

# WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES  
COOPERATIVE EXTENSION

**WATER RESOURCES  
RESEARCH CENTER**



**Sept. 18, 2020 / Volume 8, Issue 28**

The Water Resources 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

[WRRRC Office Update](#)

[View as Webpage](#)

**IN THIS ISSUE:** Request for Proposals, Teaching During COVID-19, APW-Festival Web Launch, Online Water Stories, Lincoln Institute Guidebook



## Transboundary and International Groundwater Topics Fill Events Calendar

The Permanent Forum of Binational Waters is hosting the US-Mexico Transboundary Groundwater Conference, "Innovation and Creativity: Strategies for Unprecedented Challenges," October 14-15, 2020, via Zoom. Cohosts include Texas A&M University and the Instituto Mexicano de Tecnología del Agua. Discussion panels will explore innovations in transboundary groundwater resources management between Mexico and the US from legal, technical, and managerial perspectives. The Permanent Forum of Binational Waters

is “a network [of experts] to integrate collaboration efforts and strengthen their impact across and along the border” between the US and Mexico. On September 29th at 2:30 pm, the Forum also is hosting a “Coffee Break” discussion on US-Mexico transboundary groundwater withdrawals and binational implications. One in a series of Coffee Breaks, this online conversation among distinguished panelists will include WRRC Director Sharon B. Megdal as the special guest speaker.

[Read More](#)

## WRRC EVENTS

### Upcoming Webinars

**Oct. 22 – Water for Nature**

Kristen Wolfe, *Coordinator, Sustainable Water Workgroup*

**Nov. 13 – Coronavirus Response at the Central Arizona Project**

Ted Cooke, *General Manager, Central Arizona Project*

**Nov. 18 – Bureau of Reclamation Programs Supporting Arizona Tribes**

Kevin Black, *Program Manager, US Bureau of Reclamation*

**Dec. 2 – Balancing Water for People and Nature: The Upper San Pedro River**

Scott Deeny, *Arizona Water Program Lead, The Nature Conservancy*

Holly Richter, *Arizona Water Projects Director, The Nature Conservancy*



## NEWS

### WRRC Invites Student Research Proposals

The WRRC invites students at any of Arizona's three public universities to submit research proposals for projects that explore new ideas to address water issues in Arizona and the Southwest. Proposals must show a faculty member from the student's university as the Principal Investigator (PI) and the student or students should be listed as Co-PI(s). Two to four grants of up to \$10,000 will be awarded; requests for less than \$10,000 are recommended. Funds will be available through 104(b) grants program, authorized under the Water Resources Research Act, section 104(b) and funded through the U.S. Geological Survey. Program funding is contingent each year on federal appropriations. The deadline for submitting proposals is **5:00 pm, Thursday, November 5, 2020.**



[Grant Program Announcement  
Proposal Instructions](#)

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**UArizona Employs Innovative Teaching Methods During COVID-19**

Four weeks into the semester, faculty and students across the UArizona are settling into the new reality of “distance learning,” using Zoom for live or recorded lectures, YouTube videos, online Chat Rooms, and other online tools to create a classroom atmosphere. At this point, students and faculty are finding the new reality inspiring but at times frustrating. Many faculty members spent much of the summer undergoing training in online delivery and transforming their lectures as needed. For a small number of classes, such as laboratory-based classes, in-person teaching has been deemed essential. These classes are being taught under strict COVID-19 masking and distancing guidelines. Some truly innovative instructors, like Dr. Rivka Fidel in the Department of Environmental Science, have [shipped laboratory kits to the students](#), which in essence brings the experiments into students’ homes. Students and professors alike eagerly await the day when it is safe to return to the classroom. In the meantime, much teaching and learning continue virtually.



Rivka Fidel pictured - Photo: Caroline Mosley, UA Dept. of Environmental Science



## Arizona Water Festival Web Launch

After 20 years, Arizona Project WET is streamlining and going UA blue with a new logo! With the new look comes new opportunities. We are thrilled to announce that the new Arizona Water Festival (AWF) Program website is live: <https://awf.projectwet.arizona.edu/>. As always, the AWF Program instills a deeper understanding of water in the earth system and Arizona's water resources, but now APW is fully equipped to meet that goal virtually. The curriculum unit, comprising of 10 lessons that fully cover two of the eleven 4<sup>th</sup> grade science standards, is the backbone of the program and is found in the Teacher Resources tab. This tab links to password protected site for AWF participating teachers to access all lesson resources and online activation components for the curriculum.



The Festival Modules tab links to the online activation of the *Groundwater*, *Watersheds*, the *Water Cycle*, and *Water Conservation Technology* lessons. For the thousands of professionals and community members who have helped us deliver festival learning, the Volunteers tab has new features that include the volunteer registration form, festival map locator, and volunteer resources. The Sponsors tab highlights sponsors with scrolling logos and links to their websites.

Virtual festivals in 2020-21 will feature celebrations of learning that connect students with water professionals through videos and live sessions. Contact us if you're interested in being a part of it!

