

# WEEKLY WAVE



THE UNIVERSITY OF ARIZONA  
COOPERATIVE EXTENSION

## WATER RESOURCES RESEARCH CENTER



January 19, 2024 / Volume 12, Issue 3

The Water Resources Research Center - a research unit of the [College of Agriculture, Life and Environmental 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:** AAWWA, New Colorado River Study, 104(g) Call for Proposals, APW, WIFA

[GIVE NOW](#)



# Annual Meeting



**Register for the AAWWA Annual Meeting!**

Co-hosted by the WRRC, the 2024 Arizona Association of Women in Water & Agriculture (AAWWA) Annual Meeting will be held from 9:00 am to 3:00 pm on Wednesday, January 31, at the University of Arizona Student Union Grand Ballroom. Attendees will spend a day being inspired by women in the water industry, visiting the vendor market, and networking

with women throughout Arizona who have an interest in water. You are invited to enjoy an evening of spirits and networking with colleagues at AAWWA's "Wine, Women & Water" Cocktails & Networking Mixer. The mixer will be held ahead of the annual meeting on Tuesday, January 30, from 5:30 pm to 8:30 pm (the location of the mixer will be announced soon). The annual meeting program will include a diverse set of speakers, including US Senator Kyrsten Sinema, SRP Associate General Manager & Chief Water Resources Executive Leslie Meyers, Indigenous Women's Leadership Network Co-Chair Darnella J. Melancon, and many other exciting guests. Registration for the annual meeting is \$85 for Agribusiness Water Council members, \$95 for non-members, and only \$35 for students, with the Jan 30 mixer registration fee set at \$15. Seating is limited, so register now to attend!

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

## EVENTS



**WRRC 2024 ANNUAL CONFERENCE**

**IMPLEMENTING WATER SOLUTIONS THROUGH PARTNERSHIPS**

**MARCH 12-13**  
University of Arizona  
Student Union Grand Ballroom

**Early Bird DISCOUNT**

**Registration Now Open for WRRC 2024 Annual Conference**

**Register Today!**

### Upcoming WRRC Events

- **Jan 30:** WRRC Hybrid Water Webinar: Featuring Meghan C. Scott, Esq., Noble Law Office – **Save the Date!**
- **Feb 16:** [WRRC 20<sup>th</sup> Annual Chocolate Fest](#)
- **March 12-13:** [WRRC 2024 Annual Conference: Implementing Water Solutions Through Partnerships](#)

### Upcoming WRRC Co-sponsored/Co-hosted Events

- **Jan 22:** [ENVS Colloquium: The Role of Vegetation in the Climate System — Dr. Julia Green \(UArizona\)](#)
- **Jan 29:** [ENVS Colloquium: Groundwater Depletion as Viewed from Space and Implications for the Western United States — Dr. Jay Famiglietti \(ASU\)](#)
- **Jan 30:** [AAWWA "Wine, Women & Water" Cocktails & Networking Mixer](#)
- **Jan 31:** [AAWWA Annual Meeting](#)
- **Feb 5:** [ENVS Colloquium — Rick Tafoya \(USDA\)](#)
- **Feb 6:** [NVIS Spring 2024 Seminar: Indigenous Ingenuity: A Path Forward – Co-sponsored by the WRRC](#)
- **Feb 12:** [ENVS Colloquium — Dr. Sheldwin Yazzie \(Albuquerque Area Indian Health Board\)](#)
- **Feb 19:** [ENVS Colloquium — TBD](#)

## New Study Measures Agriculture's Water Footprint Across Colorado River Basin

*Guest Authors: George Frisvold, Bartley P. Cardon Chair of Agribusiness Economics and Policy; Extension Specialist, UArizona Department of Agricultural and Resource Economics; Dari Duval, Economic Impact Analyst, UArizona Department of Agricultural and Resource Economics*

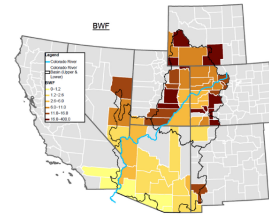


Figure 6. The Blue Water Footprint (BWF) for crop production among Colorado Basin counties.

