



January 25, 2019 / Volume 7, Issue 3

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>

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We are excited to announce that University of Arizona President Dr. Robert C. Robbins will offer a welcome address at the WRRC annual conference, next Friday, February 1st in Phoenix. This year's conference, *Arizona Runs on Water: Scarcity, Challenges, and Community-based Solutions*, takes a close look at how Arizona communities are working to ensure they have sufficient water to meet their future needs. This subject is of great importance to the University, where more than 300 researchers work on water-related topics. It has also long been a focus for the Water Resources Research Center. In fact, in 2003, WRRC Director Sharon Megdal and Research Specialist Jacqueline Moxley published an article in the *Arizona Review*, entitled, "Managing to Avoid Crisis: A Look at Water Management Efforts in Rural Arizona." The article examines water management processes and highlights watershed efforts throughout the state that were addressing topics such as growth, exempt wells, water quality, conservation, and environmental flows over 16 years ago. It is remarkable to look back in time and see how many of these same challenges face our communities today.

The government has reopened and the WRRC is extending registration through the weekend! We hope you will join us on February 1, 2019, at the Black Canyon Conference Center, 9440 N 25th Avenue, Phoenix, Arizona, for informative presentations and networking. On-site registration will be available for and additional \$10.

Managing to Avoid Crisis: A Look at Water Management Efforts in Rural Arizona, *Arizona Review*, 2003 Link

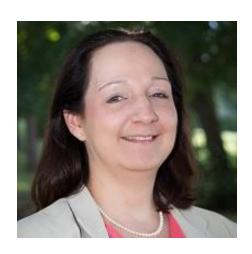
Register Here

WRRC EVENTS

WRRC Brown Bag - Effects of Energy Extraction and Utilization on Source Water Bromide Concentration and Finished Drinking Water Risk

January 30, 2019

Speaker: Jeanne VanBriesen, Ph.D., P.E., F.ASCE, F.EWRI, Duquesne Light Company Professor, Civil & Environmental Engineering and Engineering & Public Policy



Time/Location: 4:00 p.m. - 5:00 p.m./Marley Building Rm. 230, 1145 E. 4th St., Tucson **Please note special time and location.**

Natural and anthropogenic sources of bromide can alter source waters in ways that affect drinking water quality and human health. Energy extraction and utilization activities including oil and gas extraction and coal-fired power generation are sources of bromide that can affect drinking water sources, especially under low flow conditions where dilution does not adequately reduce bromide concentrations. Watershed-, state-, and national-level analyses highlight the critical characteristics of regions where current bromide loads are affecting drinking water consumers. Dr. Jeanne VanBriesen, Duquesne Light Company Professor of Civil and Environmental Engineering and Engineering and Public Policy at Carnegie Mellon University, will discuss new anthropogenic sources and will provide an overview of water quality impacts associated with these sources during her seminar on January 30. The event is co-sponsored by the UA School of Earth and Environmental Sciences.

See full abstract and bio <u>here</u>.

<u>Register for the Webinar</u>

WRRC Brown Bag *Webinar* - An Abbreviated History and Overview of Al with Example Applications to Hydrology

February 13, 2019



Speaker: Dr. Emery Coppola Jr., President NOAH

LLC

Time/Location: 12:00 p.m. - 1:15 p.m. Webinar viewing will be hosted in the WRRC Sol Resnick Conference Rm., 350 N. Campbell Ave., Tucson. The webinar can also be viewed through GoToWebinar.

A short historical overview of Artificial Intelligence (AI), how it came into existence, and its evolution from its inception to today will be presented. This includes the seminal "Turing Machine", the original two AI schools of thought, the so-called AI winter, its rebirth in 1986, and recent renaissance with Deep Learning. This will be followed by two illustrative hydrological examples. The presentation will be concluded with thoughts regarding present-day applications and requirements for AI in water management.

Register for the Webinar

UPCOMING BROWN BAGS

- February 20 Mark Brusseau
 PFAS in Water: Transport, regulations, and health consequences
- March 14 Crystal Tulley-Cordova
 Stable isotopes in precipitation and meteoric
 waters: Investigating the North American
 monsoon across the Four Corners region.
- April 24 Tanya Quist UA Arboretum Integrates Desert Landscaping and Tree Shade Project into its Website



2019 WRRC Chocolate Fest

February 15, 2019

Don't miss the 15th Annual WRRC Chocolate Fest! Share your favorite treats and try sinfully spectacular creations from your water friends and colleagues. Come applaud the WRRC's photo contest winners while celebrating the joys of chocolate. Invite your friends to join the fun! We hope to see you all there!



