

Arizona Water Innovation Initiative

# Arizona Water Innovation Initiative: Now

February 2025



Groundwater is a critical resource for Arizona's communities, environment and economy. Yet, understanding and managing this vital supply can be complex.

I am excited to share that the <u>Rural Groundwater Resilience Toolkit</u> from our Impact Water - Arizona team is now available, offering a comprehensive suite of resources to enhance rural groundwater management and resilience. This toolkit is designed to empower residents, decision-makers and organizational leaders with the knowledge and tools needed to address local water challenges effectively.

#### Key features:

• Learn and discover - access a wealth of information about Arizona's water resources through interactive tools, including the innovative Arizona Water Chatbot.

- Funding and opportunities find existing funding opportunities for water management, infrastructure and related projects in one centralized location.
- Stories and inspiration dive into curated news sources, blogs, videos, webinars and podcasts to gain diverse perspectives on Arizona's water landscape.
- Rural Groundwater Resilience Workshops earn more about Impact Water Arizona's workshop series aimed at fostering community engagement and knowledge sharing.

By bridging the gap between technical experts, policymakers and the public, the toolkit aims to foster informed decision-making and proactive water stewardship.

DDWh

Dave White Principal Investigator, Arizona Water Innovation Initiative Julie Ann Wrigley Global Futures Laboratory™

### Funding opportunity announcement



Impact Water – Arizona launched its 2025 Funding Opportunity Announcement. This funding supports ASU faculty and staff in implementing engagement activities and developing use-inspired research and tools to address Arizona's water challenges.

The program is proud to continue supporting impactful projects and innovative ideas that foster engagement and a deep understanding of Arizona's water challenges and solutions.

The submission deadline is **Wednesday, March 19th**, and selected awardees will be notified by **April 30th**.

Apply here

New online course offering: Participatory Water Methods



**The Arizona Water Innovation Initiative,** in partnership with **CareerCatalyst**, has developed a specialized program to drive measurable impacts through education in sustainable water resilience. These programs offer digital training and development opportunities that equip individuals with the skills needed to implement and support advanced water technologies and research.

As a first offering, created in collaboration with the **U.S. Army Corps of Engineers**, invites you to **discover how participatory methods can enhance your work on water** by providing unique insights into the human impact of water issues. These methods allow for ground-up problem-solving informed by those most affected by today's water challenges. This course will teach best practices for conducting participatory research, as well as introducing you to a wide variety of methods that will allow you to select the approach best suited to your goals. By the end of the course, you will have a full suite of participatory methods at your disposal and be ready to implement your own participatory research project.

Learn about the course

ASU, AAAS launch collaborative to strengthen scientific advancements



Together, <u>ASU and AAAS</u> (American Association for the Advancement of Science) are elevating and amplifying strategies and practices that advance scientific excellence and enable a boldly inclusive scientific enterprise serving society.

As part of this new partnership, ASU has developed a prize with AAAS and the society's flagship peer-reviewed journal, *Science*, to be given to early-career researchers whose work is solutions-focused. In addition, the ASU STEMM community is **invited to join AAAS** as **complementary Elemental Members**.

The <u>ASU-Science Prize for Transformational Impact</u> — which will open for submissions in May 2025 — will be awarded to a researcher who uses new methods to identify problems and produce findings with clear impacts on policy. Prizewinning work could inform issues ranging from human health to educational outcomes to beneficial uses of artificial intelligence.

"We are thrilled to be partnering in the AAAS + ASU Collaborative, which will pioneer innovative approaches to research and community building," said Sally C. Morton, executive vice president of ASU's Knowledge Enterprise.

In addition, AWII's Arizona Water for All program is among the first of three cohorts as ASU that will help to help AAAS to strengthen their existing programming and available resources in specific program areas.

Read more

Eddy Covariance Workshop



The <u>Center for Hydrologic Innovations</u> (CHI) hosted a full-day workshop in January with scientists from <u>LI-COR</u> that took a deep dive into the eddy covariance method, including its theory, the instrumentation involved and the processing of data workflows.

The workshop provided ASU faculty, students and researchers with the opportunity to learn more about eddy covariance application, a method of measuring gas and energy fluxes between the biosphere and atmosphere. This effort supports the on-going eddy covariance measurements conducted by CHI in urban, agricultural and rangelands areas of Arizona and the broader southwestern North America.

### Upcoming events





# 2nd International Atmospheric Water Harvesting Summit

Atmospheric water extraction or harvesting (AWH) is emerging as a potential solution to global water challenges, spanning from humanitarian and domestic drinking water needs to military operations or industrial water usage. Various industries, including beverage, healthcare, semiconductor and data centers, are investing in research, pilot tests and the integration of AWH into their water portfolio to achieve net-zero water footprints.

The event is being hosted at Arizona State University on **February 20 and 21**. The event encourages collaboration and is aimed at tackling the technical challenges posed by AWH. Visit the <u>registration page</u> for participation options.

