

SUMMER WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**

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

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2017 Monsoon Roars into Tucson!

On July 11, the record-breaking string of 100-degree-plus temperatures that had baked Southern Arizona in June was broken by the arrival of glorious, quenching monsoon rainfall. The monsoon season officially begins on June 15, but most Tucsonans don't truly believe that the annual monsoon has arrived until the raindrops fall. On average, Arizona receives about half of its annual rainfall during the monsoon season of June 15 to September 30.

In addition to replenishing basin groundwater, the monsoon season recharges riparian areas like the Upper San Pedro River Basin. Dry washes or rivers like the Rillito and Santa Cruz can become filled with raging waters due to water downpour and flash floods. The downpour from monsoon thunderstorms spurs plant growth, including wildflowers, shrubs, and other plants that provide food for migrating birds. Hummingbirds gather in numbers. Wildlife appears in abundance, including the toxin-producing Colorado River Toads, as well as bats and butterflies. All life in Arizona seems to be stirred with the onset of our yearly rains.

UA Climate Science Extension Specialist Michael Crimmins recommends the following sites for those interested in "tracking" the yearly summer monsoon rains.

[CALS](#)
[CLIMAS](#)
[NOAA](#)

All of us at the WRRRC wish you a joyful and safe monsoon season!

Photo: John Hays - 2012 WRRRC Photo Contest

WRRRC EVENTS



Check out all of our upcoming events and videos of previous events [website](#)

OTHER EVENTS

San Diego Screening of Beyond the Mirage

August 1, 2017

Speaker: Sharon B. Megdal
Where: Pacific Beach/Taylor Library, San Diego
Time: 6:00 p.m. - 7:45 p.m.



The Bureau of Reclamation is hosting WRRRC Director Sharon B. Megdal to present a viewing of *Beyond the Mirage: The Future of Water in the West* at the Pacific Beach/Taylor Library in San Diego. *Beyond the Mirage* explores the West's water situation in detail, including how the region arrived at this point. Through interviews with noted public policy and environmental experts, the documentary puts viewers at the center of this issue and prompts candid discussion about water resources and the need for viable, sustainable solutions. The screening of the film will be followed by a question and answer session.

[More Information](#)

**Registration for August 2017
Smartscape 101 Now Open**

SMARTSCAPE

The University of Arizona, Maricopa County Cooperative Extension is accepting [registrations](#) for the fall 2017 Smartscape 101 series! Classes will be held on Mondays and Wednesdays August 7th-August 30th from 3:00 pm to 6:00 pm at the Maricopa County Cooperative Extension office: 4341 East Broadway Road Phoenix, AZ 85040. Check out the [course flyer](#) for a list of class topics. Seats are limited and fill fast, so register today!

Smartscape is a comprehensive, research-based professional training program specifically designed to educate landscape professionals on the fundamentals of designing, installing, irrigating, and maintaining attractive, water-efficient landscapes. This Smartscape course delivers 20 hours of high-quality education on the best irrigation and horticultural practices for the Desert Southwest.



[Learn More](#)

Arizona Water Map

Water Map Posters are Available

New Arizona Water Map posters may now be purchased from the WRRC. Produced with input from a team of water resources experts and advisors, the new map accurately depicts key components of Arizona's water picture. Notable updates to this fourth version of the map include a stronger emphasis on water supply and demand, updated data, emphasis on groundwater usage, and a new, natural terrain background.



Maps are now on sale for \$12.00 plus applicable tax and shipping charges. Click the link below to order your map today!

[Order the Map](#)

NEWS

Summer 2017 AWR Newsletter Now Available

The Water Resources Research Center is pleased to announce the release of its Summer 2017 Arizona Water Resource newsletter. Student perspectives are featured, with articles on the Lower Santa Cruz River Basin Study and the potential economic benefits of water conservation, which convey the passion and commitment of these students for addressing water resource issues. The Guest View offers another perspective; this one from the Executive Director of the Yuma Center of Excellence for Desert Agriculture. Examining the feasibility and advisability various methods for agricultural water

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Feature
Intern Offers Reflections on Lower Santa Cruz River Basin Study
by Bailey Kennett, Research Analyst, WRRC

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Photo: Terry Moody courtesy of the Sonoran Institute
When I first saw the email about an interesting opportunity with U.S. Bureau of Reclamation's Lower Santa Cruz River Basin Study, I didn't give it much attention. The announcement called for a student to work on a multi-year Reclamation planning study, and stated that primary tasks involved note-taking at stakeholder meetings – neither of which were all that appealing to me. I was looking for something more exciting, some project where I could channel all the passion for water I had built over the years and was continuing to build through my graduate classes. I was looking for a platform to get the community fired up about the urgency of climate change and the critical

Climate change is happening, and it's happening in Tucson. In the southwest United States, the average annual temperature has increased about 1.9°F since 1962, with 2001 to 2010 being the warmest and fourth driest decade since that time. Arizona has been experiencing an sustained drought for well over a decade, while the 2001-2010 average Colorado River streamflow is a major source of Tucson's drinking water supply was 14 percent lower than last century's average. Looking forward, temperatures throughout the state are projected to increase 3.5 to 8.5°F by 2100, while Colorado River flow projections show the river in the next 50 years to be reduced by 19%.

conservation provides an opportunity to question the wisdom of transferring water from agriculture to other uses. A Special Feature on recent research and a Resources section update readers on what's going on in the world of water. Finally, WRRC Director Sharon B. Megdal's Public Policy Review column describes how the cooperative framework that shapes the U.S.-Mexico Transboundary Aquifer Assessment Program is a model for other transboundary efforts around the globe. Emailed directly to subscribers, the AWR is also available on the WRRC web site and can be downloaded as a PDF.

