

WEEKLY WAVE



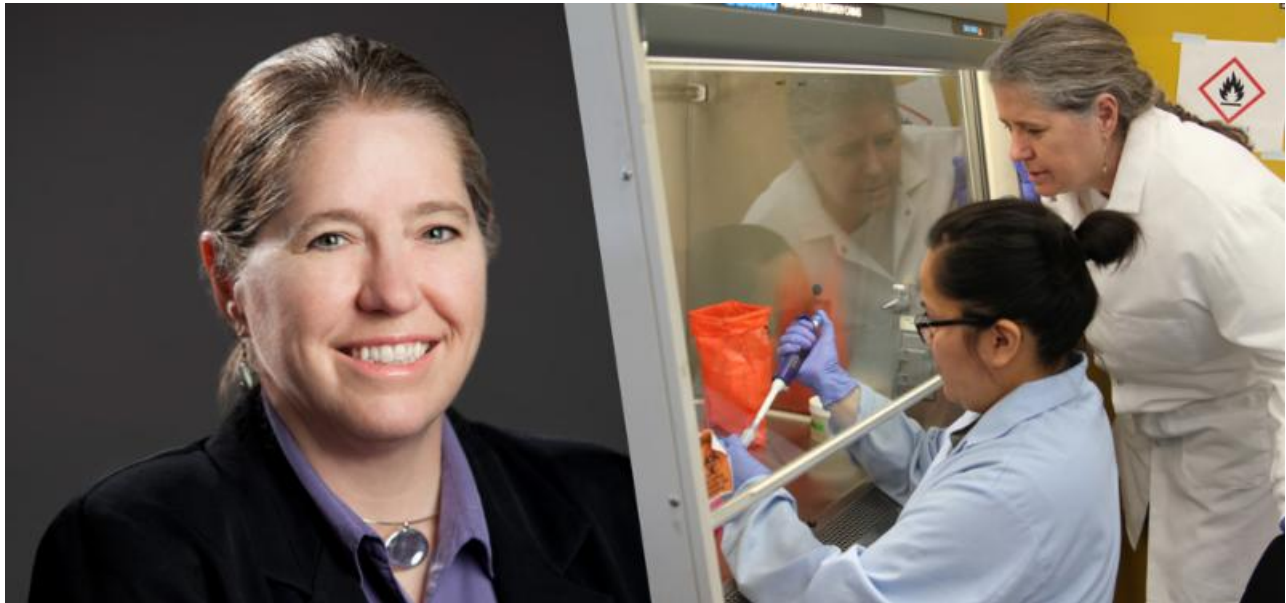
COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**

August 25, 2017 / Volume 5, Issue 20

The [Water Resources Research Center](#) - a research and [Extension](#) unit of the [College of Agriculture and Life Sciences](#)

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Dr. Jean McLain Promoted to Full Professor

The Water Resources Research Center is delighted to announce that Associate Director, Dr. Jean McLain, was promoted to full professor, with an additional appointment within UA Cooperative Extension at University of Arizona in May 2017. Her Faculty appointment is within the Soil, Water and Environmental Science Department of the College of Agriculture and Life Sciences where she will be teaching one class each year. Her outstanding work as a microbiologist, establishing linkages between microbes in the natural environment and human health, and particularly her work in antibiotic resistance, has offered new insights into water reuse opportunities in Arizona and beyond. When asked about the promotion, she said "I am really excited to continue my research and mentoring at UA and would like to thank all those at SWES, CALS, and the WRRC who helped make this happen."

[Dr. McLain's Research](#)

WRRC EVENTS

WRRC Brown Bag - Sustainability in the High Atlas Mountains of Morocco - Facing the Impacts of Climate Change



August 29, 2017

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

Speaker: Mark Apel, Area Extension Agent, Arizona Cooperative Extension

Area Extension Agent Mark Apel spent the springs of 2016 and 2017 volunteering with the High Atlas Foundation in Morocco - an organization dedicated to helping the rural populations of the High Atlas Mountains in sustainable agriculture and women's empowerment training. Through USAID's Farmer to Farmer program, administered by Land O'Lakes International Development, Mark assisted the Foundation with an assessment of project-based water resources and recommendations for sustainability. Morocco has a climate and environmental conditions similar to the Southwest US, and is experiencing the impacts of climate change - decreased precipitation, increased flooding, and warmer temperatures. Mark will discuss the changes he has seen since he was a Peace Corps Volunteer in Morocco over 30 years ago and the strategies that the High Atlas Foundation is undertaking to help rural communities adapt to a changing landscape.



