

# WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES  
COOPERATIVE EXTENSION

**WATER RESOURCES  
RESEARCH CENTER**



**September 30, 2022 / Volume 10, Issue 25**

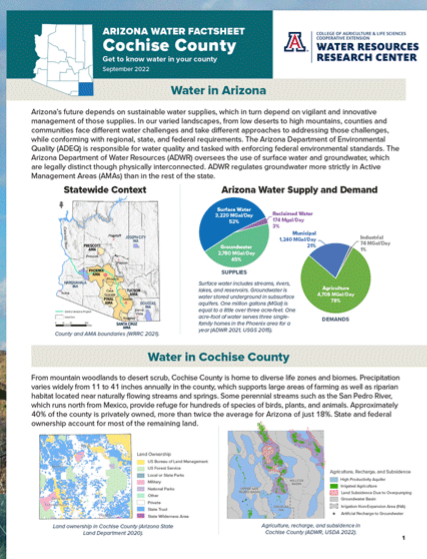
The Water Resources Research Center - a research unit of the [College of Agriculture and Life Sciences](#) and an Extension unit in [UA Cooperative Extension](#) within the Division of Agriculture, Life & Veterinary Sciences & Cooperative Extension. [Land Acknowledgement](#).

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**IN THIS ISSUE:** Cochise County, Brown Bag Recap, CLE, CAP, La Niña



# ARIZONA WATER FACTSHEETS

## Cochise County

### WRRC Publishes Water Factsheet for Cochise County

The Cochise County Water Factsheet is now available! As the third installment in the WRRC's Arizona Water Factsheet series, the factsheets offer a wide-ranging yet concise overview of county water resources information for a general audience. The Cochise County Water Factsheet covers topics such as the county's water supply and demand, unique water management challenges and opportunities, and a look to the future of water

in Cochise County. Acknowledging the distinct water resources conditions, priorities, and values of each county, the WRRC works with local experts to guide the content and access existing water-related data. For Cochise County, the Technical Advisory Committee was led by Kim McReynolds, Extension Agent, Natural Resources in Cochise County, and Extension Interim Regional Director for Cochise and Graham Counties Randy Norton. Input was also received from other local and regional stakeholders with deep knowledge of the unique local characteristics of water in Cochise County. Factsheets are available for Maricopa, Pima, and Cochise Counties. Work is well underway for Graham, Greenlee, Mohave, and Yavapai Counties! Follow the series and read about water in each county on our dedicated Arizona Water Factsheet website.

[Arizona Water Factsheet Series](#)  
[Cochise County Factsheet](#)

## EVENTS

### WRRC Brown Bag Webinar: The Water Recycling Revolution: History and Lessons from Four Western States

**Date:** Oct 13, 2022

**Time:** 12:00 pm–1:15 pm Arizona Time

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



**Speaker:** William M. Alley, *Director, Science and Technology, National Ground Water Association*

This WRRC Brown Bag presentation reviews the history of potable reuse and lessons learned by examining the key roles of Arizona, California, Colorado, and Texas. Case studies illustrate varying conditions that motivate potable reuse, challenges in implementation, and its potential future as urban population growth, environmental needs, and climate change pressure drinking water supplies of cities across the country.

- [Register Here](#)
- [More Info](#)
- [Sharon B. Megdal's Book Review](#)

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### Upcoming Events

**Oct 20:** [WRRC “Imagine a Day Without Water” Special Event: Thirst for Justice Panel; 4-5 pm AZ Time](#)

**Oct 26:** [Native Voices in STEM Fall 2022 Seminar Series: Groundwater to Snow Science: My Research and Teaching Path to Becoming a "Jack\(lyn\)- Of-All-Trades](#)

**Nov 10:** WRRC Brown Bag Webinar: 104(b) Grant Program: Student Research Presentations – Save the Date

**Nov 18:** WRRC Brown Bag Webinar: Watershed Collaboration in the Tucson Basin: Santa Cruz Watershed Collaborative Adopts a Watershed Restoration Plan to Promote Flowing Rivers – Save the Date