Event Flier

OTHER EVENTS

CUAHSI Water Data Services Workshop



January 29, 2019

Time/Location: 11:00 a.m. - 1:00 p.m. / Saguaro Hall 219 (1110 E South Campus Dr. Tucson, AZ 85719)

Come to the CUAHSI Data Services Workshop to learn about CUAHSI's Water Data Services to:

- Develop data management plans using online tools and templates;
- Search for and download a broad array of water data, including time-series data, water chemistry, spatial coverages, and more;
- Utilize water-domain apps and tools to expedite and document your workflows;
- Hear about opportunities for graduate student training and funding.

Bring a laptop and any data you are interested in archiving. If you are looking for specific data types, please email help@cuahsi.org ahead of time.

Workshop Description

WRRC NEWS

UA Hosts CUAHSI Meeting



Next week, the WRRC will have the privilege of hosting the 2019 Consortium of Universities for the

Advancement of Hydrologic Science, Inc. (CUAHSI) Board of Directors meeting on January 28-29. WRRC Director Sharon B. Megdal will be delivering a welcome address to the board. CUAHSI board member Jeannie VanBriesen of Carnegie Mellon University will also be giving a WRRC co-sponsored Brown Bag Lecture (see above).

CUAHSI regularly offers training workshops and short courses. Three this semester have Arizona connections. Hydrology & Atmospheric Sciences Professor Peter Troch was one of the instructors for a recent CUAHSI Master Class, "Advanced Techniques in Watershed Science," held at Biosphere 2 on January 13-18. On Tuesday, January 29 from 11:00 AM to 1:00 PM in Saguaro Hall 219, UA will host the CUAHSI Data Services Workshop for participants to learn about CUAHSI's water data services (see above). The workshop is aimed at undergraduates looking for data to complete their capstone projects, and graduate students on federally-funded projects looking for ways to store their data. CUAHSI will also be sponsoring a Master Class, entitled "Food, Energy and Water Systems in a Global Economy," at Northern Arizona University during May 13-16 (see Announcements for further details).

CUAHSI Website

Land Lines Colorado River Special Issue

The Lincoln Institute has just released a special issue of Land Lines focused on the Colorado River Basin. This 30th anniversary edition of the land policy quarterly includes an interview with Bruce Babbitt, along with articles detailing approaches for tackling the Basin's Millennium Drought, and an article specifically discussing Flagstaff's forward-looking policies on integrated land and water planning.



Land Lines Special Issue



No Weekly Wave on February 1

Due to the WRRC Annual Conference, we will not publish a Weekly Wave next week. The Weekly Wave will return on February 8 and contain recaps from the conference.



ANNOUNCEMENTS

- GAO Report on Bureau of Reclamation Water Reuse Grant Program
- January 25 UCOWR/NIWR Annual Water Resources Conference -Abstracts Due
- January 31 TENWEST Festival 2019 Call for Partner Applications
- <u>February 1 WRRC 2019 Annual Conference Arizona Runs on Water:</u> <u>Scarcity, Challenges, and Community-based Solutions</u>
- <u>February 1 Family Farm Alliance Annual Conference Early Registration Closes</u>
- February 7 34th Annual WateReuse Symposium Call for Abstracts
- February 12 AHS Monthly Chapter Meetings One Water Presentation
- February 25 AWRA 2019 Summer Conference Call for Abstracts
- February 28 March 1 MSSC Salinity Summit
- February 28 WaterSmart Innovations 2019 Conference Call for Abstracts
- March 15 CUAHSI Master Class on Food, Energy, and Water Systems in a Global Economy
- March 28 Arizona Project WET Tucson Water Festival Volunteers Needed
- March 21-22 Law of the Colorado River Conference Registration Open
- March 31 April 3 AWRA Sustainable Water Management Conference -<u>Program Online</u>
- April 15 New Mexico WRRI 63 Annual Water Conference Call for Abstracts
- May 31 Desert Horticulture Conference Save the Date

Visit Our Website