



#### March 22, 2019 / Volume 7, Issue 10

The <u>Water Resources Research Center</u> - a research and <u>Extension</u> unit of the <u>College of Agriculture and Life</u> <u>Sciences</u>

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# **Binational Summit on Transboundary Groundwater includes WRRC Presenters**

The Binational Summit on Transboundary Groundwater at the US-Mexico Border, which is organized by the International Boundary and Water Commission, United States and Mexico (IBWC), will take place April 10-11 in El Paso, Texas. The Summit brings together US and Mexican federal, state, and local agencies, as well as non-governmental organizations and the academic community, to share information and promote U.S. and Mexico cooperation on groundwater resource related issues. The keynote address will be given by UA Water Resources Research Center (WRRC) Director Sharon B. Megdal. Other WRRC staff speaking at the conference include Research Analyst Jacob Petersen-Perlman, who will participate in a panel on stakeholder engagement, and Senior Research Specialist and Ph.D. Candidate Elia Tapia, who will present on hydrogeologic modeling. Arizona will also be represented by James Callegary, U.S. Geological Survey, who has partnered with the WRRC and will also be speaking and moderating at the conference, and Einav Henenson, Arizona Department of Water Resources. This forum

hopes to promote the state of knowledge about regional, transboundary groundwater systems and to learn from other geographic regions that face similar needs.

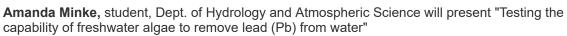
#### **View Agenda and Register**

### **WRRC EVENTS**

### WRRC Brown Bag - 104b Grant Recipients Presentations

March 28, 2019

#### Speakers:



**Drew Eppehimer**, Ph.D. student, Arid Land Resource Sciences Program will present "A Case Study on the Santa Cruz River: Can treated wastewater support desert fish?"

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

This Brown Bag will feature presentations by UA students who received research grants in 2018 through the WRRC from the Water Resources Research Act, Section 104(b) grant program. This program fosters regionally important research on water and related issues and encourages students and young scientists to pursue careers in water resources.

#### More information here

Register to view presentation online

## WRRC On-The-Road - Second Cobre Valley Forum on Water

**April 9, 2019** 

**Time/Location:** 8:00 a.m. - 2:00 p.m. / Gila County Fairgrounds (900 E. Fairgrounds Rd., Globe)



In September 2018, leaders from government, industry, and not-for-profit organizations shared their water experiences and lessons at the First Cobre Valley Forum on Water. We learned about local and regional opportunities to create a more resilient water future for healthy communities, businesses, and the environment. Since then, the WRRC and community partners have been working to make progress on some of the top priorities related to water and community well-being that emerged from the first Forum. Join us to learn about recent progress and project results, engage with local decision makers, ask questions, and share ideas about water in the Globe-Miami area.

Presentation topics include:

- Water and Supply Demand
- Trails and Environmental Stewardship
- Water Education and Awareness
- Connectivity Planning



#### **UPCOMING BROWN BAGS**

April 24 Tanya Quist - UA Arboretum Integrates
 Desert Landscaping and Tree Shade Project
 into its Website



### **OTHER EVENTS**

### Panel Discussion - The Colorado River and Arizona's Drought Contingency Plan

March 25, 2019



**Time/Location:** 5:30 p.m. - 6:30 p.m. / UA James E. Rogers College of Law (1201 E. Speedway Blvd., Tucson)

#### **Panel Members:**

**Christopher Avery**, Chief Water Counsel and Principal Assistant City Attorney for the City of Tucson

**Kirsten Engel**, Charles E. Ares Professor of Law at the College of Law and Member of the Arizona House of Representatives, representing District 10

**Robert Glennon**, Regents' Professor and Morris K. Udall Professor of Law and Public Policy at the College of Law

The University of Arizona James E. Rogers College of Law invites you to a discussion about the Colorado River and Arizona's Drought Contingency Plan. The distinguished panel will address questions about the motivation for the plan, what it does, how it affects Tucson and Arizona as a whole, who benefits/suffers from the plan, and whether it actually conserves water.

#### **Event Flyer**

### **WRRC NEWS**

## **APW Works to Align the Stars at the University of Arizona**

The UA offers opportunities too numerous to count. But teenagers need help connecting the dots. APW's role is to link real world and relevant learning with applied research. To this end, superstar Matt Haverty, the 2018 Arizona Earth Science Teacher of the Year (National Association of



Geoscience Teachers), was invited to bring his 32 Amphi High School, AP Environmental Science students to the UA on May 6. The day began with a presentation from Dr. Monica Ramirez-Andreotta, a superstar in the UA Department of Soil, V

presentation from Dr. Monica Ramirez-Andreotta, a superstar in the UA Department of Soil, Water and Environmental Science and winner of a 2019 American Association for the Advancement of Science Award. She dazzled the students with examples of real-world environmental problems being solved by the integration of biology, physics, chemistry, geology, and social sciences. Students then got to visit three labs focused on Microbiology, Soils, and Chemistry.

