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The Water Resources Research Center - a research unit of the <u>College of Agriculture and Life Sciences</u> and an Extension unit in <u>UA Cooperative Extension</u> within the Division of Agriculture, Life & Veterinary Sciences & Cooperative Extension. <u>Land Acknowledgement</u>.

WRRC Office Update

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IN THIS ISSUE:

Photo Contest Winners, NIWR, NVIS, Factsheet, APW, Where Are They Now?



On Friday, February 10, the WRRC hosted the 19th Annual Chocolate Fest and announced the winners of the 2022 Photo Contest, *Water Now! Living with Less.* There were five subject categories in the competition, and we received over 100 amazing photo submissions. The winner of *Best in Show* was Brian Anderson for his photo "Bring It On,"

gorgeous sunset colors splashed across a monsoon thunderhead over Tucson. Ted Wuollet's photo "Horseshoe Dam Reservoir" won the *Water for Us* category, with wispy pink and purple clouds reflected in the glassy water. Joe Trevino's "Watson Lake Dam" won the *Water in the Built Environment* category with a stunning overhead shot displaying the dramatic contrast between the dark water of the lake and the surrounding rock formations. The winner of the *Water in Nature* category was Robert Baker with "Monsoon Relief in Greasewood Park," which catches a moment after a storm where a deer stops for a drink in the wash. Finally, the *Water in Arid/Semi-Arid Lands Beyond Arizona* category was won by Marilyn Marron with "Tides of Decay," which highlights driftwood washed up on the rugged shore of the Salton Sea in California. All the winning photos, runners-up, and honorable mentions are available to view on the WRRC website. Winning photos are featured on the WRRC website homepage, in publications, and used in a range of other outreach materials. Keep an eye out for the 2023 photo contest!

Image: Brian Anderson, WRRC 2022 Photo Contest

View the Photos

EVENTS

WRRC Seminar Series: Universal Access to Clean Water for Tribal Communities

Date: Wednesday, February 22, 2023 **Time:** 12:00 pm – 1:15 pm Arizona Time

Location: Webinar Only

Speakers:

Anne Castle, Senior Fellow, Getches-Wilkinson Center, University of Colorado Law School Heather Tanana, Assistant Research Professor, S.J. Quinney College of Law, University of Utah

Access to clean drinking water is a fundamental human right. As highlighted by the COVID-19 pandemic, basic water and sanitation services are critical to public health and economic development. The federal government has treaty and trust





responsibilities to promote the general welfare of Tribes. Although federal programs exist to support water-related projects in Indian country, these programs historically have been underfunded. As a result, many Native American households remain without access to clean drinking water or adequate sanitation. Recent federal actions are bringing the necessary attention and financial resources to make real, tangible progress toward providing universal access to clean water for all Americans. For the first time in history, this funding will enable the federal government to more fully deliver on its responsibilities to provide basic drinking water service to Tribes. This WRRC webinar will provide an overview of federal-tribal relations and the basis for realizing the human right to water in the United States. Panelists will identify existing federal programs that can facilitate clean water access and highlight opportunities for NGOs to amplify these efforts. Recognizing the importance of Tribal sovereignty and self-determination, panelists will also discuss how to build up Tribal capacity and the necessary resources for long-term success.

Register Here
More Info

Upcoming Events

Mar 1 at 12:00 pm: NVIS Seminar Series: Food Sovereignty for the Mandan, Hidatsa, and Arikara People

Mar 16 at 12:00 pm: WRRC Seminar Series: Water in Cochise County: Challenges and Solutions

Mar 29 at 12:00 pm: WRRC Seminar Series: Geophysical Imaging as a Tool for Groundwater Management

Apr 5 at 12:00 pm: NVIS Seminar Series: Tribal Hoop House Project in Northern NV

May 3 at 12:00 pm: NVIS Seminar Series: Indigenizing Controlled Environment Agriculture and Off-Grid CEA Greenhouse for Food Production



NEWS

WRRC Staff in DC for Annual NIWR Meeting

WRRC Director Sharon B. Megdal and Program Manager Michael Seronde were in Washington, DC February 6 to 8 to participate in the National Institutes for Water Resources (NIWR) annual meeting and visit Arizona congressional staff. The WRRC is one of 54 federally authorized Water Resources Research Institutes and Centers in the US, with one located in each state, the District of Colombia, and three US Territories. At the annual



meeting, held in person for the first time in three years, Institute and Center directors and staff came together to share successes and ideas for collaboration, discuss challenges, coordinate activities related to their federally authorized status, and catch up with peers and colleagues. In addition to interacting with key staff at the US Geological Survey, the NIWR annual meeting provides participants with the opportunity to meet regionally. As part of the region that includes Colorado River Basin states, it was good to see and hear from our counterparts. In conjunction with the annual NIWR meeting, informational meetings with Arizona's congressional delegation staff were scheduled with the assistance of the UArizona federal relations team. These meetings allow the WRRC to share information about WRRC activities and learn about our elected officials' water priorities.

