

# SUMMER WAVE



THE UNIVERSITY OF ARIZONA  
COOPERATIVE EXTENSION

## WATER RESOURCES RESEARCH CENTER



June 7, 2024 / Volume 12, Issue 2

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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2024 marks the 60<sup>th</sup> anniversary of the Water Resources Research Center at the University of Arizona. Find out [more](#).

**IN THIS ISSUE:** Reflections, Breakfast With the Economists, AmeriCorps Members, Tribal Water Rights, Sulphur Springs Water Alliance, British Tea

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## Reflections: On Participating in the 10<sup>th</sup> World Water Forum

Water for shared prosperity was the theme of the [10<sup>th</sup> World Water Forum](#), which was held May 18–25 in Bali, Indonesia. My work has taken me to Europe and the Near East, but this was my first visit to Indonesia. A country of over 17,000 islands and more than 275 million people, it is the world's fourth most populous country, after China, India, and the United States. Participating in this large triennial water conference along with an estimated 15,000 attendees enabled me to share information and insights from my work in Arizona, the Colorado River Basin, and the US-Mexico border region and to learn about the work being done on water issues of other regions. It also enabled me to visit some special people and places in Bali. More on this is at the end of this essay.

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## EVENTS

## WRRC Water Webinar: Irrigation Efficiency Program: State Funded On-Farm Water Savings in Arizona

**Date:** Thursday, Jun 27, 2024

**Time:** 12:00 pm – 1:15 pm Arizona Time

**Location:** [Webinar Only](#)

### Speakers:

Ethan Orr, *Assoc Director, Agriculture, Natural Resources & Economic Development, UArizona Cooperative Extension*

Robert Masson, *Asst Ag Extension Agent, UArizona Yuma County Cooperative Extension*

In this WRRC webinar, Cooperative Extension agricultural experts Ethan Orr and Robert Masson will discuss how the Water Irrigation Efficiency Program is designed to increase irrigation water application efficiency in crop production by 20% or more and provide info on how approved grantees will receive reimbursement toward the purchase and installation of a system from an approved vendor. The University of Arizona Cooperative Extension manages the funding process, including reviewing proposals, funding disbursement, and grant management. Over \$2 million has been invested in cutting-edge irrigation and soil research. Those awarded will be required to report their data to further Cooperative Extension's research efforts related to water efficiency, crop production, and impact on a variety of factors, such as crop yield, soil health, disease, and pest pressure. Designed to conserve our most precious resource—water—the program has already conserved 36,418 acre-feet, which is more water than 400,000 Tucson residents use on an annual basis.

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



## Upcoming WRRC Events

**Jul 17:** WRRC Water Webinar: Post-2026 Colorado River Operational Guidelines: An Overview of the Lower Basin's Alternative – [Save the Date!](#)

## External Events

**Aug 8–9:** [Arizona Water Law Conference: In the Eye of the Storm](#)

## NEWS

### Breakfast With the Economists Offers Insights on Economy and Arizona's Water Future

The UArizona Eller College of Management hosted an insightful "Breakfast with the Economists" event, which provided rich data and context for business leaders, decision-



makers, and anyone curious about the latest trends in Arizona's economy and the future of Arizona water resources. Dr. George Hammond, director of the Economic and Business Research Center (EBRC), opened the event with a discussion of the latest information on labor markets, inflation, housing permits, housing affordability, and personal income in Tucson, Phoenix, and Arizona, as well as a forecast for continued growth for jobs, personal income, and population. He gave an overview of the award-winning Making Action Possible (MAP) Dashboard, which provides users with reliable, regularly updated economic information and graphics on key categories of state and local economies. Following his remarks, this year's invited speaker, WRRRC Director Sharon B. Megdal, provided an overview of Arizona water resources and what to expect in the future. An applied microeconomist by training, Megdal described how her career path led her to water policy and management when she was appointed to the Arizona Corporation Commission by then-governor Bruce Babbitt in the 1980s. Her talk focused on two Arizona "wicked water" problems: 1) the Colorado River Basin supply-demand imbalance and 2) groundwater depletion. Dr. Megdal emphasized that despite the challenges facing Arizona, we are capable of adapting to changing water conditions through innovation, partnerships, and other actions.



