

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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TAAP Presentations at UCOWR and in Sierra Vista

The WRRC's Transboundary Aquifer Assessment Program (TAAP) was featured at the 2017 Universities Council on Water Resources/National Institutes for Water Resources Annual Conference held June 13-15 in Fort Collins, Colorado. The UCOWR/NIWR Conference held two technical sessions that focused on the TAAP. The first session, entitled "The U.S.-Mexico Transboundary Aquifer Assessment Program: Accomplishments to Date", featured presentations that covered both the history of the TAAP and recent efforts by TAAP collaborators in Arizona, Sonora, New Mexico, and Texas. The second session, "The U.S. Mexico Transboundary Aquifer Assessment Program:

Ongoing Work and Future Directions," discussed current and future TAAP efforts. WRRRC Graduate Student Elia Tapia presented about recent and current TAAP efforts in Arizona.

Current TAAP efforts include stakeholder engagement with residents in the San Pedro and Santa Cruz aquifers. TAAP-Arizona/Sonora recently held a forum entitled "The Binational Study of the Transboundary San Pedro Aquifer: Results and Future Directions" in Sierra Vista on June 20. The purpose of the event was to share results from the Binational Aquifer Study of the San Pedro Aquifer and to discuss future directions for studying the aquifer. Presentations at the Sierra Vista event were given by WRRRC Director Sharon Megdal, WRRRC Graduate Student Elia Tapia, and USGS Hydrologist James Callegary on the TAAP, the challenges and efforts associated with developing a binational study, and the results of the binational study.

[Learn More](#)

WRRRC EVENTS



Check out all of our upcoming events and videos of previous events

[website](#)

Arizona Water Map

Water Map Posters are Available

New Arizona Water Map posters may now be purchased from the WRRRC. 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

Book of Water Special Issue Published

The Special Issue of the journal *Water* titled "Water Governance, Stakeholder Engagement, and Sustainable Water Resources Management" has been published in book form. The Special Issue was edited by Sharon B. Megdal, WRRRC Director, Susanna Eden, WRRRC Assistant Director, and Eylon Shamir, Hydrologic Research Center. The collection of 20 articles, by experts in numerous fields provides information related to

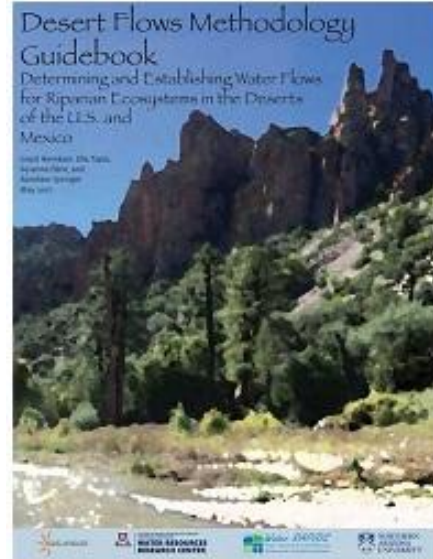


water governance and management and offers research from a range of perspectives, geographic scales, and locations around the world. It focuses on the relationship of water governance practices and stakeholder engagement approaches to the development, evaluation, and adoption of solutions for sustainable water management. Reprints are freely accessible and printed copies may be purchased on MDPI Books.

[MDPI Books](#)

Desert Flows Methodology Guidebook Released

In continuation of research focused on the surface flow needs of desert riparian ecosystems, the WRRRC Water RAPIDS program has just released the Desert Flows Methodology Guidebook: Determining and Establishing Water Flows for Riparian Ecosystems in the Deserts of the U.S. and Mexico. The product of a project funded by the Desert Landscape Conservation Cooperative (DLCC), the guidebook provides information on the range of methods used to determine appropriate surface flow characteristics needed to maintain and improve aquatic and riparian ecosystems in arid landscapes of the United States and Mexico. These regions face substantial uncertainty in future climate conditions, groundwater levels, and surface water flows. The guidebook provides information on achieving desired results through collaboration with groups and organizations that have an interest in maintaining or modifying flows, such as community stakeholders, environmental non-profit groups, and government agencies. The guidebook is based in part on the previously constructed [Desert Flows Database](#) publically available on line, which contains data from more than 400 individual studies relating to environmental flows in the DLCC.



