

# WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES  
COOPERATIVE EXTENSION  
**WATER RESOURCES  
RESEARCH CENTER**

**October 14, 2016 / Volume 4, Issue 31**

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



## Student Research Projects Sought

This year the WRRC is trying something new by focusing its 104b grants program on graduate student research projects. The program, authorized under the Water Resources Research Act, Section 104(b) and funded through the U.S. Geological Survey, provides small grants for research that explores new ideas to address water problems in Arizona and expand understanding of water and related phenomena. Because program goals emphasize the entry of new research scientists, engineers and technicians in the water resources field and education of students through significant involvement in water research, the WRRC is calling on graduate students and their faculty sponsors to submit proposals that feature student work.

The WRRC expects to award two to four grants of up to \$10,000. Funds may be applied to student support or may be used for other purposes such as field or lab work on graduate student projects. Student project proposals must show a faculty member at one of Arizona's three state universities (UA, ASU, or NAU) as the Principal Investigator (PI). Students should be listed as co-PIs. Deadline is 5:00 pm, Wednesday, November 9, 2016.

The grant announcement can be viewed by clicking [here](#).

Instructions for submitting proposals can be found [here](#).

Photo: Lynn Ketchum



## IRRIGATED AGRICULTURE IN ARIZONA: A FRESH PERSPECTIVE

WRRC CONFERENCE 2017  
MARCH 28

### WRRC EVENTS

WRRC Brown Bag Seminar - 2016  
Central Arizona Project Award  
Winners to Present Special Seminar



**October 21, 2016**

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

**Speakers:**

- Beth Kleiman, presenting *The Water-Energy Nexus Dimension of the Central Arizona Project System Use Agreement*
- Surabhi Karambelkar, presenting *When the Turbines Stop Turning: Examining the Impacts of Drought on Power Production at Hoover Dam and Its Consequences for Entities in Arizona*

Each year, the Central Arizona Project (CAP) holds a competition for students conducting research on water issues facing the lower basin states (Arizona, California, and Nevada). This year both first and second place prizes were awarded to students with strong connections to the WRRC.

To tune in to this seminar on October 21 at noon, click [here](#)

WRRC Brown Bag Seminar - Potable  
Reuse for Inland Locations: Pilot  
Testing Results from a New Potable  
Reuse Treatment Scheme



## October 26, 2016

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

**Speakers:**

- Jeff Biggs, Administrator, Strategic Initiatives Division, Tucson Water
- Michael Hwang, West Regional Technology Leader for Membranes, CH2M



To meet the needs of the greater Tucson metropolitan area, Tucson Water is exploring potable reuse as a means to diversify and expand their water portfolio. To this end, a six-month pilot test of an innovative and sustainable potable reuse treatment scheme was conducted under a tailored collaboration project between CH2M, Tucson Water, and University of Arizona. This project was funded by the WaterReuse Research Foundation (WRRF-13-09). This Brown Bag Seminar will present an overview of the treatment scheme, as well as the major results and conclusions from the pilot study.

To tune into this seminar on October 26, click [here](#).

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## WRRC Brown Bag Seminar - Arizona Value Integrated Food-Energy-Water (ARVIN-FEW)



## October 31, 2016

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

**Speakers:**

- Hwee Hwang, Research Assistant
- Dr. Kevin Lansey Department Head, Civil Engineering-Engineering Mechanics

To tune into this seminar on October 31, click [here](#).

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## WRRC Brown Bag Seminar - Assessing Water Security at Global and Local Scales

## November 10, 2016

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

**Speaker:** Jacob Petersen-Perlman, Research Analyst, WRRC

Ensuring that a readily available supply of water that has an acceptable quality for health, livelihoods, and production continues to be a challenge across the world. This challenge is made greater by increasing demands on water supply, increasing variability in water supplies due to climatic change, and increasing construction of large-scale water infrastructure. Political boundaries crossing watersheds further complicate matters. This presentation discusses water security at two scales: 1) a global assessment of transboundary watersheds more likely to experience hydro-political tensions in future years based upon



environmental, political, and economic indicators and 2) a methodology to improve water security at the local level. The presentation will draw from work submitted to the Global Environment Facility's Transboundary Waters Assessment Program and the Regional Environmental Center's WATER SUM project.