WRRC and SWES research scientist (and star in her own right), Jean McLain, used the recent lettuce contamination event in Yuma as a teaching tool. In her lab, students counted E. coli colonies on agar plates determining whether the water sample on their spread-plate met Arizona's microbiological water quality guidelines. In the two other labs, students used an element X-ray detector instrument to analyze various items for heavy metals, such as lead or arsenic and an Infrared spectrometer gas analyzer to measure the carbon dioxide gas in desert soils with and without compost.

We work to align the stars and develop new ones!

## **Drought Contingency Plan Submitted** for Implementation

On Tuesday, March 19, the Governor's representatives of the seven Colorado River Basin States and key water districts formally submitted Drought Contingency Plans to Congress for immediate implementation. This agreement between Arizona, California, Nevada, New Mexico, Utah,



and Wyoming voluntarily cuts water use to protect the Colorado River amid a 19-year drought. U.S. Bureau of Reclamation Commissioner Brenda Burman commended the group for reaching a consensus on the plan. News outlets from all over the country have tuned into to this topic, including the New York Times, where many water specialists, including WRRC Director Sharon B. Megdal, provided quotes on the topic.

Arizona Republic
Arizona Daily Star
New York Times

## World Water Day Reflections by WRRC Director Sharon B. Megdal

World Water Day is a good day for reflection. Just a few days ago, on March 19, 2019, representatives of the seven states of the Colorado River Basin gathered in Phoenix, Arizona to sign a letter asking Congress to approve



implementation of the drought contingency plans detailed in the documents attached to the letter. Immediately thereafter, Bureau of Reclamation Commissioner Brenda Burman announced termination of the Department of Interior's request for further input on how to reduce the water supply risks the Colorado River Basin is facing. The March 19th signing and announcement came less than two months after the Arizona Legislature and Governor approved historic actions requisite to Arizona's participation in the Lower Basin Drought Contingency Plan.

#### Read the entire article here

## **Crystal Tulley-Cordova Presents on Hydrology in the Navajo Nation**



The North American monsoon contributes significantly to total annual precipitation all across Arizona, including the Four Corners region. Yet how the monsoon season has contributed over space and time, and the origins of the



precipitation, have been understudied. Dr. Crystal Tulley-Cordova presented on her research that addressed these gaps in knowledge with a Brown Bag Seminar on March 14, entitled "Stable Isotopes in Precipitation and Meteoric Waters: Investigating the North American Monsoon Across the Four Corners Region." Dr. Tulley-Cordova used a hydrometeorological network of 90 precipitation sites, investigating whether there are different hydroclimatic regions in the Navajo Nation, seasonal precipitation patterns, and variabilities in the length and the onset of the monsoon. She is now the Principal Hydrologist at the Navajo Nation Department of Water Resources - Water Management Branch.

#### **View Recorded Brown Bag**

### Miami Beach's Innovative Approach to Reduce Water Bottle Waste

Bottled water consumption is continuing to grow year after year. With the increase in consumption, plastic water bottles continue to pile up in droves in riverbeds, beaches, and sidewalks. As reported in *Slate*, the City of Miami Beach, FL, is deploying a new strategy to help combat this problem. In partnership with the Israeli start-up Woosh,



Miami Beach has installed stations in several locations that dispense water after customers swipe a credit card and push a button. Fill-ups cost 50 cents. Customers can enjoy the benefits of "automated O3-based innovative purification", "accurate bottle fill", and "sensors that detect bottle presence." While this innovation may sound like a water fountain, it also may help to reduce single-use plastics.

#### Read the article

### **ANNOUNCEMENTS**

Correction from last week's Weekly Wave; North Carolina State University is a NIWR institute not University of North Carolina

- March 22 AZ Water Scholarship Applications Due
- March 26-28, Ten Across (10X) Water Summit Agenda Posted
- March 28 Arizona Project WET Tucson Water Festival Volunteers Needed
- <u>March 31 April 3 AWWA Sustainable Water Management Conference Program Online</u>
- April 1 Babbitt Dissertation Fellowships Application Deadline
- April 6 2019 Arizona Hydrological Society Symposium Call for Abstracts
- April 10-11 IBWC Binational Summit on Groundwater

- April 12 2019 UCOWR/NIWR Annual Water Conference Early Bird Registration Ends
- April 15 New Mexico WRRI 63rd Annual Water Conference Abstracts Due
- April 23-25 US-Mexico Border Water Summit Agenda Posted & Call for Student Posters (Due April 1)
- May 6 AWRA 2019 Annual Water Resources Conference Abstracts Due
- May 10 Desert Horticulture Conference Early Registration Closes
- May 15 CAP Award for Water Research Submission Deadline
- May 28 AWRA Summer Conference Early Registration Closes
- <u>May 31 Renewable Natural Resources Foundation 2019 Awards Program Nominations Due</u>
- <u>July 31 XVII World Water Congress Call for Abstracts, Special Session & Side Events</u>

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