb 11–13, 2024:** [AWWA/WEF Young Professionals Summit](#)
- **Feb 26–28, 2024:** [Water Resources Management & Sustainability: Solutions for Arid Regions 2nd International Conference](#)
- **Feb 27–29, 2024:** [2024 Southwest Adaptation Forum – Save the Date](#)
- **Mar 5–7, 2024:** [RiversEdge West 2024 Conference – Restoration for the Future: Promoting Resilience in Our Rivers and Communities](#)
- **Mar 10–16, 2024:** [National Groundwater Awareness Week](#)
- **Mar 11–14, 2024:** [AWWA WateReuse 2024 Symposium](#)
- **March 12–13, 2024:** [WRRC 2024 Annual Conference: Implementing Water Solutions Through Partnerships](#)
- **Mar 25–27, 2024:** [AWRA 2024 Geospatial Water Technology Conference](#)
- **Apr 3–6, 2024:** [BSMAR18](#)
- **Apr 8–10, 2024:** [AWRA 2024 Spring Conference](#)
- **Apr 16–17, 2024:** [NGWA Conference: Groundwater in the PFAS Era: Stressors, Protection, & Compliance](#)
- **Jun 10–13, 2024:** [AWWA 2024 Annual Conference & Expo \(ACE24\): Transforming Our Water Future](#)

PUBLICATIONS & MEDIA

The Life Aquaponic: How a Student-Led Initiative is Driving Innovation
[Read the Article](#)

Soil Health Needs Assessment Survey

The Soil Health Research and Extension (SHRE) team at the University of Arizona designed and conducted a statewide soil health needs assessment survey to document stakeholder perceptions, interests, and expectations on soil health research and educational needs. The survey successfully documented essential information from a

diverse group of producers, pest control advisors, and other industry members who represented the commercial agricultural industry in Arizona. The data confirmed stakeholder interest in soil health research and educational programs and provided the necessary information on their soil health needs to build an effective research-based soil health extension program. [More Info](#)

OTHER NOTICES

Stormwater as Adaptation Strategy Survey

A group of students with the University of Arizona's Climate Adaptation course are conducting a survey to understand how low-impact development (LID) and green infrastructure (GI) are used in cities and how municipal officials look to use LID and GI in the context of climate adaptation. Your valuable input is requested. [Take the Survey](#)

David Loveday Memorial Scholarship Poster Contest

Undergraduates through postgraduates can submit for the first-ever [Water Quality Research Foundation Poster Competition](#), intended to stimulate research concepts for students of environmental, engineering, education, or other science-related fields. The Top 2 finalists will earn travel reimbursement and hotel accommodations and present their findings at the annual Water Quality Association's Convention in Orlando, Florida on March 5, 2024. The deadline for submission is December 30, 2023. Send questions and completed submissions to Foundation@wqrf.org.

Equity in STEAM Initiative 3.0

Intel, YWCA Metro Phoenix, and SRP have launched Equity in STEAM Initiative 3.0, providing grants of up to \$2,500 to Arizona educators and nonprofits. This initiative, supported by several Arizona companies, aims to promote diversity and inclusivity in STEAM fields by addressing gender and racial disparities through project funding and leadership training. Applications are open until November 27, 2023. [More Info](#)

Nominations Open for David R. Maidment Award for Exemplary Contributions to Water Resources Data and Information Systems

The David R. Maidment Award for Exemplary Contributions to Water Resources Data and Information Systems is awarded periodically by the American Water Resources Association. The award is given to an individual who has made sustained contributions to water resources data by providing leadership in the provision of particular kinds of data, or by improving synthesis of water data using geographic and other information systems. The nomination period is open through February 2, 2024. [More Info](#)

Underground Injection Control Program Primacy Application

ADEQ is applying for primary enforcement authority ("primacy") over the Underground Injection Control (UIC) program, currently administered by the United States Environmental Protection Agency under the Safe Drinking Water Act. A successful application for primacy would allow ADEQ to administer a regulatory program for underground injection wells within the State of Arizona's jurisdiction that is consistent with the Safe Drinking Water Act, tailored to the specific needs of Arizonans and the state's unique environment, and designed to protect underground sources of drinking water from underground injection activities. ADEQ welcomes public review of the proposed [UIC Primacy Application elements](#). A [virtual public hearing](#) will be held on November 20, 2023. You may also submit comments or questions by email to uic@azdeq.gov before November 20. [More Info](#)

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

[Contact us here](#)