

Digital Conference Packet

Tuesday, March 12: 1:00 pm – 5:00 pm MST Tuesday Reception: 5:00 pm – 6:30 pm MST Wednesday, March 13: 8:30 am – 4:00 pm MST

- 1. Conference Agenda
- 2. Meixner Dedication
- 3. Speaker/Moderator Bios
- 4. Sponsors
- 5. Venue Map/Parking Info
- 6. Conference Participant Evaluation



WRRC 2024 ANNUAL CONFERENCE



Dedicated to the Memory and Legacy of Thomas Meixner

AGENDA

IMPLEMENTING
WATER
SOLUTIONS
THROUGH
PARTNERSHIPS

MARCH 12-13, 2024
University of Arizona
Student Union Grand Ballroom
Tucson, AZ

Photo: Brenda Sanchez, Lake Powell, WRRC Photo Contest Submission

We respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. Committed to diversity and inclusion, the University strives to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.



Conference Info:

- Livestreaming
- Conference Packet (Agenda, Speaker Bios, and More)

DAY 1 – MARCH 12

12:00 PM	Registration
1:00 PM	Welcome
	Sharon B. Megdal, Director, Water Resources Research Center, University of Arizona
	Shane Burgess, Vice President, University of Arizona Division of Agriculture, Life & Veterinary Sciences & Cooperative Extension
1:15 PM	Dedication to the Memory and Legacy of Thomas Meixner
	Kathleen Meixner and Family
1:45 PM	Meixner Tri-University Legacy Project
	Moderator – Kathy Jacobs, <i>Director, Center for Climate Adaptation Science and Solutions, University of Arizona</i>
	Student Presentations
	 Approach to Data Access, Hydroclimate Modeling and Scenario Development, Progress to Date
	Alternative Recharge Approaches, Recharge Suitability and Baseflow Assessments
	Landscape and Vegetation Management Options for Enhancing Runoff/Recharge
	Options for Maximizing Urban Runoff, Capture and Recharge
	Contributions of Stakeholder and Partner Engagement to ATUR Process
	Additional Project Overview
	Neha Gupta, Assistant Research Professor, Arizona Institute for Resilience, University of Arizona — Context, Rationale, and Approach for the ATUR-WRP Project

2:45 PM	BREAK (Sponsor Videos)
3:00 PM	Academic Collaborations
	Moderator – Jamie McEvoy, Associate Professor of Geography, Montana State University Panelists
	 Rashi Bhushan, Postdoctoral Research Associate, University of Arizona Developing a Decision Support Tool for Net Zero Urban Water Systems in the US Southwest: A Collaborative Approach with Academic and Utility Partners
	 Luisa Ikner, Assistant Professor, Environmental Science Department, Water & Energy Sustainable Technology (WEST) Center, University of Arizona Building Water Resource Resilience by Strengthening Academic-Water Utility Partnerships
	 Joaquin Ruiz, Director, Biosphere 2, Vice President for Global Environmental Futures, University of Arizona
	 Status and Progress of the UArizona Implementation Committee on the Future of Agriculture and Food Production in a Drying Climate
3:40 PM	Salt River Project Initiatives
	Session Speakers
	 Hannah Hansen, Water Planning Analyst, Salt River Project Downstream Modification of Bartlett Dam
	 Tice Supplee, Arizona/Southwest Director of Bird Conservation, Audubon Southwest Horseshoe Reservoir Habitat Restoration Study Phase 1
	 Craig McGinnis, Water Rights Analyst, Salt River Project Roosevelt Dam Flood Control Space Utilization
	 Caitlin Brogan, Water Conservation Coordinator, Salt River Project Conservation Through Collaboration: SRP's Commercial, Industrial, and Institutional Water Efficiency Partnerships
4:15 PM	Journalists' Perspectives
	Moderator – Sharon B. Megdal, <i>Director, Water Resources Research Center, University of Arizona</i> Panelists
	Tony Davis, Reporter, Arizona Daily Star
	 Deb Krol, Indigenous Affairs Reporter, The Arizona Republic Alex Hager, Reporter, KUNC
5:00 PM	Day 1 Wrap
	Sharon B. Megdal, Director, Water Resources Research Center, University of Arizona
5:00 PM	Reception/Poster Session
6:20 PM	Announcement of Student Poster Award Winners – Ty Morton, Senior Project Manager, HDR
6:30 PM	End of Reception

