

WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**

February 10, 2017 / Volume 5, Issue 6

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



Abstract Submission is Open for 2017 WRRC Conference Poster Session

The 2017 Water Resources Research Center's Annual Conference, **Irrigated Agriculture in Arizona: A Fresh Perspective**, will be held on March 28 at the University of Arizona Student Union. Don't miss your chance to submit a poster abstract! The conference poster session is an excellent chance to discuss and share your research with the water community at large. Posters addressing irrigated agriculture will be especially relevant to the conference focus, but any project related to water management and quality is welcome.

Accepted abstracts with a student as lead author will automatically be entered into the Student Poster Contest, with generous cash prizes.

Abstracts must be submitted by 5:00 p.m. Tuesday, February 21. Submit abstracts [here](#).

The exciting agenda and other conference information can be found on the WRRC [website](#).



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 **WRRC**
CONFERENCE
2017

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WRRC EVENTS

WRRC Brown Bag - Implementing California's Sustainable Groundwater Management Act and Other Innovative Water Solutions

February 23, 2017

Time/Location: 3:30 p.m. - 5:00 p.m. / WRRC Sol Resnick Conference Room (350 N. Campbell Ave.)

***Please note special time for this Brown Bag**

Speaker: Grant Davis, General Manager, Sonoma County Water Agency



The Sonoma County Water Agency, located in California about forty miles north of the Golden Gate Bridge, supplies drinking water to 600,000 residents in Sonoma and Marin Counties and provides wastewater and flood control services. The Agency, known nationally as a leader in water and wastewater resource management, has received White House recognition for several successful collaborations and partnerships with local, state, and federal agencies.

General Manager Grant Davis will describe innovative strategies that have leveraged financial investments and delivered more sustainable and reliable water management. Specific examples include multiple-jurisdiction water reuse, improved Atmospheric River prediction, and Forecast Informed Reservoir Operations. Mr. Davis will also describe implementation of California's new groundwater law, new initiatives that reduce energy used in water treatment and delivery, partnering with academia, and using science-based approaches to better prepare for the future.



If you can't make it to the live seminar on Feb. 23rd, join us online [here](#)



WRRC Brown Bag - Transforming Wastewater to Drinking Water: How Two Agencies Collaborated to Build the World's Largest Indirect Potable Reuse Project



April 13, 2017

Time/Location: 12:00 p.m. - 1:30 p.m. / WRRC Sol Resnick Conference Rm. (350 N. Campbell Ave.)

Speaker: Adam Hutchinson, Recharge Planning Manager, Orange County Water District

In the early 2000's, two Orange County agencies faced some challenges. The Orange County Sanitation District (OCSD) needed to replace an ocean outfall for treated sewer water at a cost of millions of dollars. The Orange County Water District's (OCWD) Water Factory 21, a groundbreaking water recycling facility constructed in the mid-1970s, was nearing the end of its useful life. Rather than focus on their individual needs, the two agencies developed a mutually beneficial project that saved money and generated tremendous benefits for the citizens of Orange County. This project is the Groundwater Replenishment System (GWRS), which currently generates 100 million gallons per day of advanced purified water that is recharged into the Orange County groundwater basin to supplement potable water supplies. Further expansion of the GWRS to 130 million gallons per day will result in the recycling of all the available wastewater within OCSD's service area, further bolstering the reliability of Orange County's water supplies. In addition to being a reliable supply, GWRS water is very pure, with a total dissolved solids (TDS) concentration of 70 mg/L, which greatly assists in reversing a salt imbalance in the basin and improving overall groundwater quality.



If you can't make it to the live seminar on April 13th, join us online [here](#).

OTHER EVENTS

UBRP Spring Panel - Water We Going To Do?



February 15, 2017

Time/Location: 5:30 p.m. - 7:00 p.m. / UA Student Union, Room 2487 (1303 E. University Blvd.)

Speakers: Jonathan Rothschild, Tucson Mayor; Dr. Sharon B. Megdal, Director, UA Water Resources Research Center; and Timothy Thomure, Director, Tucson Water

Come learn and ask questions about the past, present, and future of water conservation and availability in the Southwest, with a particular focus on Tucson and greater Arizona communities! This event is open to the public. Refreshments will be provided.

For more information, click [here](#).

AZ Water March Luncheon - Students Can Eat Free!



March 2, 2017

Professionals Dedicated To Arizona's Water

Time/Location: 11 :30 a.m. - 1:00 p.m. / Hotel Tucson City Center (425 N. Granada Ave.)

Speaker: Mike Ortega, Tucson City Manager

The monthly luncheon of the Southern Arizona Chapter of AZ Water and ASCE is featuring Tucson City Manager Mike Ortega to speak on downtown Tucson redevelopment and revitalization.

