

# WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES  
COOPERATIVE EXTENSION

## WATER RESOURCES RESEARCH CENTER



February 11, 2022 / Volume 10, Issue 6

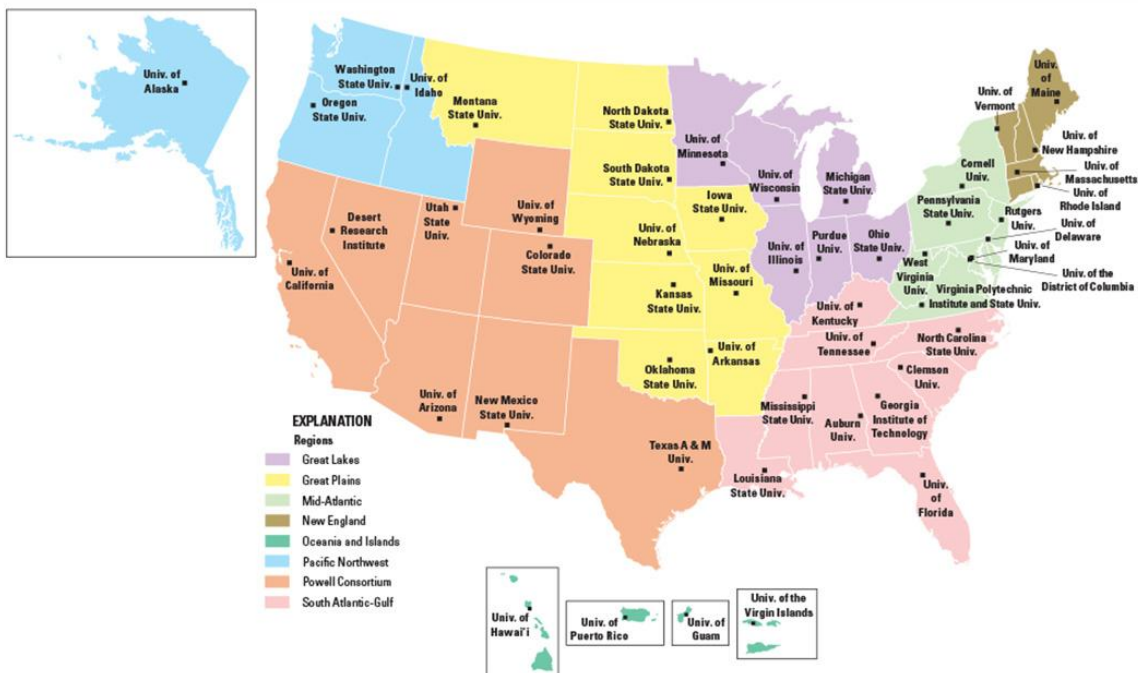
The Water Resources Research Center - a research unit of the [College of Agriculture and Life Sciences](#) and an Extension unit in [UA Cooperative Extension](#) within the Division of Agriculture, Life & Veterinary Sciences & Cooperative Extension. [Subscribe to the Weekly Wave.](#)

[WRRRC Office Update](#)

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### IN THIS ISSUE:

NIWR, Brown Bag Recap, ADWR, Watershed Videos, Drought Preparedness



Map of the 54 Water Resources Research Act Program institutes and centers by State, territory, or district location; university partner; and geographic region. The institutes and centers were established by the Water Resources Research Act of 1964, as amended in 1984 (Public Law 88-379, Stat. 78). The U.S. Geological Survey began administering the Water Resources Research Act Program in 1984. Map generated using data from the National Institutes for Water Resources (2014).

## WRRRC Represents Arizona at Virtual NIWR Meeting

For three days this week, WRRRC Director Sharon B. Megdal and Program Manager Michael Seronde participated in the National Institutes for Water Resources (NIWR) Annual Meeting, held virtually. The WRRRC is one of 54 Water Resources Research Institutes and Centers in the US, with one located in each state, the District of Columbia, and three US Territories. At the annual meeting, Institute and Center directors and staff came together to share successes and ideas for collaboration, discuss challenges, and coordinate activities related to their federally authorized status. In addition to interacting with key staff at the US Geological Survey, the NIWR annual meeting provides participants with the opportunity to meet regionally. As a part of the region that includes the Colorado River Basin states, it was good to see and hear from our counterparts. In conjunction with the NIWR meeting, informational meetings with Arizona's congressional delegation staff are scheduled with the assistance of the UArizona federal relations team. These meetings provide an opportunity to share information about WRRRC activities. Last year was particularly noteworthy in that the relevant authorizing legislation, the Water Resources Research Act, was reauthorized as part of the Bipartisan Infrastructure Bill.