	DAY 2 – MARCH 13
7:30 AM	Registration
8:30 AM	Welcome Back
	Sharon B. Megdal, Director, Water Resources Research Center, University of Arizona
8:40 AM	Keynote – Paul Brierley, CEO, Arizona Department of Agriculture
9:10 AM	Partnership Development & Process
	Moderator — Thomas Throssell, Assistant Director, Inter Tribal Council of Arizona Panelists
	 Linneth Lopez, Environmental Engineering Specialist III & Rhona Mallea, Project Manager, Arizona Department of Environmental Quality
	 Dave Roberts, Former Senior Director of Water Resources, Salt River Project A New Paradigm for Reaching Sustainability in the Upper San Pedro River Watershed
	 David Wegner, Scientist & Public Policy Strategist, Woolpert Engineering & NAS, Water Science and Technology Board Climate Change and Water Availability
	 Amy Flores, Program Manager, ASU Sustainability Teachers' Academies & Charlie Alcorn, Watershed Management Group — Storm Smart Schools
10:00 AM	Keynote – The Honorable Katie Hobbs, Governor of Arizona
10:30 AM	BREAK (Sponsor Videos)
10:45 AM	Research & Tool Development
	Moderator – Chris Udall, Executive Director, Agribusiness & Water Council of Arizona
	 Session Speakers Joseph "Joey" Blankinship, Associate Professor, Environmental Science Department, University of Arizona Developing Solutions to Arizona Water Scarcity Through the Desert Agriculture Soil Health Initiative (DASHI)
	 Andrew French, Retired Research Physical Scientist, USDA / ARS Maricopa Quantitative Assessments of Water and Salt Balance for Cropping Systems in the Lower Colorado River Region
	 Ethan Orr, Associate Director, Agriculture, Natural Resources & Economic Development, University of Arizona Cooperative Extension — The University of Arizona On-Farm Irrigation Efficiency program
	 Somnath Mondal, Postdoctoral Research Scholar, Arizona State University Drought Resilience through Advanced Monitoring, Prediction, and Mitigation Strategies

11:35 AM	Lunch
12:00 PM	Luncheon Program Acknowledgements – Sharon B. Megdal, Director, Water Resources Research Center, University of Arizona Announcement of Student Poster Award Winners – Ty Morton, Senior Project Manager, HDR
12:10 PM	Luncheon Keynote – The Honorable Stephen Roe Lewis, Governor of the Gila River Indian Community
12:45 PM	 Water User Services & Tools Moderator – Shaina Shay, Owner and Editor-in-Chief, The Water Report Session Speakers Raluca Mihalcescu, Water Conservation Coordinator, Arizona Water Company
1:35 PM	 Financing Solutions Moderator – Faith Sternlieb, Associate Director of Engagement, Internet of Water, Center for Geospatial Solutions, Lincoln Institute of Land Policy Panelists Chelsea McGuire, Assistant Director, External Affairs, Water Infrastructure Finance Authority of Arizona – Partnerships in Augmentation Maya Clifford, Water Resources Manager and Engineer, New Mexico New Mexico's Arizona Water Settlements Act Program Christian Fauser, Western Water Policy Associate, Theodore Roosevelt Conservation Partnership Cross-Watershed Coordination: Reducing Barriers to Accessing Federal Funding to Scale Watershed Restoration Efforts in Arizona Elijah Tangenberg, Water Resources Specialist, City of Phoenix The Blue Bank Promise
2:25 PM	BREAK (Sponsor Videos)
2:40 PM	Keynote – Kristen Johnson, <i>Manager, Colorado River Programs,</i> Arizona Department of Water Resources

3:05 PM	On the Border
	Moderator – Francisco Zamora, Senior Director of Programs, Sonoran Institute Session Speakers
	 Martha Gomez Sapiens, Researcher, Department of Geosciences, University of Arizona The Binational Effort to Restore the Colorado River Delta
	Roberto Molina, Associate Director West Region, Grants Financing Department, The North American Development Bank
	Elia Tapia, Professor, University of Sonora
	— Transboundary Aquifer Assessment Program, Arizona-Sonora
3:50 PM	Closing Remarks
	Sharon B. Megdal, Director, Water Resources Research Center, University of Arizona
4:00 PM	End of Conference

Dedicated to the Memory and Legacy of Thomas Meixner



On October 5, 2022, our community suffered a huge loss with the tragic and senseless death of Dr. Thomas Meixner, UArizona professor and department head of Hydrology and Atmospheric Sciences. He was a world-renowned leader in biogeochemistry, admired and respected in the water community and by those to whom he was a colleague, professor, mentor, and friend.

In honor of Meixner's life and work, the WRRC's 2024 conference, Implementing *Water Solutions Through Partnerships*, is dedicated to his memory and legacy.



WRRC 2024 SOLUTIONS ANNUAL CONFERENCE PARTNERSHIPS Dedicated to the MARCH 12-13, 2024 Memory and Legacy of Thomas Meixner University of Arizona Student Union Grand Ballro Tucson, AZ **SPEAKER BIOS** Photo: Brenda Sanchez, Lake Powell, WRRC Photo Contest Submission We respectfully acknowledge the University of Arizona is on the land and territories of **Conference Info:**

Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. Committed to diversity and inclusion, the University strives to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.



IMPLEMENTING

WATER

- Livestreaming
- Conference Packet (Agenda, Speaker Bios, and More)

Charlie Alcorn, Program Manager and Educator, Watershed Management Group



Charlie Alcorn is a Program Manager and **Educator at Watershed Management** Group where he oversees WMG's education and project work in the Phoenix Valley, as well as community education programs and projects in Tucson, Arizona. Charlie is involved with water harvesting

projects from design to implementation at residential and community sites. As an educator he has led workshops installing rain gardens, rainwater storage tanks, greywater systems, and other green infrastructure features. He is an instructor for the project installation portion of WMG's weeklong water harvesting design certification course. Along with water harvesting in urban spaces, Charlie is enthusiastic about river restoration and natural building. As a native of Pennsylvania, he has found the Sonoran Desert enchanting and takes inspiration from his time spent outdoors, soaking in the wild diversity and abundance the desert offers.

