

WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**



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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. [Land Acknowledgement](#).

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IN THIS ISSUE:

Presidential Advisory Commission, Lake Powell, New Publications, APW, Smartscape



WRRC Director Selected for UArizona Presidential Advisory Commission

WRRC Director Sharon B. Megdal has been appointed to serve on UArizona's Presidential Advisory Commission on the Future of Agriculture and Food Production in a Drying Climate. Comprising experts in agriculture, food production, and water sectors

across the university and beyond, the Commission will provide recommendations on best practices for agriculture and food production in arid regions. The drying climate and limited water resources threaten the vitality of agriculture systems in Arizona and across the world. The Commission will create research-based solutions for the transformational technologies and sustainable agricultural practices necessary to respond to a changing climate. The solutions will not only protect the economic vitality and agriculture production in Arizona but will also inform other regions facing similar threats. UArizona President Robert C. Robbins shared his enthusiasm for the commission's potential to inform research-based decisions that create resilient communities and address climate change and food security.

Image: Rosa Bevington, Aerial Field, Yuma, WRRRC Photo Contest 2017

[President Robbins' Announcement](#)

EVENTS

Upcoming WRRRC Events: Save these Dates!

Jan 26, 2023: WRRRC Brown Bag Webinar: Silent River screening and panel featuring Mathew Moseley and Matt Rice

Feb 1, 2023 (Feb 2 at 9:00 am Canberra, Australia time): WRRRC Special Event featuring Australian water expert Bradley Moggridge (co-sponsored by the Indigenous Resilience Center)

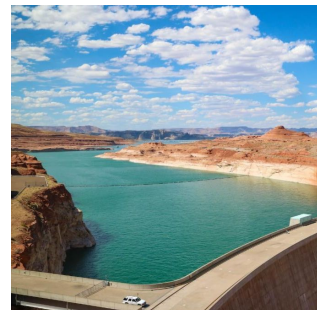
Feb 15, 2023: WRRRC Brown Bag Webinar: Sonoran Institute's Santa Cruz River team presentation on the findings of the latest *Living River* reports

Jul 11-12, 2023: WRRRC 2023 Annual Conference

NEWS

Lake Powell's Future Debated

The stunning decline in Lake Powell water levels has precipitated renewed debate on the lake's future. Glen Canyon Dam, which created Lake Powell, is operated by the US Bureau of Reclamation for water storage and power generation. A key component of the Colorado River system, it allows the Upper Basin to meet its Colorado River Compact obligation to the Lower Basin. After a series of low runoff years, however, people are asking if it is wise, or even possible, to maintain the lake and dam as designed. Beyond issues of Colorado River system operations and power generation, the debate involves future recreational use and environmental considerations. The US National Park Service continues to invest millions to preserve lake access and services for boating. Yet many access ramps and services have been closed, and boater visitation is dropping as the lake shrinks. On the other hand, land-based recreational use has increased as falling lake levels expose natural attractions, such as beaches and rock formations, now accessible to hikers, including an impressive sandstone grotto and waterfall named 'Cathedral in the Desert.' Ideas ranging



from adjusting Upper Basin operations so as to maintain the lake to decommissioning the dam have been proposed. Reclamation has not ruled out any possibility, although decommissioning is not among the wide range of options they are evaluating as they consider what to do if water levels in Lake Powell and Lake Mead fall lower than can be managed in the existing system. For Arizona Daily Star subscribers, the various perspective of recreationists, environmentalists, and the managing federal agencies are described in two articles by Tony Davis. Updates on Lake Powell conditions are available from the National Park Service.