NIWR Factsheet

NVIS Kicks Off 2023 with Andrea Carter of Native Seeds/SEARCH

On February 1, Native Voices in STEM (NVIS) kicked off their Spring 2023 programming with a presentation from Dr. Andrea Carter, a UArizona alumna and current Outreach Agronomist at Native Seeds/SEARCH in Tucson, AZ. Her presentation, titled "Rooted in the Desert – Farming and Seed Saving in Arid Lands," provided an overview of her journey from childhood



experiences working on a neighbor's farm to supporting community farmers throughout the Southwest. Carter is a member of the Powhatan Renape Nation and a descendant of Tunisian Amazigh (Berber). During an internship studying resilience in rural dryland communities in North Africa, she was inspired to study arid land agriculture. She pursued degrees in International Agriculture and Rural Development at Cornell University and Plant Science at the University of Arizona. She now works with Native Seeds/SEARCH, which works on saving and banking native seeds and growing crops on arid lands to meet food production challenges in Indigenous communities. NVIS is co-sponsored by the NSF-NRT "Indigenous Food, Energy & Water Security and Sovereignty" program and the University of Arizona Sloan Indigenous Graduate Partnership (UA-SIGP). They also partner with the UArizona Department of Biosystems Engineering (BE), the Controlled Environment Agriculture Center (CEAC), the Indigenous Resilience Center (IRes), the Water Resources Research Center (WRRC), and the Office of Societal Impact.

- View the Recording
- NVIS Seminar Series
- Native Seeds/SEARCH



Did You Know?

The San Pedro Riparian Conservation Area in Cochise County, known for its biodiversity and cultural artifacts, was the first recognized Riparian National Conservation Area in the country. It spans 43 miles of the river and is home to more than 80 mammal species, 40 different amphibians and reptiles, and 250 migratory birds. It also contains archeological remnants of human occupation from 11,000 years ago. Water was and is the



source of life in this region, but balancing water demand for nature and humans has become increasingly difficult in the face of persistent drought and groundwater overdraft. Collaborations like the Cochise Conservation Recharge Network (CCRN) are working diligently to implement a network of land and water management projects to increase water availability and meet current and future water demands. To learn more about the CCRN, check out the Cochise County Water Factsheet and attend the WRRC's upcoming Seminar on March 16.

- Cochise County Factsheet
- Cochise Conservation Recharge Network
- San Pedro National Conservation Area



APW Welcomes New AmeriCorps Members

Arizona Project WET is excited to introduce three new AmeriCorps members that are joining its Phoenix office. Brad Gray recently completed his BS in Geology and is currently working on an MES in Hydrology and Water Security. He says "My upbringing and current residence in arid Arizona led me to really focus on water and its scarcity. I found both Arizona Project Wet and my pursuit of higher education a perfect match to tackle our regional water issues." Erin Olesiewicz recently received her BS in Environmental Studies from CU Boulder. She has a passion for protecting the environment through strengthening society-nature relationships. She says "I am excited to use my degree to teach water education to Arizona children and communities. In my free time, I enjoy hiking in the desert and painting landscapes." Ashton Szymcek is a recent graduate from Southern Illinois University in Carbondale, Illinois. She recently moved to Arizona to pursue her passion for water conservation and sustainability. She is looking forward to being a part of the UArizona AmeriCorps program with the Arizona Project WET team.







Where Are They Now? Former WRRC Intern Creates Climate Adaptation Tool

Many of our excellent WRRC student interns go on to do great work in water-related jobs in Arizona and beyond. The 2017 *Arroyo* intern, Noah Silber-Coats, is now a Postdoctoral Research Social Scientist at the USDA Southwest Climate Hub. He is developing an interactive online tool that gathers



information on technologies, tools, and policies used to adapt to water scarcity in the Southwest. This tool, called the Water Adaptation Techniques Atlas (WATA), is currently in the review and feedback stage. We will provide an update when it becomes available to the public.

