

WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**

September 29, 2017 / Volume 5, Issue 25

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

In this issue: [WATEC](#) / [Groundwater](#) / [APWTeam](#) / [Water Bottles](#) / [Watershed Forum](#)



Institute of the Environment Fall Fest - A Great Success!

On September 26th, University of Arizona's Institute of the Environment hosted its annual Fall Fest, which included an Environmental Showcase, an opportunity to network and learn about more than 30 campus environmental programs and groups. The Water Resources Research Center teamed with TRIF initiative, Water, Environmental, and Energy Solutions, to inform students, faculty, and community members about the WRRC and water research and programs at the University. The event included a keynote presentation by newly appointed UA President Dr. Robert Robbins, who spoke of the strength of environmental research and sustainability efforts at the University, and of his love of the desert. In addition, UA Senior VP for Research Dr. Kimberly Espy announced the appointment of Dr. Raina M. Maier as Interim Director for Institute of the Environment. The WRRC extends our heartiest congratulations to Dr. Maier on her appointment, and we look forward to continued collaboration as she assumes her leadership of the Institute.

[Visit IE Website](#)

WRRC EVENTS

WRRC Brown Bag - Water, Wastewater, and Energy Solutions for Off-grid Bedouin, Palestinian, and Jordanian Communities

October 2, 2017

Time/Location: 4:00 p.m. - 5:30 p.m. / Hillel Foundation (1245 E. 2nd Street.)

Note special time and location.

****Parking available at 2nd Street or Park Avenue Garages.**



Speaker: Clive Lipchin, Director, Center for Transboundary Water Management at the Arava Institute

Co-Sponsors: Center for Middle Eastern Studies, Arizona Center for Judaic Studies

The Center for Transboundary Water Management at the Arava Institute for Environmental Studies in Israel is implementing an off-grid Food, Energy, Water (FEW) Nexus approach to addressing the need for conflict mitigation relating to transboundary environmental management. The project specifically implements on-site, off-grid solutions for communities lacking access to centralized water, wastewater, and energy infrastructure. The project includes greywater treatment and reuse systems; renewable energy; hydroponics micro-systems; and more. Work is being carried out in Palestinian communities in the West Bank, Jordanian farms in the Jordan Valley, and Bedouin communities in Israel's Negev Desert. Lessons learned in the Middle East can be used in addressing challenges in other arid regions of the world such as Native American communities in Arizona and New Mexico.

[More information](#)

WRRC Brown Bag - Adaptive Management and Water: The Importance of Science to Public Policy and Water Management

October 9, 2017

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

Speaker: Dave Wegner, Senior Scientific Consultant, Jacobs Engineering



Adaptive Management. Those two words have become integral to water policy and management actions since the mid-1990's. Coupling adaptive management with water legislation, policy, and agency operations has become a requirement for political and public support and action. Due to the variability of water resources, the unknown impacts of climate change and extreme events have made adaptive management a publicly required element, but has it been for the right reasons and to what success?



If you can't make it to the seminar on October 9, join us online [here](#).

WRRC Brown Bag - Yuma Agriculture and the Yuma Center of Excellence for Desert Agriculture

October 17, 2017

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

Speaker: Paul Brierley, Executive Director, Yuma Center of Excellence for Desert Agriculture

Yuma County is in the top 0.5% of U.S. Counties in agricultural crop sales, producing nearly 90% of North America's winter leafy greens, but it is always striving to overcome challenges and be even more productive. What makes it such a top producer? And how does the Yuma Center of Excellence for Desert Agriculture (YCEDA) support this amazing industry?



YCEDA is a public-private partnership between the agricultural industry and the University of Arizona's College of Agriculture and Life Sciences. Guided by industry stakeholders, YCEDA brings together researchers and funding for projects ranging from irrigation and salinity management to disease mitigation, and from wildlife deterrence to drones and remote sensing.



If you can't make it to the seminar on October 17, join us online [here](#).



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

OTHER EVENTS

SNRE/WRRC Co-Sponsored Seminar

October 25, 2017

Time/Location: 3:00 p.m. - 4:00 p.m. / ENR2 S107 (1064 E. Lowell St.)

