

WEEKLY WAVE



THE UNIVERSITY OF ARIZONA
COOPERATIVE EXTENSION

WATER RESOURCES RESEARCH CENTER



December 1, 2023 / Volume 11, Issue 34

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: Meixner Conference Dedication, One Water Summit, Multi-State Salinity Coalition, National Climate Assessment, Yuma Ag Report

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**WRRC 2024 Conference Dedicated to the
Memory and Legacy of Thomas Meixner**

On October 5, 2022, our community suffered a huge loss with the tragic and senseless death of Dr. Thomas Meixner, UArizona professor and department head of Hydrology and Atmospheric Sciences. He was a world-renowned leader in biogeochemistry, admired and respected in the water community and by those to whom he was a colleague, professor, mentor, and friend. In honor of Meixner's life and work, the WRRC's 2024 conference, *Implementing Water Solutions Through Partnerships*, will be dedicated to his memory and legacy. He was a great friend to the WRRC, leading efforts to make UArizona water science locally and regionally relevant and encouraging his students and colleagues to do the same. We hope this will be an opportunity for those who knew Tom to honor him and reflect on his invaluable contributions to the community. His wife, Kathleen, expressed her hope that the dedication of this event will "help us all to find our way forward, with courage and love."

Image: Provided by the Meixner/Cotter family

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EVENTS



WRRC 2024
ANNUAL
CONFERENCE

**IMPLEMENTING
WATER
SOLUTIONS
THROUGH
PARTNERSHIPS**

MARCH 12-13
University of Arizona
Student Union Grand Ballroom

CALL FOR STUDENT POSTER ABSTRACTS

Deadline - December 15!

All students in Arizona participating in water research, management, or community engagement projects in the Southwest region are encouraged to apply!

[More info ▶](#)

NVIS Fall 2023 Seminar: Culture, Education, and Water Sovereignty in Southern California Tribal Communities – Co-sponsored by the WRRC

Date: December 5, 2023

Time: 12:00 pm – 1:00 pm Arizona Time

Location: [Zoom](#)



Dr. Vincent Whipple is an American Indian Educator from the Lakota/Sioux and Diné/Navajo Tribes. His experience in higher education and Native American Studies includes roles with Cal State Long Beach, San Diego State University, Cal State San Bernardino, and Cal Poly Pomona. Dr. Whipple has worked extensively with Southern California Tribal nations and Native organizations for over 25 years. He is a performing artist and has been the Artistic Director for the Wichozani Native American Dance & Theater Company, a Southern California-based Indigenous theater company, since 1991. Dr. Whipple received his academic degrees from Fielding Graduate University (Doctor of Education), UCLA (Masters in American Indian Studies), and Harvard University (Bachelors in Anthropology).

[Zoom Link](#)

Upcoming WRRC Co-Sponsored Events

Jan 30, 2024: Arizona Association of Women in Water & Agriculture (Wine, Women & Water Reception) – Co-sponsored by the WRRC – Save the Date!

Jan 31, 2024: Arizona Association of Women in Water & Agriculture Annual Meeting – Co-sponsored by the WRRC – Save the Date!

NEWS

WRRC Participates in One Water Summit

The US Water Alliance’s 2023 One Water Summit was held in Tucson on November 14–16. This annual event gathers one of the most diverse groups of water leaders in the country for a unique and urgent conversation about the future of water. This year’s Summit welcomed 972 registrants from 322 cities across 46 states, including several attendees from the WRRC. The One Water concept is centered around a holistic approach to water management, valuing every drop, with core principles of water equity, affordability, and access. On Wednesday, November 15, WRRC Director Sharon B. Megdal moderated the opening plenary panel, *Tucson’s Water Story*, with five panelists: UArizona Indigenous Resilience Center Director Karletta Chief, Chairman of the San Xavier District of the Tohono O’odham Nation Austin Nunez, artist Alexandra Jimenez, Tucson Water Director John Kmiec, and Tucson Mayor Regina Romero. The panel emphasized equity, collaboration, and connecting with the community on water projects. After a brief presentation from each individual, Megdal engaged them in a Q&A about the meaning of “resilience,” in which the panelists spoke about their own experiences with resilience and the importance of caring for the environment around us to ensure it continues to care for us. The Summit featured many other excellent panels, presentations, and workshops, two of which are highlighted here.



[Read More](#)

WRRC Director Receives 2024 MSSC Salt of the Earth Award

The Multi-State Salinity Coalition (MSSC) has announced that WRRC Director Sharon B. Megdal will be awarded the 2024 Salt of the Earth Award. The MSSC seeks to meet the growing need in the United States for safe, sustainable, adequate, and affordable water supplies by promoting advancements in desalination-related technologies, salinity control strategies, and associated policies. This award recognizes leadership and commitment to advancing awareness and technologies for desalination, reuse, salinity control strategies, water/energy efficiencies, and related public policies that assist communities in meeting water needs. Megdal will give a keynote address at the 2024 MSSC Annual Salinity Summit, which will be held in Las Vegas on February 28 – March 1, 2024.



