

SUMMER WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**

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

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WRRC Brown Bag - The Red-Dead Conduit, a Regional Approach to Water Scarcity

The WRRC's May 21st Brown Bag seminar featured a presentation by Professor Uri Shani, titled "Policy Principles, the Red-Dead Conduit and Regional Solutions". A professor of soil and water physics at the Hebrew University of Jerusalem, Uri Shani was the General Manager and Chairman of the Israeli Governmental Water and Sewage Authority and Head of the Red Sea-Dead Sea Steering Committee for many years. His talk began with an overview of the water challenges faced by Israel and its neighbors and what Israel has been doing to address them. The

region is experiencing increased water demands due to population growth and decreased supplies due mostly to climate change. Use of reclaimed water for agriculture, improved efficiencies, and desalination have made Israel water independent. However, the Dead Sea is shrinking rapidly and saving this important resource is an international problem. Donors from around the world are willing to invest in protecting the Dead Sea, and in 2005, Israel, Jordan, and the Palestinian Authority agreed to initiate the Red Sea-Dead Sea Feasibility Study. The goals for a Red-Dead Conduit were to save the Dead Sea from environmental degradation, desalinate water and generate electricity at affordable prices for Jordan, Israel, and the Palestinian Authority, and build a symbol of peace and cooperation in the Middle East. In 2013 the parties agreed to pursue a pilot program to build a desalination plant near the Red Sea that would supply water to Israel and would allocate Jordan more water from Lake Kinneret (Sea of Galilee). Efforts are now underway to proceed to a Phase 1 project that would move water from the Red Sea and discharge water into the Dead Sea, with desalination of water for use by Israel and Jordan. This project exemplifies Professor Shani's principle that regional approaches can lead to water solutions rather than conflicts.

[View Powerpoint Presentation](#)

Dead Sea Photo: Sharon B. Megdal

WRRC EVENTS

Summer Seminar: Representatives of the Water Research Commission of South Africa

June 15, 2018

Time/Location: 9:30 a.m. - 10:30 a.m. / WRRC Sol Resnick Conference Room (350 N. Campbell Ave.)

Please note special time.

Save the date. A special notice will follow.



OTHER EVENTS

Water Roots - Water Beats: Reflections in Water and Music

June 28, 2018

Time/Location: 6:30 p.m. / Public Brewhouse, 209 N. Hoff Ave.

Speaker: *Claire Zucker, Associate Director, Water Resources Research Center*

Music and art have the power to both inspire and mirror - to motivate action and to show where we have traveled. This Water Roots presentation will be a fun evening of music and water combined. Musical elements that illustrate how traditional tunes and songs provide insights on the human relationship with water and land. On the flip side, learn about how our community investments and exploring new scientific horizons have changed our understanding and management of water.



WRRC NEWS

Tucson Wins Mayor's Challenge for Water Conservation

Congratulations to the City of Tucson! It was named one of five national winners in the 7th annual Wyland National Mayor's Challenge for Water Conservation. Challenge participants pledged to reduce water use as well as their use of plastic water bottles and help eliminate hazardous waste from entering watersheds. Tucson won in the population category of 300,000-599,999 people. It previously was a national winner in 2013, but also placed second in each of the last four years. Other 2018 winners include Gallup, New Mexico (Population Category 5,000-29,999); Westminster, California (Population Category 30,000-99,999); Baton Rouge, Louisiana (Population Category 100,000-299,999); and Dallas, Texas (Population Category 600,000 and over). The Wyland Foundation has helped children and families around the nation to rediscover the importance of healthy oceans and waterways since its inception in 1993.



GRACE Satellites Back in Orbit, Providing Global Observations on Water Resources

Water is constantly being redistributed across the globe. On May 22, SpaceX launched two specialized satellites into orbit that are part of the Gravity Recovery And Climate Experiment Follow On (GRACE-FO) mission to track this redistribution. The two satellites will travel 137 miles apart in orbit, and will be 310 miles above Earth. The GRACE satellites map changes in Earth's gravity field, thereby allowing observations of changes in ice sheets, aquifer levels, measuring droughts, and offering valuable information about our world's water resources. The satellites replace the two satellites of the original GRACE program, which were put into orbit in 2002 and went offline in 2017.