**Nov 29:** Water and Agriculture: Chile-Arizona Experience; Co-hosted by the Agricultural Office of the Embassy of Chile in the US and the University of Arizona Water Resources Research Center; 11:00 am to 1:00 pm AZ Time – Save the Date

**Nov 30:** [Native Voices in STEM Fall 2022 Seminar Series: Featuring Dr. Raymond Torres – Save the Date](#)

## NEWS

### **APW Groundwater Videos Featured in WRRC Brown Bag**



On September 22, the WRRC hosted a Brown Bag Webinar titled “Arizona Project WET’s Groundwater Videos in the Making.” The presentation was led by the Director of Arizona Project WET (APW), Holly Thomas-Hilburn, and Design Director for Esser Design, Kevin Sirois. To start, Thomas-Hilburn provided an overview of APW’s mission and vision. As part of the Arizona Cooperative Extension, APW aims to connect teachers, school district specialists, and water providers across the state to develop stakeholder-driven water education and outreach programs online, in-person, and in blended formats. On the topic of groundwater, Thomas-Hilburn mentioned the challenges and misconceptions associated with groundwater education. APW partnered with Esser Design to produce a nine-video series describing groundwater topics such as the hydrological cycle, the history of groundwater management, end-use, policy, safe-yield concepts, and sustainable practices to conserve water. In this webinar, Sirois and Thomas-Hilburn discussed the challenges and solutions encountered during the ten-month production process to “translate science” into an educational, visual format that serves to complement their other groundwater teaching methods. As the series was intended to appeal to a broad audience, they considered stylistic elements, opting to avoid overuse of animation and choosing voiceover rather than an on-screen narrator. Instead, a great blue heron named Blue features in each video, guiding viewers through the content.

### [Project WET Groundwater Videos Brown Bag Slides and Recording](#)

### **CLE Tribal Water Law Conference: Glimmers of Optimism on the Long Road to Equity**



CLE International held its annual Tribal Water Law Conference from September 19-20 at the Fort McDowell Yavapai Nation Reservation. WRRC Graduate Research Assistant Garland Speight attended the conference and provides these brief highlights. The conference featured speakers and participants from a variety of Tribes, law firms, NGOs, and state and federal agencies. In addition to highlighting continued challenges (e.g. ongoing water right settlement negotiation/litigation; inadequate access to safe, reliable, and affordable water for sanitation and drinking; disproportionate climate change impacts on Tribal communities), conference presentations also featured many unprecedented funding opportunities passed by the most recent Congress, including:

1. \$3.5B over 5 years for Indian Health Service to clear the backlog in the Sanitation Facilities Construction Program, enough funding to resolve deficits for more than 248,000 new and existing homes on Tribal lands.
2. \$2.5B for the Indian Water Rights Settlement Completion Fund, sufficient to fund all Indian Water Rights Settlements completed date.
3. \$868M Tribal set-aside for Clean and Safe Drinking Water State Revolving Funds from the EPA.
4. \$550M for the Bureau of Reclamation Domestic Water Supply Projects prioritizing disadvantaged communities.
5. \$250M for the Bureau of Indian Affairs to repair, improve, and maintain irrigation and power systems, safety of dams, water sanitation, and other facilities.

## [More Info](#)

### **CAP Water Users Roundtable on Proposed Conservation Incentive Program**

On Wednesday, September 28, Central Arizona Project (CAP) representatives hosted a roundtable for state water users to discuss the proposed CAP conservation incentive program. Earlier this year, the CAP board said they would “work with stakeholders to develop a conservation incentive program that is consistent with [CAP] legal authority.” This roundtable provided an opportunity for stakeholders to share ideas and provide information so CAP can develop an effective program. Water resource managers and other representatives from water entities across the state attended the roundtable, providing statistics on current conservation programs and offering insights on how CAP might be able to support or supplement ongoing efforts. Major themes of the stakeholder feedback included requests for increased or improved messaging on existing programs, “easy” grants that would provide project funding without the hassle of managing federal grants, Colorado River system conservation, and improved budget reliability through rate stabilization. The CAP board will discuss the feedback from this roundtable at their October 6 Board Meeting.

