



November 3, 2017 / Volume 5, Issue 30

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>

In this issue: Swan Park Wash / Colorado River / Wildcat Corps / Well Owner's Guide / Students / Mrs. Green' World



The WRRC is excited to be hosting a diverse and stimulating lineup of upcoming Brown Bag speakers! In addition to Andrew Craddock of the CAGRD (November 14) and Meghan Smart and Bryant Dickens of ADEQ (December 6), speakers are being scheduled for Spring 2018. On January 23, we will welcome Cindy Wallace of the USGS, who will speak on using GIS to inform resource management projects. We will host Inter-Tribal Council of Arizona Director Maria Dadgar on February 6, and a WRRC/USGS team (Sharon Megdal, Jacob Petersen-Perlman, and James Calegary) on February 20. John Fleck author of *Water is for Fighting Over and Other Myths about Water in the West*, will speak on February 22, while March and April will bring Desert Laboratory on Tumamoc Hill Director Ben Wilder and California State Water Resources Control Board Chair Felicia Marcus.

respectively. Be sure to watch the Weekly Wave for details on these and other future seminars.

A full list of upcoming Brown Bags can be found on the WRRC Brown Bag Seminar Page.

WRRC Brown Bags

WRRC EVENTS

WRRC Brown Bag - YMIDD/CAGRD Pilot Rotational Fallowing Program, Good for Business, Good Water Management



November 14, 2017

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

Speaker: Andrew Craddock, Analyst, Water Supply Program, Central Arizona Groundwater Replenishment District (CAGRD)

New development in Central Arizona must comply with Assured Water Supply Program requirements that are among the most stringent in the country. Membership in CAGRD provides one mechanism for meeting this requirement because CAGRD's Water Supply Program takes responsibility for acquiring water supplies to meet its members' replenishment obligations.



If you can't make it to the seminar on November 14, join us online **here**.

WRRC Brown Bag - Camo, Hose Clamps, and Pixels: Arizona's Approach for Low-cost Intermittent Stream Monitoring

December 6, 2017

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

Speaker: Meghan Smart, Environmental Scientist, ADEQ



If a picture is worth a thousand words, why not extrapolate from digital pixels and use that as a low cost, continuous, and unambiguous method to study intermittent streams? Arizona's 6,000 miles of intermittent streams are understudied because they are logistically difficult to sample and because perennial streams are historically thought of as 'more important'. The Arizona Department of Environmental Quality (ADEQ) developed an intermittent stream monitoring program using time-lapse photography and a probabilistic approach to fill the large data gap.



If you can't make it to the seminar on December 6, join us online here.



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

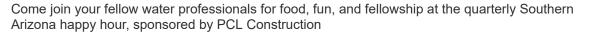
OTHER EVENTS

Southern Arizona Water **Professionals Happy Hour**

November 6, 2017

Time/Location: 5:30 p.m. - 7:30 p.m. / Brother John's

BBQ (1801 N. Stone Ave.)





Tumamoc Lecture Series - Beyond Cattle and Grains: Adaptation to Global Change in Arid Rural Communities

November 8, 2017

Time/Location:

6:00 p.m. / Desert Lab Library (1675 W. Anklam Rd., Tucson)

Speaker: America Lutz Ley, Assistant Professor, Center for Development Studies, El Colegio de Sonora

People in rural Sonoran communities, as in other places

of the world, adjust their behaviors not to climate change only, but to a combination of multiple stressors. This research shows that the livelihood profile - or what people do for a living- in the rural communities influences the type of stressors they perceive as priorities for adaptation. In general, modifications in the environment and climate events are perceived widely, but climate change as a large scale process is under-recognized in the Sonoran communities analyzed.

Please contact **Cynthia Anson** to reserve a seat.

AZ Water Luncheon- The Town of **Marana's Water Reclamation Facility Phase 1 Expansion Project**





Tumamoc Hill Lecture Series

nd Caltile and Grains: Adaptation to l Change in Arid Rural Communities

Please contact Cynthi

or 520-629-9455 to

America Lutz Lev El Colegio de Sonora

Wednesday

November 8th 6:00 p.m

Desert Lab Library A UA Science

December 7, 2017

Time/Location: 11:30 a.m. - 1:00 p.m. / Hotel Tucson City Center (475 N. Granada, Tucson) **Speaker:** Stephen Dean, Town of Marana

Stephen Dean of the Town of Marana will briefly describe and illustrate the Water Reclamation Facility (WRF) Master Plan, Design, and Construction Manager-At-Risk (CMAR) for the Town of Marana's WRF Phase 1 Expansion, which was implemented in order to help meet the overarching goals of the community.

