

SUMMER WAVE



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

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The Water Resource Research Center - a research unit of the [College of Agriculture and Life Sciences](#) and an Extension unit in [UA Cooperative Extension](#) within the Division of Agriculture, Life & Veterinary Sciences & Cooperative Extension

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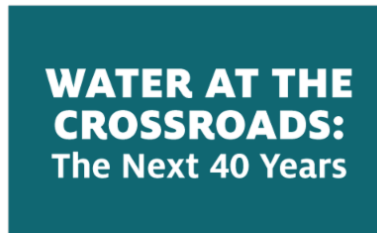
DESERT WATERS INTERNATIONAL SYMPOSIUM

**Waiting for Monsoon Rains, Considering
International Lessons for Desert Waters**

Wet/dry mapping typically documents the lowest stream flows of the year and signals impacts for the species that rely on these ribbons of green in the desert. Since wet/dry mapping wrapped up in Arizona this June, lessons from the April 2019 Desert Waters International Symposium are worth revisiting. This event convened internationally-recognized thought leaders and water experts from across the Colorado River Basin in the U.S. and Mexico, and from Australia's Murray-Darling Basin, to discuss multiple perspectives of how we provide water to natural areas in semi-arid environments and changing climates. More than 25 presenters and 100 audience members participated in this two-day symposium, held in Tucson at the University of Arizona by the Sky Island Alliance, WRRRC, and the University of Adelaide. The link below will take you to a summary of key themes and next steps generated from the two full days of presentations and discussion, including needed research.

[View summary and other resources](#)
[Summary_\(pdf\)](#)

WRRRC EVENTS



OTHER EVENTS

Arizona Water Law Conference

Date / Time: August 1-2, at 8:00 a.m - 5:30 p.m.
Location: Hilton Scottsdale Resort & Villas

The Arizona Water Law Conference will give you the facts, opinions, and in-depth analysis you need to stay on top of important water issues, including the Colorado River Drought Contingency Plan, Assured Water Supply, developments in federal water quality laws, effluent reuse, and more.

[Register Here](#)



WRRRC NEWS

Water Harvesting in Tucson Featured



in WEF Stormwater Publication

The cover article in the Summer 2019 issue of *World Water - Stormwater Management* describes the actions that made Tucson a national leader in water harvesting. Authors Susanna Eden, WRRC Assistant Director, and Evan Canfield, Pima County Regional Flood Control District Civil Engineering Manager, explain how grassroots efforts and collaboration among city, county, and academic institutions advanced the use of water harvesting and green infrastructure to achieve multiple community goals. Traveling from prehistoric time to the present, the article highlights the region's progress towards integration of rainwater into its water resource portfolio. Two examples in Tucson - the Rincon Heights neighborhood and the Kino Environmental Restoration Project - illustrate what water harvesting can accomplish. *Stormwater Management* is the official publication of the Water Environment Federation (WEF) Stormwater Institute.



[View or download the PDF here](#)

WRRC Director Gives Talk to SBAR Educators

On July 8, WRRC Director Sharon B. Megdal presented "Water Challenges and Solutions in Arizona and the West" to educators with UA Sustainable Bioeconomy for Arid Regions (SBAR). Dr. Megdal touched on many topics such as the importance of the Colorado River and Central Arizona Project, solutions to wicked water problems, recharge, and the Drought Contingency Plan.



SBAR educators work together to create lessons that are appealing and informative to youth and communities. Their goals are to prepare younger citizens to pursue education and careers in various arid regions, create awareness of sustainable and local bio-economy, and to provide free science lessons for teachers to deploy in their classrooms.

[Learn more about SBAR](#)

Water Solutions for a Sustainable Future



"Everyone should take this Academy [not just teachers]!" was the refrain on the final day of the Water Solutions: Past, Present, and Future 2019 STEM Academy.



Each day of the 5-day academy was filled with activities aimed at understanding the Salt River Project (SRP) water delivery system. This included a historical perspective with a presentation by SRP historians Ileen Snoddy and Leah Harrison and an engineering design challenge to put water to work. Project WET lessons tied to the new Arizona Science Standards guided learning throughout the week. Additional support from SRP Analyst Stephen Flora on forest health and snowpack monitoring was enlightening (he even brought snowshoes)! Also included were special SRP field trips to the SRP

Control Center and Heritage Center, the SRP Lab, and Arizona Falls, where participants saw water generating electricity!

Support from our partner SRP enabled 23 4th to 8th grade teachers to attend this APW academy. These educators were challenged to look deeply into SRP's 100-year history and develop new ideas for navigating the next 100 years. They chronicled their knowledge gain and ideas in a short Adobe Spark video produced by Phoenix middle school science educator Vanessa Flores.

[Spark Video](#)

New Study by HAS Professor Condon Shows Effects of Groundwater Pumping

The increase in groundwater use since the 1950s has had profound impacts on U.S. rivers, according to a new study led by Department of Hydrology & Atmospheric Sciences Assistant Professor Laura Condon. With co-author Reed Maxwell of the Colorado School of Mines, Condon used a computer model to evaluate how surface waters in the U.S. have been impacted by 100 years of groundwater declines. They found that groundwater pumping has contributed to as much as 50 percent of streamflow reductions in certain U.S. rivers. The article, "Simulating the sensitivity of evapotranspiration and streamflow to large-scale groundwater depletion," was published in June in *Science Advances*.



[Read the Article](#)

Arizona Water Protection Fund Grants Available

Since its inception in 1994, the Arizona Water Protection Fund (AWPF) has awarded 229 grants for a total of over \$45 million dollars. This statewide public grants program stimulates locally-led solutions for the restoration and conservation of water. The AWPF Commission has just announced that it will be offering a fiscal year 2020 grant cycle. The Commission provides funding for projects that directly maintain, enhance and restore river and riparian resources; implement innovative river and riparian research; and implement water conservation measures or programs outside of the 5 Active Management Areas. Applications will be accepted in all funding categories: capital projects, research, and data collection, and water conservation. There will be a grant application workshop with a live webinar option on July 24, 2019, at 1:30 p.m. at the Arizona Department of Water Resources office located at 1110 W. Washington St., Suite 310, Phoenix, AZ. Grant applications are due September 6, 2019, at 3:00 p.m.



[AWPF Grant Application Manual](#)

ANNOUNCEMENTS

- [July 18 AWWA Sustainable Water Management Conference - Abstracts Due](#)

- [July 19 NCSE Annual Conference Science in Environmental Decision-Making - Call for Submissions Extended](#)
- [July 22 JCWRE Call to Authors - Submission Deadline](#)
- [July 28 AZ Water Reuse Symposium - View Program](#)
- [July 31 AGU Fall Meeting Session: H084 - Impacts of climate variability and anthropogenic disturbances on subsurface systems: hydrological, social and public health - Call for Abstracts](#)
- [July 31 XVII World Water Congress - Call for Abstracts, Special Session & Side Events](#)
- [August 1-2 AZ Water Law Conference - Registration Open](#)
- [August 30 SER-SW Annual Conference - Abstract Submissions Due](#)
- [September 15-17 Groundwater Protection Council 2019 Annual Forum - Preliminary Agenda Available](#)
- [September 9-12 Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region - Registration Open](#)
- [September 17-19 Western Groundwater Congress - Registration Open](#)
- [September 22-25 Geological Society of America Annual Meeting - Phoenix, AZ](#)
- [September 25-27 Arizona Hydrological Society Symposium - Registration Open](#)
- [September 26-27 Tribal Water Law - Registration Open](#)

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