

WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**



April 14, 2023 / Volume 11, Issue 15

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: Reclamation, Seminar Recap, NVIS Recap, Factsheet, Coffee Pot Farms, Trouble on Tap

SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT



— BUREAU OF —
RECLAMATION



Reclamation Proposes Plans to Address Colorado River Crisis

On Tuesday, April 11, the Bureau of Reclamation (Reclamation) released a draft Supplemental Environmental Impact Statement (SEIS) for Near-term Colorado River Operations. The plans outlined in the draft SEIS revise the current interim operating guidelines for the management of the two largest reservoirs in the Colorado River system: Lake Mead and Lake Powell. These guidelines were established in 2007 to manage system shortages and have been augmented by emergency actions including the 2019 Drought Contingency Plan. The Colorado River system supplies water to over 40 million people, irrigates almost 5.5 million acres of agricultural land, and supplies hydropower to eight states. However, historically low water levels in Lake Powell and Lake Mead and the threat of “deadpool” conditions require additional actions to protect the system through 2026, when the interim operating guidelines expire. The draft SEIS proposes three alternatives, including a third “no action” alternative. Alternative 1 distributes Colorado River water reductions according to established water rights priority. Alternative 2 distributes reductions evenly amongst all lower basin water users. Reclamation will publish the draft SEIS in the Federal Register on April 14, initiating a public comment period before the final assessment is due this summer.

[Read More](#)

EVENTS

WRRC Seminar Series: Golf Course Water Usage: Effective Policy and Effective Water Efficiency Strategies

Date: Wednesday, April 19, 2023
Time: 12:00 pm – 1:15 pm Arizona Time
Location: [Webinar Only](#)



Speaker: Tim Cloninger, *Golf Course Agronomist*

This WRRC Seminar presentation will provide an overview of golf course water use in the southwest, looking at three different regulatory agency policies for golf course water usage and discussing which policies have been the most effective for establishing efficient water usage. The presentation will also cover the current technologies and trends in the golf course industry that will continue to improve water use efficiency.

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

Upcoming WRRC Events

May 2 at 12:00 pm: [WRRC Seminar Series: Preparing for Shortages on the Colorado River: The Activities of the Arizona Water Banking Authority](#)

May 3 at 12:00 pm: [NVIS Seminar Series: Indigeponics: Indigenizing Controlled Environment Agriculture and Off-Grid CEA Greenhouse for Food Production](#)

May 17 at 12:00 pm: [WRRRC Seminar Series: Green Infrastructure in Tucson, AZ](#)

Jun 1 at 12:00 pm: WRRRC Seminar Series: HOAs - An Overlooked Water Sustainability Opportunity in the Desert - 2023 Update – Save the Date!

External Events

May 18-19: [CLE International's Law of the Colorado River 23rd Annual Conference: The Next Century of River Policy](#)

Aug 3-4: [31st Annual Arizona Water Law Conference](#)

MARK YOUR CALENDARS!



Photo: Kim Holmes - Reflective Morning 2021
Green Valley - WRRRC Photo Contest

NEWS

WRRRC Seminar Revisits Colorado Basin Drought Research After 25 Years

On Wednesday, April 12, the WRRRC hosted a webinar featuring presentations from a panel of authors who contributed papers to the *Journal of the American Water Resources Association (JAWRA)* 2022 Featured Collection, *Severe Sustained Drought Revisited: Managing the Colorado River System in Times of Water Shortage 25 Years Later*. The webinar was quite timely in light of this week's Bureau of Reclamation release of a draft Supplemental Environmental Impact Statement for Near-term Colorado River Operations. UArizona professor George Frisvold moderated the panel, which included UArizona professors Connie Woodhouse, Kathy Jacobs, and Bonnie Colby, Cooperative Extension Economic Impact Analyst Dari Duval, and USGS Research Scientist Pamela Nagler. Their research follows up on work published in 1995, presenting collaborative research studies supported by the Powell Consortium. The 1995 special issue, *Severe Sustained Drought: Managing the Colorado River System in Times of Water Shortage*, and the publications that followed from it have "shaped thought and encouraged multi-disciplinary research on drought and water scarcity in the United States Southwest."