If you can't make it to the seminar on August 29, join us online [here](#).

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. Water SMART works through administration of grants, scientific studies, technical assistance, and provides 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 August 29, 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 increasing strains on water resources from population growth, globalization, economic growth, urbanization, and inequalities of and conflicts over shared transboundary resources, have led to an analysis of the Food-Energy-Water (FEW) Nexus and its role in development approaches for communities. The FEW Nexus concept developed because these life-sustaining sources - food, energy, and water, are inextricably linked and constitute essential human rights. Using this as a framework, a more systematic analysis of interactions between human activities and their environment can be determined, with the purpose of working towards coordinated management on local, national, and international levels. Addressing the FEW Nexus in an integrated manner is crucial in conflict zones with shared environmental resources. In arid zones especially, access to and management of FEW resources can positively impact community development. 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.

Upcoming WRRC Brown Bag Seminar - Save the Dates



GRAB A LUNCH AND JOIN US THIS FALL FOR OUR BROWN BAG SEMINARS!
We'll have a full schedule of presentations on our website soon.

October 17, 2017

Time/Location: 12:00 p.m. - 1:15 p.m./WRRC Sol Resnick Conf. Rm (350 N. Campbell Ave.)
Speaker: Paul Brierley, Executive Director, Yuma Agricultural Center

October 25, 2017

Speaker: Lisa Atkins, Arizona State Land Commissioner
Time/Location: 3:00 p.m. - 4:00 p.m./ENR2 Room S107 (1064 E. Lowell St.) **Please note special time and location.**

November 14

Speaker: Perri Benemelis/Andrew Craddock, Central AZ Groundwater Replenishment District, YMIDD Pilot Following Program
Time/Location: 12:00 p.m. - 1:15 p.m./WRRC Sol Resnick Conf. Rm. (350 N. Campbell Ave.)

December 6

Speaker: 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.)



Check out all of our upcoming **events** and **videos of previous events** [on our website](#)

OTHER EVENTS

Southern Arizona Technical Luncheon Program

September 7, 2017

Time/Location: 11:30 a.m. - 1:00 p.m / Hotel Tucson
City Center 475 N. Granada, Tucson

Speaker: Daniel Quintanar, Tucson Water

Emerging Contaminants in Arizona Water: A Status Report, authored by the Advisory Panel on Emerging Contaminants (APEC), a 35-member panel of experts and lay persons convened by ADEQ, documented available information on emerging contaminants (ECs) in Arizona's water supplies, including surface water, groundwater, reclaimed water, and drinking water.

Note that sponsorships will 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](#).

[Information and Registration](#)



SNRE Seminar - Save the Date

September 14, 2017

Speaker: Liora Meron, Israeli Architect
Where: ENR2 Rm. S107 (1064 E. Lowell St.)
Time: 1:00 p.m. - 2:00 p.m.



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 from 3500 BC through the early 1900s. It wasn't until the 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 separate sanitary sewage conveyance systems was a by-product of that change.



NEWS

TAAP Column now available in English and Spanish

WRRC Director Sharon B. Megdal recently wrote a column for the Summer 2017 issue of Arizona Water Resource entitled "The Cooperative Framework for the Transboundary Aquifer Assessment Program: A Model for Collaborative Transborder Studies." The column describes how the "Joint Report of the Principal Engineers Regarding the Joint Cooperative Process United States-Mexico for the Transboundary Aquifer Assessment Program," an official document of the International Boundary and Water Commission, has served as a framework for coordination and collaboration between the two countries for assessments and studies of the binational aquifers. The column is now available in both English and Spanish. To read the column and find more information about the collaborative efforts between the U.S. and Mexico through the Transboundary Aquifer Assessment Program (TAAP), please visit the TAAP webpage



[TAAP in English](#)

[TAAP in Spanish](#)