To tune into this seminar on November 10, click [here](#).

## OTHER EVENTS

### Desert LCC Webinar - Toolbox for Water Harvesting Assessment

**October 19, 2016**

**Time:** 1 PM Pacific / 2 PM Mountain / 3 AM Central (Mexico City) and 4 PM Eastern

**Speaker:** Susanna Eden, Water Resources Research Center, University of Arizona

Developed at the University of Arizona, Water Resources Research Center, the Water Harvesting Assessment Toolbox (WHAT) is a prototype decision aid designed to help communities in the Southwest US understand the role water harvesting can play in meeting water resource challenges while providing multiple additional benefits, such as mitigating urban heat island effects, reducing energy costs, and meeting stormwater quality regulations.

To join the webinar to learn about the development and application of the new Water Harvesting Assessment Toolbox, click [here](#).



### Security and Sustainability Forum Webinar

**October 24, 2016**

**Time/Location:** 1:30 p.m. to 2:45 p.m. EDT (10:30 a.m. MST)

The Security and Sustainability Forum will host a webinar featuring John Fleck, author of *Water is for Fighting Over and Other Myths about Water in the West*, who will be joined by panelist, Dr. Sharon B. Megdal, WRRRC Director, and moderator, Lucy Moore, a dispute resolution professional. These experts will discuss the bonds being formed to solve the Colorado River Basin's most dire threats. Registration is now open.

To register for this webinar, click [here](#)



### SWES Colloquium - Sociology of Environmental Conflict Arising from Unequal Access to Water

**October 31, 2016**



**Time/Location:** 3:00 p.m. - 4:00 p.m.  
Marley Rm. 230, ( 1145 E 4 St.)

**Speaker:** Franck Poupeau

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## WRRC Co-Hosting Special Seminar - Thirst for Power: Energy, Water & Human Survival

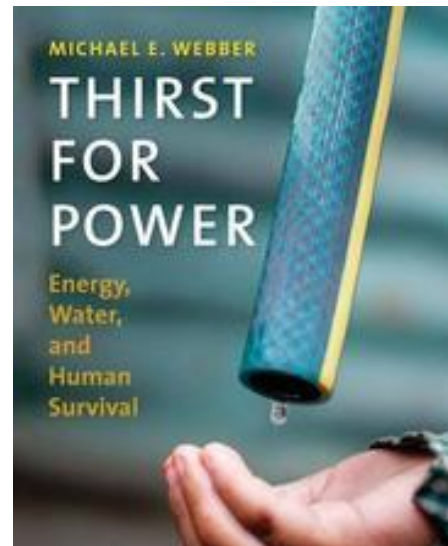
**November 15, 2016**

**Time/Location:** 4:00 p.m. James E. Rogers College of  
Law, Room 168, (1201 E. Speedway).

**Speaker:** Michael E. Webber, Ph.D.

Dr. Webber, a leader and teacher in the field of energy development and resources, explains how energy and water supplies are linked and how problems in either can be crippling for the other.

*The UA Bookstore will host a book signing in the College of Law's courtyard following this event.*



## NEWS

### Water Special Issue Tackles Water Governance, Engagement, and Sustainability



The journal *Water* has published a special issue "Water Governance, Stakeholder Engagement, and Sustainable Water Resources Management" edited by WRRC's Sharon B. Megdal and Susanna Eden, and Eylon Shamir of the Hydrologic Research Center, San Diego, CA. This special edition represents an important collection of contributions to the literature on the topic. The 20 articles gathered here focus on the relationship of water governance practices and stakeholder engagement to the development, evaluation and adoption of solutions to water management challenges. Contributions of various authors highlight forms, characteristics, and practices of water governance that enhance the sustainability of water resources management. Articles examine the functions of stakeholder engagement, collaboration, and participation through case studies from multiple regions, including transboundary water resources. Many perspectives are represented, which brings a much needed range of scholarship to this important emerging topic. All 20 papers are freely available online.

