



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**

February 8, 2019 / Volume 7, Issue 4

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

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WRRRC Annual Conference Hits a Home Run

On February 1, more than 350 people attended the WRRRC's 2019 Annual Conference, "Arizona Runs on Water: Scarcity, and Community-based Solutions." Evaluations and verbal feedback indicate that the audience was highly satisfied. Ten states and 56 Arizona communities were represented by elected officials, staff, and engaged citizens. After hearing about the particular water challenges and responses of local communities, members and staff from the Arizona State Legislature reflected on their legislative goals. As a special offering, U.S. Senator Martha McSally was present to congratulate the state legislature and the people of Arizona for coming together to pass the Drought Contingency Plan and for demonstrating again the state's commitment to solving our water challenges. Look for presentation videos and slides coming soon to the WRRRC website.

Photos: Lynn Ketchum, Courtesy of UA College of Agriculture and Life Sciences

WRRRC EVENTS

WRRC Brown Bag Webinar - An Abbreviated History and Overview of AI 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](#)

2019 WRRC Chocolate Fest

February 15, 2019

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



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](#)

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*



OTHER EVENTS

WOTUS Rule Revision Stakeholder Meetings

February 12, 2019



Time: 9:00 a.m. - 11:00 a.m.
Location: ADEQ (1110 W. Washington, Rm 3175, Phoenix)

On December 11, 2018, the U.S. Environmental Protection Agency (EPA) and Department of the Army proposed a rule revision for the Waters of the United States (WOTUS), with the goal of providing a clear, understandable and implementable definition. ADEQ recognizes the significance of a change to the WOTUS definition and remains committed to protecting Arizona's important and precious water resources.

Please RSVP whether you plan to attend in person or remotely. A link to join the meeting online will be emailed to guests at least 48 hours prior to the scheduled start time.

[Register for the Meeting](#)

WRRC NEWS

DCP Deadline Met. What's Next?

A week ago Arizona's legislature passed and the governor signed legislation endorsing the Colorado River Basin Drought Contingency Plan (DCP) and intra-state implementation agreements among the major stakeholders-cities, farmers, Native American tribes, and developers. This is not the end of the road, as reported since by numerous news media outlets. See the links below for a sample of what the press is saying about what was decided and what remains to be done.



[U.S. News and World Report](#)

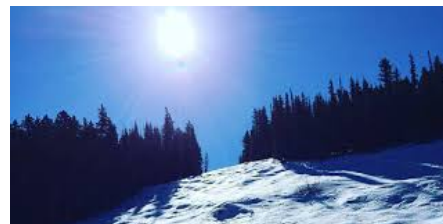
[Salt Lake Tribune](#)

[Arizona Daily Star](#)

[Arizona Republic](#)

Snowpack Not Enough to Replenish Colorado River Reservoirs

An analysis by the Western Water Assessment at the University of Colorado, Boulder is urging water managers throughout the Colorado River watershed to "brace themselves for diminished streams and a decreasing likelihood of filling reservoirs." Though much of the southern Rocky Mountains has received a healthy cycle of 2018-2019 winter snowstorms (currently at 90% of normal), the record hot and dry conditions in 2018 depleted the ground of its moisture, exacerbating already-dry conditions. Researcher Jeff Lukas of the Western Water Assessment used data from the



National Oceanic and Atmospheric Administration, the U.S. Geological Survey, and the Natural Resources Conservation Service, among other agencies, to arrive at the grim prediction.

[Read Western Water Assessment Briefing](#)

We Love Our Volunteers



From snow-capped mountains to urban desert expanses, and everywhere in between, passionate APW team members travel thousands of miles each year to bring high-quality water education to students



all over the state. At the heart of APW's overwhelming success is our beloved corps of volunteers! From high school students to retirees and corporate professionals to Master Gardener hobbyists, our volunteers bring their love for learning and giving back to our APW programs.

Would you like to make a difference in the lives of Arizona students? You can join our family of APW volunteers. Visit our program links below to sign up. It will warm your heart as much as ours.

[Water Festival Program](#)
[Aqua STEM](#)
[Robotics Program](#)

McLain Presents on Irrigation Water Quality in San Diego



On January 8, WRRRC Research Scientist Jean McLain presented her work, Intra-Laboratory Evaluation for E. coli Detection in Irrigation Water, at the 2018-2019 International Soils Meeting in San Diego, CA. Hosted by the Soil Science Society of America, the meeting also included representation from the Canadian Society of Soil Science and the Mexican Society of Soil Science. Dr. McLain's presentation covered the first year of results of a three-laboratory study (McLain's, as well as the laboratories of Dr. Chuck Gerba and Dr. Channah Rock) examining the reproducibility of currently used EPA-approved assays for monitoring irrigation water quality. The results of this work will contribute to a guidance document to be used by farmers for monitoring bacterial levels in irrigation water.

ANNOUNCEMENTS

- [CAP Releases Climate Adaption Plan - Preparing for an Uncertain Future](#)
- [Mega Drought Survey](#)
- [UA Sustainability Map, Phase 2 - UA Recognizes Sustainability Efforts](#)

- [February 12 AHS Monthly Chapter Meetings - One Water Presentation](#)
- [February 12 Water Treatment Seminar - Current Issues Impacting Ground Water and Surface Water Treatment](#)
- [February 21-22 Family Farm Alliance Annual Conference](#)
- [February 28 - March 1 MSSC Salinity Summit](#)
- [February 28 WaterSmart Innovations 2019 Conference - Call for Abstracts](#)
- [March 1 Western Groundwater Congress 2019 - Call for Abstracts](#)
- [March 10 AWRA 2019 Summer Conference - Call for Abstracts](#)
- [March 15 CUAHSI Master Class on Food, Energy, and Water Systems in a Global Economy - Early Bird Registration](#)
- [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 AWWA Sustainable Water Management Conference - Program Online](#)
- [April 15 New Mexico WRRRI 63 Annual Water Conference - Call for Abstracts](#)
- [May 31 Desert Horticulture Conference - Save the Date](#)

Visit Our Website