## [Arizona Project WET](#)

## Online Water Stories Expand Understanding



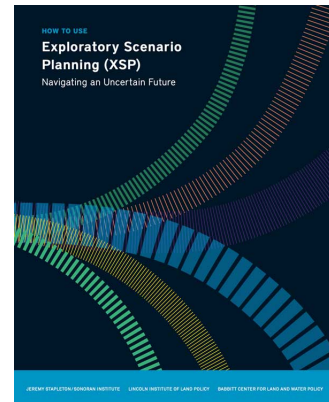
Are you looking for some online water information? Here are two resources worth checking out. First this week, an interactive StoryMap highlights the history and impressive engineering of the Central Arizona Project - CAP. While people may know that CAP brings water from the Colorado River to central Arizona, there's much more to the story of CAP. Stretching over 300 miles, the CAP canal system pumps the water that helps sustain 80% of Arizona's population almost 3,000 feet uphill. The online StoryMap explores the canals, pumps, wildlife crossings, tunnels, reservoirs, walking trails, delivery structures, and even artificial recharge projects that make up CAP. Second, a documentary created in 2018 by Ian James and Steve Elfers is still relevant and can be viewed on YouTube. "Pumped Dry: The Global Crisis of Vanishing Groundwater," highlights the growing crises caused by the overexploitation of groundwater. The video ranges across the globe, from India where falling groundwater tables have dried up rural farmers' 1,000-foot-deep wells, to Morocco and Peru where shortages are fueling political and social unrest, to the Ogallala and Central Valley aquifers of the United States. Once thought to be nearly inexhaustible, these aquifers are running dry. This forceful documentary calls attention to a major challenge to the future viability of groundwater dependent regions.

### [CAP StoryMap](#) [Groundwater Video](#)

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## WRRC Case Study Featured in New Lincoln Institute of Land Policy Guidebook

In the time of COVID-19, climate change, and other uncertainties, a new guidebook from the Lincoln Institute of Land Policy, *How to Use Exploratory Scenario Planning (XSP): Navigating an Uncertain Future*, provides a comprehensive reference for making decisions or plans in the face of critical unknowns and unclear futures. The guidebook features a case study of the XSP process in action in the Upper Gila River Watershed, a 2015 project led by the WRRC's Water RAPIDS team in collaboration with the Gila Watershed Partnership, Graham County Cooperative Extension, and US Bureau of Reclamation. Through the XSP process, stakeholders envisioned and developed multiple potential futures (i.e., scenarios) and considered how to measure and prepare for each, rather than aiming at a single vision of the future. Along with the WRRC example, the guidebook offers other case studies, recommendations, and workshop resources to equip would-be practitioners with background knowledge, procedural guidance, and practical strategies for implementing XSP successfully.



### [Read More](#)

## ANNOUNCEMENTS

- [Sept 23: AWRA - Webinar: Failure is Not an Option](#)
- [Sept 23-24: AWWA Virtual Summit](#)
- [Sept 23 - Oct. 28: WaterSmart Innovations - 2020 Webinar Series](#)
- [Sept 28-30: Groundwater Protection Council - 2020 Virtual Annual Forum](#)
- [Sept 29: Permanent Forum of Binational Waters - Coffee Break Discussion: US-Mexico Transboundary Groundwater: Withdrawals and Binational Implications](#)
- [Oct 1: UCOWR/NIWR 2021 Annual Conference - Special Session Proposals](#)
- [Oct 1: ACE21 - Submit an Abstract](#)

- [Oct 3: Sonoran Institute - Dragonfly Day on the Santa Cruz River](#)
- [Oct 5: NCSE - Art Contest: Colors of Science](#)
- [Oct 5: 2021 Flinn Scholarship - Application Deadline](#)
- [Oct 5-9: BSMAR 17 Symposium - Registration Open](#)
- [Oct 14-15: 2020 US Mexico Transboundary Groundwater Conference - Registration Open](#)
- [Oct 16: RiversEdge West 19th Annual Research and Management Conference - Abstracts Due](#)
- [Oct 20: US Bureau of Reclamation Guardians of the Reservoir Challenge - Submissions Due](#)
- [Oct 20-21: SCWC Semi-Annual Virtual Fall Forum: Connecting Restoration Opportunities Across the Watershed](#)
- [Nov 7: Research Insights in Semiarid Ecosystems \(RISE\) Symposium - Registration Open](#)
- [Nov 9-11: AWRA - 2020 Annual Water Resources Conference](#)
- [Dec 10: 2021 Ford Foundation Fellowship Programs - Dissertation and Postdoctoral, Applications Due](#)
- [Dec 17: 2021 Ford Foundation Fellowship Programs - Predoctoral Applications Due](#)
- [Jan 5-8, 2021: NCSE Drawdown 2021 Conference "Research to Action: Science and Solutions for a Planet Under Pressure - Save the Date](#)
- [April 1, 2021: Special Issue of the Journal \*Water\* \(ISSN 2073-4441, IF 2.544\) - \*Advances in Transboundary Aquifer Assessment\* - Manuscript Submissions Due](#)
- [May 9-14, 2021: IWA World Water Congress & Exhibition - Water for Smart Liveable Cities \(Copenhagen\)](#)

## PUBLICATIONS

**The Future Hydrology of the Colorado River Basin**, Center for Colorado River Studies, Utah State University - [Read the Two-Page Brief](#) - [Read the Complete Paper](#)

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