

WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION
**WATER RESOURCES
RESEARCH CENTER**

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The Water Resource Research Center - a research unit of the [College of Agriculture and Life Sciences](#) and an Extension unit in [UA Cooperative Extension](#) within the Division of Agriculture, Life & Veterinary Sciences & Cooperative Extension

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Reflections on a Successful Israeli Conference Experience

As an educator, I feel fortunate to have opportunities to share knowledge with individuals of different ages, backgrounds, and perspectives. Recently, I organized a panel for the biennial WATEC (Water Technology and Environmental Control) conference, which was held November 19-21, 2019 in Tel Aviv, Israel. The panel focused on implementing technology, specifically desalination technology, in a binational setting and brought together experts from the United States, Mexico, and Israel to discuss opportunities as well as constraints when working across borders. It was appropriate that the panel was slotted as a "Water and People" session at a conference that was laser-focused on technology. After all, working across borders requires intensive consultation and communication among the people involved.

WRRC EVENTS



The banner features a signpost with three directional signs. The top sign points right and reads 'WRRC ANNUAL CONFERENCE 2020 WATER AT THE CROSSROADS: The Next 40 Years'. The middle sign points left and reads '1980 GROUNDWATER MANAGEMENT ACT'. The bottom sign points left and reads 'SAVE the DATE FRIDAY, MARCH 27, 2020 UNIVERSITY OF ARIZONA WATER RESOURCES RESEARCH CENTER Black Canyon Conference Center 9440 N 25th Ave, Phoenix, AZ 85021'. The website 'wrrc.arizona.edu' is at the bottom right.

Water-Energy Interface in the Context of Air Conditioning and Some History of Electricity Generation

January 22, 2020

Speaker: Henry Johnstone, PE, President of GLHN Architects & Engineers, Inc.

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



The dynamic relationship between water and energy has become a national topic in recent years and is of particular interest to those in Arizona, where projections of water scarcity and changes in electrical generation are frequently reported in the media. This presentation will provide a brief overview of the sources and sinks of energy and water in Arizona then focus on their interaction at campus or municipal district scale.

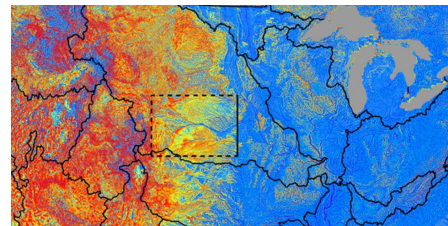
[Register for Brown Bag Webinar](#)

WRRC NEWS

Integrated Hydrologic Model Brings New Insights

At the WRRC Brownbag on Wednesday, December 4, Laura Condon, Assistant Professor in the UArizona Department of Hydrology and Atmospheric Sciences, described an integrated hydrologic modeling approach and why it is so important to do this work on a continental scale.

Many large-scale hydrologic models include atmospheric and surface water inputs, but do not include aquifer storage and subsurface flow. Dr. Condon's work, in collaboration with many others, integrates groundwater, including subsurface lateral flow, into a landscape-scale analysis. Dr. Condon explained how this type of modeling can be used to look at future hydrologic scenarios and the likely impact on vegetation across the United States. She showed modeling results highlighting the different impacts on the Western and Eastern U.S., if aquifer storage decreased or



temperatures increased. Although these high-resolution groundwater-surface water simulations are now feasible at the national scale, they are data and computationally intensive. Dr. Condon is working to make this type of modeling more transparent and accessible through HydroFrame, a national community hydrologic modeling framework that helps hydrologic scientists generate their own scenarios and interact with some of these more complex hydrologic models.

Check out the [video](#)

Congratulations to Mary-Bell Cruz Ayala

The WRRRC is happy to share that Mary-Bell Cruz Ayala, WRRRC alumna, was awarded a Carson Scholarship on December 2, 2019. Mary-Belle is a Ph.D. candidate in Arid Lands Resource Sciences. She, along with the 11 other 2020 Carson Scholarship awardees were recognized for their dedication to environmental science and their commitment to the creative communication of scientific research. The Carson Scholarship was designed to foster a network of graduate students and researchers passionate about developing their capacity to communicate environmental research to decision-makers and the public. The 2020 cohort, coming from 12 departments in six colleges, represents an incredible diversity of scholarship. Congratulations scholars!



2020 Carson Scholar Cohort. Not pictured Ziya Kaya and Varinia Felix

[Carson Scholars Program](#)

Groundwater: Out of Sight but Very Exciting



Fourth graders in Maricopa County are bringing a whole new meaning to the phrase groundwater is "out of sight!" Energized by working with two and three-dimensional models, students marvel at how water flows through the ground and comes to the surface again when the

water table crosses the land surface. "How did it do that?", they can be overheard asking each other.



APW team members engage students to think deeply about the parts of the groundwater system and how they work together to become part of our community water supplies.

On a recent visit to Rancho Gabriela Elementary School, one student pronounced "This is the best science experiment I've ever done!" At Marley Park Elementary School another pupil thanked APW staff for the presentation and precociously noted that "It gave me a much better understanding of how groundwater and the water cycle work."

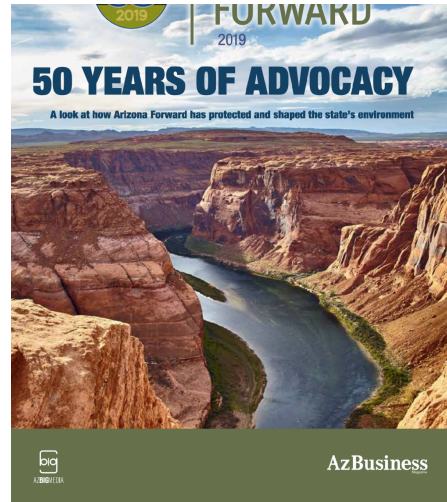
The excitement expressed by these young learners is palpable and very encouraging for their understanding of Arizona's future water challenges.

More information about [APW](#)

Half-a-Decade of Environmental Advocacy - Arizona Forward



Arizona Forward celebrates 50 years of advocacy in the November-December 2019 issue of "AzBusiness Magazine." The advocacy group includes a 60-person water committee that brings together individuals and organizations to champion Arizona water planning. In AzBusiness Magazine, the organization highlights previous efforts and included the perspective of forward-thinking experts discussing our water future. One of those experts was WRRC Director Sharon B. Megdal, "I think we all agree that we cannot rest on the laurels of our past accomplishments. Instead, we must chart our water-course forward," Megdal also noted that, "we face challenges going forward that are as diverse as our state's communities and geographic features." The article, A Fluid Outlook - Efforts from Arizona Forward, forward-thinkers create reasons to be optimistic about Arizona's water future, includes discussion about the Drought Contingency Plan, the water-energy nexus, drought, smart water planning, and the importance of collaboration.



[AZ Forward Special Edition](#)

Photo Contest Ends Today

Thank you to all of the photographers that submitted photos to our contest. We received many wonderful photos and it will be a tough job to choose the winners. We have our work cut out for us! We will let winners know the results in the next two weeks.



That said, the submission form will be open until midnight tonight, so you still have a chance to submit a photo.

[Submit Photos](#)

ANNOUNCEMENTS

- [January 3 Multi-State Salinity Coalition 2020 Student Scholarship Program - Applications Due](#)
- [January 24 - 2020 UCOWR/NIWR Conference - Abstracts Due](#)
- [June 14 - 17 - ACE20 - Registration is Open](#)





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