2017 Arroyo
USDA Southwest Climate Hub



WRRA 104 GRANTS

Water Scarcity and Availability • Water-Related Hazards and Climate Variability • Water Quality Water Policy, Planning, and Socioeconomics Ecosystem and Drainage Basin Functions • Water Technology and Innovation • Workforce Development and Water Literacy.

MORE INFO

WATER JOBS

WRRC Student Communications and Outreach Assistant (Hourly)

The UArizona Water Resources Research Center is seeking a student employee with interest and experience in writing about water and/or environmental topics to assist with outreach communication. Applicants are encouraged to visit the WRRC website for more information on WRRC programs and activities. Accepting applications until the position is filled. **More Info**

- The Water Report Paid Internship
- Town of Prescott Valley <u>Deputy Director Water Resources</u>
- University of Nebraska-Lincoln Postdoctoral Research Associate

Please visit WRRC's website for a complete listing of water jobs & opportunities.

ANNOUNCEMENTS

- Feb 18: AHS Tucson Chapter: Mission Garden, Mission San Agustín, and S-cuk Son Tour
- Feb 22: WRRC Seminar Series: Universal Access to Clean Water for Tribal Communities
- Feb 22: 104(b) Grant Program Proposal Submission Deadline
- Feb 23: AZ Conservation Professional Training: Residential Water Use and Field Training
- Feb 23-24: 2023 Family Farm Alliance Annual Conference: "A Wake Up Call for America: Why Farms, Water and Food Matter"
- Feb 24: 2023 Land and Water Summit Registration Deadline
- Feb 25: Sonoran Institute Santa Cruz River Cleanup & Fundraiser
- Feb 26: 2023 WateReuse Symposium Advance Registration Deadline
- Feb 28: Arizona Project Wet Littleton Water Festival
- Feb 28: Late Medieval and Reformations Studies' 36th Annual Town and Gown Lecture Waterworlds: An Alternative History of Brandenburg-Prussia in the Seventeenth Century
- Mar 1: ALVSCE Research Awards Nomination Deadline
- Mar 1: NVIS Seminar Series: Food Sovereignty for the Mandan, Hidatsa, and Arikara People
- Mar 1: 104(g) Grant Program Proposal Submission Deadline
- Mar 1: <u>Tucson AHS Chapter 2023 Halpenny Intern Scholarship Application</u> Deadline
- Mar 1: Babbitt Center Dissertation Fellowship Program Application Deadline
- Mar 1: UArizona ALVSCE Research Awards Call for Nominations

- Mar 1: Land and Water Summit: "Acequias The Legacy Lives On" Film Screening and Discussion
- Mar 1: Arizona Water Reuse Symposium Call for Abstracts Deadline
- Mar 1-3: 2023 Land and Water Summit
- Mar 2-4: 2023 Native Women in Agriculture & Natural Resources Symposium
- Mar 2-7: 2023 American Indian Higher Consortium Conference
- Mar 5-8: 2023 WateReuse Symposium
- Mar 6: 2023 AHS Symposium Call for Abstracts Deadline
- Mar 6-7: Arizona Viticulture Strategic Planning Summit
- Mar 6-8: Growing Water Smart: Integrated Water and Land Use Planning Workshop
- Mar 7: WRRC 2023 Annual Conference: What Can We Do? Solutions to Arizona's Water Challenges – Solutions Proposal – Extended Deadline
- Mar 8: From the Ground Up: Agricultural Technologies to Enhance Soil Health Workshop Phoenix
- Mar 9: From the Ground Up: Agricultural Technologies to Enhance Soil Health Workshop Flagstaff
- Mar 9-10: Sustainable Water Investment Summit
- Mar 10: From the Ground Up: Agricultural Technologies to Enhance Soil Health Workshop – Tucson
- Mar 11: Sustainable Landscapes Expo
- Mar 13: From the Ground Up: Agricultural Technologies to Enhance Soil Health Workshop – Safford
- Mar 13-17: UC Davis Soil & Water Assessment Tool (SWAT) Model Training Course
- Mar 16: WRRC Seminar Series: Water in Cochise County: Challenges and Solutions
- Mar 21: <u>AWRA 2023 Annual Water Resources Conference Topical Session Proposal Deadline</u>
- Mar 22: CAP University Online Course
- Mar 22-24: 2023 Annual Native FEWS Gathering
- Mar 28: Bureau of Reclamation FY 2023 Environmental Water Resources Projects
 Grant Application Deadline
- Mar 29: Santa Cruz Watershed Collaborative (SCWC) Spring 2023 Forum Field Day
- Mar 29: WRRC Seminar Series: Geophysical Imaging as a Tool for Groundwater Management
- Apr 1: ADWR Water Awareness Month 2023 Kick-off Festival
- Apr 3: Rodney Blaine Lewis Scholars Award Application Deadline
- Apr 5: <u>NVIS Seminar Series</u>: <u>Tribal Hoop House Project in northern NV Reginald Premo</u>
- Apr 6: <u>Santa Cruz Watershed Collaborative (SCWC) Spring 2023 Forum Conference Day</u>
- Apr 17-20: 90th Annual Western Snow Conference
- Apr 20-21: Santa Cruz River Research Days
- Apr 24-25: NGWA Conference: Managed Aquifer Recharge: Unleashing Resiliency, Protecting Groundwater Quality Conference
- May 3: NVIS Seminar Series: Indigenizing Controlled Environment Agriculture and Off-Grid CEA Greenhouse for Food Production
- May 5: 32nd Desert Horticulture Conference
- May 7-10: <u>National Association of Environmental Professionals (NAEP) 2023</u>
 Conference
- May 8-11: Water for Food Global Conference: Cultivating Innovation: Solutions for a Changing World
- May 9-10: 2023 Corridors, Connectivity, and Crossings Conference
- May 9-11: 96th Annual AZ Water Conference & Exhibition
- May 18-19: <u>CLE International's Law of the Colorado River 23rd Annual Conference:</u>
 <u>The Next Century of River Policy</u>
- May 19: NAMWUA Water Utility Leadership Forum (WULF)

