

SUMMER WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION
**WATER RESOURCES
RESEARCH CENTER**

July 27, 2018 / Volume 6, Issue 6

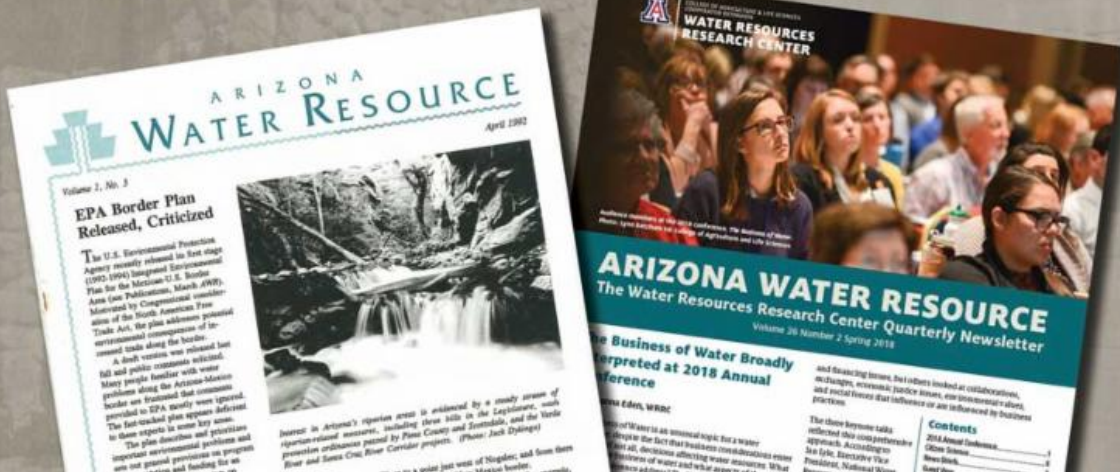
The [Water Resources Research Center](#) - a research and [Extension](#) unit of the [College of Agriculture and Life Sciences](#)

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AWR 1992-2018



WRRC Releases Penultimate Issue of *Arizona Water Resource*

The Summer issue of *Arizona Water Resource* (AWR), released this week, is devoted to the way water information is communicated. The AWR features the WRRC Director's column, with its news that publication of AWR will end with 2018. The Weekly Wave will begin to carry some of the content readers have come to expect from AWR and will link to articles, including the Public Policy Review, posted on the WRRC website. This penultimate issue contains a brief history of the newsletter's early years, a remembrance of WRRC's early newsletter editors, and a Guest View that reflects on the role of newsletters in the context of new and multiplying media choices. In addition, a Special Feature on recently completed water research projects highlights student work funded through the WRRC.

[Read AWR](#)

WRRC EVENTS

WRRC Brown Bag - The Santa Cruz River Heritage Project - Reviving an Urban River

August 28, 2018

Speaker: Timothy Thomure, *Director*, Tucson Water

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



In 2016, the City of Tucson initiated a discussion about using reclaimed water to restore perennial flow to a portion of the Santa Cruz River near downtown Tucson. This action could support riparian habitat in the urban core, improve long-term water management in the region, and stimulate economic activity. The concept was well received by a multitude of stakeholders and Tucson Water began the task of bringing this vision to reality. In May 2019, perennial flow will return to the Santa Cruz River near Tucson' Birthplace, and a new era of water management will begin.

Upcoming Fall Brown Bags

- **September 4** Meghan Smart, *Scientist, ADEQ*, Citizen Science Program
- **September 18** Courtney Crosson, *Assistant Professor, UA CAPLA*, Innovating the Urban Water System
- **September 26** Susanna Eden, *Assistant Director, UA WRRC*, Irrigated Agriculture in Arizona
- **November 8** Chase Saraiva, *Head Brewer, Wilderness Brewing Co.*, Sustainability and Beer

