

WEEKLY WAVE



THE UNIVERSITY OF ARIZONA
COOPERATIVE EXTENSION

WATER RESOURCES RESEARCH CENTER



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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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IN THIS ISSUE: Factsheet Release, League of AZ Cities and Towns, WOTUS, Governor's Water Policy Council, New Riparian Book, Kyl Center Study

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The image shows the cover of the 'Arizona Water Factsheet for Gila County'. The cover features a map of Arizona with Gila County highlighted, a pie chart titled 'Arizona Water Supply and Demand', and a map of Arizona showing 'Statewide Context'. The pie chart data is as follows:

Category	Value	Percentage
Surface Water	3,220 MGal/Day	53%
Groundwater	2,760 MGal/Day	46%
Reclaimed Water	174 MGal/Day	3%
Municipal	1,240 MGal/Day	21%
Industrial	74 MGal/Day	1%
Agriculture	4,704 MGal/Day	78%

The cover also includes the text: 'ARIZONA WATER FACTSHEET Gila County Get to know water in your county September 2023 Water in Arizona Arizona's future depends on sustainable water supplies, which in turn depend on vigilant and innovative management of those supplies. From low deserts to high mountains, counties and communities face different water challenges and take different approaches to addressing those challenges, while conforming with regional, state, and federal requirements. The Arizona Department of Environmental Quality (ADEQ) is responsible for water quality and tasked with enforcing federal environmental standards. The Arizona Department of Water Resources (ADWR) oversees the use of surface water and groundwater, which are legally distinct though physically interconnected. In general, ADWR regulates groundwater more strictly in Active Management Areas (AMAs) than in the rest of the state.' The background of the cover features a large 'GILA COUNTY' text overlay and a water drop icon.

The Gila County Water Factsheet is now available! As the eighth installment in the WRRC's Arizona Water Factsheet series, this concise resource provides a general overview of the county's water, including supply and demand as well as some unique water challenges attributed to Gila County's distinctive geology and hydrology. Water-dependent economic activities and budding partnerships dedicated to water conservation and forest management are also covered. For local stakeholders navigating water resource challenges, groundwater reliance, wildfire preparedness, and sustainable recreation have emerged as areas of focus as they work to identify community projects to

restore and enhance the watershed. Acknowledging the unique characteristics, priorities, and values of the county, the Gila County Technical Advisory Committee (TAC) helped provide context to existing water-related data. For Gila County, the TAC was led by Chris Jones, UArizona Cooperative Extension Agriculture & Natural Resources Agent, and Jake Garret, Gila County Wastewater Division Manager. Additional members of the TAC include Arizona Water Company, Town of Payson, US Forest Service, and Freeport McMoRan. Additional stakeholders provided input reflective of their deep local knowledge about the county's water resources and management.

[Download the Factsheet](#)
[Arizona Water Factsheet Series](#)

EVENTS

WRRC Water Webinar: Planning for Water Resilience: Strategic Investment in Green and Traditional Infrastructure

Date: Monday, September 11, 2023
Time: 12:00 pm – 1:15 pm Arizona Time
Location: [Webinar Only](#)

Speakers:

Elvy Barton, *Manager, Water and Forest Sustainability, SRP*
Ron Klawitter, *Manager, Water System Projects, SRP*

The Salt River Project (SRP) was founded in 1903 and has been managing water supplies from the Salt and Verde Rivers for more than a century. As SRP prepares for the next century of serving reliable water supplies to the Valley, changing climate conditions, consumer interest, and demands require strategic investment in the Green and Traditional Infrastructure that support SRP's water supplies.

SRP's Forest Health initiatives are building on more than a century of watershed stewardship while adapting to the current needs and changing dynamics of the Salt and Verde Watersheds. Over 100 years of wildfire suppression in northern Arizona's forests leave the Salt and Verde rivers at risk. SRP is investing in landscape-scale forest restoration with community and business partners to ensure that watershed health is improved and maintained in support of ecosystem and water resilience.

SRP's Water System Projects are focused on ensuring SRP's water storage and conveyance systems are ready to meet community needs, while preparing for a warmer and more variable future. SRP is building regional partnerships with municipal, Tribal, and agricultural partners to plan and implement infrastructure and operational projects that are intended to improve water availability and resilience in central Arizona.