Photo by [Joshua Sukoff](#) on [Unsplash](#)

- [More Info](#)
- [Lake Powell Conditions](#)
- [Tony Davis Article #1](#)
- [Tony Davis Article #2](#)

New Water Publications Available Online

Five new water-related articles and reports published online in recent weeks may be of interest to Weekly Wave readers. The Water Education Foundation released an article on December 9, titled “[As Colorado River Flows Drop and Tensions Rise, Water Interests Struggle to Find Solutions That All Can Accept](#),” detailing the ongoing efforts to manage water shortages in the Colorado River Basin. The Water & Tribes Initiative, with support from the Colorado River Sustainability Campaign, published a report in November on “[Enhancing Tribal Water Management Capacity in the Colorado River Basin: A Baseline Assessment](#).” Also in November, the Sonoran Institute released their latest *Living River* report, “[A Living River: Charting Santa Cruz River Conditions Nogales Wash to Amado](#).” It follows an [earlier report](#) on Santa Cruz River conditions in Tucson and Marana. Both reports are available in English and Spanish. The US Water Alliance released a new report in October, “[The Path to Universally Affordable Water Access: Guiding Principles for the Water Sector](#).” It is “the culmination of more than 18 months of convenings across eight US cities to understand the policy, practice, and impact of shutting off individual access to water due to the inability to pay water bills.” Finally, the American Water Works Association just released their [Water 2050 Report](#), summarizing the first Water 2050 Sustainability Think Tank, held in Las Vegas in September 2022, and recommending actions based on the contributions of Think Tank attendees.



More Info:

- [Water Education Foundation Colorado River Story](#)
- [Water & Tribes Initiative Report](#)
- [Sonoran Institute's Santa Cruz “Living River” Report](#)
- [US Water Alliance Report](#)
- [AWWA Water 2050 Report](#)



Water on Mars

To investigate connections between landforms on Mars to landforms on Earth, APW travels far into water education topics. Through a partnership with Flagstaff's STEM City Full STEAM Ahead (FSA) program, APW is engaged in a year-long initiative with FUSD's Shauna Cooper of Knoles Elementary to deepen science instruction in her fifth-grade classroom. To support the class's current unit on space science (and keep water education at the forefront), APW adapted a lesson from NASA that inspires curiosity and discovery using 3D models, utilized the NASA-funded NAU PLANETS activities, and brought a very special planetary scientist into the classroom!



[Read More](#)

Smartscape Courses Offered in Spanish

Landscape professionals play a critical role in water resource management, and Smartscape courses allow them to specialize in water-use efficiency planning and set themselves apart in a competitive field. Now, an in-depth, twelve-hour advanced Smartscape Course, titled *Plant Materials* is being offered in Spanish. Registration is currently open for this course, which will educate landscape professionals on the variety of water-efficient plants compatible with the Sonoran Desert and will provide hands-on activities as well. Featured in Pima and Maricopa Counties, Smartscape courses are led by experts in topics such as drip irrigation design and installation, maintaining desert-adapted plants, landscape design and renovation, and more. Graduates of the program will distinguish themselves in the field by receiving a certificate of completion from UArizona, continuing education credits from the International Society of Arboriculture and Association of Professional Landscape Designers, and professional recognition on the Smartscape website. For more information on the Advanced Smartscape course or other Smartscape courses, contact the Smartscape Program Coordinator, Kirti Mathura, at (602) 827- 82076 or via email: kmathura@arizona.edu.



[Smartscape Courses](#)

[Upcoming Advanced Smartscape Course \(Offered in Spanish\)](#)

WATER JOBS

- ADEQ [Compliance Assistance Coordinator – Drinking Water](#)
- ADEQ [Hydrogeologist 2-3](#)
- ADEQ [Surface Water Inspector](#)
- ADWR [Hydrogeologist Associate – Groundwater Modeling](#)
- ADWR [Hydrogeologist 2 – Groundwater Modeling](#)
- ADWR [Hydrogeologist 3 – Groundwater Permitting & Wells](#)
- ADWR [Water Resources Specialist Associate – Statewide Planning/Surface Water](#)
- ADWR [Water Resources Specialist 2 - Data & Document Specialist](#)
- ADWR [Water Resources Specialist 2 – Stakeholder Outreach Coordinator](#)
- ADWR [Water Resources Specialist 3 – Demand & Supply Analyst](#)
- ADWR [Water Resources Specialist 3 – Statewide Planning/Water System Program](#)

- City of Scottsdale [Water Conservation Specialist](#)
- Climate Assessment for the Southwest Program [Post-doctoral Research Associate I](#)
- Southwest Climate Adaptation Science Center [Post-doctoral Fellow](#)
- Southwest Urban Integrated Field Laboratory [Program Coordinator](#)
- Southwest Urban Integrated Field Laboratory [Post-doctoral Research Associate I](#)
- USDA Southwest Climate Hub [Post-doctoral Fellow](#)

Please visit [WRRC's website](#) for a complete listing of water jobs & opportunities.