Rashi Bhushan, Postdoctoral Research Associate, University of Arizona, College of Architecture Planning and Landscape Architecture (CAPLA)



Rashi Bhushan is currently working on Net Zero Urban Water Futures for Southwest US, an NSF project which aims at identifying the barriers and adaptive solutions for achieving water sustainability and self-sufficiency for the region. Her key interests include hydrologic modeling,

water resources planning and management under climate change, modeling centralized and decentralized solutions for urban water management, and systems modeling and optimization. With her skills she intends to address problems related to freshwater scarcity, water access inequity, and infrastructure operations under uncertainty.

Joseph "Joey" Blankinship, Associate Professor of Soil Ecology and Soil Health, Department of Environmental Science, University of Arizona



Joey Blankinship is the Director of the Desert Agriculture Soil Health Initiative (DASHI). He earned his bachelor's degree in Environmental Sciences from the University of Virginia followed by a PhD in Biology from Northern Arizona University. Now at the University of

Arizona, he addresses desert soil health problems and solutions. His team's current research tackles urgent environmental and agricultural challenges in drylands that are linked to soil health, including dust mitigation, ecological restoration, soil carbon sequestration, enhancing crop nutrient density, and improving the efficiency of water and fertilizer use in desert croplands and urban areas.

Paul Brierley, CEO, Arizona Department of Agriculture



Paul Brierley was raised working on his family's farm in central California. After earning an Electrical Engineering and Computer Science degree and conducting applied telecommunications research, he returned to production agriculture in Southeast Arizona before

serving as Director of Organization at the Arizona Farm Bureau. With a background in agriculture, research, leadership and politics, Brierly was chosen to serve as the inaugural Executive Director of the University of Arizona's Yuma Center of Excellence for Desert Agriculture (YCEDA). In June of 2023, he was appointed Director of the Arizona Department of Agriculture.

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Caitlin Brogan, Water Conservation Coordinator, Salt River Project



Caitlin Brogan is working on development, implementation, and monitoring of diverse conservation partnerships with Valley municipalities. She attended Northern Arizona University, where she earned a BS in Environmental and Sustainability Studies, a M.S. in Climate Science and

Solutions, and a M.S. in Environmental Science and Policy. She also holds a graduate certificate in Greenhouse Gas Accounting and has completed the River Management Society's River Studies and Leadership Program. Prior to joining SRP, she was a Research Consultant for the Environmental Grantmakers Association.

Fern Bromley, University of Arizona



Fern Bromley is a master's student in natural resources at the University of Arizona. Their research interests lie in plant ecophysiology, ecosystem hydrology, and their applications in landscape-scale conservation. Fern holds a BA in Earth and Environmental Sciences

from Boston University where they studied water use in trees across an urban-rural gradient. They have several years of field experience monitoring and restoring vegetation in the Sonoran Desert and Colorado Plateau, which inspired them to pursue research into best management and conservation practices.

Shane Burgess, Vice President, University of Arizona Division of Agriculture, Life & Veterinary Sciences & Cooperative Extension



Shane Burgess is Vice President of the University of Arizona Division of Agriculture, Life and Veterinary Sciences, and Cooperative Extension (ALVSCE), and the Charles-Sander Dean of the College of Agriculture, Life and Environmental Sciences (CALES). He

oversees CALES' five schools, five departments, and 22 majors, and is responsible for the statewide Arizona Cooperative Extension System and the Arizona Experiment Station, which encompasses 124,000+ acres of Arizona land with biomedical, engineering, and life science laboratories and other infrastructure. A native of New Zealand, he is a first-generation college graduate.

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Maya Clifford, Water Resources Manager, Colorado River Bureau



Maya Clifford is a chemist and water resources professional in the water industry. She grew up in rural Maine, where she managed a water quality laboratory for a private water utility company aiding operations for 17 different systems. She transitioned to graduate school focusing on water resources management and worked as a consultant helping utilities around the country. Her current focus at the Interstate Stream Commission is building a sustainable water utilization projects program for the State of New Mexico, providing communities with long-term solutions to the evolving water issues in the Southwest. She is a proud University of Maine Black Bear and Tufts University Jumbo alumni.

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Tony Davis, Reporter, Arizona Daily Star



Tony Davis is the Arizona Daily Star's environmental reporter. He graduated from Northwestern University's Medill School of Journalism and started at the Star in 1997. He has covered environmental issues in the Southwest almost continuously since 1981 for the

Star, the Tucson Citizen, and the Albuquerque Tribune. He currently focuses on water supplies, climate change, the Rosemont/Copper World Mine, and the endangered jaguar.