2023 Federal Climate Report Highlights Health Risks in Southwest

The Fifth National Climate Assessment by the federal government was released in November 2023, reporting on climate change impacts, risks, and responses across the country. Drying conditions in the Colorado River Basin were noted as one of the most significant issues in the Southwest. Higher temperatures have already led to less precipitation in the arid southwest. As winter approaches, Colorado and the rest of the basin states look to the skies, hopeful for more snow to recharge the Colorado River. However, according to the report, continued drying of the atmosphere and soils in the region has and will continue to lead to an increase in health problems. Heat-related deaths and an uptick in Valley Fever have already impacted Arizonans, disproportionately affecting unhoused populations, migrant farmworkers, Indigenous communities, and those with a lower income. Other health risks associated with the drying landscape include poor air quality from wildfire smoke and an increase of dirt and debris kicked up into the air, not to mention the mental hardship of experiencing natural disasters. On November 14, the Biden Administration announced the allocation of \$6 billion to be spent on infrastructure improvements to improve climate resilience in the US.

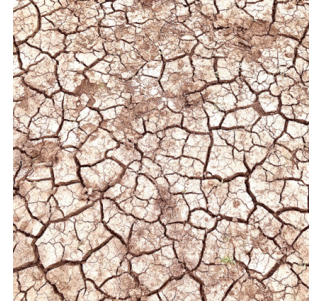
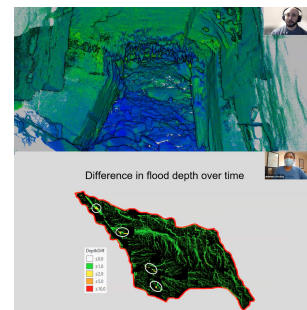


Image: [Rachael King. WRRRC 2021 Photo Contest.](#)

- [The Fifth National Climate Assessment](#)
- [KUNC Article](#)
- [Tucson.com Article](#)

WRRC Grant Recipients Present Water-Related Research

On November 28, two presenters kicked off the first installment of two WRRC Water Webinars showcasing student water research. Adriana Arcelay, a doctoral student at the University of Arizona, presented her research looking at the impact of flooding on the City of Tucson and who it affects. Using a FLO-2D model, inundation maps were created showing where flooding occurs. The maps were overlaid with the city's demographic data to determine impacted populations. The research found several areas in which Hispanic populations were disproportionately affected by flooding. In the second presentation, Blase LaSala, who is currently pursuing a PhD at Northern Arizona University, explored hydraulically active karst systems in the north rim of the Grand Canyon. The research project mapped over 10 kilometers of cave passages using a mobile light detection and ranging (LiDAR) scanner, which uses light to map land and its features. Combined with additional data, this information was used to create a 3D model of the Kaibab Plateau aquifer system. Both projects were funded in part by research grants provided by the WRRC through the Water Resources Research Act, Section 104(b).



[View the Recording
104\(b\) Grant Program](#)

New Report Assesses Water and Salt Balance in Agriculture

Since August 2016, the Yuma Center of Excellence for Desert Agriculture (YCEDA) has been collecting and analyzing irrigation and salt accumulation data from Lower Colorado River Basin irrigation districts around Yuma. Soil minerals, irrigation water, and groundwater contain salts that accumulate in the fine-textured soils of the region. Without management of the salts, the accumulation is detrimental to growing crops. Excess irrigation (beyond what is used by the crop) to leach these salts, pushing them down below the crop root zone, is one way to combat this issue. In a report published in November 2023, YCEDA researchers seek to understand areas of improvement for irrigation management after assessing current water use and salt reduction methods. This quantitative assessment was led by Dr. Charles Sanchez from the UArizona Department of Environmental Science and Dr. Andrew French from the USDA Arid Land Agricultural Research Center. The data collected since 2016 show that current irrigation methods are at an efficiency of 80-90% for most of the Yuma area rotational vegetable spring and summer crops. The team's analysis also indicates that soils and crops under existing irrigation conditions accumulate salt in the crop root zone during the growing season. This means that pre-season irrigation water for leaching is necessary. With collected and future data, collaborators in this project hope to create a mobile app called DesertAgWISE that can model optimal water needed for crop yields and necessary salt leaching.



Image: [Jeff Vanuga, US Department of Agriculture](#)

[Read the Report](#)
[Project Website](#)

WATER JOBS

- Sonoran Institute [Major Gifts Officer](#)
- Sonoran Institute [Marketing Coordinator](#)
- Town of Prescott Valley [Water Resources Specialist](#)

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



NOTICES, PUBLICATIONS, and MEDIA

Power of Progress: Sonoran Institute's 2023 Annual Report

This report embodies Sonoran Institute's focus on delivering results with a commitment to diverse and equitable outcomes for communities across the North American West.