[Read More](#)

Indigenous Food Sovereignty Featured in NVIS Seminar

On April 5, 2023, Staci Emm and Reggie Premo gave presentations as part of the UArizona Indige-FEWSS Native Voices in STEM Seminar Series on strengthening Indigenous food sovereignty within their respective Tribes. Staci Emm is from a generational farming and ranching family and is a member of the Yerington Paiute Tribe. Emm is nationally recognized for her work in building partnerships with American Indians and agricultural businesses as a Federally Recognized Tribes Extension Program (FRTEP) with the University of Nevada – Reno. Emm’s presentation discussed some of her successful programs such as *Veggies for Kids*, *Veggies for Seniors*, and *Hoop Houses for Families*. Reggie Premo also comes from a generational ranching family and currently grows alfalfa hay on his farm. Premo is a descendant of the Tosawih (White Knife) band of Western Shoshone and is a member of the Shoshone-Paiute Tribes of the Duck Valley Reservation. Premo is a Community Outreach Specialist with the University of Nevada Cooperative Extension Native Programs on the Duck Valley Reservation in Owyhee, NV. Premo’s presentation, titled "Nevada Shoshone Tribes Hoop House Program," highlighted a two-year endeavor to construct 73 hoop houses for the Duck Valley Reservation. Emm and Premo concluded their presentations by emphasizing the importance of fresh food availability on Indian land.



Image: Valerisa Gaddy

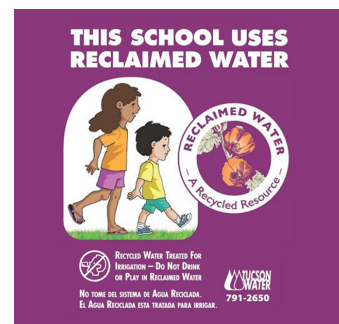
[View the Recording](#)
[Indige-FEWSS Seminar Library](#)



Did You Know?

Reclaimed water use in the Tucson AMA has increased fourfold since 1985. Reclaimed water is highly treated wastewater and is offered at a lower cost than potable water. It is treated to safe standards for the intended uses, such as irrigation, industrial processes, aquifer recharge, restoring aquatic and riparian habitats, and even direct potable reuse. Tucson Water is one of the nation’s first water utilities to recycle wastewater for beneficial reuse. Tucson Water has 160 miles of purple pipes delivering about 15 million gallons of reclaimed water in reservoirs that serve as surface storage. Want to learn more about Pima County’s water conservation initiatives?

Image: Tucson Water



[Pima County Water Factsheet](#)
[Tucson Water](#)

Coffee Pot Farms Gives Behind-the-Scenes Tour to WRRRC

On Friday, April 7, Coffee Pot Farms owner Cherilyn Yazzie gave a behind-the-scenes tour to WRRRC post-doctoral researcher Valerisa Gaddy. Coffee Pot Farms is a 36-acre farm located on the Navajo Nation in Dilkon, AZ. Both Cherilyn Yazzie and Valerisa Gaddy are Diné (Navajo) and MIT Solve Indigenous Communities fellows, and both share a passion for Tribal agriculture. Yazzie shared how her farm is making a difference by providing access to fresh, healthy vegetables to the Navajo Nation and being sustainable through solar technology. Inspired by Yazzie's story, Gaddy is highlighting Coffee Pot Farms through an ArcGIS Storymap on her program IRRIGaTE (Irrigation Resources Reaching Indigenous Growers and Tribal Entities) website.



The WRRRC would like to extend gratitude to Cherilyn and Coffee Pot Farms for the opportunity to learn more about Tribal agriculture.

Image: Valerisa Gaddy

[Gaddy's IRRIGaTE Program](#)

ABC TV Series Will Spotlight Water Crisis

A new TV series from ABC and National Geographic, *Our America: Trouble on Tap*, will debut later this month on ABC and Hulu. The three-part documentary series will explore how climate change, aging infrastructure, and pollution are affecting American communities' access to clean drinking water. The first episode, "Life With Forever Chemicals," will highlight water contamination with PFAS in North Carolina. It will air on ABC on April 21 and be available on Hulu the next day, in recognition of Earth Day on April 22. The second and third installments will be released in July and August and are titled "Chicago's \$8 billion Water Problem" and "Drilling into California's Water Crisis," respectively. A short trailer is available now to watch on YouTube.



