



WRRRC 2023 Annual Conference

## What Can We Do?

SOLUTIONS TO ARIZONA'S  
WATER CHALLENGES

**July 11 – 12, 2023**

University of Arizona Student Union  
Grand Ballroom, Tucson, AZ



### TUESDAY, JULY 11, 2023

9:30-10:30	REGISTRATION AND REFRESHMENTS
10:30-10:40	<b>Welcome</b> <ul style="list-style-type: none"><li>Sharon B. Megdal, Water Resources Research Center, University of Arizona</li></ul>
10:40-11:20	<b>Opening Keynotes: The State of Water in Arizona</b> <ul style="list-style-type: none"><li>Karen Peters, Director of the Arizona Department of Environmental Quality</li><li>Invitation Pending</li></ul>
11:20-12:20	<b>Session 1: Addressing Water Quality</b> <ul style="list-style-type: none"><li>Erin Jordan, Arizona Department of Environmental Quality, <i>How Is Surface Water Quality Protected in Arizona?</i></li><li>Jason Jones, Arizona Department of Environmental Quality, <i>Assessing the Health of Arizona's Waters</i></li><li>Grant Weinkam, Arizona Department of Environmental Quality, <i>Prioritizing Retoration of Arizona's Impaired Waters</i></li><li>Joseph Hoover, University of Arizona, <i>Using Mobile Applications to Visualize Water Quality Data for Underserved Communities</i></li></ul> <b>Moderator:</b> Invitation Pending
12:20-1:20	LUNCH
1:00-1:20	<b>Lunch Program: Central Arizona Project Response to Shortages</b> <ul style="list-style-type: none"><li>Patrick Dent, Central Arizona Project</li></ul>

1:20-2:20	<p><b>Session 2: Filling Information Gaps</b></p> <ul style="list-style-type: none"> <li>• <b>Rachel O'Connor</b>, Environmental Defense Fund, <i>OpenET: Filling a Critical Data Gap for Sustainable Water Management</i></li> <li>• <b>Noah Silber-Coats</b>, USDA Southwest Climate Hub, <i>The Water Adaptation Techniques Atlas: A Catalog of Solutions for the Southwest</i></li> <li>• <b>Jessie Pearl</b>, The Nature Conservancy, <i>Success of Water Conservation Actions in Arizona</i></li> <li>• <b>Faith Sternlieb</b>, Lincoln Institute of Land Policy, <i>Overview of the Internet of Water (IoW) Coalition and Update on Core Technology</i></li> </ul> <p>Moderator: <b>Invitation Pending</b></p>
2:20-3:20	<p><b>Session 3: Improving Farming Practices</b></p> <ul style="list-style-type: none"> <li>• <b>Sterling Johnson</b>, Ajo Center for Sustainable Agriculture, <i>Tohono O'odham Traditional Dryland Farming and Crops - Lessons to be Learned for Arizona Water Challenges</i></li> <li>• <b>Ethan Orr</b>, University of Arizona Cooperative Extension, <i>University of Arizona Cooperative Extension's Water Irrigation Efficiency Program</i></li> <li>• <b>Ricardo Aguirre</b>, WEST Consultants, Inc., <i>A Solution for Long-Term Water Security in the Southwest</i></li> <li>• <b>Debankur Sanyal</b>, University of Arizona, <i>Evaluating Deficit Irrigation for Soil Health and Small-grain Productivity in Arizona</i></li> </ul> <p>Moderator: <b>Jeff Silvertooth</b>, University of Arizona</p>
3:20-3:35	NETWORKING BREAK - SPONSOR VIDEOS
3:35-3:55	<p><b>Keynote: TBD</b></p> <ul style="list-style-type: none"> <li>• <b>Invitation Pending</b></li> </ul>
3:55-4:55	<p><b>Session 4: Working with Nature</b></p> <ul style="list-style-type: none"> <li>• <b>Neha Gupta</b>, University of Arizona, <i>Opportunities to Enhance Recharge in Arizona: A Tri-University Study</i></li> <li>• <b>Kim Schonek</b>, Water Program Director, The Nature Conservancy Arizona, <i>Opportunities for Stormwater Recharge in Arizona: Augmentation and Streamflow Benefits</i></li> <li>• <b>Sarge Green</b>, California Water Institute at California State University Fresno, <i>Optimizing Watershed Conditions for Sustainability</i></li> <li>• <b>Xochitl Coronado-Vargas</b>, Tucson Water, City of Tucson, <i>Tucson's Green Stormwater Infrastructure Program</i></li> </ul> <p>Moderator: <b>Invitation Pending</b></p>
4:55-5:00	CLOSING REMARKS - END OF DAY 1
5:30-7:00	RECEPTION

