

WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**



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The Water Resources Research Center - a research unit of the [College of Agriculture and Life Sciences](#) and an Extension unit in [UA Cooperative Extension](#) within the Division of Agriculture, Life & Veterinary Sciences & Cooperative Extension. [Subscribe to the Weekly Wave.](#)

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IN THIS ISSUE: Reflections, AWRA, ET Data, APW, New Students



Photos (L to R): MAR 5 ceremonial opening, March 2019, and October 2021. Sharon B. Megdal

Reflections: Water, Recharge, and Life

Managed aquifer recharge (MAR), the term commonly used for the practice of storing water underground, often for later recovery or use, is a widely deployed water management tool. Through legislative action and regulatory programs, Arizona has established a robust program of MAR project permitting and stored water accounting,

which facilitates the utilization of MAR. Notably, the Arizona Water Banking Authority has stored millions of acre-feet of Colorado River water in aquifers for recovery during times of shortage. Tucson Water has positioned itself well to deal with cutbacks in Central Arizona Project (CAP) deliveries by relying on recharge and recovery of CAP water to supply its customers and store the water it receives in excess of customer demand. And there are many other examples of how Arizona's storage and recovery framework has enabled cost-effective approaches to meeting water management objectives.

[Read More](#)

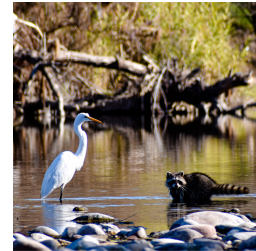
EVENTS

Water Solutions for Our Warmer World – Episode 6: Biodiversity, Water, and Climate Change in the Southwest

Date: November 17

Time: 4:00-5:30 pm Arizona Time

Location: [Webinar Only](#)



Please join [Arizona Institutes for Resilience](#) for the sixth and final episode of the Water Solutions for Our Warmer World series, *Biodiversity, Water, and Climate Change in the Southwest*, co-hosted by UArizona's [Udall Center](#) and [WRRC](#). The public webinar will run from 4 to 5:30 pm Arizona Time on Wednesday, November 17, and will address the following questions:

- How does climate change intersect with biodiversity in the Southwest US?
- What lessons can be learned about the intersections of social and ecological systems?
- What are the solutions for riparian and water-dependent ecosystems?

Panelists include:

- Jacelle Ramon-Sauberan (Tohono O'odham), *PhD Candidate, Department of American Indian Studies, UArizona*
- Dr. Jennie Duberstein, *Coordinator, Sonoran Joint Venture*
- Dr. Julie Stromberg, *Professor Emeritus, School of Life Sciences, ASU*
- Dr. Osvel Hinojosa-Huerta, *Director, Coastal Solutions Fellows Program, Cornell Lab of Ornithology, Cornell University*

The event will be moderated by Dr. Ben Wilder, *Director, The Desert Laboratory on Tumamoc Hill, UArizona*.

Image: "Unusual Friends," Salt River, Lori Williams, WRRC 2020 Photo Contest

[Register Here](#)

[More Info](#)

Brown Bag Webinar: Making Sense of the COP26 Climate Talks – Reporting Back from the Field

Date: Friday, Nov 19

Time: 12:00 - 1:15 pm Arizona Time

Location: [Webinar Only](#)

Speakers:

Betsy Wilkening, *President, Polar Educators*
Kristen Poppleton, *Senior Director of Programs, Climate Generation*

Climate Generation empowers individuals and communities to engage in solutions to climate change. They sent a delegation to the United Nations 26th Conference of the Parties (COP26) in Glasgow, Scotland this November to bring the international climate negotiations to a larger audience. This year's delegation represents professionals who support the work of Action for Climate Empowerment (ACE). ACE is a term adopted by the United Nations Framework Convention on Climate Change (UNFCCC) to denote work under Article 6 of the Convention (1992) and Article 12 of the Paris Agreement. The overarching goal of ACE is to empower all members of society to engage in climate action, through education, training, public awareness, public participation, public access to information, and international cooperation.



Two members of the delegation are reporting on the proceedings and sharing what they learned, what it means, and how all community members can engage in climate action.