[2022 NIWR Factsheet](#)  
[WRRRA Reauthorization](#)

## EVENTS

### **Brown Bag Webinar: All In: Confronting Southern Nevada's New Water Reality**

**Date:** February 15, 2022  
**Time:** 12:00-1:15 pm Arizona Time  
**Location:** [Webinar Only](#)

**Speaker:** Colby Pellegrino, *Deputy General Manager, Resources, Southern Nevada Water Authority*



Due to prolonged drought, overall snowfall and runoff into the Colorado River Basin are at all-time lows, resulting in the combined water storage in the river's two primary reservoirs—Lakes Powell and Mead—dropping to just 32 percent of capacity. The Secretary of the Interior recently announced the first-ever shortage declaration, reducing the availability of Colorado River supplies to Nevada in 2022. Projections indicate that Lake Mead water levels will continue to decline, and the likelihood of shortage remains high in future years.

Given current hydrologic conditions, water conservation remains a critical component of Southern Nevada's water resource portfolio. While the community has significantly reduced per capita water demands, additional work is required to reduce consumptive use to meet current and future water demands in Southern Nevada.

[Register Here](#)  
[More Info](#)

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### **WRRRC Chocolate Fest 2022**

**Date:** February 16, 2022  
**Time:** 4:00-5:00 pm Arizona Time

**Location:** [Webinar Only](#)

Please join us from 4:00-5:00 pm MST on Wednesday, February 16 for the WRRC's Annual Chocolate Fest! This two-part virtual program of celebration will include the announcement of our 2021 Annual Photo Contest winners! Following a slide show of the winning images, we will make a chocolate toast to our Director, Sharon B. Megdal, who on Valentine's Day (Arizona Statehood Day!) celebrates 20 years at the WRRC. Raise high a divine chocolate delectation as we acknowledge her time at the Water Center and, of course, hear a few comments on chocolate (not water!). So, bake, concoct, purchase, or brew your favorite treat and spend an hour with new and old friends at this annual WRRC event. We are looking forward to seeing you there!



[Register Here](#)  
[More Info](#)

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## Upcoming Events

**Feb 14:** [Native Voices in STEM Spring 2022 Seminar Series: Mining and Wildfire Driven Changes Alter Metals Mobilization: Restorative and Mechanistic Insights](#)  
Dr. Cherie DeVore, *Postdoctoral Scholar, Stanford University*

**Mar 15:** Brown Bag Webinar: Rio Reimagined: Reconnecting the Salt River With the Valley's Metropolitan Communities

**April 7:** Brown Bag Webinar: Public Interest, Indigenous Rights, and the Los Angeles Aqueduct; Sophia Borgias, *Assistant Professor, Interdisciplinary Programs, Boise State University*

**Apr 19:** Brown Bag Webinar: Carlos de la Parra, *Research Professor of Urban and Environmental Studies, El Colegio de la Frontera Norte*

## NEWS

### **WRRC Postdoc Shares Recent Research**

Last week's Brown Bag webinar featured Mary-Belle Cruz Ayala, a post-doctoral researcher at the WRRC, who presented her recent research on Mexican policies for Managed Aquifer Recharge. Like many places, groundwater is a major source of water for both drinking and agriculture in Mexico. But as Cruz Ayala described, the resource is "invisible" and often overexploited. According to data presented by Cruz Ayala, continuing drought conditions and lack of groundwater availability in many regions throughout Mexico pose significant challenges to water managers. Cruz Ayala presented Managed Aquifer Recharge (MAR) as an important management tool to address these challenges. MAR enables water managers to store water from other sources in the ground for future use and restore aquifer health. Discussing her research into MAR projects in Mexico, Cruz Ayala outlined how the legal framework regulating MAR projects and access to federal funding are barriers to MAR. Cruz Ayala explained how these problems can be addressed, and how farmers, nonprofit organizations, municipalities, and the federal



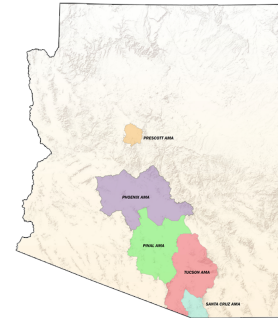
government must work together to move forward. The presentation concluded with an engaging Q&A session.

