

WEEKLY WAVE



THE UNIVERSITY OF ARIZONA
COOPERATIVE EXTENSION

WATER RESOURCES RESEARCH CENTER



September 1, 2023 / Volume 11, Issue 22

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.](#)

[WRRC Office Update](#)

[Subscribe to the Weekly Wave](#)

[View as Webpage](#)

IN THIS ISSUE: Reflections, Presidential Advisory Commission, WIFA, Factsheet, The Water Report

[Be a Supporter](#)



Reflections: Respect, Responsibility, Reciprocity, and Relationship

I recently returned from attending [Stockholm World Water Week](#) (WWW), the annual international water conference organized by the Stockholm International Water Institute (SIWI). Always an excellent conference, this one stood out for its heightened focus on Indigenous water knowledge, experiences, and communities. There had been some inclusion of Indigenous voices in last year's WWW. In fact, it was there that I met Australian hydrologist Brad Moggridge, who gave a [WRRC webinar](#) in early 2023. However, noting the limited Indigenous presence in 2022, some colleagues engaged in some cross-continental brainstorming on session ideas, resulting in multiple Indigenous-focused session proposals that were accepted for the 2023 program. The Colorado River Basin was featured in the session "Indigenous Voices in Water Governance," which was co-convened by the Water & Tribes Initiative | Colorado River Basin, the Lincoln Institute of Land Policy, and the WRRC. More about our session in a moment.

[Read More](#)

EVENTS

WRRC Water Webinar: Agricultural Managed Aquifer Recharge (Ag-MAR) – A Method for Sustainable Groundwater Management

Date: Thursday, September 7, 2023
Time: 12:00 pm – 1:15 pm Arizona Time
Location: [Webinar Only](#)



Speaker: Helen E. Dahlke, *Professor in Integrated Hydrologic Sciences, University of California, Davis*

More than two billion people and 40% of global agricultural production depend upon unsustainable groundwater extraction. Managed Aquifer Recharge (MAR), the practice of strategically recharging water to replenish subsurface storage, is an important practice for managing groundwater more sustainably. However, it is not yet reaching its full potential to counterbalance growing global groundwater demand. Agricultural Managed Aquifer Recharge (Ag-MAR) is an emerging method for spreading large-volume flows on agricultural lands and has the capacity for widespread global implementation. Yet, knowledge gaps, synergies, and trade-offs in Ag-MAR research still exist.

In this WRRC Water Webinar, Professor Helen Dahlke describes the practice and feasibility of using agricultural land as intentional spreading basins for groundwater recharge, the opportunities to address climate change with Ag-MAR, and the benefits of Ag-MAR including groundwater storage, increased environmental flows, and domestic well support. Dahlke will present the current state of research with respect to the environmental impacts of Ag-MAR on water quality (e.g., nitrate), crop health and yield, and the multidisciplinary approach needed for communication and coordination of Ag-MAR programs with stakeholders and the public. In groundwater-dependent agricultural regions, Ag-MAR provides an important approach to achieving groundwater sustainability;

however, it provides one of many solutions to achieve groundwater sustainability and cannot offset the need for groundwater conservation.

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

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](#)

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](#)





UArizona Commission Releases Report on the Future of Food

On Wednesday, August 30, the University of Arizona Presidential Advisory Commission on the Future of Agriculture and Food Production in a Drying Climate released a report outlining recommendations for actions the university can take to address threats to agriculture and food production in Arizona and semi-arid regions throughout the world. After six months of consultation with experts and stakeholders, the Commission produced recommendations that aim to build university infrastructure and strengthen engagement to realize solutions. "By developing solutions in Arizona, we can provide a lot of good resources and information for the rest of the world," said Laura Condon, report co-author and commission co-chair. "The university specifically stands out in arid landscapes for having this great history of agricultural production and research that goes across technical solutions, water resources and policy. Our goal is to bring people together around the strengths we already have." The report outlines five recommended actions: 1. Create an Institute for Sustainable Food, Water and Agriculture Systems; 2. Create a Center for Soil Health; 3. Create technology and innovation hubs at the Maricopa, Yuma, and Campus Agricultural Centers, and Biosphere 2; 4. Expand partnerships with Tribal agriculture; 5. Establish new and strengthen existing collaborations with institutions in arid regions around the world.