Thanks to the generous sponsorship of Montgomery & Associates, six student registrations are available at no charge. These luncheons provide an excellent opportunity to interact with water professionals from throughout the region. Students who are interested in this opportunity should email [Shawn-Noel Simmons](mailto:Shawn-Noel.Simmons@montgomeryandassociates.com).

For more information on this and other AZ Water programs, click [here](#).

NEWS

CAP System Use Agreement Signed

Central Arizona Project and the U.S. Bureau of Reclamation reached a historic agreement on Thursday, February 2 that allows for "new and innovative" uses of the CAP's 336-mile system of canals. CAP board President Lisa Atkins and board member, WRRRC Director Sharon B. Megdal are pictured signing this agreement, which will create a legal framework for a variety of water supplies to move through the system.

This agreement will allow flexibility in managing Arizona's Colorado River allotment and open doors for further innovation and future agreements concerning water distribution.



To read the ADWR official news blog, click [here](#).

Super Bowl "Super Flush"

Apparently, Super Bowl preparations go far beyond players, coaches, and fans as Research Scientist and WRRRC Associate Director Jean McLain discovered on a tour of a municipal wastewater treatment plant.

Calculating the "high-flow" capacity that a plant will require is a crucial step in the overall design of wastewater treatment facilities. Plant operators verified that the highest flow of the year happens during halftime of the Super Bowl. So next year during halftime, you can rest assured that the wastewater treatment plant in your area can handle the "super flush".



To read the story on the UA Cooperative Extension website, click [here](#).

To view the KGUN9 interview of Jean McLain, click [here](#).

Got Clean Water?

Students from Sahuarita
and Amphitheater Middle



Schools were challenged to find out! They applied engineering design principles to build a system that effectively filtered water. Students

learned about turbidity - cloudiness caused by suspended solids, and clarity - a physical characteristic defined by how transparent water is. A Turbidity Meter, a tool that measures the reduction in the strength of light as it passes through a water sample, was used to measure the clarity of the water, just as water providers do at water treatment plants. Using turbidity readings before and after filtration, students calculated the efficiency of their systems.

Women in Science and Engineering (WISE) sponsored the Expanding Your Horizons event, giving Arizona Project WET a chance to engage middle school students in cleaning water.

Learn more about APW's community engagement through their [Facebook](#) page.



WRRC to Host Film Screening During Groundwater Awareness Week

On March 8, the WRRC will recognize Groundwater Awareness Week with a screening of **Written on Water: A Modern Tale of a Dry West**.



Written On Water focuses on the Ogallala Aquifer and examines the conflicts, politics, economics, and groundwater depletion in the High Plains region. The Ogallala supports over one-fifth of the grain, beef, and cotton production in the United States and over 80% of the drinking water for people living in the High Plains. The Ogallala Aquifer is not being replenished as it once was by Rocky Mountain waters, instead water is being mined from the aquifer.

The film follows farmers and a West Texas community struggling to survive as wells run dry. The story highlights the tension between property rights advocates and state-mandated pumping limits.

The film screening, which will take place in the Kiva Room of the Student Union at 4:30 p.m., will be followed by a question-and-answer session with the film's Producer/Director, Merri Lisa Trigilio, Ph.D. Please join us for this unique and informative event! Refreshments will be served.

For more information on **Written on Water**, click [here](#).

USGS Arizona Water Science Center New Product Distribution

The United States Geological Survey has initiated the e-mail distribution of hydrologic-science products relevant to Arizona. These products will include traditional USGS reports, Fact Sheets, journal publications, data releases, and other publications or data sources. The first two publications announced for distribution are a Fact Sheet from a USGS National Water Quality Assessment



Program [\(NAWQA\) assessment of groundwater quality in several of the Nation's Principal Aquifers](#) including Arizona's Basin & Range basin-fill aquifers and a report, [Hydrogeologic framework and characterization of the Truxton Aquifer on the Hualapai Reservation, Mohave County, Arizona.](#)

If you would like to be added to the distribution email list, contact [Alexis Lopez](#).

ANNOUNCEMENTS

2017 UCOWR Award Nominations - Deadline Extended

Each year, University Council on Water Resources recognizes two outstanding Ph.D. dissertations in Natural Sciences and Engineering. The deadline has been extended until **Wednesday, February 15, 2017**.

For more information on nomination criteria, click [here](#).

Global Challenges: Science Diplomacy and Policy with Focus on the Americas Conference

The Office of Global Initiatives at the University of Arizona will host this two day event, February 22-24, 2017.

For more information or to register, click [here](#).

WateReuse Symposium - Call for Abstracts

Abstracts for the September 10-13, 2017 conference are due by February 27. Authors will be notified April 17.

For more information on submitting an abstract, click [here](#).

WATER RESOURCES RESEARCH CENTER

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