

# Arizona Water Innovation Initiative: Now

December 2024



As we come to the end of 2024, it's time to reflect on progress - or lack thereof - in our collective efforts to build a sustainable framework for managing the Colorado River. The annual Colorado River Water Users Association (CRWUA) conference recently took place in Las Vegas. The event brings together water managers, policymakers and experts from across the western US to discuss critical issues related to the Colorado River.

Our team was there and engaged in the dialogue. Enrique Vivoni spoke on a panel about extreme events, Claire Lauer led user experience testing for the Arizona Water Chatbot and Sarah Porter, Kathryn Sorensen and Susan Craig talked policy with water leaders from across the basin.

While the conference aims to foster collaboration and find solutions to the ongoing challenges for the Colorado River system, the underlying tension between the upper and lower basin states was evident. The states are currently deadlocked over how to share water on an overallocated river that is aridifying due to climate change. Each group presented proposals for the looming post-2026 operations. The conference highlighted the challenges in reaching consensus and the potential consequences of inaction.

Despite the disagreements, participants continued to emphasize the importance of cooperation and finding common ground. They stressed the need for innovative solutions and a collective effort to ensure the long-term sustainability of the Colorado River. As we look forward to 2025, we are focusing our efforts to provide credible and useful science, informative policy analysis, and technical assistance to enable decision makers to craft a sustainable framework for the Colorado.

A handwritten signature in black ink, appearing to read 'D. White', with a stylized flourish at the end.

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

## Funding opportunity announcement



On February 3, 2025, [Impact Water – Arizona](#) will launch its 2025 Funding Opportunity Announcement. The program supports ASU faculty and staff to empower communities with knowledge and tools for informed decisions, fostering engagement and use-inspired research to address Arizona’s water challenges.

Stay up to date by checking the [Apply for Funding](#) page, and to see previously funded projects, visit the [Funded Projects](#) page.

[Apply here](#)

## Water Innovation Technology Showcase a success



The first-ever **Water Innovation Technology Showcase**, co-hosted by the [Global Center Water Technology](#), one of the AWII pillars, and the [Southwest Sustainability Innovation Engine](#), exceeded all expectations. With over 100 registered attendees and 20 companies presenting groundbreaking solutions, the event showcased innovative advancements in water management and sustainability.

Representatives from industry, government and academia gathered from across the nation to explore how these technologies could be integrated into their communities to enhance both ongoing and planned water conservation efforts. The event facilitated meaningful discussions and fostered opportunities for collaboration, providing a vital platform for water stakeholders to connect and share ideas. Additionally, it yielded valuable insights for refining future showcases and events, ensuring they address critical gaps in water-focused business and innovation ecosystems.

## ASU launches groundbreaking partnership to address water insecurity in Arizona



A team spearheaded by [Amber Wutich](#), President's Professor in Arizona State University's School of Human Evolution and Social Change and director of the school's Center for Global Health, is making strides to support water-insecure communities and households.

"The media keeps insisting that Phoenix is the most unsustainable city in the U.S., but the reality is that, at ASU, we're leading the way in developing innovative engineering and social infrastructures to help humans survive and thrive in the face of water scarcity, excess heat and other climate stressors," Wutich said.

Under the banner of [Arizona Water for All](#), an AWII pillar, Wutich and her team are combining social infrastructure with physical infrastructure and creating community partnerships to address water insecurity in Arizona.

[Read more](#)

## ASU Flow 2024 wrap up



**ASU Flow 2024** was held on Monday, October 21, at the SRP PERA Club in Tempe. This is the second time the Arizona Hydrological Society and ASU's [Center for Hydrologic Innovations](#) have partnered to bring the water community together to celebrate the start of the water year. Graduate students and researchers put together an exciting poster session with 22 contributions, including two posters placed near the SRP CrossCut Canal, highlighting recent work on estimating evaporation from canals and climatic and water cycle dynamics in urban land covers.

Poster award winners were [Karem Abdelmohsen](#) for "Declining Freshwater Availability in the Colorado River" and [Kshitij Dahal](#) for "A Deep Learning Based Streamflow Forecasting Using CAMELS Dataset".

Lightning talk winners were [Wren Raming](#) for "Enhancing Water Resource Predictions: Streamlining the TIN-based Real-time Integrated Basin Simulator (tRIBS) with Innovative Tools" and [Krista Lawless](#) for "Policy Analysis of Rural Groundwater Management in Arizona: Voter-Driven Policy Change".

## Upcoming event



## 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, 2025**. The event encourages collaboration and is aimed at tackling the technical challenges posed by AWH. Visit the [registration page](#) for participation options.

## Congratulations to Dr. Amber Wutich



Arizona State University has named [Amber Wutich](#) as one of three Regents Professors, the highest faculty award possible, for 2025. Dr. Wutich leads the [Arizona Water for All](#) pillar of the [Arizona Water Innovation Initiative](#) and is director of the [Center for Global Health](#), President's Professor in the School of Human Evolution and Social Change and a 2023 MacArthur Fellow.