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



ENVS Colloquium Series: Holding the Line: Perspectives from the Indigenous and Conservation Field – Co-sponsored by the WRRRC

Date: Monday, September 11, 2023

Time: 3:00 pm – 4:00 pm Arizona Time

Location: University of Arizona (Marley 230) 1145 E 4th St, Tucson, AZ; [Virtual Access](#)



Speaker:

Daniel Cordalis, *Colorado River Sustainability Campaign - Tribal Partnership Manager*

The Environmental Science department invites experts from around the world to speak on a variety of topics related to environmental science every semester for its Colloquium Series. Daniel Cordalis is a member of the Navajo Nation who grew up within the four sacred mountains in Southwest Colorado. Cordalis is an attorney who has nearly two decades of experience working with Tribes to protect their water, natural, and cultural resources through litigation, resource negotiations, land acquisition, and Tribal governance and land management initiatives. He currently works both at the Colorado River Sustainability Campaign as a Tribal Partnership Manager and at the Ridges to Riffles Indigenous Conservation Group, an Indigenous-led law and policy organization he founded. Prior to working on policy issues, Cordalis obtained a master's degree from the University of Colorado, Boulder, studying alpine hydrology; a way to combine his background and interests in physical science and spending as much time as possible recreating and learning in the mountains.

[Event Flyer](#) [More Info](#)

NVIS Fall 2023 Seminar Featuring Dr. Joseph Hoover – Co-sponsored by the WRRRC

Date: Tuesday, September 12, 2023

Time: 12:00 pm – 1:00 pm Arizona Time

Location: [Webinar Only](#)



Speaker:

Joseph Hoover, *Assistant Professor, Department of Environmental Science, University of Arizona*

Dr. Hoover is an environmental scientist who addresses environmental exposure and health disparities using community-engaged research methods and geospatial technology. His research emphasizes drinking water quality and access challenges experienced by Indigenous communities with additional interests in community-engaged research methods and healthy homes. He employs a community-driven research approach to develop sustaining partnerships with communities, which includes project co-development and training. Dr. Hoover's larger research goal is to reduce exposure to environmental contaminants through the use of analytical tools that communities can then build on for future efforts.

[Zoom Link](#)

[More Info](#)

Upcoming WRRC Events

Oct 12: [WRRC Water Webinar: Solar River, Covering and Powering Canals with Photovoltaic Energy](#)

Other Events

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

NEWS

WRRC Participates in League of AZ Cities and Towns Conference

Last week, Director Sharon B. Megdal and Graduate Outreach Assistant Taylor Simmons had a great time representing the WRRC at the 2023 League of Arizona Cities and Towns Annual Conference. The WRRC set up a booth to share information on our [Arizona Water Factsheets](#) series with local government officials and their staff. Engaging with other conference attendees, the WRRC booth included a flip chart asking visitors to share their ideas for "water solutions," continuing the theme of this year's [WRRC conference](#). In addition to networking and sharing information at the WRRC booth, Director Megdal also served on a panel at a pre-conference workshop hosted by the Center for the Future of Arizona. Check out the link below to see some photos from the event!



Images: Nick Hilton

[Photo Gallery](#) [2023 League Annual Conference](#)

EPA Issues WOTUS Rule in Light of Sackett Decision

Following the May 25, 2023, US Supreme Court decision in *Sackett v. EPA*, the EPA and US Army Corps of Engineers amended their rule defining 'Waters of the United States' (WOTUS), which was published in January 2023. The Final Conforming Rule, announced on August 29, amends the agency's rule to align with the Supreme Court's interpretation of WOTUS under the Clean Water Act and will be effective once the rule is published in the Federal Register. The amendments apply only to the parts of the 2023 rule that were invalidated by the *Sackett* decision, not the entire rule. Among the amendments is the removal of the significant nexus standard used to determine whether some tributaries and wetlands are considered jurisdictional WOTUS. Three public webinars are scheduled for September 12, 13, and 20, to provide updates and information on the amended rule. While webinar registration has reached capacity,



recordings will be posted on EPA's website. More information on the Final Conforming Rule and WOTUS is available at the link below.

[More Info](#)

Governor's Water Policy Council Meets for Second Time



Wednesday, September 6, was the second meeting of the full Governor's Water Policy Council (GWPC). It was held in person at the Arizona Department of Water Resources (ADWR) headquarters in Phoenix and streamed online for public viewing. The meeting agenda featured updates from the Assured Water Supply Committee and the Rural Groundwater Committee, including a groundwater basin data review. Those who missed this meeting or prior meetings of the Council or its Committees may watch the recordings and access the presentation slides on the ADWR website. On September 12, the Assured Water Supply Committee will hold its monthly meeting, followed by the Rural Groundwater Management Committee on September 14. The next full GWPC meeting is tentatively scheduled for Friday, October 27, from 1:00-3:00 pm.

