

Arizona Water Innovation Initiative

Arizona Water Innovation Initiative: Now

May 2024



The <u>Arizona Water Innovation Initiative</u> (AWII), led by Arizona State University's Julie Ann Wrigley <u>Global Futures Laboratory</u> in collaboration with the Ira A. Fulton <u>Schools of Engineering</u>, officially launched in April 2023.

In the first year of this multi-year investment by the state of Arizona — alongside a gift from the Virginia G. Piper Charitable Trust — AWII has strengthened Arizona's water resilience through technological developments, applied research, partnerships and community engagement.

Learn more about our work and future plans with our <u>2023 Year in Review</u>.



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

Events



Urban Land Institute Trends Day 2024

Sarah Porter, director of ASU's Kyl Center for Water Policy, participated in the Urban Land Institute's <u>Trends Day</u> as one of the 30+ top industry experts on state and national real estate trends.

Sarah joined the panel to discuss how Arizona's growing economy brings increasing pressure on the State's limited water supplies and creates tensions between urban and rural communities. This conversation focused on policy choices between urban and rural interests and explored areas where both interests can be positively advanced.



Rural community water decision-making

In March, over 25 Verde Valley community members convened for a new Project Cities workshop: *Building a Framework for Inclusive Water Decision-Making in Rural Communities*.

The two-day workshop convened vital community partners, including municipal staff, youth, educators, long-term residents and topical experts to identify community priorities related to water security and sustainability. Project Cities aims to build out community-led projects that will be activated by ASU faculty and students during fall 2024, and executed by the communities in 2025.



Women leading Phoenix's water sector

This event celebrated the contributions and leadership of women in the water sector, showcasing their pivotal roles in shaping the future of Phoenix's water management and sustainability.

Our esteemed panelists, comprised of leaders and trailblazers from various facets of the water industry, shared their insights, experiences and strategies for success.



Water Awareness Month Festival

On April 6th, the Arizona Water Innovation Initiative joined the Arizona Department of Water Resource's Water Awareness Month Festival.

We celebrated of the importance of water in our daily lives. The event featured fun activities, giveaways, food, music and useful information from a variety of organizations, schools, cities and towns.

In the News



After another wet winter, is the West still facing a water crisis?

Both Lake Mead and Powell have had wet winters recently, but remain at low levels after decades of megadrought Jay Famiglietti told



Most of the Colorado River's diverted water goes to ag uses

"You're talking about farmers not being able to grow as much, potentially really impacting rural economies," Sarah Porter said in the USA Today.

Marketplace Morning Report.

Read more



Bill Nye tells students they 'have to change the world' in climate change talk

"These are important things that anyone sitting in this audience and associated with ASU can do now," said Amber Wutich as part of a panel for the ASU Rhodes Lecture.

Read more



Leaders meet at LA summit to take on critical climate issues

"The final word is that this is the starting line, right? We've completed the assessment. Now we must go through a multi-year process of

Read more



Southwest Sustainability Innovation Engine revs up for official start

The focus on water, particularly vital for Arizona, is aligned with the broader objective of integrating sustainability into the fabric of regional development, an effort led by Paul Westerhoff.

Read more



Kyl Center groundwater report provides guidance on 'water resilience'

"One concern is that where that water is being replenished is not the place where it is being taken out. This can sustaining that assessment and engaging communities to get the information into the hands of those who can use it," says Dave White.

lead to the depletion of local aquifers and a condition called subsidence, where the aquifers can no longer store water," Sarah Porter said.

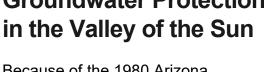
Read more

Read more

Tools and resources



Water and land use in **Groundwater Protection Central Arizona**



Because of the 1980 Arizona Groundwater Management Act, the Valley of the Sun is one of the few areas in the world where groundwater stocks are not in steep decline.

However, the valley has likely reached the limits of growth on groundwater supplies, and Colorado River shortages threaten the ability to recharge and replenish the aguifer. "Groundwater Protection in the Valley of the Sun" explains what all of this means.

Read more



The Kyl Center for Water Policy's new report and interactive map allow you to explore the water use intensity, that is, average water use per acre, of many Central Arizona cities and

Although water demand is commonly thought to be tied to population, it is more directly linked to land use. Local decisions on density, industrial and agricultural patterns and the amount of irrigated or natural open space all greatly impact a community's water use intensity.

Read more

towns.



New PFAS rule

The U.S. Environmental Protection Agency recently announced the <u>Final PFAS National Primary Drinking Water Regulation</u>. Per- and polyfluoroalkyl substances, also known as PFAS, have been an issue of growing concern for many years because they can persist indefinitely. These "forever" chemicals have been in widespread use for many decades, and are known to negatively impact human health.

The new rule has widespread implications for manufacturers, users, processors and importers of PFAS and PFAS-containing articles. Water utilities have several years to meet the new drinking water requirements.

ASU researchers, including AWII pillar lead Paul Westerhoff, have been working for many years on PFAS related issues. For example, they have demonstrated use of commercially available technologies to remove PFAS from groundwater used as drinking water in Arizona.

In addition, they have developed lab-scale testing protocols and are working with private sector consultants to identify the best adsorbent to remove PFAS from impacted groundwater, estimate lifecycle costs and design configuration of the granular activated carbon treatment processes.

New on our Blog



Colorado River forum moves water experts toward consensus



New partnership to quickly detect water supply and demand changes

Read more



Research fellow addresses Arizona tribal water policy

Read more



Arizona Water for All: Building a partner network

Read more



Asking why water tastes like water

Read more



Collaborative water solutions

Read more

Read more



For Arizona, climate change is water change

Welcome to the new Arizona Water Innovation Initiative blog

Read more

Read more

Project Highlights





Rural groundwater protection

Over forty years ago,
Arizona took an important
step toward long-term water
security with the
Groundwater Management
Act. The Act focused on the
state's most populous areas,
leaving rural groundwater
largely unmanaged. Today,
however, protecting rural
groundwater is one of
Arizona's top priorities, and
one of its thorniest
challenges.

The film Agriculture and Water in the West: A



Community Takes Charge
(trailer, full film), developed
by the Babbitt Center for
Land and Water Policy and
the Lincoln Institute of Land
Policy in partnership with the
Arizona Water Innovation
Initiative's Impact WaterArizona program,
documents the work of one
community to collaboratively
address its groundwater
issues after years of conflict.

Learn more on our blog





Arizona Forward award nomination

The Arizona Forward Environmental Excellence Awards has served as Arizona's signature sustainability recognition event for over 40 years.

The Arizona Water Innovation

Impact Water - Arizona: Collaborate with us!

Impact Water - Arizona proudly joins forces with a dynamic array of partners to extend their reach and impact. These collaborative efforts aim to empower Arizonans, fostering a collective commitment to active

Initiative is proud to have had Impact Water - Arizona and the funded project 'Exploratory Scenario Planning for Water Resilient Agriculture' nominated for this prestigious award.

Learn more

change and promoting water stewardship.

Interested in collaborating with us? We would love to hear from you as we expand our list of partners.

Learn more





Arizona State University

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