To have access to all the articles in this *Water* special issue, click [here](#)

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### WRRC Brown Bag Webcasts

The WRRC holds Brown Bags several times per semester. But did you know you don't have to come to the WRRC to participate? We use GoTo Meeting to webcast each seminar; it's easy to tune in from your desk! Each talk is also recorded, and when permission is granted, is



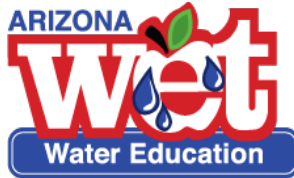
available on the WRRRC Brown Bag page usually the same day.



To see upcoming Brown Bag Seminars, click [here](#).

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## APW Educator Continues Her Own Education



APW Education and Technology Coordinator, Mary Ann Stoll, was recently awarded an MS in Educational Technology from UA. Two full years of work in design of online instruction,

learning theory, emerging technology, gamification, and student engagement complement Mary Ann's background in engineering, instructional design, and curriculum development. "I'm very motivated to pursue even more purposeful and engaging uses of technology in our APW curriculum and with our teachers," says Mary Ann, who designs water-themed curriculum for middle school students, delivers professional development focused on water content and advancing best instructional practices to teachers, and develops and maintains APW's website.



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## ADEQ Final Report on Emerging Contaminants Released



The Arizona Department of Environmental Quality (ADEQ) has released the report, Emerging Contaminants in Arizona: A Status Report. The 35-member Advisory Panel on Emerging Contaminants (APEC) compiled and documented updated information on emerging contaminants (ECs). ECs are synthetic or naturally occurring chemical compounds or biological agents that are not commonly monitored or regulated and may represent a hazard to human health. The APEC's report identifies ECs found in Arizona waters and recognizes ongoing and future research required to improve our understanding of their behavior in the environment. Report recommendations highlight the need for collaboration on efforts monitor and manage these unregulated chemical and microbial contaminants and communicate about them to the citizens of Arizona.

To read the full report click [here](#)

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## Save the Date for the 2017 WRRRC Annual Conference!

The 2017 WRRRC Annual Conference will be held on March 28, 2017 at the UA Student Union. Be sure to save the date for "Irrigated Agriculture in Arizona: A Fresh Perspective," which will offer unique insights into Arizona's agricultural water challenges. Included in the day's agenda will be a screening of the movie, "Groundwater: to enact a law for the common good," followed by a panel discussion that will include several of Arizona's most highly visible water leaders. A luncheon program will celebrate Tucson's designation as the First



US World City of Gastronomy. Look for registration to open in early January!

For further information, bookmark this page: <http://wrrc.arizona.edu/conferences/2017>

## ANNOUNCEMENTS

### WRRC Arizona Water Map: Cookies and Corrections Party

The fourth volume of the Arizona Water Map is almost ready for print. Before we make anything permanent, we need some sharp eyes to find any typos, misplaced arrows, or stray pie charts. Arizona water knowledge is helpful, but not necessary. Red pens and cookies will be readily available for all correctors. Please join us on Monday, October 17, 2016 from 1:00 p.m. to 1:45 p.m. in the Sol Resnick Conference Room at the WRRC, 350 N. Campbell Ave., Tucson, AZ.



### "Beyond the Mirage" Expands to National Audience

Mark your calendars in mid-October, "Beyond the Mirage: The Future of Water in the West" will be shown in 33 states, nationwide. Tune into your local stations to watch this eye-opening documentary.

To view the national show time listings, click [here](#)

## WATER RESOURCES RESEARCH CENTER

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