[Past & Upcoming Meeting Links, Recordings, & Slides](#) [GWPC Info](#)

ASU Ecologist Reads from Her New Urban Gardening Book

Prof. Julie Stromberg has been the go-to expert on riparian systems for many years. Retired from ASU, she has written a book based on her experience tending a 4-acre garden on riparian land in south Phoenix, *Bringing Home the Wild: A Riparian Garden in a Southwest City*. On Wednesday evening, September 20, at 5:30 pm, Stromberg will present a reading and talk about ecological gardening, hosted in Tempe at ASU's Biodiversity Knowledge Integration Center (BioKIC). Part of the Arizona Riparian Council (ARC) Speaker Series, the presentation will give direction to individuals who want to help counteract habitat and species loss while providing multiple additional environmental benefits. The ARC Speaker Series is co-sponsored by BioKIC and ASU. To attend the September 20 event, RSVP to Cindy Zisner cindy.zisner@asu.edu.

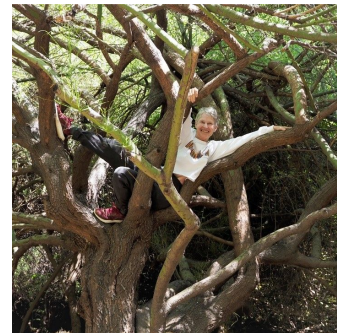


Image: Julie Stromberg

[More Info](#) [BioKIC](#)

Kyl Center Publishes Affordability Study of Northern AZ Water

ASU Kyl Center for Water Policy's recently published report, *Northern Arizona Water Affordability Study*, explores financial obstacles to accessing safe, reliable water in the region. The report begins with important context for its analysis, providing an overview of the region's Tribal and non-Tribal communities, the systems providing water to the region, and water use types in the study area (Coconino, Navajo, and Apache Counties). The

authors focused their analysis on water affordability measures for access to community water systems that deliver piped water. In their Conclusions, they note that “Not surprisingly given Northern Arizona’s vast landscape, varied water utility sizes, and different socio-economic conditions, measures of affordability vary widely,” and “Water affordability in Northern Arizona is a study in extremes.” The authors’ suggestions for decision-makers seeking to improve affordability include restructuring community water rates to lower “fixed charges” and offering a small “allowance” for basic water needs, though they note it is important to weigh those benefits against any potential impacts to the stability and revenue sufficiency of the system. They conclude by stating that Northern Arizona communities can use the results of this study “to better inform decisions regarding water access policies such as disconnects for non-payment, to adopt rate structures that enhance affordability, and to apply for federal and state grants.”

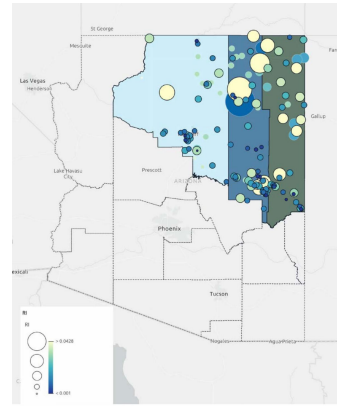


Image: Heat Map of Residential Indicator Results. Northern Arizona Water Affordability Study. Appendix B. pg 29.

[Read the Study](#)

WATER JOBS

WRRC Seeks Associate Director/Specialist

The University of Arizona Water Resources Research Center (WRRC) is actively seeking candidates for its Associate Director / Extension Specialist position to work closely with the Director, providing center administration, program direction, and leadership for WRRC. In this position, the successful candidate will also conduct applied research and engagement, pursue scholarly activities, and establish and maintain extramural funding. The minimum qualifications include a Doctorate or equivalent terminal degree, a minimum of five years of work experience related to Arizona’s and regional water management, a strong record of scholarly accomplishments, and a record of collaborative projects and programs. The WRRC is administratively located within the University of Arizona’s Division of Agriculture, Life and Veterinary Sciences, and Cooperative Extension and is also part of the National Institutes for Water Resources, a national network of federally authorized institutes/centers that address unique water-related concerns of the individual states and the nation. The academic home of the position will depend on the candidate’s specialization and the rank will depend on the candidate’s record and experience.

Please visit [UA Talent req14913](#) for additional information on the position and to apply.