[Read the Guidebook](#)

Recharge and Rain Academies



This year Tucson experienced the hottest June in 130 years, and residents anxiously await the arrival of the monsoon. Building community resilience to increased temperatures, extended drought, and extreme storm events is the focus of the

Recharge the Rain Program. Arizona Project WET (APW) and Watershed Management Group (WMG) have partnered through a NOAA Environmental Literacy Grant to build community resilience through STEM education. Sixteen Tucson teachers are participating in this multi-year program, which involves professional development to enable teachers to develop and teach climate literacy and rainwater harvesting curriculums. Teachers and students will design and install schoolyard rainwater harvesting systems to increase community resilience. Last week teachers braved the heat, learning about climate change and rainwater harvesting. Field trips included a visit to the local National Weather Service office and a day spent evaluating an existing rainwater harvesting system at Old Main on the UA campus.



[Learn More](#)

Studies Confirm Conservation Lowers Water Rates

According to new research from two Arizona communities, water conservation helps keep water rates lower than they would otherwise be. The Alliance for Water Efficiency released the studies by the Town of Gilbert and the City of Tucson on costs avoided by conservation and water efficiency. The audience for the [WRRC's Brown Bag](#) seminar by Candace Rupprecht of Tucson Water and Mary Allen of Pima County Wastewater Reclamation (April 19, 2017) will already be familiar with the Tucson study. The Tucson Avoided Cost Analysis examined the overall impact of water efficiency on water and wastewater rates and clearly and convincingly debunks the myth that conservation drives up water rates. Water and wastewater rates in Tucson are at least 17% lower today than they would have been without the various water conservation and efficiency actions Tucsonans have implemented. Gilbert's results showed a similar effect. Gilbert, which avoided nearly \$341M in investment costs for new water resources and water and wastewater treatment, estimated that a residential unit's system development fee is \$7,700 lower today than it would have been.



[Read Reports](#)

Municipal Water Leader Magazine Features Desal in the Desert

The latest issue of the magazine, Municipal Water Leader, focuses on desalination and the progression of technology, financing, and public support necessary to create desalinated water supplies. In an international spotlight, the magazine features an interview with WRRC Director Sharon B. Megdal, as well as some of her personal photographs from a recent visit to Israel's Sorek Desalination Plant.



Over the past decade, desalination has been a game changer for the stability and reliability of Israel's water supply. Israel operates five seawater desalination plants, including the Sorek Plant, which is the largest reverse osmosis plant in the world. Collaboration on the Red Sea-Dead Sea project between Israel and Jordan shows the potential for similar projects in the U.S. According to Dr. Megdal, "Such cooperation can be relevant to issues in the [American] West, especially for places like Arizona that could develop seawater desalination and potentially exchange Colorado River water with, for example, Mexico."

[Read Article](#)

Rainwater Harvesting Trainings Advance Citizen Science in Arizona

In May and June, 2017, two week-long trainings were held in Tucson and Globe, Arizona, respectively. The trainings were the first phase of a five year NSF-funded project, Advancing Informal Environmental Health STEM Learning: Co-Created Citizen Science Rainwater Harvesting in Underserved Communities. This project trains citizens in underserved Arizona communities to harvest rainwater and to conduct and understand water quality measurements. The project, led by Monica Ramirez-



Andreotta and including WRRC Associate Director Jean McLain brings rainwater harvesting to communities that will benefit greatly from harvesting rainwater. These same communities also have limited ability to afford materials needed to build and maintain rainwater harvesting systems. Citizen scientists will collect water quality data over three years, providing important information on the utility of harvested rainwater for irrigation of fresh produce.

APW Seeks a Part-Time Instructional Specialist, Sr.

The University of Arizona's Project WET (APW) program is seeking a part-time Instructional Specialist, Sr. The mission of APW is to develop water stewardship and STEM literacy by providing teacher professional development that evolves instructional practice and deepens content knowledge, by directing student outreach that delivers or extends classroom learning, and through community engagement.



The Instructional Specialist will manage a team of 10 to 12 Water Educators who will deliver in-classroom and field programs.

[To Apply.](#)

ANNOUNCEMENTS

SAVE THE DATE
MARCH 28, 2018

WRRC CONFERENCE
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- [July 1 WIFA's technical assistance funding cycle opens](#)
- [July 21 Call for Abstracts 2017 AHS Symposium - Deadline Extended](#)
- [July 25 Public Hearing - Proposed Reclaimed Water Rules Revision](#)
- [August 25 Call for Session Proposals - NCSE's National Conference and Global Forum](#)
- [November 1 Call for Abstracts - BSMAR16](#)

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