

WEEKLY WAVE



COLLEGE OF AGRICULTURE & LIFE SCIENCES
COOPERATIVE EXTENSION

**WATER RESOURCES
RESEARCH CENTER**



May 6, 2022 / Volume 10, Issue 17

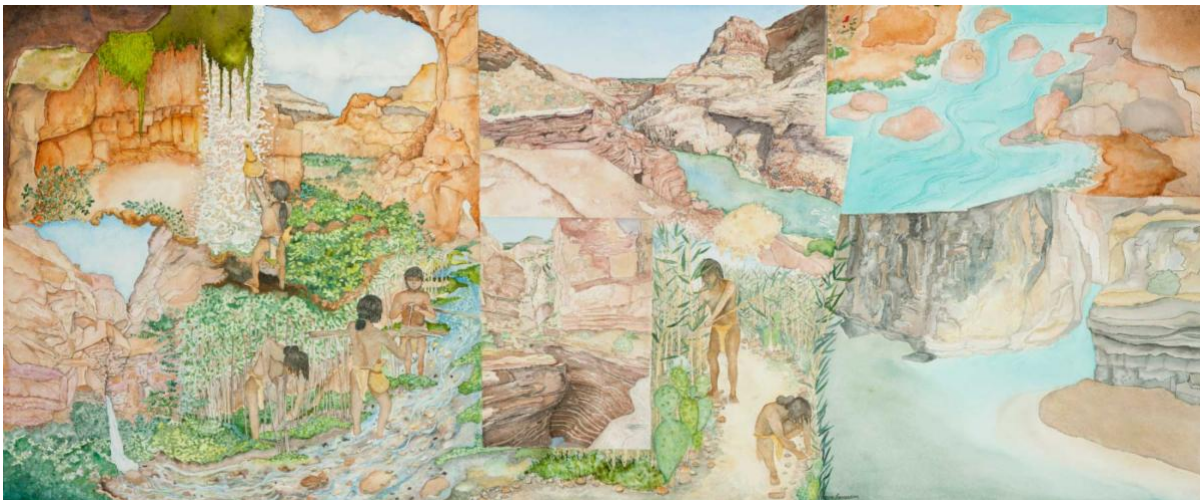
The Water Resources Research Center - a research unit of the [College of Agriculture and Life Sciences](#) and an Extension unit in [UA Cooperative Extension](#) within the Division of Agriculture, Life & Veterinary Sciences & Cooperative Extension. [Subscribe to the Weekly Wave.](#)
[Land Acknowledgement](#)

[WRRRC Office Update](#)

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Special Event Recap, LSCRB Study, Departing Students, Sharon B. Megdal, AAWWA



Special Event on Counter Mapping Re-Examines How We View Mapmaking

On May 2, the WRRRC hosted a Special Event, *Counter Mapping Articulates What is Between*, at which Jim Enote, CEO of the Colorado Plateau Foundation, spoke about mapmaking, maps, and how they shape our understanding of “the way things are.” Following an introduction by WRRRC Director Sharon B. Megdal, there was a virtual screening of the short documentary, *Counter Mapping*, about the movement Enote has been developing. As described by Enote, the Counter Mapping movement is a departure

from long-standing cartographic conventions, which permit or prevent certain kinds of information-sharing and constrain how the information is framed. Counter Mapping counters these conventions with a legitimate alternative form of “ordering knowledge” and communicating ideas through techniques that “widen our compassion” and deepen our understanding of each other. Enote articulated three basic ideas of Counter Mapping: “1) there are many more ways of knowing than we realize, 2) maps are powerful and often arbitrary, and 3) representing a deeper context of place requires a broader spectrum of imaginative mapmaking.” The presentation was followed by an extensive and lively Q&A discussion with many questions posed by the audience about how to support Counter Mapping efforts, where examples of Counter Mapping could be found, and how they could create their own Counter Maps.

Image: Levon Loncassion, Deer Springs and Havasu Creek, 2010. Watercolor on paper, 47 x 20 in.

