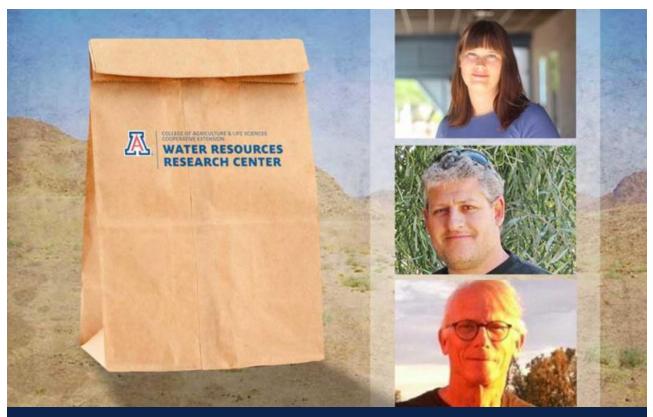




September 15, 2017 / Volume 5, Issue 23

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: <u>Watershed Forum</u> / <u>Middle East</u> / <u>AHS Teacher Workshops</u> <u>Prize Competition</u> / **Leadership Awards**



WRRC Brings Noteworthy Lineup of Fall 2017 Brown Bag Speakers

Each year the Water Resources Research Center brings a diverse slate of speakers to the University of Arizona through its publicly accessible Brown Bag seminar series. This year is no exception! With nine presentations already scheduled for Fall 2017, you can learn about such diverse topics as the Bureau of Reclamation's WaterSMART grant program, the move toward adaptive water policy and management, or a food-energy-water approach for off-grid communities. Brown Bag seminar

speakers not only offer unique perspectives and information-packed presentations, but also encourage interaction and lively discussion. Most of the WRRC Brown Bags take place in the Sol Resnick Meeting Room at the WRRC (350 N. Campbell), southeast of the UA campus. There is free on-site parking and, as an added benefit, most of our seminars can be attended remotely or can be watched after the fact through GoToWebinar.

Learn More About Brown Bags

WRRC EVENTS

WRRC Brown Bag - WaterSMART Grant Program Offerings

September 18, 2017

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

Speaker: Jessica Asbill-Case, Water Resources Program Manager, U.S. Bureau of Reclamation



The Sustain and Manage America's Resources for Tomorrow (WaterSMART) Program allows the Bureau of Reclamation to work with states, tribes, local governments, and non-governmental organizations to pursue a sustainable water supply for the nation. WaterSMART works through administration of grants and scientific studies, and provides technical assistance and scientific expertise on the efficient use of water, integrating water and energy policies to support the sustainable use of all natural resources, and coordinating the water conservation activities of the various Department of the Interior offices. This presentation will focus on the grants offered by Reclamation through the WaterSMART Program.



If you can't make it to the seminar on September 18, join us online here.

WRRC Brown Bag - Water, Wastewater, and Energy Solutions for Off-grid Bedouin, Palestinian, and Jordanian Communities

October 2, 2017

Time/Location: 4:00 p.m. - 5:30 p.m. / Hillel

Foundation (1245 E. 2nd Street.) **Note special time and location.**



Speaker: Clive Lipchin, Director, Center for Transboundary Water Management at the Arava Institute

Co-Sponsors: Center for Middle Eastern Studies, Arizona Center for Judaic Studies

The Center for Transboundary Water Management at the Arava Institute for Environmental Studies in Israel is implementing an off-grid Food, Energy, Water (FEW) Nexus approach to addressing the need for conflict mitigation relating to transboundary environmental management.

The project specifically implements on-site, off-grid solutions for communities lacking access to centralized water, wastewater, and energy infrastructure. The project includes greywater treatment and reuse systems; renewable energy; hydroponics micro-systems; and more. Work is being carried out in Palestinian communities in the West Bank, Jordanian farms in the Jordan Valley, and Bedouin communities in Israel's Negev Desert. Lessons learned in the Middle East can be used in addressing challenges in other arid regions of the world such as Native American communities in Arizona and New Mexico.