# WEDNESDAY, JULY 12, 2023

8:00-9:00	REGISTRATION AND REFRESHMENTS
9:00-9:15	<b>Welcome</b> <ul style="list-style-type: none"><li>• Sharon B. Megdal, Water Resources Research Center, University of Arizona</li></ul>
9:15-10:00	<b>Keynote Panel: The Importance of Inclusive Consultation in Negotiating Solutions</b> <ul style="list-style-type: none"><li>• Amelia Flores, Chairwoman of Colorado River Indian Tribes</li><li>• Invitation Pending</li><li>• Invitation Pending</li></ul>
10:00-11:15	<b>Session 5: Adapting Policy</b> <ul style="list-style-type: none"><li>• Rashi Bhushan, University of Arizona, <i>Identifying Policy Barriers Towards a Net Zero Urban Water Future in Southwestern US</i></li><li>• Tres English, Sustainable Tucson, <i>Sustaining Tucson - Living Within Our Limits</i></li><li>• Raluca Mihalcescu, Arizona Water Company, <i>Water Conservation: A Viable Part of the Solution for Private Water Utilities</i></li><li>• Elia Tapia, Universidad de Sonora, <i>Transboundary Aquifers</i></li><li>• Jake Golden, City of Phoenix, <i>Central Arizona Water Clearinghouse</i></li><li>• Richeal Young, ERA Economics, LLC, <i>Central Arizona Water Clearinghouse</i></li></ul> <b>Moderator: Juliet McKenna, Montgomery &amp; Associates</b>
11:15-11:30	NETWORKING BREAK
11:30-12:30	<b>Session 6: Growing the Workforce</b> <ul style="list-style-type: none"><li>• Gary Woodard, Water Resources Consulting, <i>Ramping up Regional Conservation Capacity</i></li><li>• Joshua Ruddick, Arizona Project WET, University of Arizona Cooperative Extension, <i>Career and Technical Education Building Water Related Pathways to a Green Workforce</i></li><li>• Selwyn Sekaquaptewa, Hopi Utilities Corporation, <i>Hopi Experience with Tribal Workforce Capacity</i></li><li>• Frank Barbaro, Central Arizona Project, <i>CAP Apprenticeship Program</i></li></ul> <b>Moderator: Maria Dadgar, Inter Tribal Council of Arizona</b>
12:30-1:30	LUNCH
1:10-1:30	<b>Lunch Program: Navajo Water Project</b> <ul style="list-style-type: none"><li>• Invitation Pending</li></ul>

## Session 7: Utilizing Technology

1:30-2:30

- **George Bomar**, Texas Weather Modification Association, *Harvesting the Skies of the American Southwest*
  - **David Proctor**, BKW Farms, *A Commercial Application of Controlled Environment Agriculture in the Southwest*
  - **Ben Cloud**, CEO, *Microbial Soil Reclamation*
  - **Robert Pulliam**, Tubular Rail Inc., *Ocean Imports of Fresh Water for Augmentation of the Colorado River*
  - **Jing Luo**, Apex Applied Technology, Inc., *A STAR Solution to Safe Drinking Water Challenges on Navajo and Hopi Reservations*
  - **Mark Witten**, Witten Technologies Inc, *Low-Energy Desalination Technology*
  - **Greg Barron-Gafford**, University of Arizona, *Agrivoltaics*
  - **Nazario Prieto**, City of Phoenix, *City of Phoenix Advanced Purified Water Plan*
- Moderator: Dave Wegner**, Woolpert

2:30-2:45

NETWORKING BREAK - SPONSOR VIDEOS

## Poster Session

2:45-3:45

- **Laura Condon**, University of Arizona, *HydroGEN: A Web Based Hydrologic Scenario Generation Platform for a Changing World*
- **Tom Smolarek**, Cypress Ltd, *Advanced Cooling Tower Water Treatment Integrated System to Reduce Water, Waste, Energy and Chemicals*
- **Robert Masson**, Yuma County Cooperative Extension, *Monitoring Sprinkler Water Use on the Farm*
- **Ashley Wright**, Cochise County Cooperative Extension, *Collective Impact: Documenting Small Scale Efforts That Lead to Systems Wide Changes*
- **Shaku Nair**, Arizona Pest Management Center University of Arizona, *How is Water Management Related to Pest Management?*
- **Melanie Moore**, Gowan High School, **Robert Masson**, Yuma County Cooperative Extension, *Student: Building the Water Bank: Moisture Retention Qualities of Soil Amendments in Desert Agricultural Soils*
- **Sarah Cerra**, New Mexico State University, *Student: Using Atriplex for RO Concentrate Reuse: Managing Soil Salinity and Microbes*
- **Courtney Lee**, University of Arizona, *Student: Designer Biochars for Removal of PFAS from Contaminated Water*
- **Zoey Reed-Spitzer**, University of Arizona, *Student: How do Groundwater Levels Vary with Economic and Climate Factors?*
- **Robert Jimenez-Wieneke**, University of Arizona, *Student: AZstreamCAT*
- **Kun Qi**, University of Arizona, *Student: Flash Flood Simulation Using HEC-HMS Model for an Arid Watershed in Arizona*

3:45-4:20	<p><b>Session 8: Portfolio-Based Approach</b></p> <ul style="list-style-type: none"><li>• John Take, Stantec, <i>Portfolio-Based Approaches to Address Near-Term and Long-Term Water Demands</i></li></ul> <p>Moderator: John Take, Stantec</p>
4:20-4:35	<p><b>Session 9: Arizona State University's Arizona Water Innovation Initiative</b></p> <ul style="list-style-type: none"><li>• Susan Craig, Arizona State University, <i>ASU's Arizona Water Innovation Initiative: An Investment in Water &amp; Climate Resilience</i></li></ul>
4:35-4:55	<p><b>Keynote: Financing for Water, Wastewater, Stormwater, and Water Conservation Infrastructure Projects</b></p> <ul style="list-style-type: none"><li>• Chuck Podolack, Director of Water Infrastructure Finance Authority of Arizona</li></ul>
4:55-5:00	CLOSING REMARKS - END OF CONFERENCE