

WEEKLY 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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WRRC Annual Conference: Online Registration Closes March 21

Online registration for the March 28, 2018, WRRC Conference, *The Business of Water*, will no longer be available after March 21st, so please register soon! You can still register on-site at the conference, which will be held at the University of Arizona Student Union in Tucson, but online registration ensures we have everything in place for your best conference experience.

This year's conference, *The Business of Water*, features morning panels that will broaden our understanding of negotiating, financing, and securing reliable supplies of water, along with the implications of these activities. The first panel, moderated by Rod Smith, President of Stratecon, brings Mike Irlbeck, Director of Business Development at EPCOR Water, Chris Higgins, Executive Director at Goldman-Sachs, and John H. Moffatt, Economic Development Director at Pima County together to discuss financing and benefits of public-private partnerships for projects in Texas,

California, and Arizona. We follow this with a panel on water transactions and their role in creating sustainable water supplies. David Wegner, Senior Scientific Consultant, Jacobs Engineering will moderate the panel, which includes Peter Culp, Partner at Culp & Kelly addressing transaction complexities, Cynthia Campbell, Water Resources Management Advisor for City of Phoenix discussing lessons learned, and Richard Morrison, Chairman of Morrison Enterprises presenting thoughts on water transaction ethics. Join us for a full day of thought-provoking presentations and community conversation.

[Agenda](#)

Register Today!

WRRRC EVENTS

WRRRC Brown Bag - WATER CASA at 20: Lessons Learned, Unlearned, or Relearned

March 19, 2018

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

Speaker: Val Little, *Director, Water Conservation Alliance of Southern Arizona (Water CASA)*

As Water CASA reaches a milestone -- 20 years of water conservation advocacy, Val Little allows herself a look back and a look forward, through the lens of Water CASA's accomplishments, at some lessons learned from its efforts. Much has changed in the past 20 years in the field of water conservation and in overall water management. A candid look at some of these changes can inform decisions going forward. "If I have learned one thing over the past 20 years, it is that water management is only going to get more complicated and costly in the future," says Little. "We must be well-informed and well-prepared to make clear-eyed, rigorous choices for the benefit of all of us."



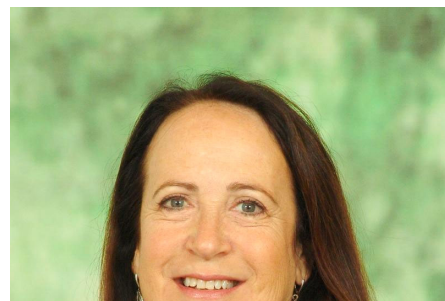
If you can't get to the WRRRC on March 2, you can join us [here](#).

Special Upcoming WRRRC Brown Bag

April 12, 2018

Time/Location: 4:00 p.m. - 5:15 p.m. / ENR2, S107 (1064 E. Lowell St., Tucson)

Note special time and location



Speaker: Felicia Marcus, Chair, California State Water Resources Control Board



Felicia Marcus was appointed by Governor Jerry Brown to the State Water Resources Control Board for the State of California in 2012 and designated by the Governor as Chair in April of 2013. The Board implements both federal and state laws regarding drinking water and water quality, and it implements the state's water rights laws. The Board sets statewide water quality, drinking water, and water rights policy; hears appeals of local regional board water quality decisions; decides water rights disputes; and provides financial assistance to communities to upgrade water infrastructure.

Video will be posted shortly after the presentation.

[More About Felicia Marcus](#)

Upcoming Brown Bag Seminars

- **Apr. 17** - Chris Castro, *Associate Professor, Department of Hydrology & Atmospheric Sciences, University of Arizona*
- **Apr. 25** - Melanie Stansbury, *Sr. Advisor and Consultant, Utton Transboundary Resources Center, University of New Mexico*
- **Apr. 26** - Cindy Wallace, *Research Geographer, USGS Western Geographic Science Center*



Missed a Brown Bag seminar? Find it posted on our website [here](#).

WRRC NEWS

Interview with WRRC Director Aired on Arizona 360

On March 9th, WRRC Director Sharon Megdal spoke with Lorraine Rivera of Arizona Public Media for the Arizona 360 show, which airs Fridays at 8:30 p.m. on PBS 6 and Saturdays at 8 p.m. on PBS 6 PLUS. Dr. Megdal drew a distinction regarding a potential shortage on the Colorado River between "crisis" and "challenge". She described who would feel the first effects of shortage if it is declared and what Arizona is doing now to avert a shortage. "We're working in certain ways as Arizona should," she said. She noted that Arizona has done a good job in the past of overcoming water challenges, but we should not diminish the importance of our vulnerability to a shortage. "We need to prepare for it," she said, "and the sooner we do that, the better."