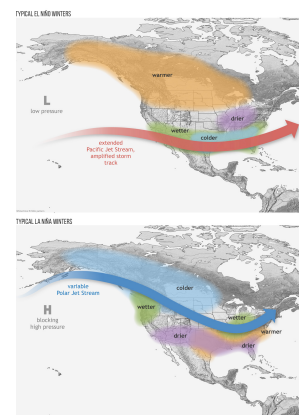


*Image: CAP*

### [CAP Roundtable Information Brief](#) [Upcoming CAP Board Meetings](#)

### **La Niña and Drought Impacts on the Colorado River Basin States**

El Niño-Southern Oscillation (ENSO) refers to the irregular, periodic variations in winds and sea surface temperatures over the eastern Pacific Ocean that drive El Niño and La Niña phases. Ocean and atmospheric conditions such as sea surface temperature, currents, winds, and humidity are monitored daily by the National Atmospheric and Oceanic Administration. Using these data and visual satellite information, the Climate Prediction Center (CPC) predicts ENSO trends that affect climate conditions for us in Arizona and throughout the Northern Hemisphere. In early September of 2022, the CPC predicted a third consecutive La Niña winter in the Northern Hemisphere. La Niña events typically mean warmer and drier conditions in the Southwest, as cool ocean temperatures in the central and eastern tropical Pacific shift precipitation to the north into the Pacific





Northwest. The warm and dry conditions do not always extend as far north as the Colorado Rocky Mountains and have in the past resulted in cool and wet conditions in the northern portions of the Colorado River Basin. However, for the last two years, weak La Niña events have resulted in dry conditions extending up into the headwaters of the Colorado River. UCLA Climate Scientist David Swain suggests that three consecutive years of La Niña conditions will further depress river flow and reservoir levels, and delay the probability of drought relief for at least another year.

Image: [Climate.gov](https://climate.gov)

[La Niña Info](#)  
[CPC Predictions](#)  
[Tucson.com Article \(pay-wall\)](#)



**WRRC 2022 Photo Contest**

**WATER NOW!**  
*Living With Less*

**Submit your photos!**

## WATER JOBS

- City of El Mirage [Environmental Technician](#)
- City of Avondale [Environmental Coordinator \(Stormwater\)](#)
- AZGFD [Wildlife Specialist Senior \(Water Resources Manager\)](#)
- AZGFD [Wildlife Specialist Senior \(Land Resources Manager\)](#)
- Town of Gilbert [Water Conservation Coordinator](#)

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

## ANNOUNCEMENTS

- **Sep 30:** [National Association of Environmental Professionals \(NAEP\) 2023 Conference – Abstract Submission Deadline](#)
- **Sep 30:** [2023 Water for Food Global Conference: Cultivating Innovation: Solutions for a Changing World – Proposal Deadline](#)
- **Oct 1:** [Sonoran Institute: Dragonfly Day on the Santa Cruz 2022](#)
- **Oct 1:** [Stanley A Leake Memorial Service](#)
- **Oct 2:** [Campus Sustainability Fund Mini Grants – Preliminary Application Deadline](#)
- **Oct 3:** [CAP Executive Search Committee Virtual Meeting](#)
- **Oct 4-6:** [2022 WaterSmart Innovations Conference & Exposition](#)
- **Oct 6:** [We are Water 2022 Photo Contest – Submission Deadline](#)
- **Oct 6-7:** [Salazar Center for North American Conservation: 2022 Symposium on Conservation Impact](#)
- **Oct 6-8:** [SustainValencia2022: Achieving Sustainable Groundwater Management: Promising Directions and Unresolved Challenges](#)