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

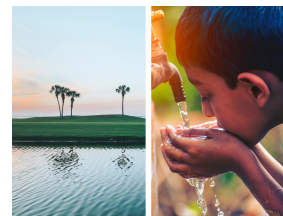
Upcoming WRRRC Events

Dec 6: [Brown Bag Webinar: The Evolution of the Water Sector in Israel: The Role of Mekorot, the National Water Company of Israel](#)
Diego Berger, PhD, *Coordinator of International Projects, Mekorot*

NEWS

AWRA 2021 Annual Conference Presentations Highlight Engagement

The American Water Resources Association (AWRA) Annual Water Resources Conference was held virtually this week, November 8-10, 2021. On the first day of the conference, WRRRC Director Sharon B. Megdal and Graduate Student Assistant Simone A. Williams presented at two separate sessions on different WRRRC efforts. The AWRA calls its conference “one of the most diverse and inclusive conferences in water resources management,” making it an appropriate venue for the WRRRC presentations. Megdal spoke about addressing wicked water problems through science diplomacy and dialogue. Using examples from WRRRC activities, she illustrated how pathways to solutions to large complex water problems can be found through processes that respectfully engage disparate points of view in collaborative exploration of the issues. Williams described her research for the WRRRC’s initiative, Diversifying Voices in Water Resources (DViWR), which reviewed and synthesized the literature associated with diversity, equity, inclusion, and justice (DEIJ) in the water sector. Her work focuses on increasing DEIJ in water dialogues to empower previously excluded, overlooked, or otherwise absent participants. Drawing from four theoretical constructs: discourse, diversity, equity, and social learning, Williams identifies conditions for engaging disadvantaged groups and righting injustices through empowered



engagement. The goal of the research is a set of practical strategies to employ in when water-related issues are discussed.

[WRRC Programs](#)

[AWRA 2021 Conference Program](#)

Online Platform Provides Better Data for Future Water Planning



Last month, the National Aeronautics and Space Administration (NASA) released a new online platform called OpenET. OpenET uses satellite imagery from NASA's Landsat program to provide evapotranspiration data from 17 western states. Using the data, researchers can calculate how much water is lost through evaporation from plants, soils, and other surfaces, for an area as small as a quarter-acre. OpenET will provide information to farmers and water managers facing decades long drought conditions and uncertainty of climate change. According to Robyn Grimm, a water scientist at the Environmental Defense Fund who helped develop the tool, data on how much water crops and other plants use as they grow, which is critical for water use planning, has been expensive and fragmented. The platform will be expanded in the future to include data for other parts of the US, as well as precipitation rates. In May, the WRRC hosted Robyn Grimm who presented her work on the OpenET program. The recorded webinar can be found [here](#).

Image: Pixabay/CC0 Public Domain

[Article](#)



Building Leadership for Pinal County's Water Future



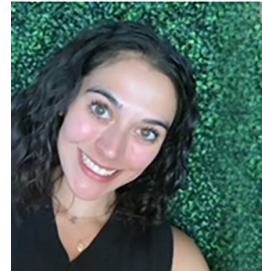
Arizona Project WET is excited to welcome Shevonda "Shevy" Joyner as the new Pinal County Coordinator. Shevy will help students in Pinal County begin their journey as water stewards, as she embarks on her own journey as a water steward. Shevy received her bachelor's degree in Literacy, Learning, and Leadership with an emphasis in community education. She began her career as a Developmental and Sensory screener for Cooperative Extension in 2019. She was inspired to pursue this new position after participating in Project CENTRL, another Extension program, and through the work of the previous Pinal County Coordinator Miriam Aleman.

Shevy believes in family first. She lives with her great-grandmother and is across the street from her aunt and cousins. In her spare time, she loves karaoke, dancing, and taking part in different community events around Pinal County.

Pinal County plays an important role in Arizona water management, now and will in the future. Shevy is ready to prepare Pinal County's youngest citizens to be leaders in important water conversations.