Christian Fauser, Western Water Policy Associate, Theodore Roosevelt Conservation Partnership



Christian Fauser is the Theodore Roosevelt Conservation Partnership's Western Water Policy Associate, based in Tucson, Arizona. In this role, he is working to support Federal and State policies that increase the pace and scale of watershed and habitat restoration efforts in Arizona

and the Colorado River Basin, broadly. Previously, Fauser worked with Northern Arizona University's Free-Flowing Rivers Lab, informing State and Federal invasive fish management efforts on the Upper Verde River in Central Arizona. An early career water policy and conservation professional, he has worked on a wide-array of projects focused on conserving rivers and aquatic species for the benefit of present and future generations in the Southwestern United States. He holds an MS in Environmental Science and Policy from Northern Arizona University, a bachelor's degree in Natural Resource Conservation from the University of Montana, and a River Studies & Leadership Certificate from the River Management Society.

Amy Liu Flores, Program Manager, Sustainability Teachers' Academies, College of Global Futures, Arizona State University

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Amy Liu Flores is a Program Manager with the Sustainability Teachers' Academies, College of Global Futures at Arizona State University. She is passionate about rainwater harvesting and hydro-local approaches and policy. She spent over 10 years in public

education and is lower elementary Montessori certified,

upper elementary trained, and gifted endorsed. She has worked with and supported over 100 school gardens that grow food and/or native plants, most recently working with schools in Phoenix and South Florida.

Andrew French, Research Scientist and Research Development Professional, University of Arizona



Andrew French studies crop water in irrigated agriculture using remote sensing and ground flux observations. Formerly a Physical Scientist with the Agricultural Research Service, USDA (2004-2023), he is a Research Development Professional with the University of Arizona. He has

degrees from Tufts University (BS Geology/Physics, 1976), University of Michigan (MS Geology, 1978), and the University of Maryland (BS, MS, PhD Civil Engineering, 1996, 1998, 2001). His research quantifies actual consumptive water use on production-scale farms, evaluates the ability of remote sensing technologies to estimate crop water use, and develops techniques that predict seasonal water requirements.

Martha Gomez Sapiens, Research Scientist, Department of Geosciences, University of Arizona



Martha Gomez Sapiens is an Ecologist and Research Scientist who has worked on the Colorado River delta restoration efforts for the last 10 years, researching and monitoring the water deliveries for environmental flows on the Colorado River following implementation of the

agreements Minutes 319 and 323 between the U.S. and Mexico. She is focused on using ground and drone surveys and remote sensing data to document vegetation response to environmental flows. She co-leads a binational and multidisciplinary scientific team which provides recommendations and planning on restoration and water deliveries. She received her PhD from the University of Arizona in 2014.

Aniket Gupta, Department of Hydrology and Atmospheric Sciences, University of Arizona



Aniket Gupta is a dedicated Postdoctoral Associate at the Department of Hydrology and Atmospheric Sciences, University of Arizona. With a strong academic background and a passion for advancing understanding in his field, He brings a wealth of expertise to his

research pursuits. His work focuses on exploring the intricate dynamics of hydrology and atmospheric sciences, contributing to the broader scientific community's knowledge base.

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Neha Gupta, Assistant Research Professor, Department of Hydrology and Atmospheric Sciences, University of Arizona



As an assistant research professor at the Arizona Institute for Resilience, Neha Gupta participates in a number of interdisciplinary research efforts focused on urban hydrological issues (including the use of stormwater as a resource), water resource planning and

management, and climate adaptation planning. She also works closely with the Office of Sustainability as a Faculty Advisor for Students for Sustainability and is affiliated with the University of Arizona Department of Hydrology and Atmospheric Sciences. Neha coordinates with regional governance agencies, community groups, and stays connected to local efforts via her participation in a number of advisory councils, cooperatives, and working groups. Prior to joining UArizona, Neha worked as an environmental consultant on contaminated soil and groundwater issues.

Alex Hager, Reporter, KUNC



Alex Hager covers the Colorado River and water in the West for KUNC public radio in Colorado and a network of 20+ NPR stations throughout the Southwest, including four in Arizona. He previously covered environmental issues and the resort economy for Aspen Public Radio

and reported on the world's largest sockeye salmon fishery for KDLG public radio in Alaska. He is an avid skier and mountain biker.

Hannah Hansen, Water Planning Analyst, Salt River Project



Hannah Hansen works for Salt River Project as a Water Planning Analyst. She is the Project Manager of the Bartlett Dam Modification Project. In that role, she leads a group of 23 non-federal partners in a collaborative effort to provide support to the Bureau of Reclamation's

Verde Reservoirs Sediment Mitigation Project. She earned a MS in Applied Economics & Policy Analysis from the University of Arizona Department of Agricultural and Resource Economics and a BS in Business Economics from Northern Arizona University.