More information

WRRC Brown Bag Adaptive Management and Water: The Importance of Science to Public Policy and Water Management

October 9, 2017

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

Speaker: Dave Wegner, Senior Scientific Consultant, Jacobs Engineering

Adaptive Management. Those two words have become integral to water policy and management actions since the mid-1990's. Coupling adaptive management with water legislation, policy, and agency operations has become a requirement for political and public support and action. Due to the variability of water resources, the unknown impacts of variability and extreme events have made adaptive management a publicly required element but has it been for the right reasons and to what success?



If you can't make it to the seminar on October 9, join us online here.

Upcoming WRRC Brown Bag Seminars - Save the Dates

October 17, 2017

Speaker: Paul Brierley, Executive Director, Yuma Center

of Excellence for Desert Agriculture

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

October 25, 2017

Speaker: Lisa Atkins, Commissioner, Arizona State Land Department **Time/Location:** 3:00 p.m. - 4:00 p.m. / ENR2 Rm. S107 (1064 E. Lowell St.)

Note special time and location.

November 14, 2017

Speakers: Perri Benemelis/Andrew Craddock, Central Arizona Groundwater Replenishment

District, Yuma Mesa Irrigation and Drainage District Pilot Fallowing Program

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

December 6, 2017

Speakers: Meghan Smart/Bryant Dickens, ADEQ, Citizen Science Water Quality Monitoring **Time/Location:** 12:00 p.m. - 1:15 p.m./WRRC Sol Resnick Conf. Rm. (350 N. Campbell Ave.)



GRAB A LUNCH AND JOIN

US THIS FALL FOR OUR BROWN BAG SEMINARS!
We'll have a full schedule of presentations



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

website

OTHER EVENTS

SWES Colloquium - The Wild, Wild WEST

September 18, 2017

Time/Location: 3:00 p.m. - 4:00 p.m. / Marley

230 (1145 E. 4th St.)



Speakers:

Chuck Gerba, Professor of Environmental Microbiology, UA-SWES Ian Pepper, Professor of Environmental Microbiology, UA-SWES

The WEST Center is a leading-edge venue focused on water and wastewater treatment and monitoring, alternative energy, and related technologies. WEST is co-located with the Pima County water reclamation facility and adjacent to reclaimed water recharge basins and constructed wetlands - all of which are part of a Water Reclamation Campus.

AZ Water Young Professionals Happy **Hour Event - Tracking Down the Roots of Our Sanitary Sewers**

September 18, 2017

Time/Location: 5:30 p.m. / Borderlands Brewing

Company, 119 E. Toole Ave.

Speaker: Jon C. Schladwiler, P.E.

This presentation will trace the development of sewers mid-1800s that people began to understand that "filth," when mixed with their water supply, resulted in disease and death. Thus began the evolutionary development of modern-day sewers and a betterment of sanitary conditions in highly populated areas. The advent of

from 3500 BC through the early 1900s. It wasn't until the

separate sanitary sewage conveyance systems was a by-product of that change.



Register Here

Senator Jeff Flake Confirmed as Keynot the Watershed

Only one week left to register for the first annual State of the Watershed for the Upper Gila River! This highly anticipated event will feature Senator Jeff Flake as the Keynote Speaker, as well as many local, state, and regional experts. Join community members and partners at Eastern Arizona College on September 22, as we discuss the most up-to-date information about natural and water resources in the Upper Gila Watershed. The three panel sessions are: 1) Status of the Watershed: Climate, Snowpack, & Local Resources; 2) Our River and Streams: Ecology & Function; and 3) Hot Topics in the Watershed: Tamarisk Leaf Beetle, Fire, & Restoration.



Register Here

View Full Agenda

WRRC Director Checks in from the Middle East

WRRC Director Sharon B. Megdal spent nine busy days in the Middle East. The first segment of her visit involved accompanying representatives of the International Arid Lands Consortium (IALC) to Amman, Jordan for meetings to discuss collaboration opportunities. Jordan is one of the most water-stressed countries in the world. UA Associate Vice President for Global Research Initiatives Randy Burd, who is IALC Board President, Dr. Megdal, and five others met with HRH Prince El Hassan bin Talal and higher



Sharon B. Megdal and HRH Prince El Hassan bin Talal

education officials to discuss common research and education interests. Later in the day, a subset of the IALC delegation met with Royal Scientific Society researchers Dr. Ayoup Ghrair and Dr. Othman Almashaqbeh. Dr. Megdal has collaborated with Drs. Ghrair and Almashaqbeh on a grey water project in the Jordan Valley since 2011. The pilot-scale project was the subject of a presentation she made on behalf of the grey water research team a few days later in Tel Aviv.