[View Recorded Interview](#)

Fresh Water Springs - The Pozos of

the Gran Desierto

At this week's WRRC Brown Bag Seminar, Dr. Ben Wilder, Director of the Desert Laboratory on Tumamoc Hill, described the unique water resources of the Gran Desierto region of the Sonoran Desert. In this, the largest extent of sand dunes in North America, one can find an array of freshwater springs, or pozos, punctuating the salt flats where the dunes meet the sea. Dr. Wilder began the presentation by describing the flora and fauna of the pozos and the long archeological history of human interaction and dependence on this fresh potable water source. He shared numerous beautiful images of these freshwater islands in a sea of sand taken by photographer, Ben Johnson, one of his collaborators on the project. After providing historical background, Dr. Wilder set the geologic stage by describing how the sand dunes consist of ancient Colorado River sediments and then described work done with UA Geosciences and Hydrology graduate student Hector Zamora to the source and age of the water in the pozos. Stable isotope analyses showed that the waters were not derived from recent rainfall in the Pinacate Mountains as previously thought, but were actually very old, with dates generally ranging between 8,000 and 16,000 years, but as old as 30,000 years in a few locations. He added that this work is a part of the [Next Generation Sonoran Desert Researchers 6&6 art-science collaboration](#).



[View Recorded Brown Bag](#)

Head on Over to the Hassayampa River Preserve



Exciting changes are happening at the Hassayampa River Preserve. If you haven't been there in a while, now is the time to rediscover it. In May of 2017, The Nature Conservancy

turned over the keys and the reigns to Maricopa County Parks and Recreation. New Park Manager, Jessica Bland, has a clear vision for expansion. The Ranch House Visitor Center has been remodeled and an outdoor classroom with restrooms are underway. The outdoor classroom was envisioned to assist educational programs like Arizona Project WET's Aqua STEM program, which leads regular riparian habitat science investigation activities for 4th through 6th graders at the Preserve. Aqua STEM students love being outdoors and their excitement is palpable. They often shriek with delight when they discover a bird's nest or see an animal first hand.



The Grand Reopening of the Preserve is March 24th from 9 AM to 11 AM. Head on over for a visit. You'll be glad you did!

[Learn More About APW](#)

WRRC Representatives Attend BSMAR16 Conference

On March 6, WRRC Director Sharon B. Megdal, along



with two graduate students, Rebecca Bernat and Mary Belle Cruz Ayala presented at the 16th Biennial Symposium on Managed Aquifer Recharge in San Diego, CA. This year's topic speaks of the expanding role of groundwater banking in securing water for a water-scarce U.S. Southwest and elsewhere around the world. Dr. Megdal presented "The Role of Managed Aquifer Recharge in Meeting the Statutory Requirements of the Central Arizona Groundwater Replenishment District", and Bernat presented "Meeting Arizona Water Management Objectives with Long-Term Storage Credits" during the Arizona MAR session. Cruz Ayala presented her poster titled, "Public Policies for Managed Aquifer Recharge in Sonora, Mexico". She identified new approaches to her research by answering questions about her poster.



[BSMAR16](#)

The Irish Potato Famine - Could It Happen Again?

This is a question addressed in a recent blog post authored by WRRRC Research Scientist Jean McLain. In a post on the "Soils Matter, Get the Scoop" blog published by the Soil Science Society of America, Dr. McLain discusses the social and agronomic factors that contributed to the Irish potato famine of the mid-1800s. Though monoculture cropping can improve efficiency and yield, McLain states that modern farming practices in the U.S., which rely on crop rotation, reduce the potential for widespread crop loss.



[Read Blog](#)

ANNOUNCEMENTS

- **[NOW AVAILABLE: "The OECD Principles on Water Governance: From policy standards to practice", Water International - Special Issue](#)**
- **[March 21 GWP Native Plant Nursery Manager - Application Due](#)**
- **[March 25-28 AWWA Sustainable Water Management Conference](#)**
- **[April 3 Support Tucson C2E on Arizona Gives Day at Borderlands](#)**
- **[April 9 Benson Riparian Restoration and Tamarisk Beetle Workshop](#)**
- **[April 16 AHS Symposium - Call for Abstracts](#)**
- **[April 24-26 IFC Flow 2018 - Registration Open](#)**
- **[May 2-4 AZ Water 91st Annual Conference & Exhibition](#)**
- **[May 10 PNW WaterReuse Conference - Advance Registration Ends](#)**
- **[May 21-24 U.S. EPA Region 9 Tribal Drinking Water Symposium - Save the Date](#)**

- [June 15 WaterReuse AZ 2018 Scholarship - Application Due](#)
- [June 26-28 UCOWR/NIWR Annual Water Resources Conference - Registration Open](#)
- [July 9-11 AWRA Summer Conference: The Science, Management, and Governance of Transboundary Groundwater](#)
- [September 26 Innovations at the Nexus of Food, Energy, and Water Systems \(INFEWS\) - NIFA Grant Application Due](#)

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