

WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**

April 14, 2017 / Volume 5, Issue 15

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

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Photos: Lynn Ketchum-College of Agriculture and Life Sciences

WRRC 2017 Conference Videos are Posted on the UA Youtube Channel

The Water Resources Research Center's 2017 annual conference, *Irrigated Agriculture in Arizona: A Fresh Perspective*, attracted over 300 people from around the state to discuss and explore the relationship between agriculture and water. Keynote speakers and panels addressed critical issues such as leadership, whole farm management, and fallowing. Several speakers focused on the future; planning for agricultural water needs, addressing challenges, sharing outlooks regarding Arizona agriculture's future given the potential for water shortages.

If you were unable to attend the conference or would like to re-visit one of the discussions, videos are now available via the WRRC playlist on the [UA Youtube channel](#).

WRRC EVENTS

WRRC Brown Bag - The Financial Benefits of Water Conservation: The Tucson Story

April 19, 2017

Time/Location:

12:00 p.m. - 1:30 p.m. / WRRC Sol Resnick Conference Rm. (350 N. Campbell Ave.)



If you can't make it to the live seminar on April 19th, join us online [here](#).

Speakers:

Candice Rupprecht , *Water Conservation Specialist, Tucson Water*
Mary Allen, P.E., *Pima County Wastewater Reclamation*

"Why do you ask me to conserve water and then raise my rates?" This question is frequently asked by water customers, often without a clear answer from utilities except to say that water rates would be higher today without conservation. This presentation will share the findings of the *Tucson Avoided Cost Analysis* done by WaterDM in partnership with the Alliance for Water Efficiency, Tucson Water, and Pima County Regional Wastewater.

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Sally & Ralph Duchin Campus Lecture Series - Israel's Shared Borders and Shared Waters: Water as a Bridge and a Barrier

April 19, 2017

Time/Location:

4:00 p.m. / The University of Arizona Hillel Foundation (1245 E. 2nd St.)



Speaker:

Sharon B. Megdal, *Director, UA Water Resources Research Center*

In this presentation, Prof. Sharon B. Megdal will explain how Israel has addressed the scarcity of freshwater and how the lessons learned by Israel can assist us here in the Southwest as we deal with low flows on the Colorado River and growing population. She will discuss collaborative efforts involving Israelis, Jordanians, and Palestinians. She will also address what she sees as some challenges and barriers to water cooperation. Her presentation will include reflections on her most recent visit to the Middle East with the Mexican and U.S. Commissioners of the International Boundary and Water Commission and more recent efforts to foster dialogue and professional exchanges.

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WRRC Brown Bag - Plugging into WEST: Researchers, Industry, and Arizonans Benefit by Connecting with the UA Water and Energy Sustainable Technology Center



April 26, 2017

Time/Location:

12:00 p.m. - 1:30 p.m. / WRRC Sol Resnick Conference Rm. (350 N. Campbell Ave.)



If you can't make it to the live seminar on April 26th, join us online [here](#) .

Speakers:

Ian Pepper, *Co-Director, WEST Center*

Bob Stea, *Associate Director, Research Business Development, WEST Center*

In 2016 WEST became the most recently established RDI "Institutional-level" Center at the University of Arizona. Such Centers are initiated to provide unique infrastructure or technological capabilities to the UA personnel on campus. The two Co-directors, Ian Pepper and Shane Snyder, report to the Senior Vice President for Research within the Office of Research, Discovery and Innovation. WEST focuses on the water/energy nexus and has unique features that allow for innovative research and technology that can make research proposals more competitive. WEST partners with companies in the private sector and public utilities, and focuses on water and wastewater treatment, providing opportunities to pursue real-world problems.

[More](#)



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

OTHER EVENTS

Screening and Panel Discussion - *Paya: The Water Story of the Paiute*

April 21, 2017

Time/Location:

6:00 p.m./ ENR2 building, Room S107 (1064 E. Lowell St., Tucson).



The Paiute Native Americans constructed and managed 60-miles of intricate irrigation systems in Owens Valley for millennia long before Los Angeles secured its largest source of water through modern engineering a century ago. Today, 150 years after the Paiute returned to the region, they continue to fight to save their waterworks. Paya, which means water in Paiute, intends to reveal both Paiute history and water practices, and strengthen their legal case through the powerful medium of film.

[More](#)

Lecture - Decision Support for Uncertain Climate Futures: The Confidence Trap

April 27, 2017

Time/Location:

12:00 p.m. - 1:00 p.m./ ENR2 Building, Room S107
(1064 E. Lowell St., Tucson)

Speaker:

Jeff Arnold, *Lead Climate Scientist, U.S. Army Corps of Engineers*



For more than 200 years, the U.S. Army Corps of Engineers (USACE) has had primary responsibility for water resource operations on most major U.S. river systems. Managing the impacts of climate variability and change is a significant challenge; projections of specific, possible threats and impacts to regional scale hydrology are still uncertain enough that explicit guidance is needed on their interpretation and use. This talk will describe new approaches to helping decision makers understand uncertainties in managing real river systems, aiming to avoid communication issues about confidence while respecting uncertainties.