ANNOUNCEMENTS

- **Dec 16:** [2023 Family Farm Alliance Annual Conference: “A Wake Up Call for America: Why Farms, Water and Food Matter” – Super Saver Registration Deadline](#)
- **Dec 16:** [2023 WaterReuse Symposium – Early Bird Registration Deadline](#)
- **Dec 16:** [UCOWR Board of Directors 2023 Election – Nomination Deadline](#)
- **Dec 21:** [CAP Board Meeting: Special Finance, Audit and Power Committee](#)
- **Jan 10, 2023:** [2023: Upper Verde Wild and Scenic River Suitability — Deadline for Public Comment](#)
- **Jan 11, 2023:** [Growing Water Smart: Integrated Water and Land Use Planning Workshop – Extended Application Deadline](#)
- **Jan 15, 2023:** [Campus Sustainability Fund Annual Grants – Preliminary Application Deadline](#)
- **Jan 16, 2023:** [NGWA Conference: Managed Aquifer Recharge: Unleashing Resiliency, Protecting Groundwater Quality – Abstract Submission Deadline](#)
- **Jan 23, 2023:** [Drinking Water Regulations – Prohibition on Lead Use Rulemaking – Deadline for Public Comment](#)
- **Jan 27, 2023:** [2023 Family Farm Alliance Annual Conference: “A Wake-Up Call for America: Why Farms, Water and Food Matter” – Early Registration Deadline](#)
- **Jan 27, 2023:** [Fifth National Climate Assessment Call for Public Comment – Submission Deadline](#)
- **Jan 30, 2023:** [2023 UCOWR/NIWR Annual Water Resources Conference – Abstract Deadline](#)
- **Jan 30, 2023:** [Arizona Association of Women in Water & Agriculture: Wine, Women & Water](#)
- **Jan 31, 2023:** [Arizona Association of Women in Water & Agriculture: Annual Meeting & Networking Conference](#)
- **Feb 1, 2023:** [90th Annual Western Snow Conference – Call for Papers Submission Deadline](#)
- **Feb 6-7, 2023:** [Groundwater Resources Association of California Conference: Climate Change Inundates Groundwater Industry](#)
- **Feb 15, 2023:** [Call for Papers: JCWRE Special Issue on Undergraduate Research and Education – Submission Deadline](#)
- **Feb 23-24, 2023:** [2023 Family Farm Alliance Annual Conference: “A Wake Up Call for America: Why Farms, Water and Food Matter”](#)
- **Feb 24, 2023:** [2023 Land and Water Summit – Registration Deadline](#)
- **Feb 26, 2023:** [2023 WaterReuse Symposium – Advance Registration Deadline](#)
- **Mar 1-3, 2023:** [2023 Land and Water Summit](#)
- **Mar 5-8, 2023:** [2023 WaterReuse Symposium](#)
- **Mar 6-8, 2023:** [Growing Water Smart: Integrated Water and Land Use Planning Workshop](#)
- **Apr 17-20, 2023:** [90th Annual Western Snow Conference](#)
- **Apr 24-25, 2023:** [NGWA Conference: Managed Aquifer Recharge: Unleashing Resiliency, Protecting Groundwater Quality Conference](#)

- **May 7-10, 2023:** [National Association of Environmental Professionals \(NAEP\) 2023 Conference](#)
- **May 8-9, 2023:** [Water for Food Global Conference: Cultivating Innovation: Solutions for a Changing World](#)
- **Jun 13-15, 2023:** [UCOWR/NIWR 2023 Annual Water Resources Conference](#)
- **Jul 11-12, 2023:** [WRRRC 2023 Annual Conference – Save the Date!](#)
- **Jul 17-19, 2023:** [AWRA 2023 Summer Conference: Connecting Land & Water for Healthy Communities](#)

PUBLICATIONS & MEDIA

New Article from the Water Education Foundation

[*As Colorado River Flows Drop and Tensions Rise, Water Interests Struggle to Find Solutions That All Can Accept.*](#)

New Report from the US Water Alliance

[*The Path to Universally Affordable Water Access: Guiding Principles for the Water Sector.*](#)

Water Management Assistance Program (WMAP) PowerBI Dashboard is now live and available on the [WMAP webpage](#).