[Read more](#)

## New on our blog



### Water, climate change and infrastructure: A conversation with Upmanu Lall

[Upmanu Lall](#) is the founding director of the Water Institute in the Julie Ann Wrigley Global Futures Laboratory at Arizona State University. Prior to joining ASU, Lall was the Alan and Carol Silberstein Professor of Engineering at Columbia and director of the Columbia Water Center. Lall studies how to solve water scarcity and how to predict and mitigate floods.

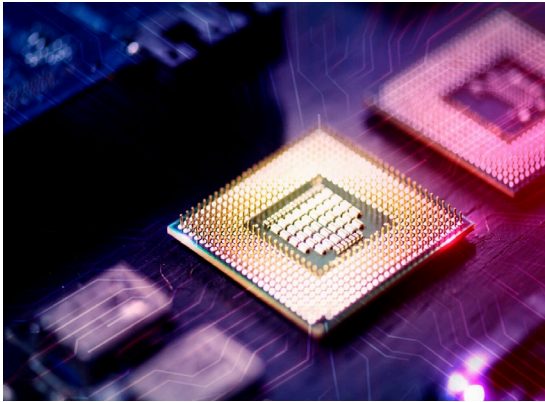
[Read more](#)



### Arizona's Tribal water rights settlements status

For over 60 years, the Navajo Nation, Hopi Tribe and San Juan Southern Paiute Tribe have been engaged in a legal effort to secure their water rights. In May, these Tribes and other parties announced a landmark settlement. If affirmed by Congress, the agreement will end the Tribes' long struggle for water security. [Cora Tso](#), senior research fellow with the [Kyl Center for Water Policy](#) explains.

[Read more](#)



## Tech innovation in Arizona's water sector

Point of use water filters, destruction of forever chemicals, hydrogen, wastewater reuse, atmospheric water harvesting as well as and water sterilization are all areas where researchers with the [Global Center for Water Technology](#) are pursuing technology innovation to support job growth and the state's economic future.

[Read more](#)

## Tools and resources



Arizona Water Chatbot

[New Chat](#)

Arizona Water Chatbot is your Grand Canyon State water pal. Learn about drought, water conservation, and creative ways to protect our desert oasis's vital resource. Together, we can improve Arizona's water future!



## Impact Water - Arizona: Engage, empower, activate

Arizona residents are no strangers to water challenges. What they may not always realize is that they are also a key part of the state's water solutions. [Impact Water - Arizona](#) is a program focused on supporting Arizona communities to take action on the water issues that are most important to them

[Read more](#)

## Arizona Water Chatbot

From water quality to water supply, Arizona residents have many [water-related questions](#) that can sometimes be hard to find answers to, but a new Arizona-specific water chatbot is on the scene to help.

Developed by ASU researchers and supported by the AWII [Impact Water - Arizona](#) program, the [Arizona Water Chatbot](#), or AZ Waterbot, is a tool that provides highly curated information in response to user-



generated questions about Arizona water.

**Explore this tool**

## In the news



**Could wet winters start to refill Colorado River reservoirs? What researchers are saying**

"[Enrique Vivoni](#) pointed out that precipitation models don't always distinguish between rain and snow, which have drastically different effects on a watershed. The way to fix those problems, Vivoni said, is to incorporate another component: communication. If scientists can communicate with water managers and users, they can learn how their needs and observations reveal flaws in the models."

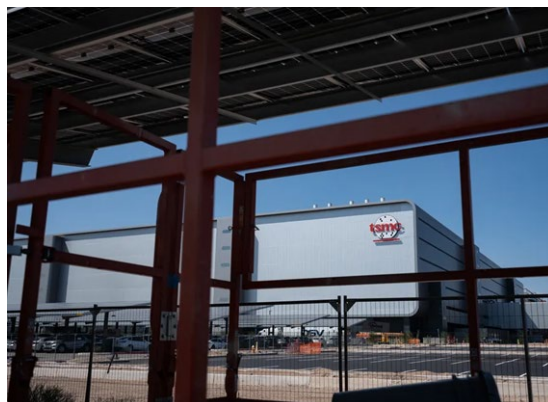
**Read more**



**Shrinking aquifers worry Cochise County residents, but support is weak for regulations**

"The Legislature would have to pass new laws to allow for changes — either specifically or by authorizing the Director to make changes," said [Kathleen Ferris](#), former ADWR director and a senior research fellow at ASU's [Kyl Center for Water Policy](#). Changing an AMA into an Irrigation Non-Expansion Area is also not allowed.

**Read more**



## Drinks giants face water pressure

"The time for corporates to ignore water scarcity is passed," says [Jay Famiglietti](#), the global futures professor at Arizona State University and the director of science for the Arizona Water Innovation Initiative. "There is growing consumer and non-profit pressure for corporates to step up and champion global water stewardship in order to help sustain economic growth, food production, and to play a leading role in protecting the environment."

[Read more](#)

## 'A thirsty operation': TSMC plant arrives amid water doubts, but Phoenix isn't worried

"They're world leaders in chips, and they want to be world leaders in all these other things," said [Paul Westerhoff](#), an ASU professor who has worked for more than a decade with the semiconductor industry. He leads a dozen scientists in research for semiconductor water treatment. "What we're trying to do is to figure out how they can take that wastewater, clean it up and make new chips again with it."

[Read more](#)



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—Times Higher Education, 2021