[More](#)

Colloquium - Managing the Colorado River in Interesting Times: Overallocation, Drought and Climate Change



April 27, 2017

Time/Location:

4:00 p.m./ ENR2 Building, Room 225 (1064 E. Lowell St., Tucson)

Speakers:

Ted Cooke *General Manager, Central Arizona Project*

Marie Pearthree, P.E. *Former Deputy General Manager, Central Arizona Project*

This is a critical time for the State of Arizona and key sectors of its economy, given the impacts of the 17 year drought on the Colorado River and historic overallocation of its supplies characterized as a "structural deficit." This colloquium will present the history of Colorado River management from 1922 to the present, focusing on the evolution of decision making on the river over time, the impacts of changing climatic and hydrologic conditions on water supplies, and current negotiations among the seven Basin States and Mexico.

NEWS

Jean McLain to Present at Idaho Water Reuse Conference

On May 17 and 18, 2017, WRRRC Associate Director Jean McLain will travel to Boise, Idaho to present *Recycled*



Municipal Wastewater and Antibiotic Resistance: Is There a Connection? at the Idaho Department of Environmental Quality's 2017 Water Reuse Conference. Many recent scientific studies have attempted to identify direct links between bacterial antibiotic resistance and water reclamation processes, but it is becoming increasingly clear that such links are extremely complex. McLain will discuss the fact that, though antibiotic resistance genes can be detected throughout the water treatment process, culturable bacteria are difficult to identify within recycled water distribution systems, suggesting that current water treatment methods are effective at removing viable resistant bacteria. The potential impact that natural antibiotic resistance may have in skewing research results will be discussed. The presentation will end with a "call to action" for environmental scientists to design more accurate research studies that fully consider natural resistance.



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Students Learn About Conservation Through Practicing It



The Littleton School District students were in for a treat last month! 646 fourth-grade students from 25 classes at seven elementary schools participated in Arizona Project WET's (APW) Water Festival,



enhancing their knowledge of groundwater, the water cycle, water conservation, and Arizona's watersheds. After the festival, APW partnered with The Nature Conservancy (TNC) and PepsiCo Recycling to initiate a three week recycling drive for the classes with the goal of conveying the connections between recycling and water conservation. The five classes to collect the most recyclables were treated to a pizza party! In just three weeks, students collected over 24,000 recyclables by collecting recyclables at school and in many cases from their parents' work offices, neighbors, and other family members. The students' efforts helped make this drive a huge success. Through the Water Festival and recycling drive, APW, TNC and PepsiCo Recycling hope to encourage these students to continue taking action for their community and world!

Find out more about APW's direct community outreach on our [Facebook page](#) .

WRRC Research Analyst Wins Thinkwater Fellowship

ThinkWater recently announced the selection of 10 leaders in water education, outreach, and extension to be ThinkWater Fellows for 2017-18. Dr. Grant Weinkam, Research Analyst, University of Arizona Water Resources Research Center, was among those new fellows selected from the many outstanding applications from candidates across the country. As a member of the new ThinkWater fellowship, Weinkam will interact with others engaged with water-related issues and learn a proven method for teaching the universal rules underlying systems thinking suitable for all ages and populations.



[More](#)



USGS Assessment of Brackish Water Could Help Nation Stretch Limited Freshwater Supplies

A new nationwide assessment by the U.S. Geological Survey suggests that the nation's brackish groundwater could help stretch limited freshwater supplies. This study, the first of its kind in more than 50 years, found that the amount of brackish groundwater underlying the country is more than 800 times the amount currently used each year. With issues like drought, groundwater depletion, dwindling freshwater supplies, and demand for groundwater expected to continue to rise, understanding brackish groundwater supplies can help determine whether they can supplement or replace over-taxed freshwater sources in water-stressed areas.



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Tucson Water Promotions Advance UA Hydrology Alums

Dee Korich was recently promoted to be the new Chief Hydrologist for Tucson Water in the Water Resources Section of the Planning and Engineering Division. Korich started her career with Tucson Water as an intern and worked in positions with increasing responsibility over the years. She was Lead Hydrologist in the Water Resources Section before accepting the Chief Hydrologist position. Dee has a M.Admin. from Northern Arizona University and a M.S. in Hydrology from UA.



Candice Rupprecht was named Water Conservation Program Supervisor, taking over for Daniel Ransom in the Strategic Initiatives Division. Rupprecht joined Tucson Water in 2014 after working for several years at the Water Resources Research Center, where she focused on water education, engagement and conservation research. In her time at Tucson Water, she launched two new rebate programs and elevated Tucson Water's efficiency efforts nationally. She has an M.S. in Hydrology and a B.S. in Geosciences from UA.

ANNOUNCEMENTS

- [Final Call - AWRA Israel Conference Call for Abstracts - Deadline: Next Monday, Apr. 17, 2017](#)
- [BBCS Postdoctoral Research Associate Job Posting](#)
- [Community Water Coalition \(CWC\) is Seeking a Coordinator](#)
- [Arizona Domestic Well Owner's Workshop - April 22, 2017](#)
- [AWRA Annual Conference Abstracts due May 8, 2017](#)
- [Agribusiness & Water Council of Arizona's Annual Meeting & Water Conference - Trumping Arizona Ag - May 19, 2017](#)
- [WaterReuse Arizona 2017 Offer Scholarship](#)

- [Save the Date: The Waterfront Center - Urban Waterfront Planning, Development, and Culture-January 26-27, 2018](#)

WATER RESOURCES RESEARCH CENTER

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