Sonoran Institute Arizona Reports: *A Living River*

The Sonoran Institute publishes reports on Arizona river ecosystems. Recent reports feature [Tucson](#) and [Nogales](#). Many of the reports are available in both English and Spanish. [More Info](#)

Water and Tribes Initiative Report [Full PDF](#)

Enhancing Tribal Water Management Capacity in the Colorado River Basin: A Baseline Assessment [More Info](#)

New Podcast: Valerisa Joe-Gaddy on Tribal Water Justice: Agents of Change in Environmental Justice

Dr. Valerisa Joe-Gaddy joins the Agents of Change in Environmental Justice podcast to discuss the importance of including Indigenous people in water management decisions and says “They’re still fighting for water rights.” [Listen Here](#)

OTHER NOTICES

Congratulations to Dr. Monica Ramirez-Andreotta

Dr. Monica Ramirez-Andreotta, assistant professor of Soil, Water and Environmental Science for the UArizona Department of Environmental Science, has been awarded funding for two excellent projects: *Building a Culture of Health in the Green: Participatory Learning and Action to Address Air and Soil Quality in Rural Underserved Communities* and *Wildfires and Flash Floods: Using Exposure Science to Identify Rural Arizona Mining Communities at Risk from the Release and Remobilization of Contaminants*.

CALS Career Center: Spring 2023 Career Talks

In Spring 2023, the UArizona College of Agriculture and Life Sciences (CALs) will be holding weekly Career Talks — an opportunity for employers to connect with CALs students to share an industry overview, discuss internship and/or job opportunities, and meet 1:1 with interested students. Career Talks are on Wednesdays from 12:30 - 1:30 pm AZ time. Interested employers can sign up [here](#).

Public Comment: Drinking Water Regulations – Prohibition on Lead Use Rulemaking

ADEQ welcomes comments on updates to the safe drinking water rules in A.A.C. Title 18 Chapter 4 to conform to EPA’s final regulation entitled “Use of Lead Free Pipes, Fittings, Fixtures, Solder, and Flux for Drinking Water” (Lead Free Rule). 85 FR 54235 (Sept. 1, 2020). [More Info](#)

UArizona Presidential Advisory Commission on the Future of Agriculture and Food Production in a Drying Climate

WRRRC Director Sharon B. Megdal has been appointed to serve on this new Commission that will provide recommendations on concrete steps the University can take to make our state a global leader in creating and applying transformational technologies and climate-resilient sustainable agricultural and food production practices, in partnership with the desert agriculture industry. [More Info](#)

Tucson One Water 2100 Public Survey

Help Tucson Water develop the One Water 2100 Master Plan. The plan will manage Tucson’s water resources for the next eight decades. Your feedback will help develop long-range strategies for water use and infrastructure. [Take the Survey](#)

Upper Verde Wild and Scenic River Suitability — Request for Public Comment

The Bradshaw and Chino Valley Ranger Districts of the Prescott National Forest are seeking comments on the Upper Verde Wild and Scenic River Suitability Study Draft Environmental Assessment (DEA). The purpose is to determine whether the eligible portions of the Upper Verde River continue to be suitable for and should be recommended to Congress for inclusion in the National Wild and Scenic River System (NWSRS). Comments will inform officials of the best alternatives available for preserving the river’s free-flowing condition and Outstanding Remarkable Values (ORVs), in relation to a proposal by the Bureau of Reclamation to construct two fish barriers in NWSRS-eligible sections of the Upper Verde River. [More Info](#)

Do you have a story idea, water job announcement, or event to share?

[Contact us here](#)