According to a new study published in *Hydrology*, Arizona counties have some of the lowest agricultural water footprints in the Colorado River Basin. Conducted by George Frisvold and Dari Duval of UArizona's Department of Agricultural and Resource Economics, the study estimated blue water footprints — the amount of irrigation water used to produce \$1,000 worth of crops — across Colorado River Basin counties. The authors combined publicly available data from the US Geological Survey, USDA, US Department of Commerce, and US Department of Labor. In Lower Basin counties, it took 1.2 acre-feet of water on average to produce \$1,000 worth of crops, while in the Upper Basin, it took 7.6 acre-feet. Counties in western Arizona and southern California had the lowest water footprints, followed by those in southern Arizona. Low water footprints mean that these counties generate more crop revenue per acre-foot of water than in other parts of the Basin. Crops in these low desert areas use more water per acre compared to other parts of the Basin, but the desert environment allows growers to produce higher yields and to grow high-value specialty crops. As the region faces water cutbacks, water conservation policies have emphasized compensated, voluntary reductions in agricultural water use. The results of the study can help identify where water conservation is least costly in terms of the value of foregone crop production or farm income.

*Image: Courtesy of Dari Duval. The Blue Water Footprint (BWF) for crop production among Colorado Basin counties.*

[Read the Study](#)

## WRRC Announces National Competitive Grant Opportunity

The WRRC is now accepting proposals for the FY 2024 Water Resources Research Act (WRRRA) Section 104(g) National Competitive Grants Program. Grants will support research on water problems and issues of a regional or interstate nature. The 104(g) grant program funds two categories of grants — 104(g) General and PFAS — each with its own research priorities and RFP. Any investigator at an institution of higher learning in the US is eligible to apply for a grant through a Water Resources Research Institute (WRRI) established under the Water Resources Research Act of 1984. The WRRC is the designated WRRI for Arizona. Proposals may request up to \$310,000 in federal funds and proposed projects may be from one to three years in duration. The federal funds request must be matched 1:1 with a non-federal contribution. Proposals that include a USGS collaborator as a co-PI are encouraged. Submitting preproposals to the WRRC is the first step in the process of applying for 104(g) program grants. Proposals



must be submitted by email to Jessie Hampton ([jessiehampton@arizona.edu](mailto:jessiehampton@arizona.edu)) **BEFORE 5:00 PM MST on Wednesday, March 27, 2024**. Funds have not yet been appropriated for this program for FY 2024, and the government's obligation under this program is contingent upon the availability of funds. Visit our [website](#) for program information and application guidance. More information on the WRRRA grant programs administered by the WRRRC can be found [here](#).

**[104\(g\) Grant Info](#) Proposal Deadline: March 27, 2024 (BEFORE 5:00 PM MST)**  
**[104\(b\) Grant Info](#) Proposal Deadline: March 1, 2024 (BEFORE 5:00 PM MST)**

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## Meet APW's Shining New Team Members

Arizona Project WET (APW) is excited to welcome a couple of new team members, Jordan Christiansen and Rachael King, to its Phoenix office. These two have been delivering educational programming to communities across the state since last November and are already impressing everyone with their knowledge and experience. Until you have the opportunity to meet them in person, read on for a little more info about each of them.



[Read More](#)

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## WIFA Updates Stakeholders at January Board Meeting

Last year, between April and November, the Water Infrastructure Finance Authority of Arizona (WIFA) received 273 grant applications for the \$200 million budgeted Water Conservation Grant Fund (WCGF). WIFA estimates that the 89 projects funded thus far will save between 2.8 and 4.2 million acre-feet of water. Challenges that WIFA hopes to tackle in the new year include insufficient funds for all applications received and uneven distribution of funds across Arizona's 15 counties. More on these issues can be found in the AZ Central article linked below. On January 17, WIFA held its first board meeting of 2024 in Yuma, AZ, accepted five applications, and discussed the next steps for the Long-Term Water Augmentation Fund (LTWAF). Among vegetation management and turf removal projects, the Board approved a unique project by the City of Avondale that will establish domestic water conservation classes and provide water-efficient fixtures for residences. During the meeting, there was also discussion about how the \$1 billion LTWAF should be allocated. Based on the stakeholder opinions collected late last year, the current plan is to develop a solicitation that would best encourage stakeholder participation.



*Image: Amy Fee, WRRRC 2022 Photo Contest*

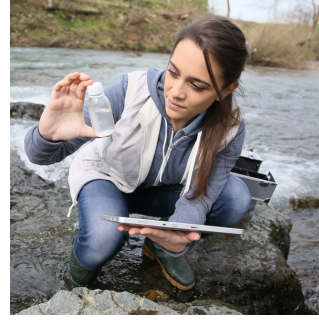
- [AZ Central Article](#)
- [WIFA](#)
- [More Info](#)



# WATER JOBS/OPPORTUNITIES

## WRRC Invites Research Proposals for 104(b) Program

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. Grant funds are provided by the Water Resources Research Act (WRRRA), Section 104(b) program, through the US Geological Survey. Proposals should feature student work and explore new ideas to address water problems in Arizona and the Southwest and expand understanding of water and related phenomena. Proposals from a broad range of academic disciplines and professional programs will be considered. Additionally, proposals that increase diversity, equity, inclusion, and justice, and address issues in historically marginalized or underserved communities are highly encouraged.