- ADEQ [Environmental Justice Coordinator](#)
- ADEQ [Community and Intergovernmental Engagement Section Manager](#)
- Hayden and Sawyer [Assistant Engineer](#)
- Hayden and Sawyer [Hydraulic Modeler](#)

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

ANNOUNCEMENTS



- **Sep 10:** [AWWA WaterSmart Innovations 2023 Student Poster Competition – Submission Deadline](#)
- **Sep 10–13:** [AWWA Water Infrastructure Conference 2023](#)
- **Sep 10–15:** [Southwest Tribal Climate Action Summit](#)
- **Sep 11:** [WRRC Water Webinar: Planning for Water Resilience: Strategic Investment in Green and Traditional Infrastructure](#)
- **Sep 11:** [ENVS Colloquium Series: Holding the Line: Perspectives from the Indigenous and Conservation Field – Co-sponsored by the WRRC](#)
- **Sep 11:** [ADEQ Virtual Meeting — Aquifer Water Quality Standards Rulemaking](#)
- **Sep 11:** [Virtual Public Hearing: Notice of Proposed Expedited Rulemaking – Drinking Water Regulations – Lead and Copper Rule Revisions](#)
- **Sep 12:** [NVIS Fall 2023 Seminar Featuring Dr. Joseph Hoover – Co-sponsored by the WRRC](#)
- **Sep 12:** [Assured Water Supply Committee Meeting](#)
- **Sep 12:** [AWRA 2023 Annual Water Resources Conference – Student Poster Deadline](#)
- **Sep 13:** [AHS Symposium Fieldtrip: Oak Creek Watershed Restoration](#)
- **Sep 13–16:** [Arizona Hydrological Society 35th Annual Symposium](#)
- **Sep 14:** [Rural Groundwater Management Committee Meeting](#)
- **Sep 14:** [Sonoran Institute: Bugs and Brews 2023](#)
- **Sep 15:** [ABWC Annual Meeting & Water Conference: Watery Going to Do?](#)
- **Sep 16:** [¡Agua es Vida! Celebration of Water in the Desert and Short Film Showcase](#)
- **Sep 16:** [AHS Symposium Fieldtrip: Hoxworth Springs, Lake Mary, and Montezuma Well](#)
- **Sep 18:** [Integrated Hydrologic Verde River Basin Model Informational Session](#)
- **Sep 20:** [Arizona Riparian Council Speaker Series: Bringing Home the Wild: A Riparian Garden in a Southwest City](#)
- **Sep 20:** [CAP University Virtual Learning](#)
- **Sep 27–28:** [Southwest Drought Learning Network 2023 Annual Meeting](#)
- **Sep 28:** [CNRS International Emerging Actions – Proposal Submission Deadline](#)
- **Sep 29:** [AWRA 2024 Geospatial Water Technology Conference – Abstract Deadline](#)
- **Sep 30:** [Water Resources Management & Sustainability: Solutions for Arid Regions 2nd International Conference – Abstract Submission Deadline](#)
- **Sep 30:** [Sonoran Institute: Guided Dragonfly Tours](#)
- **Oct 1:** [RiversEdge West 2024 Conference – Oral Presentation Abstract Deadline](#)
- **Oct 3–5:** [AWWA WaterSmart Innovations 2023 Conference](#)
- **Oct 6:** [AWRA 2024 Spring Conference – Abstract Deadline](#)
- **Oct 7:** [Urban Wildlife Conservation Day: Rio Reimagined Salt River Clean-Up](#)
- **Oct 12:** [WRRC Water Webinar: Solar River, Covering and Powering Canals with Photovoltaic Energy](#)
- **Oct 19:** [Imagine a Day Without Water](#)
- **Oct 19-20:** [Upper Gila Watershed Forum - CANCELED](#)
- **Oct 21:** [19th Annual Research Insights in Semiarid Ecosystems \(RISE\) Symposium](#)
- **Oct 23:** [BSMAR18 — Abstract Submission Deadline](#)
- **Oct 25:** [Water Education Foundation’s 39th Annual Water Summit: Taking on the Improbable in Western Water](#)
- **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 14–16:** [US Water Alliance One Water Summit 2023](#)
- **Dec 5–7:** [AWWA North American Water Loss Conference & Exposition](#)
- **Dec 11–15:** [AGU23: Wide. Open. Science](#)

