

SUMMER WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**

August 18, 2017 / Volume 5, Issue 7

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

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UPPER GILA RIVER STATE ^{of} the WATERSHED SEPT. 22, 2017



Gila State of the Watershed Forum

We are pleased to announce that the first annual State of the Watershed Conference for the Upper Gila River will be held on September 22, 2017 at Eastern Arizona College in Thatcher, Arizona. This public forum is an exciting opportunity for community members to engage with local and state experts about critical issues in their region. The result of ongoing coordination among agricultural representatives, the Gila Watershed Partnership (GWP), Graham County Cooperative Extension, and the WRRC, this event will highlight the topics of fire, flood, and the arrival of the tamarisk leaf beetle. Other topics include: snowpack, climate forecasts, mining, local water supplies, and river channelization. All are welcome, and questions from the audience are encouraged!

[View Agenda](#)

[Register](#)

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 26, 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 through administration of grants, scientific studies, 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 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.



If you can't make it to the seminar on October 2, join us online [here](#).

OTHER EVENTS

SNRE Seminar - Save the Date

September 14, 2017

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



COLLEGE OF AGRICULTURE
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SCHOOL OF NATURAL RESOURCES
AND THE ENVIRONMENT



Workshop on Water and Energy Nexus During Emergencies

September 14, 2017

Presented by: The U.S. Environmental Protection



Agency (EPA)

Where: PERA Club 1 E. Continental Dr., Tempe, AZ

Time: 8:30 p.m. - 3:00 p.m. (MST)



The U.S. Environmental Protection Agency (EPA), the Association of Metropolitan Water Agencies (AMWA), and the Water Information Sharing and Analysis Center (WateriSAC), in coordination with the AZ Water Association are hosting a free one-day workshop on the nexus between water and energy during emergencies. The goal of this event is to help water and wastewater service providers and their counterparts in the power sector improve their resiliency during power outages.

[Information and Registration](#)

NEWS

CALS Wins Design Award for Beyond the Mirage

Graphic Design USA magazine, a resource for graphic design professionals since 1963, has awarded the UA College of Agriculture and Life Sciences an American In-house Design Award for the Beyond the Mirage documentary and interactive web experience and the Desert Landscaping Website. Both prize winning designs were the products of CALS video and web development/design personnel in cooperation with the WRRC. The award was one of only a few hundred out of more than 6,000 entries. Graphic Design USA organizes this annual competition to showcase in-house design excellence.



[View Award](#)

WRRC Congratulates Our AHS 2017 Academic Scholarship Winners

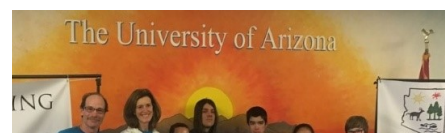
The Arizona Hydrological Society Academic Scholarship Committee selected three students for this year's award. A total of 16 complete applications were submitted from students at 4-year colleges in Arizona. Each scholarship is \$2,000, funded by AHS and the AHS Foundations. Student winners were Timothy Lahmers, Erin Gray, and David Sinclair. Timothy Lahmers is seeking a PhD at the UA from the Department of Hydrology & Atmospheric Science in hydrometeorology. He was the 2017 Summer Writing Intern at the WRRC doing research and writing for the 2018 Arroyo on irrigated agriculture in Arizona. Erin Gray is seeking an MS at the UA from the Department of Hydrology & Atmospheric Science in environmental hydrology. She has worked at the WRRC for two years as an integral part of the Arizona Project WET team helping this educational program develop water stewardship and STEM literacy throughout Arizona. David Sinclair, who is a student at NAU, is seeking an MS in Geology from the Department of Geology.

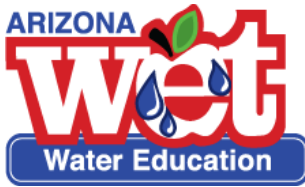


**Arizona
Hydrological
Society**

[View Announcement](#)

Arizona Students Go Above and Beyond at International Competition





Students from Tri-City College Prep in Prescott represented Arizona at the National Conservation Foundation's annual Envirothon, an international competition focused on the development of skills and understanding related



to natural resources management. The five-member team placed 20th overall and 9th at the EcoSoils station among a field of 54 student teams from the US, Canada, and China. The competition tested knowledge of environmental stewardship and gave students the opportunity to apply critical thinking skills. Pam Justice, Arizona Project WET coordinator and Arizona Envirothon Executive Committee member, is looking forward to seeing what the team brings to future competitions: "We know this team has the capability, with more experience and training from our Envirothon committee, to place even higher in next year's competition."