**Proposals are due BEFORE 5:00 PM MST on Friday, March 1, 2024.** Funded projects will start on September 1, 2024, contingent on congressional budget approval. For more information visit the webpage below or email Communications Coordinator Jessie Hampton ([jessiehampton@arizona.edu](mailto:jessiehampton@arizona.edu)). For information on the other WRRRA grant program administered by the WRRC, the National Competitive Section 104(g) Grants, [click here](#).

### [Program Info & Instructions](#)

[104\(g\) National Competitive Grants](#) (Deadline: March 27, 2024, BEFORE 5:00 PM MST)

- 
- Annis Water Resources Institute [Executive Director](#)
  - National Park Service [Interdisciplinary Ecologist/Hydrologist \(Wetlands Specialist\)](#)
  - Town of Gilbert [Water Conservation Specialist](#)
  - Watershed Management Group [Community Conservation Program Director](#)
  - Watershed Management Group [Events and Fundraising Coordinator](#)
  - WestWater Research [2024 Summer Associate](#)
  - WestWater Research [2024 Summer Analyst](#)
  - WestWater Research [Senior Associate – Rocky Mountain Water Resources Lead](#)
  - WestWater Research [Research Associate, Water Resource Economics and Finance](#)
  - WestWater Research [Research Analyst, Water Resource Economics and Finance](#)

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

# CALENDAR ANNOUNCEMENTS

- **Jan 22:** [ENVS Colloquium: The Role of Vegetation in the Climate System — Dr. Julia Green \(UArizona\)](#)

- **Jan 22–24:** [Growing Water Smart: Integrated Water and Land Use Planning Workshop](#)
- **Jan 26:** [WRRC 2023 Annual Conference – Student Poster Abstract Deadline Extended!](#)
- **Jan 29:** [ENVS Colloquium: Groundwater Depletion as Viewed from Space and Implications for the Western United States — Dr. Jay Famiglietti \(ASU\)](#)
- **Jan 30:** [WRRC Hybrid Water Webinar: Featuring Meghan C. Scott, Esq., Noble Law Office – Save the Date!](#)
- **Jan 30:** [Arizona Association of Women in Water & Agriculture \(Wine, Women & Water Reception\) – Co-sponsored by the WRRC](#)
- **Jan 31:** [Arizona Association of Women in Water & Agriculture Annual Meeting – Co-sponsored by the WRRC](#)
- **Jan 31:** [3<sup>rd</sup> International Groundwater-Agriculture Conference: Toward Sustainable Groundwater in Agriculture - Linking Science and Policy – Abstract Deadline](#)
- **Jan 31:** [Pete McBride: Into the Grand Canyon, Between River and Rim](#)
- **Feb 4–7:** [NIWR 2024 Annual Meeting](#)
- **Feb 5:** [ENVS Colloquium — Rick Tafoya \(USDA\)](#)
- **Feb 6:** [NVIS Spring 2024 Seminar: Indigenous Ingenuity: A Path Forward – Co-sponsored by the WRRC](#)
- **Feb 8–9:** [First International Atmospheric Water Harvesting Summit](#)
- **Feb 11–13:** [AWWA/WEF Young Professionals Summit](#)
- **Feb 12:** [WRRC 2024 Annual Conference – Early Bird Registration Deadline!](#)
- **Feb 12:** [ENVS Colloquium — Dr. Sheldwin Yazzie \(Albuquerque Area Indian Health Board\)](#)
- **Feb 16:** [WRRC 20<sup>th</sup> Annual Chocolate Fest](#)
- **Feb 16:** [2024 Bouwer Intern Scholarship – Application Deadline Extended!](#)
- **Feb 19:** [ENVS Colloquium — TBD](#)
- **Feb 20:** [Santa Cruz River Research Days – Abstract Submission Deadline](#)
- **Feb 22:** [Spring 2024 Tumamoc Talk: What Goes on Inside the Clouds? – Dr. Sylvia Sullivan](#)
- **Feb 22–23:** [2024 Family Farm Alliance Annual Conference – Resilience in Every Drop: Safeguarding America’s Food Security](#)
- **Feb 25:** [AWRA/UCOWR/NIWR 60<sup>th</sup> Anniversary Joint Water Resources Conference – Topical Session Deadline](#)
- **Feb 26–27:** [Environmental Professionals of Arizona \(EPAZ\) Conference](#)
- **Feb 26–28:** [Water Resources Management & Sustainability: Solutions for Arid Regions 2nd International Conference](#)
- **Feb 27–29:** [2024 Southwest Adaptation Forum – Save the Date](#)
- **Feb 28–Mar 1:** [MSSC 2024 Annual Salinity Summit](#)
- **Mar 1:** [Water Resources Research Institute Program 104\(b\) Student Grant – Proposal Deadline](#)
- **Mar 4:** [WRRC 2024 Annual Conference – Standard Registration Deadline!](#)
- **Mar 5–7:** [RiversEdge West 2024 Conference – Restoration for the Future: Promoting Resilience in Our Rivers and Communities](#)
- **Mar 10–16:** [National Groundwater Awareness Week](#)
- **Mar 11:** [ENVS Colloquium — Dr. Thomas Lavanchy \(Oklahoma State University\)](#)
- **Mar 11–14:** [AWWA WaterReuse 2024 Symposium](#)
- **Mar 12:** [NVIS Spring 2024 Seminar: Place Based Learning and Cultural Fire Practice in California – Co-sponsored by the WRRC](#)
- **March 12–13:** [WRRC 2024 Annual Conference: Implementing Water Solutions Through Partnerships](#)
- **March 12–13:** [A Meeting of Sacred Waters: A Global Gathering of Indigenous Voices](#)
- **Mar 14:** [Spring 2024 Tumamoc Talk: The Influence of a Variable and Changing Climate on Upper Gila River Streamflow – Dr. Connie Woodhouse](#)
- **Mar 18:** [ENVS Colloquium — SEES Earthweek Keynote Speaker](#)
- **Mar 21:** [ENViSion Research Symposium](#)