Katie Hobbs, Governor of Arizona



Born and raised in Arizona, Governor Hobbs has spent her life exemplifying hard work and public service. She is a graduate of both NAU and ASU and has used her Masters of Social Work to help unhoused youth in Phoenix and run one of the largest domestic violence shelters

in the country. With over a decade of public service, Governor Hobbs spent 8 years in the Arizona Legislature, including two terms as Senate Minority Leader. She later became Arizona's Secretary of State where she forcefully defended the votes and voices of every single Arizonan. Seeing her home state at a critical moment in history, she made the decision to run for Governor, and in 2022 was elected the fifth woman, and also fifth Arizona native, to lead the state. Governor Hobbs sees her role in government as an extension of her social work. In her first term, she has already moved the needle forward on some of our state's most critical issues, including housing, water security, and economic development. Governor Hobbs approaches every situation and every challenge with a desire to make people's lives better and give every Arizonan an opportunity to thrive.

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Luisa Ikner, Assistant Professor and Environmental Microbiologist, Department of Environmental Science, University of Arizona



Luisa Ikner is an Assistant Professor and Environmental Microbiologist in the Department of Environmental Science at the University of Arizona. At the Water & Energy Sustainable Technology (WEST) Center, she collaborates with academic, industry, and municipal partners on a

broad spectrum of research projects. She currently serves as co-investigator for research ventures funded by the USDA, EPA, and the U.S. Army Corps of Engineers. Ikner's research interests include quantifying reductions of pathogens during advanced water treatment to promote resiliency and reuse across multiple sectors. She also recently served as the Water Quality Expert for UArizona's Presidential Advisory Commission on the Future of Agriculture and Food Production in a Drying Climate.

Kathy Jacobs, Director, Center for Climate Adaptation Science and Solutions, University of Arizona

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Kathy Jacobs is a professor of Environmental Science at the University of Arizona and Director of the Center for Climate Adaptation Science and Solutions (CCASS) within the Arizona Institute for Resilience (AIR). CCASS builds capacity on campus and off to

accelerate adaptation and on-the-ground solutions to climate issues. She was the executive director of the Arizona Water Institute from 2006-2009. From 2009 -2013, Jacobs worked in the Office of Science and Technology Policy in the White House. She was director of the Third National Climate Assessment, and the lead advisor on water science, water policy, and climate adaptation. She worked 23 years for the Arizona Department of Water Resources (ADWR), including 15 as the appointed director of the Tucson Active Management Area (AMA). At ADWR she led the establishment of groundwater rights in the Tucson AMA and the statewide Assured Water Supply Rules, developed conservation requirements for all sectors, and contributed to aquifer recharge and statewide planning efforts. She has served on nine National Academy panels and boards and currently is an elected board member of the University Corporation for Atmospheric Research.

Kristen Johnson, Manager, Colorado River Programs, Arizona Department of Water Resources



Kristen Johnson joined the Arizona Department of Water Resources (ADWR) in March 2021 as the Colorado River Programs Manager. She is responsible for overseeing the technical staff working on the many issues affecting the state's Colorado River entitlement and

supporting ADWR Director Tom Buschatzke as the Governor's Representative for Basin States/Colorado River negotiations. Immediately prior to joining ADWR, Johnson was the Government Affairs Specialist at Coachella Valley Water District (CVWD). She has a law degree from Southern Illinois University School of Law, where she also taught water law as an Adjunct Professor for two semesters. She practiced law with the Department of the Interior's Office of the Solicitor in Washington, D.C. where she counseled the Bureau of Reclamation from 2008-2017.

Deb Krol, Indigenous Affairs Reporter, The Arizona Republic



Debra Utacia Krol is an Indigenous affairs reporter at the Arizona Republic, where she covers the intersection of climate, culture and commerce in Southwestern Native communities. Krol, a citizen of the Xolon Salinan Tribe from the Central California coast, has more than two

decades of expertise in reporting on Native issues for publications large and small, with an emphasis on environmental and science issues. Krol has also been a contributor to two books on Native Californian traditions.

Stephen Roe Lewis, Governor, Gila River Indian Community



Stephen Roe Lewis has been Governor of the Gila River Indian Community since being elected in 2014. He was raised in Sacaton, "Gu-u-Ki", on the Gila River Indian Community. His parents are Rodney B. and Willardene Lewis. His paternal grandparents were Rev. Roe Blaine and

Sally Lewis, and his maternal grandparents were Willard and Catherine Pratt. As Governor, he oversees the implementation of the Community's Water Settlement of 2004 (the largest water settlement of its kind in U.S. history). He also serves on the Board of Directors for the Native American Rights Fund, the Executive Board for the National Indian Gaming Association, and the Board of Trustees for the Heard Museum of Phoenix. Governor Lewis advocates for renewable and green technologies guided by O'otham agricultural history and cultural teachings. Governor Lewis graduated with a BS from Arizona State University and pursued graduate studies at John F. Kennedy School of Government at Harvard University.

Linneth Lopez, Environmental Engineering Specialist III, Arizona Department of Environment Quality



Linneth Lopez is an Environmental Engineering Specialist III in the Groundwater Protection Section with the Arizona Department of Environmental Quality (ADEQ). She has worked at ADEQ for over 12 years in various capacities including the hazardous waste and

pollution prevention programs, and recently with the engineering review unit. She is a co-lead for the Enhanced Source Control technical group of the Advanced Water Purification (AWP) rulemaking. She holds a BS in Civil Engineering from Cal Poly Pomona.

