



COLLEGE OF AGRICULTURE & LIFE SCIENCES  
COOPERATIVE EXTENSION

**WATER RESOURCES  
RESEARCH CENTER**

**October 5, 2018 / Volume 6, Issue 25**

The [Water Resources Research Center](#) - a research and [Extension](#) unit of the [College of Agriculture and Life Sciences](#)

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# ARIZONA RUNS ON WATER™

## Scarcity, Challenges, and Community-based Solutions

UNIVERSITY OF ARIZONA WATER RESOURCES RESEARCH CENTER

**ANNUAL CONFERENCE**

**FRIDAY, FEB. 1 2019 | 7:30 AM - 2 PM**

BLACK CANYON CONFERENCE CENTER | 9440 N 25TH AVE, PHOENIX, AZ 85021

## WRRC 2019 Conference - Preliminary Agenda Posted

The preliminary agenda is now posted for the Water Resources Research Center's 2019 conference, Arizona Runs on Water: Scarcity, Challenges, and Community-based Solutions. The agenda shows the schedule and general topics for the conference, which will be held on Friday, February 1, at the Black Canyon Conference Center (9440 N 25th Ave, Phoenix). We will begin the day with framework presentations about water resources across the state, Arizona's water laws and regulations, and Tribal perspectives. Later in the day, we will feature panels and lightning talks presented by speakers from communities all across Arizona, who will share their challenges and successes in securing sufficient water to meet their future needs. The conference will conclude with a panel discussion among Arizona legislators moderated by WRRC Director Sharon Megdal. The agenda posted on our conference website will continue to be updated as speakers

confirm their participation. Conference registration will open in mid-October!

Visit our [Conference Webpage](#)

## WRRRC EVENTS

### WRRRC Brown Bag - How Beer Can Save Rivers

**November 8, 2018**

**Speaker:** Chase Saraiva, *Head Brewer*, Arizona Wilderness Brewing Company

**Time/Location:**

12:00 p.m. - 1:15 p.m./Sol Resnick Conference Rm.,  
350 N. Campbell Ave., Tucson



Water, such a vital component to our lives and the environment around us, is also the main ingredient in beer. As we dive into what it takes to make beer and the role water has in this fermented beverage, we will also investigate some creative ways we are able to conserve water inside the brewery and out. From involvement with local farmers, a maltster, and a charitable environmental organization, to working with recycled wastewater, all it takes is an idea, a conversation, and little creativity to make an impact.



If you cannot get to the WRRRC on November 8, you can join us [here](#).

### Other Upcoming Fall Brown Bags

- **November 14** Greg Barron-Gafford, *Associate Professor*, UA School of Geography and Development

## OTHER EVENTS

### Symposium - Indigenous Water Ethics: Sacred Waters Connecting Culture, People, and Place

**October 22, 2018**

**Time/Location:** 8:00 a.m. - 5:30 p.m. / ENR2, Room 107 (1064 East Lowell Street, Tucson, AZ)

Western societies have manipulated the supply and distribution of water for consumption, development, mining, industry and other purposes to meet an immediate and every growing water demand and changing climate. Water ethics is a growing area of dialogue focused on managing water based on values, culture, beliefs, and co-existence with



nature. For indigenous people, the fundamentals of water ethics are the foundation of how indigenous peoples value water as a sacred entity connecting culture, people and place. This symposium brings together Indigenous water protectors to share their perspectives on water ethics and the challenges they face to protect sacred water and to create dialogues to discuss synergistic advocacy and action towards changing the way western water is managed and perceived.

[RSVP](#)

[View Agenda](#)

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## 2018 Tribal Water Summit

**October 25-26, 2018**

**Time/Location:** October 25, 9:00 a.m. - October 26, 1:00 p.m. / Wild Horse Pass Casino and Events Center, Chandler, AZ

All those interested in Tribal water management are encouraged to attend the Gila River Indian Community's two-day Tribal Water Summit, focused on developing Tribal water management programs and federal policy concerning Tribal water. Special panels and sessions will explore important topics including case studies of Tribes working creatively within their watersheds, development of Tribal water resource departments, implementation of water settlements, and protection of Tribal water rights.



**Registration extended until October 15th, 2018!**

[Register Here](#)

## WRRC NEWS

### Binational Water Relations Public Workshop, October 15-16, 2018

You are invited to take part in a two-day public workshop commemorating 75 years of U.S.-Mexico water relations. The workshop, Binational Water Relations at 75 Years: Retrospectives, Resilience, and U.S.-Mexico Border Water Resources Governance, will be held at the UA's Environment and Natural Resources (ENR2) Building, October 15-16, 2018. Next year marks the 75th anniversary of the landmark Treaty of 1944 that apportioned the waters of the Rio Grande/Rio Bravo River, Colorado River, and Tijuana River, between Mexico and the United States. The UA's Udall Center for Public Policy, in collaboration with the Institute of the Environment and the WRRC, has partnered with El Colegio de Sonora (Hermosillo, Mexico) to use this timely opportunity to reflect on the importance of this and other transboundary agreements, including NAFTA and the La Paz Agreement (the first comprehensive accord on the environment between Mexico and the U.S.). The workshop brings together key scholars and practitioners to promote public understanding of the history and evolution of U.S.-Mexico transboundary resource governance, assess current challenges to shared resource resilience, and envision future water policy in the borderlands. This event is free and open to the public.