Sponsorships allow up to four students to attend this luncheon at no charge, but pre-registration is mandatory. Students interested in this opportunity are encouraged to contact **Carol Johnson**

Register

NEWS

Swan Park Wash Project Work Begins

Changemaker High School is leading a Tucson Conserve2Enhance (C2E) Community Grant funded project in the Naylor Neighborhood to restore a portion of Swan Park Wash. The "Saving Water and Nature: Swan Wash Restoration" project will make improvements to Swan Park through stormwater harvesting on the west end of the park. The project, which officially broke ground on October 18, 2017, consists of a series of basins that will spread and slow the flow of water in the wash to



support native riparian vegetation and reduce street flooding. Pima County is doing the major earth moving as part of a project funded through a neighborhood reinvestment grant, and Changemaker students, staff, and volunteers will complete the work with rockwork and plantings. C2E is a program that motivates voluntary water conservation by linking savings to environmental enhancement. Tucson C2E funds projects designed to restore and maintain urban washes and riparian areas for the benefit of the community.

Tucson C2E Community Grants

Study Finds Reduced Flow from Hotter Upper Colorado River Basin

Researchers at the U.S. Geological Survey, the Nevada State Climate Office, and UA documented a substantial reduction in the ratio of streamflow to precipitation, called runoff efficiency, in the Upper Colorado River Basin. The authors attribute this change to higher temperatures across the basin. Published in the American Meteorological



Society's online journal Earth Interactions, the study found temperature increases since 1980 have led to a 7 percent decrease in average annual streamflow. The reduction in runoff efficiency is especially pronounced in the warm season (April - September), which indicates that increased evaporation or snowmelt is more important than rain or snow in contributing to change in river flow.

Read Article

"What are you doing for others?"



In a 1957 speech, Martin Luther King Jr. described the question -- What are you doing for others? -- as "life's most persistent and argent question". Sixty years later, six UACE

Wildcat Corps members serving Arizona Project WET can easily answer that question. They develop water stewardship and STEM literacy in Tucson and Phoenix. Corps members engage students through inquiry and exploration in learning about the water cycle, groundwater systems, watersheds, riparian habitats, engineering, and in acting to save water at schools and homes. The UACE Wildcat Corps is an AmeriCorps program through University of Arizona Cooperative Extension with 71

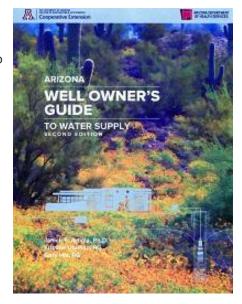


members serving 12 counties across Arizona. Reasons for serving vary with each member. Brian Flynn says, "It gives me the opportunity to help students in our community connect with issues outside of their classroom." A new Tucsonan, Sarah Randall, says, "I think it is important to provide time and service to the people and organizations who have welcomed me to Tucson." They benefit, Arizona Project WET benefits, and Arizona students benefit!

Learn About APW

Well Owner's Guide

An updated and expanded edition of Well Owner's Guide to Water Supply has just been published by Arizona Cooperative Extension. Authors Janick Artiola, Kristine Uhlman, and Gary Hix designed the Guide to help well owners gain a better understanding about their well, its components, maintenance, upkeep, geology, and water quality. This understanding will ultimately empower the well owner to do what is necessary to insure safe drinking water.



Download Guide

New AZ Water Student Chapter forming at UA

Are you an undergraduate or graduate student with interest in the water industry? Perhaps you are studying engineering, water resources, or have interest in public



policy or customer service. Please come to the inaugural meeting of the University of Arizona Student Chapter of AZ Water. The main goal of this group will be networking and knowledge-sharing, with young water professionals from throughout the state. Students from NAU and ASU (yes, they have already formed student chapters!) report that participation in their student chapters

helped them to form relationships that enhanced their career opportunities. The first meeting will be held on Friday, December 1, from 3:00 to 4:00 p.m. in Harshbarger 206, followed by a Happy Hour at Gentle Ben's.

Learn More About AZ Water

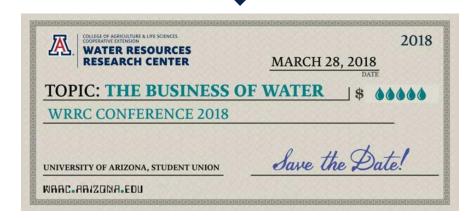
Water Policy: Challenges & Solutions

Beginning Thursday, November 2, the podcast of Mrs. Green's World Radio Show with WRRC Director Sharon B. Megdal, will be available. *Down to Earth* with Mrs. Green is a 60-minute podcast, featuring health and sustainability experts from around the globe. Dr. Megdal will discuss Water Policy: Challenges and Solutions with show host Gina Murphy-Darling.



Listen to Podcast

ANNOUNCEMENTS



- November 8 RFCD Brown Bag Living River
- November 8 USGS Seminar Water Availability and Sustainability in California's Central Valley: Past, Present, and Future
- November 13 Flinn-Brown Civic Leadership Academy Applications Due
- November 15-17 2017 NWRA Annual Conference
- November 16 Yuma Center of Excellence 2017 Research Symposium
- November 18 9th Annual Pedal with Purpose Tour de Tucson
- December 15 JCWRE Open Issue Call for Papers
- January 25-27 Urban Waterfronts Conference
- February 5 2018 Borlaug CAST Communication Award Nominations Due
- March 25-28 Sustainable Water Management Conference

WATER RESOURCES RESEARCH CENTER

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