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The Water Resource 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

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Finding Answers to Arizona Water Questions

Arizonans have questions about water and the Water Resources Research Center has a lot of experience answering them. At this year's University of Arizona Cooperative Extension Conference, held on August 6-7, the WRRC staff hosted a breakout session entitled "You want to know what? Answering questions about water in Arizona." Assistant Director Susanna Eden, Research Analyst Ashley Hullinger, and Associate Director Claire Zucker highlighted a variety of questions ranging from the big-picture "Are we running out of water?", to questions about how water management works in Arizona and questions from homeowners and potential new residents requesting advice. For each, they provided perspectives on what information to offer and then identified web-based information sources to back up the answers. All of the web resources were included in a new WRRC Fact Sheet created for the event (see link below). During the presentation, live animated polling allowed audience members to provide real-time feedback

about their comfort level answering each question. Over half of extension specialists participating in the polling reported getting water questions weekly or even daily. We hope the presentation and the fact sheet helps them provide even better water answers in the future and reaffirms that the WRRC is here to help.

WRRC Fact Sheet: Web-based Information Resources About Water in Arizona



Fall Brown Bags

The WRRC will be kicking off the Brown Bag Seminar series this fall. This is what we have confirmed so far. Check back as we add more interesting and relevant water topis.

- September 10, Vanessa Buzzard, *Sr. Research Specialist*, UA/SNRE "The Ecology of Water Harvesting"
- October 8, Dick Thompson, and Maya Teyechea, *Hydrologists*, Tucson Water, Santa Cruz Heritage Project



WEES Initiative Funds Water Research



THE UNIVERSITY OF ARIZONA RESEARCH, DISCOVERY & INNOVATION Water, Environmental & Energy Solutions

Each year, Arizonans help support education through the

sales tax supported Technology and Research Initiative Fund (TRIF). The University of Arizona directs TRIF resources through the Water, Environmental, and Energy Solutions (WEES) Initiative to fund cutting-edge research at UA. WEES works in coordination with the UA offices of Research Discovery, and Innovation (RDI) and Research Development Services (RDS) to run the grant process. WEES funded five proposals this year. Congratulations to all of the grant recipients! To learn more about WEES funding history and upcoming collaboration events, visit the new WEES website or join the Water Network listserv here.

2020 Research Advancement Awards in water, energy, and environment

- Walter Betancourt: Viromic analysis of reverse osmosis concentrates through ozonebiofiltration for safe reuse in irrigation: A novel approach for zero liquid discharge,
- Andrew Cohen: Preliminary subsurface investigations of the Bouse Formation, Western AZ: A unique paleoenvironmental archive of Colorado and opportunity for Native American STEM training

- Hongyue Jin: Internet of Things-based Pipeline Structural Health Monitoring
- Jennifer McIntosh: NSF Critical Zone Observatory Proposal: Support for Workshop and Proposal Development
- Jean McLain: Assessing public health risk from sewage spills along the Mexico-Arizona border

WEES Website

Tucson Water Seeks Public Input on Stormwater Infrastructure Program

Tucson Water posted an online survey to collect public input on the proposed Green Stormwater Infrastructure (GSI) Program and fee. The proposed GSI is consistent with a "One Water" approach, in which water resources are



managed in an integrated fashion. Thus, the program focuses on water management in a way that also addresses urban heat island effects within vulnerable communities and adopts programs that promote economic development. Anyone who is a citizen or business owner within the City of Tucson is encouraged to complete the survey, which will be open through the month of August.

A copy of the proposed GSI program can be downloaded <u>here</u> (click on Green Stormwater Infrastructure Fund proposal)

To complete the survey in English To complete the survey in Spanish

An Exciting New APW STEM Unit



How does Arizona's hydrologic cycle rule your world? That is the driving question behind a new Aqua STEM unit called Waters of Our World, or WOW, which will be offered in some Maricopa County classrooms this school year. Using this

guiding question as a base, students will dive deeply into understanding Arizona's water sources by asking



questions, defining problems, and exploring our state's water resource challenges. The WOW unit features opportunities to develop and use models, ultimately putting students at the center of their own role in the hydrological cycle. One engaging activity offers students an understanding of how the Central Arizona Project (CAP) pumps water uphill by challenging them to create a working model of the CAP system. Arizona's Science Standards encourage students to use science and engineering practices to figure out how things work. It will be exciting to see how students who have gained an in-depth understanding of Arizona's hydrologic cycle may be able to solve water resource problems in the future.

Megadroughts in Mongolia Transform Rural and Urban Life

Mongolia is already home to one of the world's most extreme climates with its long, cold winters and short summers. A recent series on National Public Radio, called "Losing the Eternal Blue Sky", focuses on how the country is changing in the face of more frequent natural disasters caused by shifting climate patterns. The NPR series chronicles the migration of people in three areas of Mongolia: its capital, Ulaanbaatar; the steppe; and the desert. Mongolia is becoming drier and warmer, exacerbating the difficulties of raising livestock in the steppe and driving migration to the capital. The meager resources of the desert are being depleted as well, due to a significant increase in mining in Mongolia's Gobi Desert.



More on Mongolia

ANNOUNCEMENTS

- <u>August 14 Arizona Riparian Council Speaker Series The Arizona Water</u> <u>Blueprint: A map for Arizona's Water Resilience</u>
- <u>August 20 Management Plans Work Group Meeting View Agenda</u>
- <u>August 27 SNRE Ecosystem Genomics Seminar Series First Meeting</u>
- <u>August 29 SNRE Ecology of Water Harvesting First Meeting</u>
- <u>August 30 SER-SW Annual Conference Abstract Submissions Due</u>
- August 31 Groundwater Week Summit Call for Posters Deadline Extended
- <u>September 9-12 Biennial Conference of Science & Management on the</u> <u>Colorado Plateau & Southwest Region - Registration Open</u>
- <u>September 10 Incentivising Groundwater Recharge: A Berkeley Law</u> <u>Symposium - Registration is Now Available</u>
- <u>September 15-16 GWPC Annual Conference Oklahoma City Conference</u> <u>Scholarship Applications</u>
- September 15-17 GWPC 2019 Annual Forum Preliminary Agenda Available
- <u>September 16 UCOWR/NIWR Conference Call for Special Sessions</u>
- <u>September 17-19 Western Groundwater Congress Registration Open</u>
- <u>September 22-25 Geological Society of America Annual Meeting Phoenix,</u>
 <u>AZ</u>
- <u>September 25-27 Arizona Hydrological Society Symposium Registration</u>
 <u>Open</u>
- September 26-27 Tribal Water Law Registration Open
- October 3 AWWA Water Quality Technology Conference Early Bird Registration Closes

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