Image: [ABC-Owned Television Stations](#)

[More Info](#)
[Watch the Trailer](#)

WATER JOBS

WRRC Student Communications and Outreach Assistant (Hourly)

The WRRC is seeking a student employee with interest and experience in writing about water and/or environmental topics to assist with outreach communication. Applicants are encouraged to visit the WRRC website for more information on WRRC programs and activities. Accepting applications until the position is filled. [More Info](#)

- ADWR [Water Resources Administrative Intern](#)

- AMWUA [Conservation Coordinator](#)
- Arizona Forward [Paid Summer Internship](#)
- The Babbitt Center for Land and Water Policy [Executive Director](#)
- The Nature Conservancy [Water Program Policy Specialist](#)

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

ANNOUNCEMENTS

- **Apr 15:** [Rio Reimagined Earth Day Salt River Cleanup](#) **POSTPONED – New date to be shared soon!**
- **Apr 15:** [City of Glendale Water Awareness Day](#)
- **Apr 17-20:** [90th Annual Western Snow Conference](#)
- **Apr 19:** [WRRC Seminar Series: Golf Course Water Usage: Effective Policy and Effective Water Efficiency Strategies](#)
- **Apr 20:** [CAP Board Meetings](#)
- **Apr 20:** [Flood Justice Symposium](#)
- **Apr 20-21:** [Santa Cruz River Research Days: Raising All Voices in Conservation](#)
- **Apr 21:** [Data-Enabled Agriculture Resilience Panel](#)
- **Apr 21:** [2023 AHS Symposium – Call for Abstracts Deadline](#) **EXTENDED!**
- **Apr 21:** [AHS 2023 Herman Bouwer Intern Scholarship – Application Deadline](#) **EXTENDED!**
- **Apr 21:** [AHS 2023 Halpenny Intern Scholarship – Application Deadline](#) **EXTENDED!**
- **Apr 22:** [Earth Day w/ Cooper Center for Environmental Learning](#)
- **Apr 23-25:** [American Society of Irrigation Consultants 2023 National Conference](#)
- **Apr 24-25:** [NGWA Conference: Managed Aquifer Recharge: Unleashing Resiliency, Protecting Groundwater Quality Conference](#)
- **Apr 25:** [Arizona Water Innovation Initiative Kick-off Event](#)
- **Apr 25:** [Rocky Mountain Research Station Webinar: Using an Understanding of Stream and Riparian Geomorphic Sensitivity and Ecological Resilience to Guide Management: Part 1 – Watershed Processes and Traits](#)
- **Apr 26:** [Southwest Tribal Drought Conversation](#)
- **Apr 27:** [Rocky Mountain Research Station Webinar: Using an Understanding of Stream and Riparian Geomorphic Sensitivity and Ecological Resilience to Guide Management: Part 2 – Meadow Hydrology and Traits](#)
- **Apr 27-28:** [Law Seminars International 10th Annual Comprehensive Conference on Tribal Water in the Southwest](#)
- **Apr 30:** [AHS Academic Scholarships – Application Deadline](#)
- **Apr 30:** [AHS 2023 Avery Intern Scholarship – Application Deadline](#) **EXTENDED!**
- **May 1:** [AWRA Awards Program – Nomination Deadline](#)
- **May 2:** [WRRC Seminar Series: Preparing for Shortages on the Colorado River: The Activities of the Arizona Water Banking Authority](#)
- **May 3:** [NVIS Seminar Series: Indigeponics: Indigenizing Controlled Environment Agriculture and Off-Grid CEA Greenhouse for Food Production](#)
- **May 5:** [One Health 2023 Spring Symposium: Water is Life](#)
- **May 5:** [32nd Desert Horticulture Conference](#)
- **May 7-10:** [National Association of Environmental Professionals \(NAEP\) 2023 Conference](#)
- **May 8-11:** [Water for Food Global Conference: Cultivating Innovation: Solutions for a Changing World](#)
- **May 8-12:** [Arizona Water Professionals Appreciation Week](#)
- **May 9-10:** [2023 Corridors, Connectivity, and Crossings Conference](#)
- **May 9-11:** [96th Annual AZ Water Conference & Exhibition](#)