- [Hammond & Megdal Presentation Slides](#)
- [MAP Dashboard](#)
- [AZ Daily Star Article](#)

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## WRRRC Bids Farewell to AmeriCorps Members

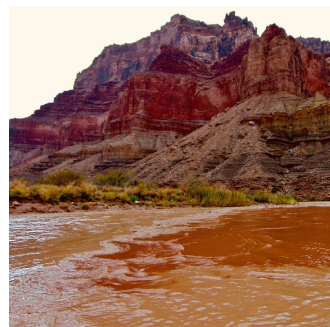
This week, the WRRRC bids a bittersweet farewell to AmeriCorps members Austin Bauer and Courtney Lee. This was our first year partnering with AmeriCorps, which is a national service program with more than 270,000 individuals in service roles annually making a difference in communities across America. During their time here, Austin and Courtney assisted with communications and outreach, helping to develop the 2023 Arroyo (coming soon!), participating in WRRRC hosted and co-sponsored events, and, of course, writing countless stories for the Weekly Wave. They were a joy to have on our team, and both their talents and their personalities will be greatly missed. As their term of service with AmeriCorps comes to an end, we wish Austin and Courtney all the best in their future endeavors.



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## Agreements on Tribal Water Rights and Involvement in Colorado River Negotiations Announced

Over a century ago, the Colorado River Compact of 1922 divided Colorado River water among seven western states; however, the negotiations did not include Tribal Nations, and their water rights were disregarded. Recent agreements could soon be rectifying some of this historical exclusion. In



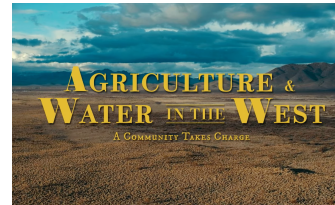
April this year, a historic memorandum of understanding was signed between the Upper Colorado River Commission and six Upper Basin Tribes. The memorandum formalizes meetings between states and Tribal Nations and aims to promote cooperation on key issues surrounding the Colorado River. In the Lower Colorado River Basin, the Navajo, Hopi, and San Juan Southern Paiute Tribes are seeking more than \$5 billion as part of a proposed water rights settlement, potentially the largest deal of its kind to date. The three Tribes voted in May to approve the settlement, but ultimately, Congress must approve the proposal. Of the \$5 billion sought, about \$1.75 billion would fund a pipeline from Lake Powell to deliver water to dozens of Tribal communities in remote areas. Nearly a third of homes in the Navajo Nation don't have running water, and many homes on Hopi lands face similar situations.

*Image: Karletta Chief, WRRC 2022 Photo Contest*

## [Memorandum Article](#) [Proposed Settlement Article](#)

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### **Film Documents Formation of New Sulphur Springs Water Alliance**



In April 2024, the Lincoln Institute of Land Policy shared a short documentary entitled “Agriculture & Water in the West: A Community Takes Charge.” This film captures the current groundwater situation for ranchers, farmers, residents, and others in Arizona’s Cochise County. Today, water users in the region pump three to five times the natural recharge of aquifers annually. Industrial agriculture and commercial industries moving into local farming communities have increased pumping significantly, causing water levels to drop below many preexisting wells. The region has seen conflict about groundwater use among various stakeholders, including residents, industries, municipal officials, and local farmers. In September of 2023, the Lincoln Institute’s Babbitt Center for Land and Water Policy and Arizona State University’s Water Innovation Initiative helped assemble stakeholders from the Sulphur Springs Valley to collaborate on groundwater issues. The film provides footage from these meetings, giving insight into stakeholder opinions. Since initial collaborations, these county stakeholders formed the Sulphur Springs Water Alliance for more effective water management to decrease pumping, increase recharge efforts, increase water education, and — most crucially — foster collaboration.

## [Watch the Video](#) [More Info](#)

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### **How a Spot of Tea Could Save Lives in 18th-Century England**

Today, we know drinking certain types of tea can provide some health benefits, but for those living in 18th-century England, tea may have had a much bigger benefit — saving lives. This is due not to the leaves or herbs in the tea, but to boiling the water. Without knowing it, tea drinkers were eliminating bacteria that cause illnesses like dysentery. The connection between the rise of tea and a decline in mortality rates was explored in a recently published article in *The Review of Economics and*



*Statistics.* Conducted by University of Colorado Boulder economics professor Francisca Antman, the quantitative study analyzed mortality rates before and after tea became popular in England. Pulling data from more than 400 parishes, Antman found evidence that suggests tea became affordable to nearly everyone in England in the late 1780s, during the Industrial Revolution. The data revealed a significant decline in mortality around this time that can be explained by the introduction of and widespread use of tea. Antman described her research as an example of a population willingly adopting a healthy behavior from preference and without outside influence.