[Register Here](#)

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## Susanna Eden Talks About Irrigated Agriculture in Arizona at WRRC Brown Bag

Despite its reputation as a desert state, Arizona has a significant agricultural sector, with agricultural sales contributing \$23.3 billion to Arizona's sales in 2014 (8% of its GDP). Arizona is ranked second in the nation in the production of lettuce, spinach, broccoli, and cauliflower. The agricultural sector uses approximately 70% of Arizona's water annually. On Thursday, September 27th, WRRC Assistant Director Susanna Eden gave an overview of Arizona's irrigated agriculture and its water supply. Eden's presentation covered the history of agriculture in Arizona, agricultural water uses and sources, agriculture's economic impact, and agricultural water issues. Arizona agriculture faces many challenges, including groundwater depletion and overdraft, shortages on the Colorado River, and water quality. Eden discussed how Arizona farmers are meeting these challenges with innovative solutions.



[Link to Brown Bag](#)

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## Students to Design, Build and Operate Underwater Robots for 2019 Competition



"Came in knowing next to nothing and I am leaving feeling confident to share information with students and successfully build an ROV." This comment came from one of 20 Arizona



teachers who braved Tucson's July heat and monsoon storms to participate in Arizona Project WET's Underwater Robotics & Engineering Design Academy. During the 4-day professional development academy, teachers investigated the Central Arizona Project and learned how ROVs (Remotely Operated Vehicles) are used in the water industry. While designing, building and testing an ROV, they built an understanding of circuits, developed soldering skills, and practiced troubleshooting procedures. At the end of the week, they demonstrated their ability to operate their ROVs to accomplish a set of tasks in the UA Recreation Center's pool. Teachers will apply their learning by preparing their students for a Spring 2019 ROV competition at the UA.

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## WRRC Director Presents Seminar at Southern Illinois University

On September 25, WRRC Director Sharon B. Megdal presented a seminar at Southern Illinois University titled, "Groundwater Governance and Management Research: Connecting Researchers and Practitioners". This talk, cosponsored by Universities Council on Water Resources (UCOWR) and SIU, provided attendees information about challenges associated with



groundwater governance and management, where authorities are decentralized and governance practices are still evolving. Findings from case study analysis of regional collaboration, two national surveys of state groundwater governance, and transboundary groundwater assessments along the U.S. - Mexico border.



## Chuck Graf receives AHS Lifetime Achievement Award

WRRC is pleased to congratulate former ADEQ Principal Hydrogeologist and long-time WRRC friend, Chuck Graf, on his Lifetime Achievement Award from the Arizona Hydrological Society (AHS). For over four decades, Chuck has been committed to improving understanding and regulation of Arizona's water. He provided critical water guidance to the Arizona Water Commission, ADWR, and ADHS, and served as both the Associate Director of the Arizona Water Institute and the Deputy Director of ADEQ's Water Quality Division. He was appointed to the Governor's Blue Ribbon Panel on Water Sustainability and ADEQ's Advisory Panel on Emerging Contaminants and was instrumental in establishing a committee to revamp water quality permitting. From his early involvement in remediation for State and Federal Superfund sites, to his recent leadership in efforts to construct a new framework for regulating recycled water in Arizona, Chuck has been a leading water researcher and innovator. Through the years, from volunteering on the team that first documented the hydrology of Kartchner Caverns to current involvement with the Tucson Mission Garden, he has maintained an avid interest in learning and sharing what he has learned with professionals, students, and others in Arizona and beyond. Chuck made his expertise available to the WRRC as a technical reviewer, a WRRC brown bag presenter, a guest lecturer in Dr. Megdal's Water Policy course, and a distinguished colleague. We join AHS in honoring his contributions.



The Lifetime Achievement Award honors individuals who have contributed to AHS or to the science of hydrology within Arizona and/or who have received national acclaim for their contributions in the field.

### [AHS Newsletter Story](#)

## ANNOUNCEMENTS

- [Lower Colorado River Dissolved Solids Models Scientific Investigations Report \(SIR 2018-5108\) - New Report Released](#)
- [Current and Future Trends in Nutrient Monitoring - Free White Paper Available](#)
- [October 10 PCRFD Monthly Brown Bag Series - Innovating the Urban Water System: Decentralized Approaches to Stormwater Mitigation](#)
- [October 11-12 Tribal Water Law Conference - Nationwide Perspectives on the Critical Demand for Water](#)
- [October 14 Celebrate the Santa Cruz River and the Return of the Gila Topminnow](#)
- [October 15-19 USCID International Conference on Irrigation and Drainage -](#)

## Registration Open

- October 26 Arizona Water Protection Fund Grant Applications - Public Comment Ends
- October 30 - 31 10th Annual Santa Cruz River Research Days - Registration Open
- October 31 Haury Program Fall 2018 Funding Opportunity - Now Open
- November 7 Water Public Art Challenge - Finalist Showcase and Awards Ceremony
- November 16 AWRA Spring Speciality Conference Call For Abstracts - Application Deadline
- November 19 JCWRE Open Issue Call for Papers - April Issue Deadline
- December 6 Mine Water Management Symposium Scholarship - Applications Due
- December 10 Arizona Agribusiness Roundtable - Save the Date

Visit Our Website