[Read the Report](#)

CALENDAR ANNOUNCEMENTS

- **Dec 1:** [AWRA 2024 Spring Conference – Abstract Deadline](#) **EXTENDED!**
- **Dec 5:** [NVIS Fall 2023 Seminar: Culture, Education, and Water Sovereignty in Southern California Tribal Communities – Co-sponsored by the WRRC](#)
- **Dec 5–7:** [AWWA North American Water Loss Conference & Exposition](#)
- **Dec 6:** [AZ Water Association 2023 Conservation Program Measurement and Integration Workshop](#)
- **Dec 8:** [Environmental Professionals of Arizona \(EPAZ\) Conference – Student Poster Submission Deadline](#)
- **Dec 11–15:** [AGU23: Wide. Open. Science](#)
- **Dec 12–13:** [Western SARE: Building Partnerships for Agricultural Sustainability Summit](#)
- **Dec 13–15:** [2023 Colorado River Water Users Association \(CRWUA\) Annual Conference](#)
- **Dec 15:** [WRRC 2023 Photo Contest: Water Scarcity & Extreme Weather – Submission Deadline](#)
- **Dec 15:** [WRRC 2023 Annual Conference – Student Poster Abstract Deadline](#)
- **Dec 18:** [Environmental Professionals of Arizona \(EPAZ\) Conference – Abstract Submission Deadline](#)
- **Dec 22:** [A Meeting of Sacred Waters: A Global Gathering of Indigenous Voices – Abstract Deadline](#)
- **Dec 30:** [Water Quality Research Foundation – Poster Submission Deadline](#)
- **Jan 1, 2024:** [RiversEdge West 2024 Conference – Poster Presentation Abstract Deadline](#)
- **Jan 8, 2024:** [NGWA Conference: Groundwater in the PFAS Era: Stressors, Protection, & Compliance – Abstract Submission Deadline](#)
- **Jan 12:** [2024 Bouwer Intern Scholarship – Application Deadline](#)
- **Jan 22–24, 2024:** [Growing Water Smart: Integrated Water and Land Use Planning Workshop](#)
- **Jan 30, 2024:** [Arizona Association of Women in Water & Agriculture \(Wine, Women & Water Reception\) – Co-sponsored by the WRRC – Save the Date!](#)
- **Jan 31, 2024:** [Arizona Association of Women in Water & Agriculture Annual Meeting – Co-sponsored by the WRRC – Save the Date!](#)
- **Feb 5–7, 2024:** [NIWR 2024 Annual Conference](#)
- **Feb 11–13, 2024:** [AWWA/WEF Young Professionals Summit](#)
- **Feb 22–23, 2024:** [2024 Family Farm Alliance Annual Conference – Resilience in Every Drop: Safeguarding America's Food Security](#)
- **Feb 26–27, 2024:** [Environmental Professionals of Arizona \(EPAZ\) Conference](#)
- **Feb 26–28, 2024:** [Water Resources Management & Sustainability: Solutions for Arid Regions 2nd International Conference](#)
- **Feb 27–29, 2024:** [2024 Southwest Adaptation Forum – Save the Date](#)
- **Feb 28–Mar 1, 2024:** [MSSC 2024 Annual Salinity Summit](#)
- **Mar 5–7, 2024:** [RiversEdge West 2024 Conference – Restoration for the Future: Promoting Resilience in Our Rivers and Communities](#)

- **Mar 10–16, 2024:** [National Groundwater Awareness Week](#)
- **Mar 11–14, 2024:** [AWWA WateReuse 2024 Symposium](#)
- **March 12–13, 2024:** [WRRC 2024 Annual Conference: Implementing Water Solutions Through Partnerships](#)
- **March 12–13, 2024:** [A Meeting of Sacred Waters: A Global Gathering of Indigenous Voices](#)
- **Mar 25–27, 2024:** [AWRA 2024 Geospatial Water Technology Conference](#)
- **Apr 3–6, 2024:** [BSMAR18](#)
- **Apr 8–10, 2024:** [AWRA 2024 Spring Conference](#)
- **Apr 16–17, 2024:** [NGWA Conference: Groundwater in the PFAS Era: Stressors, Protection, & Compliance](#)
- **Jun 10–13, 2024:** [AWWA 2024 Annual Conference & Expo \(ACE24\): Transforming Our Water Future](#)
- **Sep 30–Oct 2, 2024:** [AWRA/UCOWR/NIWR 60th Anniversary Joint Water Resources Conference](#)

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

[Contact us here](#)