Speaker: Lisa Atkins, State Land Commissioner

The Arizona State Land Department manages approximately 9.2 million acres of State Trust lands within Arizona. These lands were granted to the State under the provisions of the federal Enabling Act that provided for Arizona's statehood in 1912. These lands are held in trust and managed for the sole purpose of generating revenues for the 13 State Trust land beneficiaries, the largest of which is Arizona's K-12 education.



SNRE Seminar - Desert Landscape Conservation Cooperative - Landscape Conservation Design Process



November 1, 2017

Time/Location: 3:00 p.m. - 4:00 p.m. / ENR2 S107 (1064 E. Lowell St.)
Speaker: Desert LLC Panel

The Bureau of Reclamation and the U.S. Fish and Wildlife Service have partnered to develop the Desert LCC. The Desert LCC is a bi-national, self-directed, non-regulatory regional partnership formed and directed by resource management entities as well as interested public and private institutions in the Mojave, Sonoran, and Chihuahuan Desert regions of the southwestern United States and northern Mexico. Through collaborative partnerships, the Desert LCC seeks to provide scientific and technical support, coordination, and communication to resource managers and the broader Desert LCC community to address climate change and other landscape-scale ecosystem stressors.

NEWS

WRRC Director Speaks at WATEC International Conference

The final component of WRRC Director Sharon Megdal's visit to the Middle East was her participation in WATEC, the international biennial Water Technology & Environment Control Exhibition & Conference. Held in Tel Aviv. For her fourth consecutive year as an invited speaker, Dr. Megdal participated in an interactive plenary panel on the topic "From Scarcity to Abundance: New perceptions about water value". Building upon the theme of the conference held the two days immediately prior to WATEC, Megdal noted that, unlike Israel, many regions - particularly growing regions - that face a scarcity of natural water resources have not yet moved from scarcity to abundance. Her second point was that addressing the wicked water problems many regions face requires a change in perspectives or perceptions. It requires interdisciplinary collaboration, and requires changing the questions, managing uncertainty, and creating resilience. In addition to her speaking role, Megdal spoke with many about potential collaboration opportunities and participated in a roundtable program organized by GlobalWaterWorks that focused on technological solutions to water challenges.



[WATEC Israel](#)

Groundwater as a Freshwater Resource



On September 23, 2017, Oregon State University Professor Michael E. Campana raised an interesting issue in his WaterWired blog post. The post referred to a video recently released by the World Bank which names water as 'precious' and a resource that is vital to the sustainability of humankind. In the video, the World Bank states that 4% of the Earth's water supplies consist of freshwater and of this, only 0.5% is safe for human consumption - a startlingly small number. But Dr. Campana points out that the 0.5% figure quoted in the World Bank video may be erroneous. The World Bank appears to be completely neglecting groundwater, which comprises more than 30% of total freshwater supplies. By eliminating groundwater from the conversation, the World Bank has skewed the numbers on water availability. As Campana wrote, this miscalculation does not negate the fact that fresh water supplies in many parts of the World are in peril, but it does indicate that the World Bank might benefit from a lesson from groundwater experts.



[Watch the Video](#)

[Read Blog](#)

Bringing Experience to the Team!



Growing up in Nogales, Arizona, Miriam Aleman lived through times of water shortages and water rationing. This experience ignited in her an appreciation for water conservation, an appreciation she carries with her into her new position as a Senior



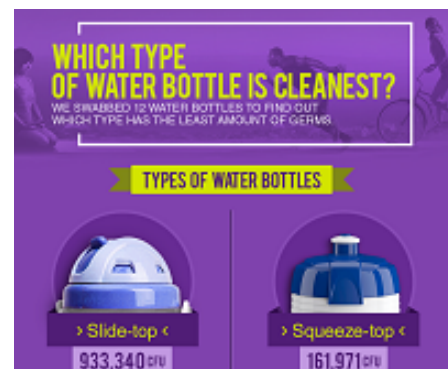
Instructional Specialist with the APW Tucson Education Program. Miriam brings with her the experiences she gained as an APW Water Educator for the past 2 years, as well as her years as a Surveillance Officer and a Spanish language Interpreter. A motivated learner, she is currently working towards a Bachelor's Degree in Environmental Science through the University of Arizona's Soil, Water and Environmental Science Department. Miriam enjoys inspiring and challenging young minds through water education and envisions a long and enjoyable career with Arizona Project WET.