[More Info](#)

## WATER JOBS & OTHER OPPORTUNITIES

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

## NOTICES, PUBLICATIONS & MEDIA

### **PBS features CALES Scientists in Upcoming "Hope In The Water" Series**

The new PBS show *Hope In The Water* is a three-part documentary coming to a screen near you on Wednesday, June 19. Explore the groundbreaking work of dedicated fishers, aqua farmers, and scientists who are attempting what was once thought impossible: harvesting aquatic species to feed our growing planet while saving our oceans. Episode 2, "Sustainable Aquaculture," will air June 26. [More Info](#)

### **New Report: Bridging the Gap: The Power of Investment in Water**

This report, a collaboration of the Value of Water Campaign, the American Society of Civil Engineers, and EBP, examines two scenarios surrounding the economic impacts of federal investment in water over the next 10 and 20 years — underscoring the need for water infrastructure investments to sustain public health, quality of life, economic prosperity, and environmental integrity across the nation. [Read the Report](#)

### **Interactive Map of PFAS Contamination Across the US**

An interactive map from the Environmental Working Group tracks PFAS contamination in drinking water systems nationwide, and the latest data indicates that nearly every state is struggling with PFAS levels above the Environmental Protection Agency's new limits for drinking water to some degree. PFAS contamination appears to be widespread in the Carolinas, Alabama, Ohio, New Jersey, Massachusetts, Rhode Island, Minnesota, Wisconsin, Florida, and part of Colorado. [View the Map](#)

**Western Water Article:** New Scientific Strategy Helps Make Case for Holistic Management of California Rivers [Read the Article](#)

### **Call to Authors: Journal of Contemporary Water Resources and Education Seeks Special Issue Paper Submissions**

Manuscripts can be submitted at any time. Most general submissions are published in the August issue designated for open submissions; however, general submissions may be considered for themed issues if appropriate. If accepted before the issue is published, the article will be published as a sneak peek on JCWRE's website (<https://ucowr.org/journal/jcwre-sneak-peek/>). Manuscripts should be submitted by June 30, 2024, to be considered for the December 2024 issue, and October 15, 2024, to be considered for the April 2025 issue. Email submissions to Jackie Gillespie ([crimjac@siu.edu](mailto:crimjac@siu.edu)). All articles

are peer-reviewed. Please review the [author instructions](#) and [review process](#) for more information. You must follow the author instructions for your manuscript to be considered for peer review. Manuscripts for the *Special Issue on Sponsored Research of the National Institutes for Water Resources* are due June 30, 2024. [Click here for the Call for Papers](#). Manuscripts for the *Special Issue: Cultural Keystone Resources as a Nexus for Water Research Co-Production Opportunities* are due October 15, 2024. [Click here for the Call for Papers](#).

## CALENDAR ANNOUNCEMENTS

- **Jun 9–16:** [Family Farm Alliance Virtual Screening of “The Green Desert” Documentary](#)
- **Jun 10–13:** [AWWA 2024 Annual Conference & Expo \(ACE24\): Transforming Our Water Future](#)
- **Jun 11:** [AHS Tucson Chapter Meeting: El Día del Agua y la Atmósfera Student Award Winner Presentations](#)
- **Jun 11:** [Tucson Floodplain Management Plan \(FMP\) Update Meeting](#)
- **Jun 12:** [AWRA Webinar: Developing Community-Based Environmental Monitoring Research as Curriculum to Protect Drinking Water Sources](#)
- **Jun 17–20:** [3<sup>rd</sup> International Groundwater-Agriculture Conference: Toward Sustainable Groundwater in Agriculture - Linking Science and Policy](#)
- **Jun 18:** [One Water Webinar: Race and Water: Tools and Strategies to Advance Racial Justice](#)
- **Jun 18:** [AHS Phoenix Chapter – 2024 Craft Beer Tasting Fundraiser](#)
- **Jun 18:** [CAP University Virtual Learning: CAP 101](#)
- **Jun 26:** [City of Tucson Stormwater Management Workshop](#)
- **Jun 27:** [WRRC Water Webinar: Irrigation Efficiency Program: State Funded On-Farm Water Savings in Arizona \(Ethan Orr and Robert Masson\); 12–1:15 pm](#)
- **Jun 27:** [University of Arkansas Water Webinar: Ruination to Restoration to Revitalization: The Story of a Great Lakes Area of Concern](#)
- **Jul 17:** [WRRC Water Webinar: Post-2026 Colorado River Operational Guidelines: An Overview of the Lower Basin's Alternative – \*\*Save the Date!\*\*](#)
- **Jul 17:** [AWRA Webinar: Outcomes and Motivations of Student Researchers in a Community-Based Environmental Monitoring Research \(CBEMR\) Project](#)
- **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 9–11:** [NSS National Conference: Innovation, Implementation, and Workforce Development for Sustainability](#)
- **Sep 30–Oct 2:** [AWRA/UCOWR/NIWR 60<sup>th</sup> Anniversary Joint Water Resources Conference](#)
- **Apr 28–30, 2025:** [AWRA 2025 Spring Conference](#)
- **Jul 8–11, 2025:** [One Water Summit 2025](#)

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

[Contact us here](#)

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