Jing Luo, *Director, Marana Water*



Jing Luo is a professional engineer (PE) registered in Arizona with over 20 years of extensive experience in the water industry. She previously worked as City Engineer for the City of Sierra Vista, Senior Civil Engineer for the City of Mesa, and Civil Engineering Manager at Pima

County RWRD. In 2010, Dr. Luo founded Apex Applied Technology, Inc. (AATech), a professional consulting firm aimed at providing direct outreach and technical assistance to socially-disadvantaged groups and communities. She obtained her PhD in Environmental Engineering from the University of Arizona in 2003.

Rhona Mallea, Project Manager, Arizona Department of Environmental Quality



Rhona Mallea is a Project Manager in the Groundwater Protection Section and has been with the Arizona Department of Environmental Quality for the last five years. She holds certifications as a Project Management Professional (PMP) and as a Certified Associate in Project

Management (CAPM). She is currently the PM of over six ADEQ projects that include three rulemakings: Advanced Water Purification (AWP) Rulemaking, Aquifer Water Quality Standards (AWQS) Rulemaking, and the Underground Injection Control (UIC) Primacy Application. She holds a Bachelor of Science in Geoarchaeology from Boise State University.

Season Martin, CEO, Virga Labs



Season Martin has built her career around bridging design, data science, and conservation to bring game-changing solutions to clients. With over 15 years of experience throughout the western United States, Martin brings on-theground knowledge of western water

management and highly specialized experience in data science, data visualization, water supply and demand

models, water economics, and finance. She is a skilled communicator with a distinct ability to distill complex data, context, and information into clear, easily understood messaging with a focus on connecting the big picture to the ground. As the CEO of Virga Labs, She leads clients through problem definition and solution ideation; designs data visualization and storytelling mediums; develops planning, collaborative process, and modeling frameworks; and creates communications strategies, plans, and materials. She holds a BA in Geology and Environmental Studies from Whitman College; and a Masters of Environmental Science and Management with a specialization in Economics and Policy of the Environment from the University of California Santa Barbara, where she was a member of the first cohort of Sustainable Water Markets fellows.

Jamie McEvoy, Associate Professor of Geography, Montana State University



Jamie McEvoy received her PhD in Geography and Development from the University of Arizona in 2013. She went on to become an Associate Professor of geography at Montana State University with a teaching and research program focused on water governance, climate

adaptation, and equity. She has published on topics including participatory water planning, ecological drought, flood risk communication, desalination, climate adaptation, and nature-based strategies. Her recent grants include a Fulbright Award to study nature-based water storage in Mexico and Canada and a National Oceanic and Atmospheric Administration (NOAA) grant to improve monitoring and preparedness for ecological drought in Montana.

Craig McGinnis, Water Rights and Contracts Analyst, Salt River Project



Craig McGinnis is a Water Rights and Contracts Analyst at Salt River Project where he specializes in water resource law and policy, water infrastructure, and related agreements. His prior experience includes Colorado River management with the Arizona Department of Water

Resources and staffing at the U.S. House of Representatives. He holds a master's degree from the Sandra Day O'Connor College of Law at ASU, sits on the Executive Council of the State Bar of Arizona's Environmental and Natural Resources Law Section, and is active with the Arizona Center for Rural Leadership.

Chelsea McGuire, Assistant Director for External Affairs, Water Infrastructure Finance Authority of Arizona



At WIFA, Chelsea McGuire oversees legislative relations, media, and all other external communication, highlighting the agency's financial investments in effective water augmentation, conservation, reuse, and quality actions. She holds a bachelor's degree in

Agribusiness Economics from the University of Arizona and a law degree from Regent University School of Law. She has over seven years of experience in state and federal natural resources policy, especially relating to water rights and water use.

Sharon B. Megdal, *Director, Water Resources Research Center, University of Arizona*



Sharon B. Megdal is Director of the University of Arizona Water Resources Research Center, an Extension Center and research unit in the College of Agriculture and Life Sciences. She is also Professor of Environmental Science, C.W. & Modene Neely Endowed Professor, and

Distinguished Outreach Professor. The geographic focus of her water policy and management work ranges from local to international. Current research projects focus on groundwater governance, managed aquifer recharge, and transboundary aquifer assessment. Engagement efforts include Indigenous Water Dialogues and Diversifying Voices in Water Resources. Megdal endeavors to bridge the academic, practitioner, and civil society communities. Recently, she completed 12 years as an elected member of the Central Arizona Project Board of Directors, and she is active in many professional organizations. Past state-level public service activities include the Arizona Corporation Commission, the State Transportation Board, the Arizona Medical Board, and several other boards and commissions. She holds a PhD in Economics from Princeton University.

Kathleen Meixner



Kathleen Meixner grew up in Tucson and is a graduate of Salpointe Catholic High School and the University of Arizona, receiving a degree in Elementary Education. Kathleen met Tom at the Newman Center on the U of A campus where they were married. They raised

two amazing sons, Sean and Brendan. Their lives together were full of adventures, laughter, and love. Kathleen is grateful for the generous support from the University, Hydrology, and Tucson community, and for honoring Tom in such a special way at this WRRC conference.

