

# WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES  
COOPERATIVE EXTENSION

**WATER RESOURCES  
RESEARCH CENTER**



**January 28, 2022 / Volume 10, Issue 4**

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.](#)

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**IN THIS ISSUE:** Scholar's Award, NVIS, Elia Tapia, ADEQ, WOTUS



## Rodney Blaine Lewis Scholars Award Accepting Applications

Rodney "Rod" Blaine Lewis was a pioneer whose accomplishments in resolving the water rights claims of Native Nations laid the foundation for advancing the position of Indigenous communities in today's natural resource dialogues. In honor of his work, the Rodney

Blaine Lewis Scholars Award was created to support graduate students at the University of Arizona who are enrolled members of an Arizona Indian Tribe, and who are enrolled in a program of study in water law, policy, or a closely related field. Students can find the Rodney Blaine Lewis Scholars Award at the [UArizona Scholarship Universe](#) website. Applications for the inaugural year of this award are being accepted until April 3, 2022. For more information on Rod Lewis, please visit [WRRC's conference dedication page](#).

*Image: Courtesy of the Lewis Family*

## [Rodney Blaine Lewis Scholars Award](#)

# EVENTS

## **Brown Bag Webinar: Recent Research on Policies for Managed Aquifer Recharge in Mexico**

**Date:** February 2, 2022

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

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

**Speaker:**

Mary-Belle Cruz Ayala, PhD, *WRRC Postdoc, US-Mexico Transboundary Aquifer Assessment Program*



In Mexico, groundwater availability has been decreasing, especially in arid and semi-arid regions. One way to address this decline is using Managed Aquifer Recharge (MAR) to boost aquifer recharge with stormwater or treated wastewater. Considering the impact that climate change can have on natural recharge, the implementation of MAR efforts in the Northwest region of Mexico would help maintain environmental services, halt seawater intrusion, and act as a source for potable service. However, according to state and municipal water managers, implementing MAR effectively would require improvements in the Mexican legal framework, aquifer recharge policies, and financial programs.

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

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## **Upcoming Events**

**Feb 15:** [Brown Bag Webinar: All In: Confronting Southern Nevada's New Water Reality](#); Colby Pellegrino, *Deputy General Manager, Resources, Southern Nevada Water Authority*

**Feb 16:** [WRRC Chocolate Fest 2022](#)

**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*

## NEWS

### NVIS Seminar Features Ranalda Tsosie

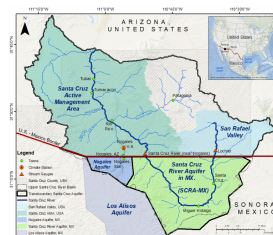
On January 24, the UArizona [Indige-FEWSS](#) program co-sponsored a webinar featuring Dr. Ranalda L. Tsosie (Diné), a post-doctoral scholar at Montana State University. The presentation, "Utilizing Diné Science and Innovation to Tackle Longstanding Water Challenges in Diné Communities," was the first seminar of the Spring 2022 series, Native Voices in STEM (NVIS). After a brief introduction, Tsosie began the talk by defining the relationship between Diné and Western perspectives of science and how "connectedness to the land and the sense of place" differentiates the two. In fact, the traditional Navajo songs and stories that she heard as a child continue to serve as lifelong conceptual frameworks through which she learns about and understands the health of the environment and her community. As a post-doctoral researcher, Tsosie's work—which often includes the participation of community members from the Tolikan Chapter of the Navajo Nation—studies the impacts of uranium mining on groundwater quality and community health while adhering to the guiding principles of the Four Life Lessons: Nitsáhákees (Thinking), Nahat'á (Planning), liná (Implementing), and Siih Hasin (Reflection). Tsosie explained that these principles represent "not a replacement, but an alternative approach in understanding the scientific method." She concluded her presentation by stressing the importance of community involvement at all stages of research, and reminded the audience that "Indigenous knowledge has a valid place in scientific research." A recording of the seminar will be posted on the NVIS website below.