- [View the Recording](#)
- [View the Short Documentary](#)
- [More Info](#)

EVENTS

WRRC Special Event: INHABITANTS: Indigenous Perspectives on Restoring Our World - Asynchronous Screening and Panel Q&A

Date: May 16, 2022

Time: 4:00 pm-5:00 pm Arizona Time

Location: [Webinar Only](#)

Speakers:

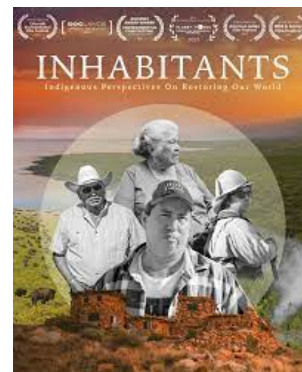
Dr. Michael Kotutwa Johnson, *Assistant Specialist, UArizona Resiliency Center, School of Natural Resources and the Environment*
Costa Boutsikaris, *Co-director/Cinematographer*
Anna Palmer, *Co-Director/Producer*

Moderated by: Rebecca Tsosie, J.D., *Regents Professor of Law, UArizona James E. Rogers College of Law*

Documentary Viewing and Panel Discussion

As part of the WRRC's Indigenous Water Dialogues, we are pleased to announce a special panel discussion of INHABITANTS: Indigenous Perspectives On Restoring Our World, as well as free screening for all event registrants. The film is a beautiful account of the role that Native communities have in shaping our broader approach to climate change adaptation as it explores the restoration of their traditional land management practices. Using both narrative and visual depictions of Native land stewardship methods in deserts, coastlines, forests, and prairies, INHABITANTS relates the personal histories of five different Native American Tribes and how they have continued to exercise their self-determination to the local and global challenges posed by our changing climate.

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



WRRC Brown Bag Webinar: Water Reuse Action Plan and REUSExplorer Demo

Date: May 17, 2022

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

Location: [Webinar Only](#)

Speaker: Sharon Nappier, *National Program Leader for Water Reuse, US Environmental Protection Agency*



The National Water Reuse Action Plan (WRAP) helps drive progress on reuse by leveraging the expertise of scientists, policymakers, and local experts across the country to create a more resilient water future for communities of all sizes. The collaborative launched in February 2020 with federal, state, Tribal, local, and water sector partners to build state and local capacity to pursue reuse practices that help to solve local water resource challenges. There are currently more than 100 organizations partnering on 50 actions in the plan, ranging from scientific and technical advancements in water reuse to better policy and coordination across jurisdictions. The presentation will highlight progress across the WRAP actions and provide a demo of a new tool: Regulations and End-Use Specifications Explorer (REUSExplorer). The REUSExplorer compiles state water reuse regulations and guidelines and highlights the underlying scientific and technical basis of water quality metrics. This new web-based tool, developed by the Environmental Protection Agency (EPA) and partners under WRAP Action 3.1, is searchable by state, source of water, and end-use application to assist states interested in developing regulations and help utilities and practitioners to better understand current regulations. The first end-uses available include potable water reuse, onsite non-potable reuse, and other centralized non-potable reuse applications, not including agricultural and landscape reuse applications. The REUSExplorer is available at <http://www.epa.gov/reuseexplorer>.

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

Upcoming Events

May 9: [Night of Ideas – Tucson; Arizona, a Laboratory for the World: Conference-Debate on Contemporary Social and Environmental Challenges](#)

Jul 12-14: [WRRC 2022 Annual Conference: Arizona's Agricultural Outlook: Water, Climate, and Sustainability](#)

Note that the following event has been postponed and that we will provide an update as we have more information. **May 10:** [Celebrating 100 Years of Relations Between Egypt and the US](#); Featuring the Ambassador of the Arab Republic of Egypt to the US, Ambassador Motaz Zahran