[Arizona's Envirothon](#)

How to view Eclipse 2017 at the University of Arizona

On Monday, August 21, 2017, all of North America will experience a solar eclipse. The Moon will cover at least part of the Sun for 2 to 3 hours. Here in Arizona we will experience a 60 percent partial solar eclipse. Special-purpose solar filters, such as eclipse glasses or a handheld solar viewer, are the only safe way to look directly at the Sun. NASA recommends checking the authenticity of viewing glasses to ensure they meet safety standards. Ordinary sunglasses, even very dark ones, should not be used as a replacement for eclipse viewing glasses.



Here at the University of Arizona, the Flandrau Science Center and Auditorium can help you prepare for the eclipse. At the Solar Eclipse Weekend on Saturday, August 19 and Sunday, August 20 you can learn about how an eclipse happens and buy your solar viewing glasses. On the big day, join the crowd on the UA Mall in front of Flandrau to view the eclipse!

[Flandrau Eclipse 2017 Information](#)

Sewage Spill Brings High Level Attention to an Old Problem

On July 25, public works employees of the City of Nogales, Arizona, found a partial breach in the pipeline that carries sewage from Nogales, Sonora to the International Wastewater Treatment Plant near Rio Rico in Arizona. A section of cement surrounding a manhole used for access to the sewer line was dislodged and the pipe was damaged below the waterline. Sewage spilled from the damaged pipe into a creek that flows north into the Santa Cruz River. The pipe, called the International Outfall Interceptor or IOI, was constructed beneath the Nogales Wash in 1975. Heavy rains often trigger spills from the old structure, and sewage flowing through Nogales Wash and into the Santa Cruz River has been an occasional problem for many years. This time Gov. Doug Ducey declared a state of emergency; made \$200,000 in state funding available; and sought federal assistance from the U.S. Army Corps of Engineers for dealing with the situation. Early on the morning of August 2, work was completed on a bypass system to divert the leaking sewage around the breach to the treatment plant. The temporary pipeline will allow the IOI to be inspected and repaired. Chronic problems with the IOI have provoked calls for major upgrades or



replacement. The Friends of the Santa Cruz River, an group devoted to the welfare of the river, has produced a video on the IOI that appeals for action on a comprehensive solution.

[View Video](#)

In Remembrance, Dick Kassander

A. Richard Kassander, Jr, "Dick", age 96, passed away on July 27, 2017 in Mesa, AZ. Dick was born in Carbondale, PA, Sept 10, 1920 and grew up in Larchmont, NY. He attended Amherst College and graduated with a BA in Geology in 1941. He received a MS from the University of Oklahoma in 1943 and his PhD in Physics from Iowa State University in 1950. Dick joined the faculty of the University of Arizona as Professor of Physics and Associate Director of the Institute of Atmospheric Physics. From 1964-1972 he served as the first director of Arizona's Water Resources Research Institute, the WRRRC. We extend our sympathies to Dick's family; we will be ever grateful for his dedication to the WRRRC.



[View Obituary](#)

So Long Summer, the Weekly Wave Returns August 25!

It is hard to believe that summer is almost over. This will be the last issue of the Summer Wave. Beginning August 25, we will resume the Weekly Wave. Same great information, just more often!



ANNOUNCEMENTS

A rectangular 'Save the Date' card with a light beige background and a decorative border. In the top left corner is the University of Arizona logo (a stylized 'A' in a blue square) followed by the text 'COLLEGE OF AGRICULTURE & LIFE SCIENCES COOPERATIVE EXTENSION' and 'WATER RESOURCES RESEARCH CENTER'. In the top right corner is the year '2018'. In the center, the date 'MARCH 28, 2018' is written in a serif font, with 'DATE' in smaller letters underneath. Below the date, the text 'TOPIC: THE BUSINESS OF WATER' is written in a bold, teal, sans-serif font, followed by a dollar sign and four teal water droplets. Below this, 'WRRRC CONFERENCE 2018' is written in a teal, sans-serif font. At the bottom left, 'UNIVERSITY OF ARIZONA, STUDENT UNION' and 'WRRRC.ARIZONA.EDU' are listed. At the bottom right, the phrase 'Save the Date!' is written in a blue, cursive script. The entire card is framed by a thin, repeating pattern of small squares.

- [August 24-25 Arizona Water Law Conference](#)
- [August 24 and 31 EPA Webinars on New Water Infrastructure Financing Clearinghouse](#)
- [August 25 Early Bird Registration Closes - AWRA International Conference](#)
- [August 25 Public Comment Period Closes - Draft 2017 Review, Water Quality Standards for Salinity, Colorado River System](#)
- [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 UCOWR Call for Special Sessions - 2018 Annual Water Resources Conference](#)
- [November 1 Call for Abstracts - BSMAR16](#)
- [Funding Opportunities BARD - the US-Israel Binational Agricultural Research and Development Fund](#)

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