### **Rethinking Water West**

Rethinking Water comes to the West after a 5-year run at New York City's Columbia University in partnership with Sciens Water.

This is America's Water Conference where solutions and change are embraced.

Join us on Thursday, March 20 from at the Walton Center for Planetary Health Auditorium for this remarkable one-day event that will feature speakers and panelists from private companies, government entities, technologists, academia and non-profits operating in the water sector.

Through a mix of panels and breakout sessions, participants will have the opportunity to make new connections and engage in conversations about the wide range of actionable solutions to water challenges specific to the American West as well and those faced by the nation. Learn more and register here.

### Welcome new AWII directors



Harry Cooper joins the AWII team as the Director of Water Conservation Innovation working to foster science-based, innovative conservation and efficiency approaches in both supply and demand sides of water management, across multiple water sectors, scales and disciplines to address complex water-related challenges in Arizona.

Cooper has more than 20 years of practical, professional experience in landscape architecture, water conservation and natural resources management. He is a registered landscape architect in Arizona and holds a Master of Landscape Architecture and a Bachelor of Science in Renewable Natural Resources Management. He brings a holistic approach to sustainability and resiliency, recognizing that water, land use and climate change are inextricably linked.



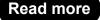
Cynthia Campbell joins AWII as the Director of Research . She is an attorney with over 30 years of experience in environmental and water resource law and policy. For the past nine years she has been the Water Resources Management Advisor for the City of Phoenix where she managed the City's water resource portfolio and advised the Mayor, Council and City Manager on policy issues relating to water resource planning and strategy. She has represented local, county and state governments in Arizona and Illinois, including as an Assistant City Attorney for the City of Phoenix and an Assistant Attorney General for the State of Arizona. Cynthia served on Arizona's Drought Contingency Plan and Arizona Reconsultation Committees, advising the state on Colorado River operating rules, and on the Governor's Water Policy Council, tasked with modernizing the Arizona Groundwater Management Act.

New on our blog



#### New methods for mapping and monitoring Arizona snowpack for water supply planning

Researchers with the Arizona Water Innovation Initiative and the <u>Center for Hydrologic Innovations</u> are using innovative new data and methods for analyzing snowpack in ways that are useful to water managers. "We go to water managers and ask them what kinds of information could make their jobs easier, and then we tackle that," says <u>Zhaocheng Wang</u>, a postdoctoral scholar.



### **Tools and resources**





#### **Empowering water leadership in southern Arizona**

Arizona Water for All, in partnership with the Rural Community Assistance
Corporation and Environmental Defense Fund, piloted a Water Leadership Institute (WLI) in both South Tucson and Nogales to increase empowerment and engagement in water-decision making among Arizona's most water-insecure communities.

### Read more

# Webinar and explainer on the Yavapai-Apache Nation Water Rights Settlement Agreement

A recording of the Kyl Center for Water Policy's recent webinar on the Yavapai-Apache Nation Water Rights Settlement Agreement is now available on the Morrison Institute for Public Policy's YouTube channel.

Want to learn more about Indian water rights? View the Arizona Tribal Water Rights: How did we get here?

Find an explainer on the Yavapai-Apache Nation Water Rights Settlement Agreement and other publications on the Kyl Center website.

Read the explainer

In the news



#### California's problem now isn't fire—it's rain

"The risk of damaging post-fire debris flows is increasing as the climate changes, because we are seeing stronger storms, in between more intense dry times, that can lead to instability in previously burned areas," says Faith Kearns, a water and wildfire expert at Arizona State University. "At the same time, wildfires themselves are also burning more intensely, leaving behind fire-affected soils that can repel water and little vegetation to keep slopes intact."



# Water expert drinks in ASU Regents Professor recognition

"I grew up in hurricane culture and I experienced major storms like Hurricane Andrew," said Wutich, an Arizona State University President's Professor and director of ASU's Center for Global Health. "And because I lived in a neighborhood where we had very strong social support networks, I felt that social infrastructure was a very visible way to survive," said the 2023 MacArthur Fellow. Today, Wutich, is a world-renowned expert on water insecurity. And her dedication to the field has earned her the title of ASU Regents Professor for 2025, the highest faculty honor awarded at ASU.

### Read more



# Water scarcity could hamstring Trump's push for data centers

"Places like Arizona and the Phoenix area are among the fastest-growing for data centers and among the most water-stressed," said Jay Famiglietti, a professor in the school of sustainability at Arizona State University. "We're on a collision course for maybe a major disappointment about what we can accomplish with our data centers in our physical environment."

#### **Read more**

### **Read more**



# EPA withdraws plan to regulate harmful 'PFAS' chemicals in drinking water

"They're everywhere. If you use nonstick appliances, if you have Scotchgard on your couches, it's often used in making more flame retardant materials, so frequently in your clothing," Rhett Larson said.

#### **Read more**





# #1 in the U.S. for global impact -Times Higher Education, 2021