Raluca Mihalcescu, Water Conservation Specialist, Arizona Water Company



Raluca Mihalcescu is a Water Conservation Specialist with the Arizona Water Company, where she is building up the conservation resources available across the 22 communities they serve. Currently, she is also enrolled in a Masters of Science in Innovation and

Venture Development at Arizona State University, where she is focusing on pain points within the Carbon Dioxide Removal industry. Mihalcescu's long term goal is to work within the field of carbon management to do her part in mitigating the effects of climate change for the sake of future generations.

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Abdul Moiz, Postdoctoral Research Scholar, Center for Hydrologic Innovations at the Ira A. Fulton Schools of Engineering, Arizona State University (ASU)



Abdul Moiz finished his PhD in Civil Engineering from The University of Tokyo specializing in distributed hydrological modeling and modeling dam reservoir operations. At ASU, He is analyzing hydroclimate data at multiple scales to investigate groundwater recharge

opportunities in Arizona.

Roberto Molina, Associate Director, Environmental infrastructure Financing, and Program Manager, Grants and Technical Services, North American Development Bank (NADBank)



Currently, Roberto Molina-Acedo is responsible for identifying and selecting new environmental infrastructure projects for the west border region including New Mexico, Arizona and California, Baja, Sonora, and Chihuahua. He served as regional project manager for the Border

Environment Cooperation Commission (BECC) developing and implementing binational water infrastructure projects with EPA's Border Water Infrastructure Program (BWIP) Molina-Acedo holds a BS in aerospace engineering from the University of Arizona (U of A), a MS in mechanical engineering from U of A, and studied graduate level design optimization/expert systems at the University of Missouri-Columbia.

Somnath Mondal, Hydroclimatic Extremes and Data Scientist, Postdoctoral Scholar, Arizona State University



Somnath Mondal, got his PhD in Civil Engineering from Clemson University, where he geeked out on Complex Climate Extremes. He is about flexing those brain muscles with Complex Network Analysis, Machine Learning, and Deep Learning by cracking codes that

reveal the hidden stories of droughts, heatwaves, extreme rain dances, and other climate shenanigans across the map. When Mondal is not deciphering climate secrets, you might catch him teaching, working out, motorcycling or conversing fluently in languages like English, Bengali, Hindi, Punjabi, and even a bit of German – the perks of being a global climate detective.

Ty Morton, AZ/NM Water Client Development Lead, HDR



Ty Morton is a seasoned professional with a passion for shaping sustainable solutions in the realm of water management. With a rich background spanning over two decades in the consulting industry, Ty has been instrumental in advancing HDR's portfolio

of water projects in the arid landscapes of Arizona and New Mexico. Graduating with a Bachelor of Science degree from the University of Arizona in 1995 and then obtaining a Master of Science degree from Colorado State University in 1998. Driven by a commitment to sustainability and forward-thinking solutions, Ty Morton continues to play a pivotal role in shaping the future of water management, leaving an indelible mark on the industry through his expertise and leadership.

Ethan Orr, Director for Agriculture, Natural Resources and Economic Development, University of Arizona Cooperative Extension



Ethan Orr is the Director for Agriculture, Natural Resources and Economic Development for the University of Arizona Cooperative Extension and an Associate Professor of Community Vitality and Economic Development. He has taught government and business at UA

and NAU for over 23 years. In Arizona Cooperative Extension, he works closely with research and programing in water, forest health, crop production, and range management. As a faculty member, he oversees the \$63 million on-farm irrigation program, which partnered with growers to conserve over 36,400 acre feet of water through improved irrigation efficiency. Orr served in the Arizona legislature where he worked with both parties to bring commercial spaceflight to Arizona, create the mental health first aid program, and resolve a number of difficult issues in education, agriculture and natural resources. He has also served as the Assistant Vice President for Government

Affairs and Community Relations for the University of Arizona and helped secure funding to complete the Phoenix Bio-Medical Campus and to start the College of Veterinarian Sciences.

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Kristin Pearthree, *Graduate Student*, *University of Arizona*



Kristin Pearthree is a graduate student in the Water, Society, and Policy (MS) Program in the School of Natural Resources and the Environment at the University of Arizona. She comes from a background in the earth sciences, with previous experience as a Research

Scientist and Hydrogeology Technician at the New Mexico Bureau of Geology and Mineral Resources, where her work focused on surficial geologic mapping, managing a statewide groundwater monitoring network, and science outreach. Her professional interests lie in collaborative water management to support water availability for communities and environmental use.

David Roberts, Water Strategy Consultant



Dave Roberts currently serves as a water strategy consultant for several clients. Prior to his current role, he worked for Salt River Project in Phoenix for 35 years in various water resource management capacities including as Associate General Manager and Chief Water Resources Executive for the company. Dave's areas

of expertise include Native American water rights and partnerships; water supply planning and acquisitions; water exchanges and transfers; and water rights analysis.