New Report Details San Pedro Sedimentary History

The Arizona Geological Survey (AZGS) has just released a report on its site investigation aimed at determining the accuracy of maps depicting the sedimentary relationships between the San Pedro River and tributary alluvium. This relationship is important because it indicates the lateral extent of the San Pedro's saturated "floodplain Holocene alluvium", the zones where a well is presumed to be pumping water that is hydraulically connected to the surface flow of the river, and therefore subject to the Gila River adjudication. The survey, made in partnership with the Arizona Department of Water Resources (ADWR), examined 22 sites along the San Pedro River from near its confluence with the Gila River at Winkleman, AZ, to near the U.S.-Mexico border. Twelve of the sites held indications that Holocene alluvium extends beyond the modern river channel farther in the subsurface than is depicted on AZGS surficial geologic maps. As a result of the survey, AZGA and ADWR developed new, more realistic delineations of the San Pedro floodplain Holocene alluvium, which the judge in the Gila River adjudication affirmed in his Order of July 13, 2017. The report is filled with informative color photographs and maps. "Site Investigation of Tributary Drainages to the San Pedro River, Arizona" (OPEN-FILE REPORT OFR-15-02) by Joseph P. Cook of the Arizona Geological Survey is available online.



[Read Report](#)

The Arizona Project WET Team Explores the Verde



Kayaking a section of the Verde River near the town of Clarkdale with Mayor Doug Von Gausig, Executive Director of the Verde River Institute, gave the Arizona Project WET team a chance to experience for ourselves one of



the last flowing rivers in Arizona. One mid-August morning, eleven of us experienced firsthand the thrill of being out on the water amongst the Fremont Cottonwood-Goodding's Willow forest, the rarest type of forest in North America. The beautiful river provided a compelling backdrop for learning about the river's natural and human history, and pondering its future. The Verde River Institute's mission is *to ensure that the Verde River in central Arizona retains flows that will support sustainable, healthy and diverse economies and ecosystems.*

[Verde River Institute](#)

Raise Your Voice! Complete the Santa Cruz River Improvements Survey

The Sonoran Institute is currently conducting an online survey that will be used to guide their future work related to the Santa Cruz River. Embedded in the survey is a video featuring WRRC Associate Director Jean McLain and other local water experts. This is your chance to be a part of the development of a Pima County Regional Flood Control District Management Plan for the river between Grant Road and Trico Road.



All are welcome to participate in the survey. The deadline for submitting your answers is September 15th, 2017. The survey is a companion to upcoming community workshops where opinions on the management plan will be debated and discussed. Stay tuned to the WRRC Weekly Wave for workshop times and dates.

[Take Survey](#)

SRP Reports Healthy Runoff Season

The 2017 January-to-May runoff season on the Salt and Verde Rivers was the best it has been since 2010. The Salt River Project reported that 970,440 acre-feet of snowmelt and rain filled all the system's reservoirs except Roosevelt Lake, which reached 76 percent full in April. Runoff was about 140 percent of normal or close to twice the 30-year median of 534,336 acre-feet and about 3.5 times the 280,000 acre-foot average of the past six dry years. The season might have been even better, but the substantial snowpack of January and February was reduced by a warm, dry March and April. As of August 23, the combined reservoir system was sitting comfortably at about 68 percent of capacity.



[View Daily Water Report](#)

ANNOUNCEMENTS



- [August 27 EJTF Community Teach-In - Health concerns related to historic groundwater contamination on Tucson's South Side](#)
- [September 1 Call For Abstracts - International Conference on Drylands, Deserts, and Desertification](#)
- [September 1 Early Registration Closes - Biennial Conference of Science & Management on the Colorado Plateau & Southwest Region](#)
- [September 6-9 AHS 30th Annual Symposium](#)
- [September 22 Gila State of the Watershed Forum](#)
- [September 22 UCOWR Call for Special Sessions - 2018 Annual Water Resources Conference](#)
- [September 22-24 Edible Urban Forests Conference, LEAF - Tucson COG](#)
- [October 2-3 7th National Meeting in Climate Change \(NW Mexico\)](#)
- [November 1 Call for Abstracts - BSMAR16](#)
- [Funding Opportunities BARD - the US-Israel Binational Agricultural Research and Development Fund](#)

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