- **Mar 25:** [ENVS Colloquium — Dr. Katerina Dontsova \(UArizona\)](#)
- **Mar 25–27:** [AWRA 2024 Geospatial Water Technology Conference: Data to Decisions: Managing & Modeling Water Challenges](#)
- **Mar 27:** [USGS 104\(g\) National Competitive Grant – Proposal Deadline](#)
- **Apr 1:** [ENVS Colloquium — TBD](#)
- **Apr 2:** [NVIS Spring 2024 Seminar: \[Presentation title TBD\] – Co-sponsored by the WRRRC](#)
- **Apr 3–6:** [BSMAR18](#)
- **Apr 8:** [ENVS Colloquium — Dr. Luisa Ikner \(UArizona\)](#)
- **Apr 8–10:** [AWRA 2024 Spring Conference: Water Risk & Resilience: Research and Sustainable Solutions](#)
- **Apr 15:** [ENVS Colloquium — ENVS Undergraduate Presentations](#)
- **Apr 16–17:** [NGWA Conference: Groundwater in the PFAS Era: Stressors, Protection, & Compliance](#)
- **Apr 18:** [Spring 2024 Tumamoc Talk: The Science and Wonder of Arizona Lighting – Ron Holle](#)
- **Apr 22:** [ENVS Colloquium — Dr. Beth Marlowe \(Quest Diagnostic Labs\)](#)
- **Apr 23–25:** [97<sup>th</sup> Annual AZ Water Conference & Exhibition Annual AZ Water Conference & Exhibition](#)
- **Apr 24–26:** [Santa Cruz River Research Days](#)
- **Apr 29:** [ENVS Colloquium — Dr. Jen McIntosh \(UArizona\)](#)
- **May 7:** [NVIS Spring 2024 Seminar: Eleltek Waali \(I'm Reading Country\) – Co-sponsored by the WRRRC](#)
- **Jun 10–13:** [AWWA 2024 Annual Conference & Expo \(ACE24\): Transforming Our Water Future](#)
- **Jun 17–20:** [3<sup>rd</sup> International Groundwater-Agriculture Conference: Toward Sustainable Groundwater in Agriculture - Linking Science and Policy](#)
- **Jul 28–30:** [2024 Arizona Water Reuse Symposium](#)
- **Sep 30–Oct 2:** [AWRA/UCOWR/NIWR 60th Anniversary Joint Water Resources Conference](#)

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

[Contact us here](#)