OTHER EVENTS

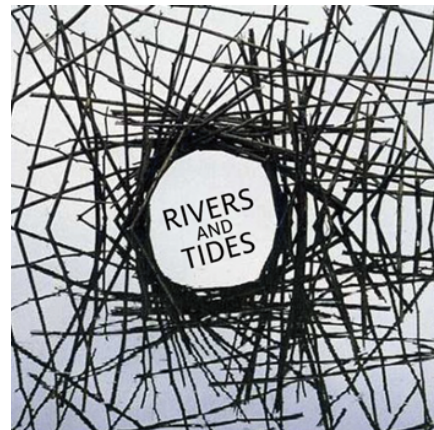
Water Roots - Special Film Screening: Rivers and Tides - Loft Cinema

July 31, 2018

Time/Location: 7:30 p.m./Loft Cinema, 3233 E. Speedway Blvd., Tucson, AZ 85716

Join us for a special screening of the critically acclaimed documentary, Andy Goldsworthy's *Rivers and Tides* (2001), hosted by the Loft Cinema. After the film, you are invited to a panel discussion and dynamic community conversation about how we value water and protect natural areas in Arizona.

Panelists include:



Cody Sheehy, *Director*, Beyond the Mirage; Video Coordinator, UA College of Agriculture and Life Sciences
Catlow Shipek, Founding Member; Policy and Technical Director, Watershed Management Group
Ginger Shulick Porcella, Executive Director, Museum of Contemporary Art, Tucson

The panel will be moderated by Arizona Public Media's Tony Paniagua.

This event and panel discussion is part of the Water Roots series organized by the Sky Island Alliance and UA Water Resources Research Center. Water Roots is a celebration and study of water in the desert highlighting the unique ways that we value our most precious resource. Our region can build a water future that considers water for humans and nature - please join us for upcoming events, show your support, and share your water story.

[Event Info Here](#)

WRRC NEWS

WRRC Annual Conference Feb. 1, 2019 - Save the Date

We are excited to announce that this year's WRRC Annual Conference will be held on Friday, February 1st - so please mark the date on your calendar! This year, we will be holding the conference in Phoenix, Arizona, for the convenience of members of the Arizona Legislature. We are working with a program committee to create a conference focus and list of expert speakers that is highly relevant to decision makers and sparks the interest of a wide audience. Our goal is to further the statewide conversation on water resource opportunities and constraints. Look for more details in August!



Food, Water, and Energy in the Arava Valley: Turning Disadvantage into Advantage in the Hyper-arid Climate of the Region

On July 18, the WRRC welcomed two speakers from Israel for a Brown Bag seminar on innovations to meet food and energy challenges in the hot, hyper-arid climate of Israel's Arava Valley. David Lehrer, Director, Arava Institute for Environmental Studies, and Dorit Davidovich Banet, CEO, Eilat-Eilat Renewable Energy Initiative, spoke on how the Arava Valley, a sparsely populated region in southern Israel, which receives less than one inch of annual rainfall and routinely sees summer temperatures reach 115° to 120° F, has become a major exporter of fruits and vegetables and producer of solar energy. The region annually produces 150,000 tons of fruits and vegetables including 5,200 tons of Medjool dates. Solar installations in the Arava Valley are being built to help meet the region's, and Israel's, needs. The speakers referenced efforts to encourage infrastructure for "prosumers", i.e., an entity that produces whatever it needs to consume.

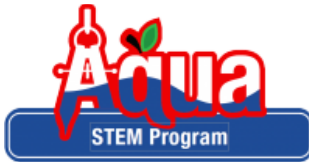


[Link to the Seminar Video](#) (registration required)

Resounding Success

From the valley to the mountains, the excitement





created by APW's Aqua STEM program was palpable this summer. After almost a month of stimulating Teacher Academies in Maricopa County, Aqua STEM



headed for the high hills of Flagstaff to kick off an expanded program in Coconino County. Not only did every registered participant attend, all of them agreed that the School Water Audit workshop "was excellent-one of the best [they] have ever attended." Very impressive for a brand new program!

Back in Maricopa County, educators were actively engaged in learning how to design rainwater harvesting systems - even getting a little wet in the process! Some teachers also equipped themselves for an experiential expedition to the Rio Salado Habitat Restoration in downtown Phoenix, while others mastered new mechanical and analytical skills by changing aerators and calculating water savings. Regardless of the Teacher Academy attended, all expressed overwhelming appreciation for the Aqua STEM program and facilitators. It's going to be a great school year!