Photo NASA Bill Ingalls

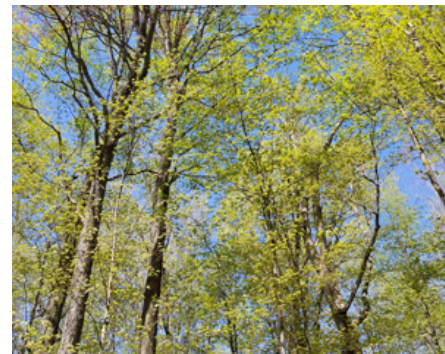
[More Information and Video](#)

Applying Systems Thinking to Complex Water Issues



Arizona Project WET Program was chosen as a ThinkWater state coordinator along with teams from Purdue University in Indiana, Water Education Colorado,

Michigan State University, and Milwaukee Water Commons in Wisconsin. In April, ThinkWater teams met at the Treehaven Field Station in northern Wisconsin to begin work on a year-long collaboration.



ThinkWater, a project funded by the National Institute of Food and Agriculture, helps people of all backgrounds and ages think about water through integration of systems thinking into existing water education and research - and for the past five years, APW has contributed to that goal

As part of their March 2018 to March 2019 goal, ThinkWater is working with partners to expand the process of systems thinking into statewide, regional, and organizational efforts. In parallel with these partnerships, APW delivered a systems thinking teacher workshop this week, furthering the system thinking method here at home in Arizona water education!

[Learn More](#)

The New Arizona Prize: Water Public Art Challenge



The New Arizona Prize Community Foundation is excited to announce the launch of the Water Public Art Challenge. This team-based competition offers five \$50,000 prizes to fund the top creative teams' public art projects, which build connectivity between cultures within the greater Phoenix area and emphasize the historical importance of water to life in the area. Projects should honor the legacy of the Hohokam People's irrigation engineering and agricultural achievements that delivered water and created the foundation for life in the Valley of the Sun. Project submissions are due by August 16, 2018.

[Information and Registration](#)

Guest Column: Pima County Maps and Monitors Water on its Conservation Land

Julia Fonseca

Environmental Planning Manager, Pima County Office of Sustainability and Conservation

Did you know that Pima County owns and leases over 240,000 acres of land? Collectively known as Pima County Conservation Lands, they are managed to be in alignment with the goals and strategies of the County's sweeping [Sonoran Desert Conservation Plan \(SDCP\)](#), which was enacted in 2001. Water was identified as a focal resource of the SDCP. Because much of the County's land acquisition took place after the SDCP was finalized, staff efforts in the past 10 years has been to locate and monitor surface water, particularly during the dry "foresummer" season because of the increased demand for water at that time and because the extent of surface water is at its minimum. A new report by Pima County summarizes seven years of surveys to map the location and condition of all naturally occurring (i.e., unsupplemented) surface water (stock tanks and dams, springs, and streams) throughout Pima County's conservation lands, which are spread throughout eastern Pima County and include lands in Pinal and Cochise counties. Unsurprisingly, surface water was extremely rare. Data from this report will help the County improve monitoring and management of this rare resource.



Cienega Creek Natural Preserve Photo by Terry Hendricks.

[Read the Report](#)

ANNOUNCEMENTS

- [USGS Report Release - Environmental Flows in the Middle Verde River Watershed](#)
- [June 6 AZ Humanities - Arizona: Land of the Water Have and Water Have-nots](#)
- [June 6 RiversEdge West seeks an Executive Director - Application Due](#)
- [June 6-7 ADEQ CWA 404 Program Stakeholder Meeting](#)
- [June 8 Tucson C2E 2018 Grants - Applications Due](#)
- [June 15 - WaterNow's project Accelerator, Round Two - Applications Due](#)
- [June 15 WaterReuse AZ 2018 Scholarship - Applications Due](#)
- [June 26-28 UCOWR/NIWR Annual Water Resources Conference - Registration Open](#)
- [June 29 Texas Desal Conference Poster Contest and Scholarship Opportunity - Applications Due](#)
- [June 29 MSSC Student Scholarship Program - Applications Due](#)
- [July 9-11 AWRA Summer Conference: The Science Management, and Governance of Transboundary Groundwater - Preliminary Program](#)
- [July 30 Lake Tahoe Basin, Sciences, & Research Scholarship - Applications Due](#)
- [August 2-3, 2018 Arizona Water Law Conference - Registration Now Open](#)
- [August 24 CAZMEX Consortium for Arizona-Mexico Arid Environments - Call for Proposals](#)
- [September 26 Innovations at the Nexus of Food, Energy, and Water Systems \(INFEWS\) - NIFA Grant Application Due](#)
- [December 6 Mine Water Management Symposium Scholarship - Applications Due](#)

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