## [Presentation Slides and Recording](#)

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### **ADWR Taking Comments on Draft Fifth Management Plans**

The Arizona Department of Water Resources is asking for stakeholder reviews and informal comments on their draft Fifth Management Plans (5MPs). The initial drafts of the five plans, one for each Active Management Area (AMA), are available for download from the ADWR [Management Plans webpage](#). Backup data and documentation can also be viewed online. A series of interactive data dashboards, including one dashboard each for agricultural, municipal, and industrial uses, as well as overdraft and recharge data, are available on the [AMA Data page](#). People who want to review and comment on the draft plans can find the results on the 5MP Safe-Yield Technical Subgroup discussions in the report: [Overdraft, Safe-Yield, and the Management Goals in Arizona's Active Management Areas](#). The report includes a description of how ADWR analyzes the several aspects of safe-yield and the status of each AMA with regards to its management goal, whether or not that goal is safe-yield. Upcoming Groundwater Users Advisory Council meetings are open to the public and will focus on the draft plans and next steps. A formal comment period and a hearing for each AMA are part of the legal adoption process, which continues throughout 2022. The informal review and comment period ends February 28th. Comments on the draft plans can be sent to [managementplans@azwater.gov](mailto:managementplans@azwater.gov)



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### **SRP Watershed Video Series**

The Salt River Project (SRP) has informative educational materials about watersheds available online. A six-part video series focuses on the Salt and Verde Rivers and describes the components of a watershed. These components, from mountain forests to the creeks, work in concert to store and filter water that ultimately is used by households. The videos explain where the water comes from, how and why water is stored, what makes up a watershed, how our water infrastructure works, the role and history of water in Arizona, and the challenges we may face in the future. SRP also provides other education materials like discussion questions for students that can be paired with the videos. The watershed video collection is available on PBS and Vimeo.



Image: [Apache Lake, Salt River Project](#)

[PBS](#)  
[Vimeo](#)

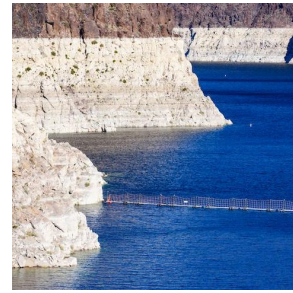
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### **National Listening Sessions on Drought**

The National Oceanic and Atmospheric Administration's National Integrated Drought Information System (NIDIS) and the US Geological Survey (USGS) will host a series of webinar listening sessions throughout 2022. The goal of the series is to receive input from

the public about predicting water availability changes at national and regional scales. The USGS and NIDIS hope to gain insight into local and regional priorities and needs as drought conditions continue. They invite decision-makers, resource managers, and the interested public to join the listening sessions. Sessions will include presentations from USGS and NIDIS researchers, along with an introduction to relevant prediction products followed by a guided discussion to help determine research priorities.

Information gathered from these listening sessions will be used to inform future policy and planning. The next session will focus on streamflow drought prediction and will be held on Thursday, March 3, 1:00-3:30 pm ET. Additional sessions will focus on groundwater, water use, water availability for ecosystems, and lessons learned.



### [Series Information and Registration](#)

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## WRRC Invites Research Proposals

Faculty and research personnel at any of Arizona's three public universities are invited to submit research proposals to the WRRC for grants of up to \$10,000. Proposals should feature student work and explore new ideas to address water problems in AZ and the Southwest and expand understanding of water and related phenomena. Proposals are due by 5:00 pm MST on Tuesday, March 1, 2022.



### [More Information](#)

## WATER JOBS

### **UArizona Director, Cooperative Extension [Job Listing](#)**

The University of Arizona seeks a strategic and innovative leader to be the next Director of the [UArizona Cooperative Extension System \(CES\)](#).

- WRRC [Postdoctoral Research Associate \(RAPIDS\)](#)
- WRRC [Postdoctoral Research Associate](#)
- Pima County [Program Coordinator \(Environmental Education\)](#)
- River Network [Program Manager \(Healthy Rivers\)](#)
- Sonoran Institute [Program Manager \(Growing Water Smart\)](#)
- WestWater Research [2022 Summer Associates Internship](#)
- Babbitt Center [Native American Water & Land Intern](#)
- Babbitt Center [Sustainable Agricultural Water Futures Intern](#)
- EPA Water Quality Fellowships: [Water Quality Modeling and Economics](#), [Water Quality and Valuation](#), [Environmental Justice in Water Quality](#)