- [Oct 7: UCOWR/NIWR 2023 Annual Conference – Special sessions Proposal Deadline](#)
- [Oct 8: Urban Wildlife Conservation Day 2022](#)
- [Oct 8: Watershed Management Group: River Run Network Creek Walk: Santa Cruz River Flows](#)
- [Oct 10-12: Southwest Adaptation Forum 2022](#)
- [Oct 11: Virtual Rainwater Harvesting Class \(Tucson Water Rebate\)](#)
- [Oct 12: ADEQ Webinar: Proposed Individual Permit Fees](#)
- [Oct 12: ADEQ Webinar: Proposed Operator Certification Program Fees](#)
- [Oct 13: WRRC Brown Bag Webinar: The Water Recycling Revolution: History and Lessons from Four Western States](#)
- [Oct 13: 2022 Ruth Wright Distinguished Lecture in Natural Resources: Mobilizing the Global Community on Climate Change: An Indigenous Leadership Perspective](#)
- [Oct 13: ADEQ On-site Wastewater Treatment Facility Proposed Rulemaking Hearing](#)
- [Oct 14: ADEQ Webinar: Proposed General Permit Fees](#)
- [Oct 17: AWRA 2023 Summer Conference – Topical Session Proposal Deadline](#)
- [Oct 19: Indigenous Knowledge and Water Security Mini Film Festival & Speaker Panel](#)
- [Oct 20: Imagine a Day Without Water](#)
- [Oct 20: WRRC “Imagine a Day Without Water” Special Event: Thirst for Justice Panel](#)
- [Oct 20: ADEQ Public Notice: EPA's Approval of State Drinking Water Program Primacy Revision Determination – Deadline to Submit Requests for Public Hearing](#)
- [Oct 20: Watershed Management Group: Community Conversation: Take Action for a Hydro Local Future - Desert Living Home Tour Kick-Off](#)
- [Oct 22: Watershed Management Group: 11th Annual Desert Living Home Tour](#)
- [Oct 26: Native Voices in STEM Fall 2022 Seminar Series: Groundwater to Snow Science: My Research and Teaching Path to Becoming a "Jack\(lyn\)- Of-All-Trades](#)
- [Oct 28: Public Comment Period for Arizona Water Protection Fund Fiscal Year 2023 Grant Applications – Deadline](#)
- [Nov 7-9: AWRA 2022 Annual Water Resources Conference](#)
- [Nov 10: WRRC Brown Bag Webinar: 104\(b\) Grant Program: Student Research Presentations – Save the Date](#)
- [Nov 16: Yuma Center of Excellence for Desert Agriculture: Desert Agriculture Research Symposium](#)
- [Nov 18: WRRC Brown Bag Webinar: Watershed Collaboration in the Tucson Basin: Santa Cruz Watershed Collaborative Adopts a Watershed Restoration Plan to Promote Flowing Rivers – Save the Date](#)
- [Nov 27-Dec 1: The 8<sup>th</sup> International Conference on Drylands, Deserts & Desertification: Learning from Drylands: A Global Effort Towards Ecosystem Restoration](#)
- [Nov 29: Water and Agriculture: Chile-Arizona Experience; Co-hosted by the Agricultural Office of the Embassy of Chile in the US and the University of Arizona Water Resources Research Center – Save the Date](#)
- [Nov 30: Native Voices in STEM Fall 2022 Seminar Series: Featuring Dr. Raymond Torres – Save the Date](#)
- [Jan 15, 2023: Campus Sustainability Fund Annual Grants – Preliminary Application Deadline](#)
- [May 7-10: 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](#)

## PUBLICATIONS & MEDIA



[A Living River: Charting Santa Cruz River Conditions Downtown Tucson to Marana \(2021 Water Year\)](#)

## OTHER NOTICES



### **Public Notice of EPA Approval of State Drinking Water Program Primacy Revision**

The US Environmental Protection Agency (EPA) invites any interested parties to request a public hearing on the approval of revisions to Arizona's approved State primacy program, which oversees public water systems in Arizona. Requests for public hearings are due Oct. 20, 2022. [More Info](#)

Notice of Public Comment Period for Arizona Water Protection Fund Fiscal Year 2023 Grant Applications [More Info](#)

### **Stanley A. Leake Memorial Service**

We are sad to report that Stanley A. Leake, a friend, colleague, and the 2017 AHS Lifetime Achievement Awardee, passed away on September 19 while in hospice. Stan's memorial service will be held on Saturday, October 1, at 11:00 AM at the Sunrise Bible Baptist Church. [More Info](#)

Do you have a story idea, water job announcement, or event to share?  
[Contact us here](#)