[Aqua STEM](#)

Jean McLain Presents Research Results at the University of York

On Monday, July 23, WRRC Research Scientist Jean McLain presented the results of her groundbreaking research on environmental antibiotic resistance at the University of York in the United Kingdom. Jean was invited to speak by Dr. Brett Sallach, who is completing his postdoctoral research in the laboratories of Dr. Alistair Boxall in York. Drs. Sallach and Boxall attended a 2014 Conference held at the UA Biosphere2



Conference Center and organized by Dr. McLain entitled "Antibiotics in Agroecosystems: State of the Science." Dr. McLain's talk in York covered current knowledge about the connections between recycled water use and the development of antibiotic resistance in irrigated soils.

Two USGS Publications and a Presentation Offered by AZ Water Science Center



The USGS Arizona Water Science Center announced publication of two reports pertaining to water use in the Colorado River Basin. The first [report](#) is a collaborative analysis that presents a comparison between the methods employed to assess water use by USGS and Reclamation, which helps explain why there are differences in the values produced by their assessments. The report also discusses terminology and how the two agencies use similar terms differently.

The second [report](#) presents water-use data and trends at 5-year intervals between 1985 and 2010 for 11 categories of use. The report contains interesting information on how water use has changed relative to population, how supplies are distributed between groundwater and surface water in the Upper and Lower Basins, and more.

On July 9, the Water Science Center hosted a thought-provoking talk by Marcela Brugnach,

Assistant Professor Water Engineering and Management, Civil Engineering Department, University of Twente, titled "What we talk about when we talk about uncertainty." The talk presented a concept of uncertainty that includes the ambiguity resulting from the presence of multiple valid, and sometimes conflicting, ways of framing water issues and described water management examples from Spain, Italy and The Netherlands.

A recording of the presentation is available [here](#).

ANNOUNCEMENTS

- [City of Phoenix Green Green Infrastructure Cost-Benefit Study - Now Available](#)
- [ADWR Groundwater Flow Model of Wilcox Basin - Completed](#)
- [ANSAC Determination Final Reports - Now Available](#)
- [July 30 BLM Public Input on Draft Management Plan for San Pedro Riparian National Conservation Area - Comments Due](#)
- [July 30 Lake Tahoe Basin, Sciences, & Research Scholarship - Applications Due](#)
- [July 31 AHS Annual Symposium Call for Abstracts - Early Bird Registration Closes](#)
- [July 31 WaterReuse Symposium - Early Bird Rate Ends](#)
- [August 1 American Geophysical Union \(AGU\) Fall Meeting Abstract and Town Hall Submission Deadline](#)
- [August 2-3 Arizona Water Law Conference - Registration Open](#)
- [August 3 National Council for Science and the Environment Annual Conference submission deadline, Jan 8-9, 2019](#)
- [August 10 GWPC Annual Forum - Early Registration Ends](#)
- [August 14 AHS Special Fundraising Event In Tucson - Registration Open](#)
- [August 16 The New Arizona Prize Water Public Art Challenge - Registration Ends](#)
- [August 22 AMWUA and WSI Offer First-Timer Scholarship to the WaterSmart Innovations Conference and Expo](#)
- [August 23 ADEQ Triannual Review Stakeholder Meeting, Phoenix](#)
- [August 24 CAZMEX Consortium for Arizona-Mexico Arid Environments - Call for Proposals](#)
- [September 7 AZ Water Protection Fund Accepting Application for Fiscal Year 2019 Grant Cycle](#)

- [September 12 BARD Research Grant Proposals - Applications Due](#)
- [September 21 UCOWR/NIWR Annual Water Resources Conference - Call for Sessions](#)
- [September 26 Innovations at the Nexus of Food, Energy, and Water Systems \(INFEWS\) - NIFA Grant Applications Due](#)
- [September 27 Draft Resource Management Plan for San Pedro Riparian National Conservation Area Public Comments Due](#)
- [December 6 Mine Water Management Symposium Scholarship - Applications Due](#)

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