[Read the Report](#)
[Report Press Release](#)

WIFA Approves \$41M in Water Conservation Funding – More to Come

As of August 16, the Water Infrastructure Finance Authority of Arizona (WIFA) has awarded more than \$41 million to fund water conservation initiatives throughout the state, saving an estimated 860,000 – 1.3 million acre-feet of water. The funding is part of the \$200 million Water Conservation Grant Fund (WCGF) established in 2022 by the Arizona legislature. The 24 programs and projects approved to date include nine that will install advanced water metering, eight turf and grass removal efforts, six agricultural system upgrades, and a single, multi-faceted program that reduces turf, installs smart meters, installs efficient irrigation systems, and reclaims drainage and weather stations on public lands. A list of all awarded grants and submitted proposals, along with information on how to apply, is available on the [WCGF website](#). Applications for conservation funding are awarded on a rolling basis. The current funding opportunity (Round 4) closes on August 31, at which point Round 5 will open.

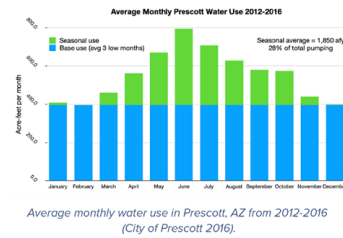


[WCGF Website](#)
[Audubon Coverage and FAQs](#)

Did You Know?

Strategies to manage outdoor water use can conserve meaningful amounts of water within Yavapai County and the Prescott Active Management Area (AMA), as they do throughout the state. The Prescott AMA's management goal is to achieve safe-yield by 2025, which would balance natural and planned recharge with groundwater withdrawals.

However, the Prescott AMA has been in overdraft for all but five years since 1985. Some of this water deficit can be attributed to outdoor irrigation. In Prescott, municipal water demand can double in June when outdoor irrigation is at its peak, accounting for 28% of annual groundwater withdrawals. Communities throughout Yavapai County are actively adopting methods to conserve and improve the resilience of available groundwater supplies. Conservation strategies include irrigation scheduling to reduce evaporation and optimize water use, as well as offering incentives for xeriscaping in new developments.



To learn more about water conservation strategies in Yavapai County, check out the WRRC's water factsheet [here](#).

Image: Citizens Water Advocacy Group

[Yavapai County Water Factsheet](#)

Colorado River Basin Publication Free to WW Readers

In September, The Water Report, a monthly publication offering in-depth coverage of water rights, water quality, and water solutions in the West, published a special issue on the Colorado River Basin. It contains articles that analyze Colorado River Basin challenges from different perspectives, including agricultural, legal, and geographical perspectives, and an update on current conditions. As a special offer to readers of the WRRC's Weekly Wave, the publisher is making the entire September issue available free online. Readers can find the Colorado River Basin issue of The Water Report by following this [link](#).



[Colorado River Basin Special Issue](#)

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.

-
- IRes [Research Assistant](#)
 - Watershed Management Group [Bilingual Education & Engagement Coordinator](#)

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

ANNOUNCEMENTS

- **Sep 5:** [Hassayampa River Mineral Withdrawal: Comments and Public Meeting Request Deadline](#)
- **Sep 6:** [Water Justice Knowledge Exchange Launch Event](#)
- **Sep 6:** [CAGRD 2025 Plan of Operation Water Supplies Roundtable](#)
- **Sep 7:** [WRRC Water Webinar: Agricultural Managed Aquifer Recharge \(Ag-MAR\) – A Method for Sustainable Groundwater Management](#)
- **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:** [Virtual Public Hearing: Notice of Proposed Expedited Rulemaking – Drinking Water Regulations – Lead and Copper Rule Revisions](#)
- **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:** [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:** [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:** [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 19-20:** [Upper Gila Watershed Forum - CANCELED](#)
- **Oct 21:** [19th Annual Research Insights in Semiarid Ecosystems \(RISE\) Symposium](#)
- **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](#)
- **Mar 5–7, 2024:** [RiversEdge West 2024 Conference – Restoration for the Future: Promoting Resilience in Our Rivers and Communities](#)
- **Mar 11–14, 2024:** [AWWA WateReuse 2024 Symposium](#)
- **Mar 25–27, 2024:** [AWRA 2024 Geospatial Water Technology Conference](#)
- **Apr 8–10, 2024:** [AWRA 2024 Spring Conference](#)
- **Jun 10–13, 2024:** [AWWA 2024 Annual Conference & Expo \(ACE24\): Transforming Our Water Future](#)

PUBLICATIONS & MEDIA

Tool & Explainer on Long-Term Storage Credits Released

Stored groundwater – known as Long-Term Storage Credits or LTSCs – is an important component of water supply for many Central Arizona cities and other entities. The Kyl Center for Water Policy recently released a new Arizona Water Blueprint feature on how LTSCs work and a tool to show where water is banked and who owns it. [More Info](#)

OTHER NOTICES

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](#)