Stay tuned for more on the AWRA and WATEC conferences in Israel in next week's Weekly Wave.

More information about IALC

Teachers Learn From Hydrologists at Professional Conference



Broad smiles and happy faces were the end result of Arizona Project WET (APW)'s recent Arizona Hydrological Society (AHS) Symposium 2017 Teacher Workshop, sponsored by the AHS Foundation. The theme of this



year's AHS Symposium was "How to Keep the Water Flowing?" which focused on the timely topic of Colorado River shortage sharing.

At the workshop, Flagstaff educators had a unique opportunity to learn from a variety of hydrology professionals from around the state. After attending symposium speaker sessions, teachers were given resources developed by APW to help incorporate this new knowledge into their classrooms. One teacher said, "A lot of needed background and in-depth knowledge was included, which was so valuable."

AHS, which is member supported, has cared enough about education to fund this teacher workshop for 12 years! This amazing partner sees the value of including K-12 education in the effort to keep the water flowing in our state.

Learn More Here

Prize Competition Seeks Ways to Improve Data Visualization for Colorado River



The Bureau of Reclamation is launching a new prize competition in collaboration with the U.S. Geological

Survey, the Colorado River Basin Forecast Center, the Natural Resource Conservation Service, and the U.S. Section of the International Boundary and Water Commission. They are seeking innovative, interactive, and user-driven ways to display data that supports the management of the Colorado River Basin. Winners will be awarded a maximum single award of \$20,000 and other winners will receive awards of no less than \$5,000. Winners will create solutions that integrate visualization of multiple relevant data types, that are user-customizable, and that contain interactive data. The competition is a part of the Bureau of Reclamation's Water Prize Competition Center, which seeks to find crowd-sourced solutions to the nation's most critical water-related resource problems.

Learn More

Four Arizona Entities Named Water Sustainability Leaders of the Year

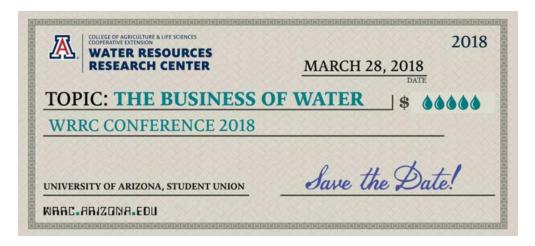


Arizona projects and programs took four out of the eleven extraordinary leadership awards presented by the WateReuse Association this year. Announcement of the

awards took place at the 32nd Annual WateReuse Symposium, held in Phoenix on September 10-13. Through this award, the WateReuse Association recognizes utilities, businesses, and individuals for activities that advance development of sustainable local water supplies. Two projects in Goodyear, AZ were honored with awards for the large and small projects of the year. The large project is the Liberty Aquifer Replenishment Facility and the small project is the City of Goodyear's Vadose Injection Project. Water Citizen Academy/Scottsdale Water received the award for Public Education Program of the Year. Last but not least, the Water and Energy Sustainable Technology (WEST) Center, a partnership involving Pima County, Tucson Water, industry, and the University of Arizona, was named the Institution of the Year The WRRC extends hearty congratulations to all the awardees.

WateReuse Website

ANNOUNCEMENTS



- <u>September 22 UCOWR Call for Special Sessions 2018 Annual Water</u> Resources Conference
- September 22-24 Edible Urban Forests Conference, LEAF Tucson COG
- October 2-3 7mo Congreso Nacional de Investigación en Cambio Climático
- October 13 Call for Papers Tamarisk Coalition's 16th Annual Riparian Restoration Conference
- November 1 Call for Abstracts BSMAR16
- January 1 Call for Abstracts 2018 MSSC Annual Salinity Summit

WATER RESOURCES RESEARCH CENTER

Visit Our Website