Welcome to the team, Miriam!

[About APW](#)

Which is Cleaner - Your Water Bottle or Your Dog's Chew Toy?

We all know that staying hydrated can be a challenge to those of us living in hot and dry Arizona. Most of us maintain a source of hydration close at hand in the form of a water bottle. However, according to a recent study reported by treadmill.com, your favorite reusable drinking container can be harboring thousands of moisture-loving bacteria. Water bottles were found to contain as many as 900,000 colony forming units (CFU) of bacteria per square centimeter, whereas a typical dog toy contained fewer than 3,000 CFU per square centimeter. For more information on



this study, including which water bottle types harbored the most bacteria and instructions on bottle cleaning, click the link below.

[Water Bottle Review](#)

Upper Gila Watershed Forum Attracts Enthusiastic Audience

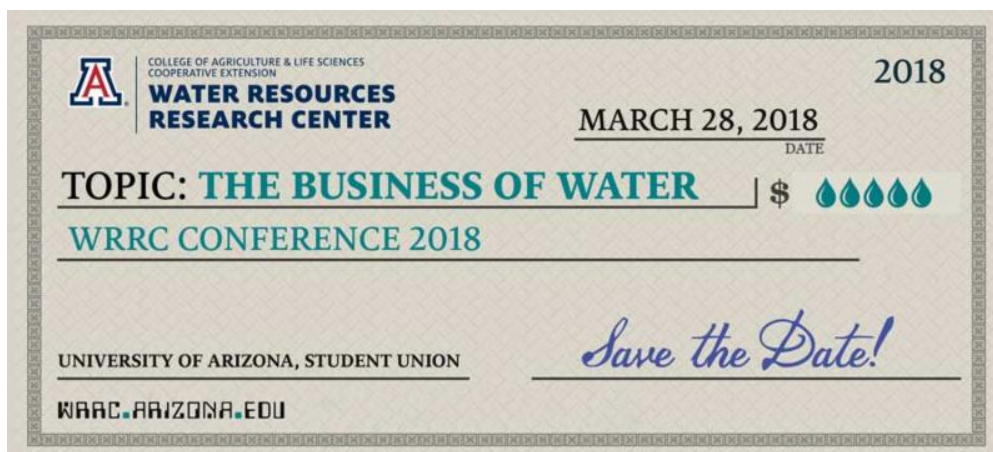
More than 130 individuals attended in the first annual State of the Watershed forum for the Upper Gila River at Eastern Arizona College in Thatcher, AZ. Attendees heard from local and state experts who shared the most current information about natural and water resources in the Upper Gila Watershed. Arizona Senator Jeff Flake gave the luncheon keynote and fielded audience questions. Participants expressed hope that the forum will become an annual event.



Be sure to check out next week's Weekly Wave for speaker presentations.

[Read The Copper Era Article](#)

ANNOUNCEMENTS



- [October 4 WMG Citizen Science Monitor Training](#)
- [October 9 SWES Colloquium - Dr. Susan Crow](#)
- [October 10, 12, 18 Workshops - Santa Cruz River Improvements Survey](#)
- [October 13 Call for Papers - Tamarisk Coalition's 16th Annual Riparian Restoration Conference](#)
- [October 31 Applications for Heritage Fund Grants Due](#)
- [November 1 Call for Abstracts - BSMAR16](#)
- [November 17-17 2017 NWRA Annual Conference](#)
- [November 16 Save the Date - Center of Excellence 2017 Research Symposium](#)

- [January 5 Call for Poster Abstracts - 2018 MSSC Annual Salinity Summit](#)
- [January 26-27 Urban Waterfronts Conference](#)
- [Arizona Water Map Poster Available for Purchase](#)

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