- **May 12:** [AWRA 2023 Annual Water Resources Conference – Abstract Deadline](#)
- **May 17:** [WRRC Seminar Series: Green Infrastructure in Tucson, AZ](#)
- **May 18-19:** [CLE International's Law of the Colorado River 23rd Annual Conference: The Next Century of River Policy](#)
- **May 18-20:** [Climate Change Preparedness Conference](#)
- **May 19:** [NAMWUA Water Utility Leadership Forum \(WULF\)](#)
- **May 23-25:** [Rural Water Association of Arizona 2023 Annual Spring Conference](#)
- **May 31:** [US Water Prize 2023 – Application Deadline](#)
- **May 31:** [NWRI Fellowship Program 2023-24 – Application Deadline](#)
- **Jun 1:** [WRRC Seminar Series: HOAs - An Overlooked Water Sustainability Opportunity in the Desert - 2023 Update – Save the Date!](#)
- **Jun 13-15:** [UCOWR/NIWR 2023 Annual Water Resources Conference](#)
- **Jun 15:** [WaterReuse Arizona 2023 Scholarship – Application Deadline](#)
- **Jun 15-16:** [2023 Next Generation Water Summit](#)
- **Jul 11-12:** [WRRC 2023 Annual Conference: What Can We Do? Solutions to Arizona's Water Challenges](#)
- **Jul 17-19:** [AWRA 2023 Summer Conference: Connecting Land & Water for Healthy Communities](#)
- **Jul 23-25:** [Arizona Water Reuse 2023 Symposium](#)
- **Aug 3-4:** [31st Annual Arizona Water Law Conference](#)
- **Sep 12:** [AWRA 2023 Annual Water Resources Conference – Student Poster Deadline](#)
- **Sep 13-16:** [Arizona Hydrological Society 35th Annual Symposium](#)
- **Nov 6-8:** [AWRA 2023 Annual Water Resources Conference](#)

PUBLICATIONS & MEDIA

Open-Access Article on Diversity, Equity, Inclusion, and Justice (DEIJ) in Water Dialogues

Williams, Simone A., Susanna Eden, Sharon B. Megdal, and Valerisa Joe-Gaddy. "Diversity, Equity, Inclusion, and Justice in Water Dialogues: A Review and Conceptualization." *Journal of Contemporary Water Research & Education*, no. 177 (April 2023): 113–139. https://ucowr.org/wp-content/uploads/2023/04/177_full_issue.pdf

OTHER NOTICES

Wyland National Mayor's Challenge for Water Conservation

My Water Pledge is a friendly competition between cities across the US to see who can be the most "water-wise." Mayors nationwide will challenge their residents to conserve water, energy, and other natural resources on behalf of their city through a series of informative, easy-to-use pledges online. Cities with the highest percentage of residents who take the challenge win. Last year, the challenge awarded more than \$50,000 in prizes to nearly 300 residents in US cities. [More Info](#)

AWRA Awards Program

Each year, AWRA recognizes individuals, organizations, projects, state sections, and student chapters for outstanding leadership and service in the water resources profession. Individuals and organizations have an opportunity to nominate candidates across different categories each spring, with awards presented during AWRA's Annual Water Resources Conference in the fall. [AWRA membership](#) is not required to make a nomination or

receive an award except for the Fellow Member Award. Nomination applications must be submitted by May 1, 2023. [More Info](#)

WateReuse Arizona 2023 Scholarships

WateReuse Arizona will award two (2) scholarships of three thousand dollars (\$3,000) each to Arizona university and college students. The purpose of this award is to encourage full-time students with a focus on wastewater reclamation, water reuse, and/or desalination. The scholarships will be awarded July 24, 2023 at the Arizona Water Reuse Conference in Flagstaff, Arizona. Scholarship applications must be post-marked by June 15, 2023. [More Info](#)

Science Philanthropy Alliance Members Meeting Recap – Water: The Universal Solvent

At the March 28–29, 2023 meeting, WRRRC Director Sharon B. Megdal moderated a panel on “Managing Water Scarcity and Abundance.” [More Info](#)

March 30, 2023, CAWCD Board Meeting Recap

The Board convened for its annual Pinal County meeting in Casa Grande, beginning by honoring late colleague Marie Pearthree. [More Info](#)

AHS Now Accepting Applications for Academic Scholarships

AHS will award up to three \$2,500 student scholarships for the academic year. The deadline for submitting is April 30. [More Info](#)

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

[Contact us here](#)