Little did I know at the time that the Basin Study was just that opportunity. Considering these very real threats to regional water supplies, the Basin Study is taking a risk-based approach and facing the implications of these projections head on. By exploring worst case scenarios, the study encourages preparedness for climatic extremes, not just projected averages.

wrrc.arizona.edu

Photo Credit: Terry Moody courtesy of the Sonoran Institute

[Read the AWR](#)

[Subscribe](#)

City Offers Grants for Neighborhood Stormwater Harvesting Projects

The City of Tucson is offering grant funding for neighborhood-scale stormwater harvesting projects in public spaces. Project applications are evaluated for benefits to human and environmental health, community safety, and the neighborhood's commitment to maintenance. The residents incur no cost for a project, but they do need to do some upkeep in the future. "For about the following three years, they're going to have to do maintenance on the project, pick up litter, trash, take out the weeds," said Irene Ogata, the urban landscape manager with Tucson Water. After that, the residents must monitor how much rainwater is going into the basin and how much rain fell in that area of town, she said. Each member of the Mayor and Tucson City Council has \$45,000 to fund stormwater projects. Tucson Clean and Beautiful is helping with application and project site selection.



[More Information](#)

New Teachers Gain Experience, Confidence at Sacaton Water Festival



The Sacaton Elementary School District partnered with Teach for America and Arizona Project WET (APW) to finish their summer program with a splash! More than 100 students from Sacaton Elementary participated in the first ever



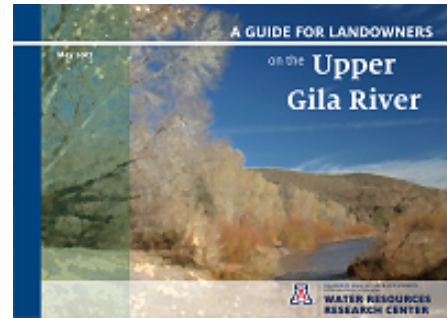
Sacaton Water Festival. What made this festival unique was that 56 teachers from Teach for America learned lessons on groundwater, watersheds, the water cycle, and water conservation technology. Thirteen of these teachers led the activities during the festival, adjusting questions and strategies to engage students from a range of grades. The teachers pledged to take this experience and what they learned from APW with them into their classrooms across the country. As APW continues these partnerships into the future, we hope to engage more students and provide teachers with new tools to make learning about water conservation a splash.

[Learn More](#)



A Guide for Landowners on the Upper Gila River is Now Posted

Hot off the presses! A Guide for Landowners on the Upper Gila River is now posted online and hard copies are available upon request. This Guide was created as a helpful resource to answer common questions and address common misconceptions related to land use practices along the Upper Gila River in Graham and Greenlee Counties. The idea for the Guide was sparked by conversations among Gila Valley residents, Cooperative Extension agents, and County officials about what activities or modifications are legally allowable on land adjacent to the river. With simple answers to realistic questions, A Guide for Landowners on the Upper Gila River fills a need for a handy, credible information resource.



In addition to materials previously published by the WRRC, the content of this Guide was informed by dozens of interviews with Cooperative Extension agents, federal and local government officials, irrigation district representatives, and active members of the farming and ranching community.

[Download Guide](#)

2017 International Conference: Cutting-Edge Solutions to Wicked Water Problems

The American Water Resources Association (AWRA) and the Water Research Center of Tel Aviv University are co-hosting this dynamic two-day dialogue on how water managers, engineers, scientists, and policy makers are working together to develop and implement solutions to address some of the world's most pressing water challenges.



The exciting program recently finalized, is available [online](#). WRRC Director and Conference Co-chair Sharon B. Megdal will moderate the closing plenary session titled, The Red Sea-Dead Sea Project. Oded Fixler, Ministry of Regional Cooperation in Tel Aviv and Eng. Abu-Hammour, Jordan Valley Authority Ministry of Water and Irrigation in Amman will join Dr. Megdal to discuss specifics of the project. Also recently added is a post-conference field trip to the world's leading irrigation company, Netafim, and their manufacturing facility and water quality lab, Kibbutz. This trip is free but limited to 50 participants. Information to sign up is under the Field Trips tab on the website.

[More Information](#)

ANNOUNCEMENTS

SAVE THE DATE
MARCH 28, 2018

WRRC CONFERENCE
THE BUSINESS
OF WATER

- [APW Seeks AmeriCorps Water Educator](#)
- [August 24-25 - Arizona Water Law Conference](#)
- [August 25 Early Bird Registration Closes - AWRA International Conference](#)
- [August 25 Public Comment Period Closes - Draft 2017 Review, Water Quality Standards for Salinity, Colorado River System](#)
- [September 6-9 AHS 30th Annual Symposium](#)
- [September 1 Early Registration Closes - Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region](#)
- [September 22 Save the Date - State of the Watershed - Upper Gila River](#)
- [November 1 Call for Abstracts - BSMAR16](#)

WATER RESOURCES RESEARCH CENTER

[Visit Our Website](#)