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

## ANNOUNCEMENTS



- **Feb 14:** [Native Voices in STEM Spring 2022 Seminar Series: \*Mining and Wildfire Driven Changes Alter Metals Mobilization: Restorative and Mechanistic Insights\*](#)
- **Feb 15:** [Spring 2022 UCOWR Roundtable Series: \*Utilizing Drones in Research\* – Email to RSVP](#)
- **Feb 15:** [WRRC Brown Bag Webinar: \*All In: Confronting Southern Nevada’s New Water Reality\*](#)
- **Feb 16:** [WRRC Chocolate Fest](#)
- **Feb 16:** [GRACast: \*SGMA Implementation: Using an Integrated Hydrologic Model to Monitor and Manage Stream\*](#)
- **Feb 20:** [Water Science Policy Groundwater Photostory Competition – Submission Deadline](#)
- **Feb 21:** [AWRA 2022 – Topical Sessions Deadline](#)
- **Feb 23:** [Free Webinar: \*Getting to the Heart of Science Communication\*](#)
- **Feb 25:** [Circle of Blue Fellowship Program: \*Reporting Water Inequality In A Changing Climate\* – Application Deadline](#)
- **Feb 28:** [11<sup>th</sup> International Symposium on Managed Aquifer Recharge – Early Bird Registration Deadline](#)
- **Mar 1:** [Babbitt Center for Land and Water Policy 2022 Dissertation Fellowships – Application Deadline](#)
- **Mar 2:** [AWRA 2022 Spring Conference: \*Water Risk Under a Rapidly Changing World - Evaluation & Adaptation\* – Early Bird Deadline](#)
- **Mar 4:** [2022 AHS Annual Symposium – Abstract Deadline](#)
- **Mar 9:** [Spring 2022 UCOWR Roundtable Series: \*Aquatic Invasive Species\* – Email to RSVP](#)
- **Mar 15:** [WRRC Brown Bag Webinar: \*Rio Reimagined: Reconnecting the Salt River With the Valley’s Metropolitan Communities\* – Save the Date](#)
- **Mar 16-18:** [Water Education Foundation’s Lower Colorado River Tour](#)
- **Mar 17-18:** [\*The Colorado River Compact: Navigating the Future\*](#)
- **Mar 22:** [World Water Day 2022](#)
- **Mar 22-24:** [Expo 2020 Dubai, \*Water Resources Management and Sustainability: Solutions for Arid Regions\*](#)
- **Mar 24-25:** [Santa Cruz River Research Days](#)
- **Mar 31:** [Los Charros Foundation Scholarship – Application Deadline](#)
- **Apr 1:** [EPA Environmental Justice Video Challenge for Students – Phase 1 Submissions Due](#)
- **Apr 6:** [Udall Center Workshop: \*State of the Art in Green Infrastructure Research & Practice: Reframing Stormwater from a Hazard to a Resource in Tucson, Arizona\*](#)
- **April 7:** [WRRC Brown Bag Webinar: \*Public Interest, Indigenous Rights, and the Los Angeles Aqueduct\* – Save the Date](#)
- **Apr 11-15:** [11<sup>th</sup> International Symposium on Managed Aquifer Recharge](#)
- **Apr 11-17:** [Arizona Water Professionals Appreciation Week](#)
- **Apr 12-14:** [AZ Water 95<sup>th</sup> Annual Conference & Exhibition](#)
- **Apr 15:** [Fall 2022 Agents of Change in Environmental Justice Fellowship – Application Deadline](#)
- **Apr 19:** [WRRC Brown Bag Webinar: Carlos de la Parra – Save the Date](#)
- **Apr 20:** [Spring 2022 UCOWR Roundtable Series: \*Coastal Water Issues II\* – Email to RSVP](#)
- **Apr 22:** [Earth Day 2022 Lower Salt River Cleanup](#)
- **Apr 25-27:** [AWRA 2022 Spring Conference: \*Water Risk Under a Rapidly Changing World - Evaluation & Adaptation\*](#)
- **May 11-12:** [The Third International Congress on Desert Economy: \*Energy Economics between Deserts and Oceans \(Dakhla, Morocco\)\*](#)
- **May 19-20:** [23<sup>rd</sup> Annual Law of the Colorado River Conference](#)
- **Jun 14-16:** [UCOWR/NIWR 2022 Annual Water Resources Conference](#)
- **Jun 19-24:** [Frontiers in Hydrology 2022: \*Future of Water\*](#)
- **Jun 21-24:** [Global Council for Science and the Environment \(GCSE\) 2022 Virtual Conference: \*Biodiversity, Conservation Science, and Climate Change\*](#)
- **Sep 11-14:** [AWWA 2022 Water Infrastructure Conference & Exposition](#)

- **Sep 11-15:** [IWA World Water Congress & Exhibition - \*Water for Smart Liveable Cities\* \(Copenhagen\)](#)
- **Sep 14-16:** [2022 AHS Annual Symposium](#)
- **Oct 6-8:** [SustainValencia2022; \*Achieving Sustainable Groundwater Management: Promising Directions and Unresolved Challenges\* – Save the Date](#)
- **Nov 7-9:** [AWRA 2022](#)

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

[Contact us here](#)