WRRC Welcomes New Students to its Team

The WRRC is pleased to introduce two of its newest team members, who are both current students at the University of Arizona. Hannah Johnson is our new Student Communication and Outreach Assistant and will be assisting the communications team with writing the Weekly Wave. She is a senior studying ecology and evolutionary biology, with minors in marine science and natural resources. Hannah also does research in the Biosphere 2 Rainforest. Originally from Littleton, CO, Hannah loves exploring the outdoors, skiing, and working with children. Hannah is passionate about environmental education and science communication. Raquel (Rocky) Nañez is a Student Assistant for the ADEQ Surface Water Quality Historic Records Database Project. She will be responsible for adding/editing metadata for over 40 years of historic records. She is a junior majoring in Environmental Science. Rocky is a Tucson native and loves to travel. In her free time, she likes to watch movies, hike, and paint with friends.



We are looking forward to working with our new student workers!

WATER JOBS

- SRP [Analyst Water Rights & Contracts Senior](#)
- RiversEdge West [Program Coordinator](#)
- University of Minnesota Water Resources Center [Research and Extension Coordinator](#)

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

ANNOUNCEMENTS

- **Nov 15:** [Arizona Growing Water Smart Workshop – Application Deadline](#)
- **Nov 15:** [Arizona Hydrological Society Monthly Chapter Meeting – From the Stars to Your Tap – How Cosmic Ray Surveys Can Be Applied to Local Hydrology](#)
- **Nov 17:** [Water Solutions for Our Warmer World – Episode 6: Biodiversity, Water, and Climate Change in the Southwest](#)
- **Nov 18:** [A Meeting of Sacred Waters \(Te Huinga Wai Tapu\)](#)
- **Nov 19:** [Brown Bag Webinar: Making Sense of the COP26 Climate Talks – Reporting Back from the Field](#)
- **Nov 20:** [17th Annual Research Insights in Semiarid Ecosystems \(RISE\) Symposium](#)
- **Dec 1:** [Expo 2020 Dubai: Water Resources Management and Sustainability: Solutions for Arid Regions – Call for Abstracts Deadline](#)
- **Dec 5:** [UArizona Water Whys UGrad/Grad VIP Research Opportunity – Application Deadline](#)
- **Dec 6:** [WRRC Brown Bag Webinar: The Evolution of the Water Sector in Israel: The Role of Mekorot, the National Water Company of Israel](#)
- **Dec 7-8:** [2021 NGWA Groundwater Summit](#)
- **Dec 9:** [UCOWR Fall 2021 Virtual Roundtable Series: Remote Sensing and Consumptive Use Measurement](#)

- **Dec 13-17:** [AGU Fall Meeting Session H057: Groundwater Response to Climate Change and Variability](#)
- **Dec 17:** [WRRRC 2021 Photo Contest: Aridity, Shortage, and Resilience – Submission Deadline](#)
- **Feb 10-11, 2022:** [CLE International's 10th Annual Tribal Water Law Conference](#)
- **Feb 23-24, 2022:** [The Third International Congress on Desert Economy: Energy Economics between Deserts and Oceans \(Dakhla, Morocco\)](#)
- **Mar 1-3, 2022:** [Arizona Growing Water Smart Workshop](#)
- **Mar 8-10, 2022:** [GCSE 2022 Virtual Conference](#)
- **Mar 22, 2022:** [World Water Day 2022](#)
- **Mar 22-24, 2022:** [Expo 2020 Dubai, Water Resources Management and Sustainability: Solutions for Arid Regions](#)
- **Apr 11-15, 2022:** [11th International Symposium on Managed Aquifer Recharge](#)
- **Apr 25-27, 2022:** [AWRA 2022 Spring Conference: Water Risk Under a Rapidly Changing World - Evaluation & Adaptation](#)
- **Jun 14-16, 2022:** [UCOWR/NIWR 2022 Annual Water Resources Conference](#)
- **Sep 11-15, 2022:** [IWA World Water Congress & Exhibition - Water for Smart Liveable Cities \(Copenhagen\)](#)
- **Sep 14-16, 2022:** [2022 AHS Annual Symposium – Save the Date](#)

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

[Contact us here](#)

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