



April 28, 2017 / Volume 5, Issue 17 The <u>Water Resources Research Center</u> - a research and <u>Extension</u> unit of the <u>College of Agriculture and Life</u> <u>Sciences</u>

In this issue: <u>Conservation Savings</u> / <u>Water Release</u> / <u>Whole Farm</u> <u>Management</u> / <u>C2E Grant</u> / <u>Summer Wave</u>



Sparking Interest in Science Investigations

Field opportunities ignite a passion for science and the environment. This was the case for Pusch Ridge Academy highschool student, Rachel Nehrmeyer. Armed with Arizona Project WET (APW)

equipment and lessons, Rachel performed biological and chemical sampling of Tucson waterways for the past two years to assess the health of the system. Her work received two awards at the recent Southern AZ Regional Science & Engineering Fair and a third award at the AZ Science & Engineering Fair. Speaking of her field investigation, Rachel said, "Water testing was a good experience. I loved being out in the field and learning about the environment."

WRRC EVENTS

Read more on the **APW blog**.

Check out all of our upcoming events and videos of previous events <u>on our</u> website

OTHER EVENTS

Gertrude and Fred Rosen Memorial Lecture - Bridging Through Water

May 7, 2017

Time/Location:

7:00 p.m./ Weintraub Israel Center Tucson J Heritage Room (3822 E. River Rd., Tucson)

Speaker:

Sharon B. Megdal, *Director, University of Arizona, Water Resources Research Center*

Based on Dr. Megdal's research and the perspective she



has gained from many visits to Israel and the region, she will share up-to-date information on Israel's water management practices. Israel is a world leader in efforts to combat scarcity of naturally occurring freshwater. She will explain how Israel's development and deployment of water technology, along with national water management practices, are relevant to our region. Dr. Megdal will also share how the Red-Dead pilot desalination project can be a bridge to regional cooperation. A screening of *Beyond the Mirage* with a Q&A session will follow. This event is free and open to all (suggested donation of \$5 per person at the event). RSVP by May 4, 2017.

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NEWS

The Financial Benefits of Water Conservation, April 17th WRRC Brown Bag - Video Posted

On April 18, the WRRC Brown Bag featured Candice Rupprecht, Water Conservation Specialist at Tucson

Water, and Mary Allen, Program Manager at Pima County Waste Water, who discussed their joint project to evaluate cost savings due to water conservation. They began by describing the many approaches undertaken by both Tucson Water and Pima County to achieve water efficiency, including implementing water-saving ordinances, offering rebates for new efficient appliances, and designing utility rate structures that encourage low water use. Using a



start date of 1980, this study projected hypothetical, non-conserving, water demands for 2015 and then compared these numbers to actual water use numbers. The next step was to estimate costs. Many factors were taken into consideration including additional costs for water resources, infrastructure, treatment, and operations that would have been required if higher water demand had occurred. Findings were quite significant: Tucson Water rates are estimated to be 22.3% lower today and Pima County Water Reclamation rates are estimated to be 7.8% lower today than otherwise would have been necessary if per capita water demand had not been reduced.

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Lake Powell to Lake Mead Water Release Will Increase

The U.S. Bureau of Reclamation announced that it is "highly likely" that they will be releasing nine million acre-



feet of Colorado River water from Lake Powell downstream into Lake Mead. The wet winter brought over 160 percent of average snowpack accumulation on the Rocky Mountains. Because of the accumulation, the Bureau of Reclamation anticipated a release of 11 million acre-feet; however, a very dry and warm early March caused them to reduce the planned release, although it will still be higher than the normal release of 8.3 million acre-feet. This should be enough to protect water levels in Lake Mead and forestall a shortage declaration.

<u>More</u>

Whole Farm Management for Efficient Water Use

Managing roughly 850 thousand acres of irrigated land in Arizona still takes a localized-farm approach. Farmers across the state use a variety of irrigation techniques to improve their overall farm operations and optimize crop yields with minimal input costs.

At the 2017 WRRC Annual Conference, topics of whole farm management were explored through a panel discussion. Dr. Paul Brown, UA, began the irrigation management dialogue with an overview of the trends in



adopting techniques like drip irrigation and solid set sprinklers among farmers. Although Brown mentioned that efficiency improvements happen slowly, he also noted the considerable improvements in water management on farms. Arnott Duncan, a Central Arizona farmer, presented a grower's perspective and illustrated how farmers will continue to grow what they think they can sell. Duncan built upon Brown by demonstrating certain economic and conservation drivers that farmers face. Ramona Farms owners, Ramona and Terry Button, provided their experience in farm management on Gila River Indian Community lands. Learning from her father, Ramona persists with growing traditional Native foods.



Enhance Your Community With a Grant From C2E

Tucson Conserve to Enhance is accepting grant applications from local organizations seeking to improve the community with water harvesting and habitat restoration projects. Grant applications are due by May 31, 2017.



There will be a free Grant Workshop on Tuesday, May 2 from 5:30 p.m. to 7:00 p.m. in the Ward 6 Community Room (3202 E. 1st St.). The workshop will explain goals of the C2E program, grant process, and offer application guidance. Please RSVP to <u>Tucson@conserve2ehnance.org</u>.

<u>More</u>

Summer Wave Begins May 26

Beginning May 26, 2017, the WRRC will again switch over to a biweekly newsletter, the Summer Wave. We will continue to bring you upcoming events, relevant stories, and announcements to keep you informed and up to date.



The WRRC wishes everyone a safe and enjoyable summer. We will resume our weekly schedule on August 25, 2017.

ANNOUNCEMENTS

- <u>May 1 Early Registration Ends for International Water Association (IWA)</u> <u>Reuse 2017</u>
- <u>May 2 Arizona Department of Environmental Quality hearings on revisions to</u> the reclaimed water rules
- May 4 AZ Water Career Fair
- May 8 AWRA Annual Conference Abstracts due
- <u>May 19 Agribusiness & Water Council of Arizona's Annual Meeting & Water</u> <u>Conference - Trumping Arizona Ag</u>
- June 13-15 UCOWR/NIWR Conference Preliminary Program now Posted

WATER RESOURCES RESEARCH CENTER

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