WRRC 2022 ANNUAL CONFERENCE

Arizona's Agricultural Outlook: Water, Climate, and Sustainability

REGISTRATION OPENS MAY 12, 2022

July 12 | In-person Event with Livestreaming

July 13-14 | Additional Virtual Programming

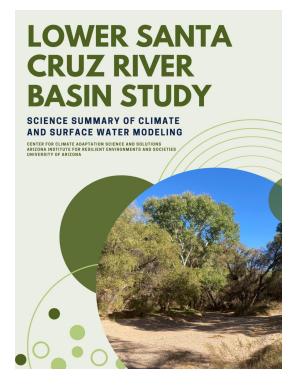
wrrc.arizona.edu

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NEWS

LSCRB Climate Change Impact Study Results Available

University of Arizona researchers Kathy Jacobs, Neha Gupta, Chris Castro, and Hsin-I Chang have been key contributors to the first comprehensive assessment of climate change effects on the Lower Santa Cruz River Basin (LSCRB). Jacobs, Director of AIRE Center for Climate Adaptation Science and Solutions, and Gupta, Program Coordinator for AIRE University Climate Change Coalition, were on the study's leadership team. A collaboration between the US Bureau of Reclamation and a group of LSCRB stakeholder organizations, the 5-year study assessed climate change effects, including reduced CAP deliveries. The study incorporated historical observations and model-based projections into its assessment. Castro, Professor and Associate Head, and Chang, Assistant Research Professor, both from the Department of Hydrology and Atmospheric Sciences, were responsible for the study's climate projections. Projected effects on basin-wide water supplies and demands informed efforts to identify potential supply-demand imbalances, groundwater-level changes, and environmental impacts. The final report summary states that the LSCRB can expect hotter, drier conditions, more variability in precipitation, and decreased streamflow. Regions of special concern include communities outside and surrounding the city of Tucson on the North, East, and South. The report also contains potential adaptation strategies. The final report will not be released officially before the fall, but [summary results](#) and [climate modeling outcomes](#) are available. With the publication of these results, a Safe Yield Task Force meeting has been scheduled for Monday, May 23, 10:00 AM at Metro Water. When call-in and agenda information are available, an update will be published in the *Weekly Wave*. AIRE is the Arizona Institute for Resilient Environments & Societies.



[LSCRB Science Summary](#)
[LSCRB Project Summary](#)

WRRC Bids Farewell to Student Workers

The end of the school year marks several changes for the WRRC, including the departure of two student workers. Taylor McHugh spent their time as a Graduate Student Assistant working with Water RAPIDS Program Director Ashley Hullinger, doing water information outreach to Arizona communities. Taylor helped develop soon-to-be-published Factsheets

for Cochise and Pima counties and assisted with foundational work for a new geospatial platform in partnership with Arizona Water Company, Pinal County, City of Coolidge, City of Casa Grande, and Lincoln Institute of Land Policy. Taylor will be continuing their graduate studies in the fall. Hannah Johnson is graduating with a BS in Ecology and Evolutionary Biology. She served as our Student Communication and Outreach Assistant, creating and distributing event flyers, and writing stories for the *Weekly Wave*. She will be working as a marine science instructor at the Catalina Island Marine Institute in southern California this summer, then taking a gap year while she applies to graduate school programs. The WRRC would like to thank Taylor and Hannah for all their hard work and wish them both well in their future endeavors.



WRRC Director Megdal Interviewed on Colorado River Shortages & Conservation

WRRC Director Sharon B. Megdal was interviewed by KOLD's Mikala Novitsky for a local news story on the historically low water levels in the Colorado River. Director Megdal provided context for the significance of Colorado River shortages, saying "things are getting to levels whereby, the probabilities are looking like, in the next year or two or maybe two or three years, we could see shortages to Arizona [cities]." She also spoke to the role of climate change, saying "Climate has not been cooperating with us in the Colorado River basin. It's serious, it's really serious." The story also features Candice Rupprecht, Tucson Water Conservation Program Manager and WRRC alumna, who highlighted conservation measures that can help mitigate the effects of our historic drought, including checking toilets for leaks with dye tablet tests, checking home irrigation systems, and following seasonal watering guidelines for the summer.

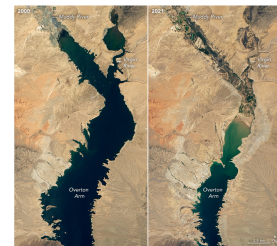


Image: <https://earthobservatory.nasa.gov/images/148758/lake-mead-drops-to-a-record-low>

[KOLD Story](#)

AAWWA to Host Colorado River Event

On May 24, the Arizona Association of Women in Water & Agriculture (AAWWA) is hosting an event on Colorado River history, current conditions, impacts, and solutions at the Salt River Project PERA Training and Conference Center in Tempe, AZ. The AAWWA "is designed to support, promote, celebrate and inspire women with careers and interest in water and agriculture through education, networking and fellowship." Topics of the meeting will include current Colorado River hydrology, operations, power impacts, law, and potential solutions to ongoing challenges. The keynote speaker, Brenda Burman, was the first woman to serve as Commissioner of the Bureau of Reclamation and is now the Executive Strategy Advisor for the Central Arizona Project. Other speakers will include Cynthia Campbell, Water Resources Management Advisor for the City of Phoenix; Cheryl Lombard, President and CEO of Valley Partnership; and Vineetha Kartha, Colorado River Programs Manager for the Central Arizona Project. Registration for the event is open for AAWWA members and non-members.