- **Jan 1, 2024:** [RiversEdge West 2024 Conference – Poster Presentation Abstract Deadline](#)
- **Jan 22–24, 2024:** [Growing Water Smart: Integrated Water and Land Use Planning Workshop](#)
- **Feb 11–13, 2024:** [AWWA/WEF Young Professionals Summit](#)
- **Feb 26–28, 2024:** [Water Resources Management & Sustainability: Solutions for Arid Regions 2nd International Conference](#)
- **Mar 5–7, 2024:** [RiversEdge West 2024 Conference – Restoration for the Future: Promoting Resilience in Our Rivers and Communities](#)
- **Mar 11–14, 2024:** [AWWA WaterReuse 2024 Symposium](#)
- **Mar 25–27, 2024:** [AWRA 2024 Geospatial Water Technology Conference](#)
- **Apr 3–6, 2024:** [BSMAR18](#)
- **Apr 8–10, 2024:** [AWRA 2024 Spring Conference](#)
- **Jun 10–13, 2024:** [AWWA 2024 Annual Conference & Expo \(ACE24\): Transforming Our Water Future](#)

PUBLICATIONS & MEDIA

Best Practices Guide: Water Circularity for Controlled Environment Agriculture Operations

This guide produced by the Resource Innovation Institute seeks to support cultivators in: speaking the language of water circularity, understanding crucial water conservation principles, reviewing the available technology for treatment and recapture of multiple water streams involved in crop production, maximizing incentives for energy-efficient water treatment solutions, and protecting natural water resources while aligning with your business model. [View Guide](#)

Northern Arizona Water Study

ASU's Kyl Center for Water Policy recently released a Northern Arizona Water Affordability Study, exploring financial obstacles to accessing safe, reliable water in the region. [Read the Study](#)

OTHER NOTICES

Arizona Water Survey to Inform Water-Related Tools

The ASU Water Innovation Initiative (AWII) team of ASU researchers and students are surveying people to ask people about their experiences with water, what things they are curious to know more about, and what questions they have about Arizona's water. The data will be used to improve the design and features of water-related tools.

[Take the Survey](#)

Call for Abstracts: BSMAR18

Submit your abstract for BSMAR18! This year's symposium will be held April 3–6, 2024, in Tucson, AZ. We welcome talks and posters on virtually any topic related to managed aquifer recharge. Examples include, but are not limited to, the following: design, construction, development, and testing; operations and maintenance; economics and energy efficiency; governance and regulation; water quality and monitoring; modeling; tools and technologies; or climate change. The deadline to submit is October 23, 2023.

[More Info](#)

Call for Abstracts — Water Resources Management & Sustainability: Solutions for Arid Regions 2nd International Conference

We cordially invite you to submit your abstract or full-length paper. The conference will be held February 26–28, 2024, in Dubai, United Arab Emirates. Papers may be submitted under one of the following sub-themes: socio-economic water studies, climate change and water resources resilience, water resources and hydrological processes, advanced technologies in water resources management, non-conventional water resources and water quality management, or water resources sustainability. The deadline for submissions is September 30, 2023. [More Info](#)

Integrated Hydrologic Verde River Basin Model Informational Session

The Nature Conservancy in Arizona and the Yavapai-Apache Nation have partnered to develop the Integrated Hydrologic Verde River Basin Model (Verde Model) that incorporates groundwater, surface water, water quality, and climate. The Verde Model was developed over the past three years using the integrated modeling tool known as MIKE SHE and builds on the USGS Northern Arizona Groundwater Flow Model framework by adding atmospheric, land surface, and unsaturated zone hydrologic processes. TNC and YAN will be hosting an Informational Session on September 18, 2023, from 10–11:30 am. The meeting will be recorded for those who are unable to attend.

[Zoom Meeting Link](#)

Wyland National Mayor's Challenge for Water Conservation 2023 Winners

Tucson, AZ was among the winners of this year's Wyland National Mayor's Challenge for Water Conservation. The other winners were Laguna Beach, CA; North Port, FL; Gainesville, FL; and Houston, TX. [More Info](#)

DAMA and HVINA Online Applications Available

The Arizona Department of Water Resources (ADWR) is happy to announce that applications can now be submitted online for Grandfathered Rights in the Douglas Active Management Area (DAMA) and Irrigation Authorities in the Hualapai Valley Irrigation Non-Expansion Area (HVINA). If you require assistance in completing these forms or using the online application process, ADWR staff provides online office hours on Tuesdays from 3–4 pm that may be accessed through the [ADWR public meeting calendar](#). Outside of these office hours, you can get assistance by calling the customer service line at 602-771-8585 or emailing earp@azwater.gov.

[DAMA Application/Info](#) / [HVINA Application/Info](#)

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

[Contact us here](#)