- Jun 13-15: UCOWR/NIWR 2023 Annual Water Resources Conference
- Jun 15-16: 2023 Next Generation Water Summit
- Jul 11-12: WRRC 2023 Annual Conference: What Can We Do? Solutions to Arizona's Water Challenges
- Jul 17-19: <u>AWRA 2023 Summer Conference: Connecting Land & Water for Healthy Communities</u>
- Jul 23-25: Arizona Water Reuse 2023 Symposium
- Nov 6-8: AWRA 2023 Annual Water Resources Conference

PUBLICATIONS & MEDIA

Opinion on Saving the Colorado River

UArizona Professor of Environmental Science, Katherine Jacobs, wrote an opinion piece in Newsweek titled "We Must Save the Drought-Stricken Colorado River—Here's How." View Article

OTHER NOTICES

Request for Comments for Rio de Flag Flood Control Project DSEA

The US Army Corps of Engineers, Los Angeles District announces the availability of and is requesting comments on the Draft Supplemental Environmental Assessment (DSEA) and Draft Clean Water Act Section 404(b)(1) analysis for the Rio de Flag (RDF) Flood Control Project, located in Flagstaff, AZ. Comments may be submitted through March 14, 2023. Please submit comments or questions regarding the Draft SEA to Kirk.C.Brus@usace.army.mil with subject heading "Rio de Flag Flood Control Project Draft SEA Review Comments." Electronic versions of the Draft SEA and Appendices are available here.

WaterSMART Recycling and Desalination Funding

The WaterSMART program at the Bureau of Reclamation is offering grant awards of up to \$5,000,000 for selected projects. The program funds feasibility studies, planning, preliminary design, and environmental compliance activities for water recycling and desalination projects that supplement existing freshwater supplies in urban and agricultural areas in the Western United States. The deadline for this funding opportunity is February 28, 2023, at 5 PM MST. **More Info**

WaterSMART Environmental Water Resources Project

The Bureau of Reclamation will provide up to \$3 million in Federal funding for water supply projects that cost \$6 million or less and can be completed in three years. The funding will be provided in the form of a 75% Federal cost-share for projects that demonstrate an increase in water supply reliability for ecological values, have been developed through a collaborative process, and align with established strategies or plans to increase water supply reliability for consumptive and non-consumptive ecological values. All applications are due March 28th, 2023 at 4 PM MST. More Info

Call for Volunteers: Avondale's Project WET Water Festival

Littleton School District is searching for volunteers for its 6th Annual Water Festival, an educational field day event that instills a deeper understanding of water in the earth's system and Arizona's water resources. The Littleton Water Festival will be held at Estrella Vista Elementary school in Avondale, AZ, on February 28. More Info

Contact us here