[Register Here](#)

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 [Statewide Water Information Manager](#)
- UC Davis [Postdoc Scholar – Water Management and Climate Adaptation Strategies](#)
- Colorado State University [Colorado Water Center Associate Director](#)
- SRP [Analyst Water Programs](#)
- City of Avondale [Environmental Coordinator – Backflow](#)
- City of Avondale [Environmental Coordinator - Pretreatment](#)
- Town of Prescott Valley [Deputy Water Resources Director](#)
- Town of Gilbert [Water Conservation Coordinator](#)

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

ANNOUNCEMENTS

- **May 7:** [Cienega Watershed Partnership Field Trip: Discovering the Land: Community, Science, and Partnership in the Sonoita and Patagonia Region](#)
- **May 9:** [Night of Ideas – Tucson; Arizona, a Laboratory for the World: Conference- Debate on Contemporary Social and Environmental Challenges](#)
- **May 9:** [Night of Ideas – Phoenix; Between Dreams and Realities...Where Are We Going?](#)
- **May 10:** [AHS Monthly Meeting and Presentation \(Tucson Chapter\); World Water Scarcity: Current Situation and Lessons Learned](#)
- **May 11-12:** [The Third International Congress on Desert Economy: Energy Economics between Deserts and Oceans](#)
- **May 13:** [31st Desert Horticulture Conference](#)
- **May 15:** [The Babbitt Center for Land and Water Policy: 2022 Evaluating Tools for Integrating Land Use and Water Management – Proposal Deadline](#)
- **May 16:** [WRRC Special Event: INHABITANTS: Indigenous Perspectives on Restoring Our World Screening and Panel Q&A](#)
- **May 16:** [ADEQ Stakeholder Meeting: State Surface Water Protection Program Significant Nexus Technical Paper](#)
- **May 16:** [AWRA 2022 Annual Water Resources Conference – Abstract Deadline](#)
- **May 17:** [WRRC Brown Bag Webinar: Water Reuse Action Plan and REUSExplorer Demo](#)
- **May 19-20:** [23rd Annual Law of the Colorado River Conference](#)
- **May 24:** [AAWWA Event: The Colorado River: History, Current Conditions, Impacts and Solutions](#)
- **Jun 14-16:** [UCOWR/NIWR 2022 Annual Water Resources Conference](#)
- **Jun 17-20:** [AHS Flagstaff Chapter North Rim Field School](#)
- **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](#)
- **Jul 12-14:** [WRRC 2022 Annual Conference: Arizona's Agricultural Outlook: Water, Climate, and Sustainability](#)

- **Aug 11-12:** [Arizona Water Law Conference](#)
- **Sep 11-14:** [AWWA 2022 Water Infrastructure Conference & Exposition](#)
- **Sep 11-15:** [IWA World Water Congress & Exhibition - Water for Smart Liveable Cities](#)
- **Sep 14-16:** [2022 AHS Annual Symposium](#)
- **Sep 26-27:** [OU International WaTER Conference](#)
- **Sep 26-29:** [State of the Verde Watershed Conference – The Future of the Verde: Solutions for the Next Decade](#)
- **Oct 6-8:** [SustainValencia2022; Achieving Sustainable Groundwater Management: Promising Directions and Unresolved Challenges](#)
- **Nov 7-9:** [AWRA 2022](#)

PUBLICATIONS & MEDIA

- [Arizona Project WET Launches its Groundwater Video Series.](#)
- [The Arizona Water Blueprint is Improved and Easier to Use.](#)
- Nabhan, Gary P., Eric Daugherty, and Tammi Hartung. 2022. "Health Benefits of the Diverse Volatile Oils in Native Plants of Ancient Ironwood-Giant Cactus Forests of the Sonoran Desert: An Adaptation to Climate Change?" *International Journal of Environmental Research and Public Health* 19, no. 6: 3250.
<https://doi.org/10.3390/ijerph19063250>

OTHER NOTICES

- [Tucson One Water 2100 Community Engagement Campaign](#)

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

[Contact us here](#)