### [NVIS Series](#)

### New Publication Assesses Sustainable Groundwater Withdrawal

A new publication in a Special Issue of the journal *Water* evaluates annual groundwater withdrawal from the Santa Cruz River aquifer in Mexico. The article, "Assessing Groundwater Withdrawal Sustainability in the Mexican Portion of the Transboundary Santa Cruz River Aquifer," emphasizes the need for "water resources management that considers the large inter-annual climate variability in the region." Co-authors Elia M. Tapia-Villaseñor, research professor at the Universidad de Sonora, Eylon Shamir, hydrologic engineer at San Diego's Hydrologic Research Center, Sharon B. Megdal, WRRC director, and Mary-Belle Cruz Ayala, WRRC post-doctoral researcher, developed a water balance model to determine the withdrawal rate that maintains sustainable conditions. Using historical data, the study found that the maximum sustainable annual groundwater withdrawal has decreased from 36.4 MCM/year in 1993 to less than 8 MCM/year in 2020. The article is one of 13 publications in the Special Issue *Advances in Transboundary Aquifer Assessment* that WRRC Director Megdal and Anne-Marie Matherne of US Geological Survey are guest editors of. All the articles are freely available online.



### [View the Article](#)

### **ADEQ Reporting Engages the Public**

The Arizona Department of Environmental Quality (ADEQ) makes use of a robust public engagement process in rulemaking and reporting. This week the agency is inviting interested community members to comment on the five-year review of ADEQ's administration rules, as published in the Arizona Administrative Code. Those interested can participate in an online feedback survey. Responses are due no later than February 2, 2022. These reports contain a concise analysis of ADEQ's administrative rules over the past five years. On January 6, the public comment period for Arizona's 2022 Clean Water Act Assessment, covering the period July 1, 2012 to June 30, 2021, ended. Following revisions, expect to see "for the first time in Arizona history" what ADEQ calls "a clear picture of every protected surfacewater in the State — 883 rivers, streams & lakes critical for drinking, recreation & fish consumption." The draft assessment is still available for viewing online. Established in 1987, ADEQ is the state agency that protects and enhances public health and the environment.



### **ADEQ Survey** **2022 Clean Water Act Assessment**

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### **Supreme Court to Hear WOTUS Case**

On Monday the Supreme Court of the United States (SCOTUS) granted an appeal in *Sackett v. EPA*, a 2012 case involving federal jurisdiction to regulate wetlands on private land under the Clean Water Act (CWA). In the 2012 decision, SCOTUS sided with the Idaho landowners, ruling that the Sacketts have the right to challenge a CWA order from the US Environmental Protection Agency (EPA), but the court affirmed the lower court's ruling that the wetland in question was under the jurisdiction of the CWA.



**[Read More](#)**

## **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 \(CES\)](#)**.

- WRRRC **[Communications Coordinator](#)**
- WRRRC **[Postdoctoral Research Associate \(RAPIDS\)](#)**
- WRRRC **[Postdoctoral Research Associate](#)**
- ADWR **[Hydrogeologist 2 \(Hydrology Division/Field Services Section\)](#)**
- ADWR **[Adjudications GIS Intern \(2 positions\)](#)**
- ADWR **[Chief Hydrologist/ Hydrology Assistant Director](#)**
- Las Vegas Valley Water District **[Post-Doctoral Researcher – LTE \(Applied Water Quality Research\)](#)**

- Las Vegas Valley Water District [Post-Doctoral Researcher – LTE \(Research Microbiology\)](#)
- Water Education Foundation [Staff Writer](#)
- Montana DNRC [Water Rights and Adjudication Bureau Chief](#)
- City of Peoria [Water Resources Policy Analyst](#)

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

## ANNOUNCEMENTS

- **Jan 28:** [Water Education Foundation 2022 Inaugural Colorado River Water Leaders Program – Application Deadline](#)
- **Jan 28:** [Santa Cruz River Research Days – Abstract Deadline](#)
- **Jan 31:** [UNESCO Groundwater Youth Network \(GWYN\) – Call for Interest Deadline](#)
- **Feb 2:** [WRRC Brown Bag Webinar: \*Recent Research on Policies for Managed Aquifer Recharge in Mexico\*](#)
- **Feb 4:** [Fifth National Climate Assessment: SW Chapter Public Engagement Workshop](#)
- **Feb 7:** [US Environmental Protection Agency and Army Corps of Engineers New Proposed Rule for Waters Protected Under CWA – Public Comments Deadline](#)
- **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 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 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 1-3:** [Arizona Growing Water Smart Workshop](#)
- **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 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 31:** [Los Charros Foundation Scholarship – Application Deadline](#)
- **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 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 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\* \(Dakhla, Morocco\)](#)
- **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](#)

## OTHER NOTICES

### [NGWA Free Student Memberships](#)

NGWA offers free student memberships to those studying in groundwater-related programs (in both undergraduate and graduate programs), whether in a university, community college, or a drilling school.

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

[Contact us here](#)