Joaquin Ruiz, Director, Biosphere 2



Joaquin Ruiz received his B.S. (1977) in Geology and Chemistry from the University of Miami and his M.S.(1980) and Ph.D. (1983) in Geology from the University of Michigan. In 1983, he joined the University of Arizona Geosciences Department as Assistant Professor and

was promoted to Associate Professor in 1989 and Professor in 1993, serving as head of the Department of Geosciences from 1995 to 2000. He served as Dean of the College of Science from 2000-2019, Executive Dean of the Colleges of Letters, Arts and Science from 2009-2018, and Vice President for Innovation from 2013-2019. He was appointed Vice President of Global Environmental Futures in 2019 and has served as the Thomas R. Brown Chair and Director of Biosphere 2 since 2013. In 2018, the Mexican Secretary of State named Dr. Ruiz one of forty distinguished Mexican citizens living abroad who have brought distinction to the country. As a scientist with equal abilities in chemistry and in geology, Dr. Ruiz addresses many first-order problems in the Earth Sciences, such as the development of

new isotope systems for studying ore deposits and the tectonic processes involved in the growth and evolution of Mexico. His research team addresses problems ranging from the origins of life to present-day climate change.

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Shaina Shay, Owner and Editor-in-Chief, The Water Report



Shaina Shay is an accomplished water professional who has spent more than a decade developing expertise in water policy and management, conservation, and community outreach. Her passion for pragmatically sharing information has been a theme throughout her career. She

has worked as a Water Resources and Conservation Specialist for two investor-owned utilities in Arizona, EPCOR Water and Global Water Resources. She also spent several years working in Victoria, Australia as a Water Market Specialist for the government and a Senior Consultant with Aither. She has degrees in Environment and Water Resources Economics and International Relations, both from the University of Arizona.

Vashti "Tice" Supplee, Arizona/Southwest Director of Bird Conservation, National Audubon Society



After a 29-year career with the Arizona Game and Fish Department that included experiences in research, habitat management, game management and urban wildlife, Supplee was hired by the National Audubon Society. As the Bird Conservation Director for Arizona and

New Mexico she focuses on birds and their habitats. Projects include administration of the Arizona Important Bird Areas program in Arizona and New Mexico. These are sites critical to a complete life cycle for resident and migratory birds. Horseshoe Reservoir and Bartlett Lake are within the Lower Salt and Verde Rivers Important Bird Area.

Faith Sternlieb, Associate Director of Engagement, Internet of Water, Center for Geospatial Solutions, Lincoln Institute of Land Policv



Faith Sternlieb is the Associate Director of Engagement for the Internet of Water (IoW) initiative at the Center for Geospatial Solutions, Lincoln Institute of Land Policy, where she facilitates the IoW Coalition and fosters public-private partnerships from local to international

scales to support water data modernization. She holds degrees in anthropology, agricultural, and earth sciences, and she has 15 years of experience working with stakeholders at the nexus of water science, policy, and technology in the Colorado River Basin. Sternlieb aims to

help diverse communities achieve environmental justice, water sustainability, and climate resilience through appropriate technology, intelligent systems design, collaboration, sound science, and political resolve.

Xin Su, Postdoctoral Scholar, Arizona State University



Xin Su is currently a Postdoc Scholar in School of Sustainable Engineering and the Built Environment at Arizona State University. She earned a bachelor's degree in Sewer and Water Supply Engineering in China, and her master's degree from University of California Irvine

in Hydrology and Water Resource, while her PhD was from Stevens Institute of Technology in Civil Engineering. Before joining ASU, she was a postdoc scholar at the University of Arkansas in the Department of Geosciences. Her research interests include numerical modeling in urban green infrastructures assessment and compound coastal hazards modeling.

Elijah Tangenberg, Water Resource Specialist, City of Phoenix's Water Services Department



Elijah Tangenberg's duties include liaising between the City and commercial partners about water conservation projects, representing the City at regional meetings, and managing the Conservation Catalyst program. He earned his MSc in Water Science, Policy and Management at the University of Oxford.

Elia M. Tapia, Professor, University of Sonora



Elia Tapia is a faculty professor at the University of Sonora in Hermosillo. Mexico. She holds a PhD in Arid Lands Resource Sciences and a Minor Degree in Hydrology from the University of Arizona. She has 13 years of experience in applied hydrology, hydrogeology,

climate change studies, and disaster risk assessment. She has contributed to the United States-Mexico efforts on the Transboundary Aquifer Assessment Program (TAAP) for over 12 years, along with various other projects for private and public institutions in the United States, Latin America, and the Caribbean. Recently, she has been involved in projects for the Inter-American Development Bank (IDB) and IDB Invest, including the Transboundary Regional Plan for Drinking Water, Basic Sanitation, and Solid Waste Management for the Amazon Cooperation Treaty Organization. Her interests encompass water governance, climate change, stakeholder engagement, and water resources management, particularly in transboundary settings.

Thomas R. Throssell, Assistant Director, Inter Tribal Council of Arizona



Thomas R. Throssell is an enrolled member of the Tohono O'odham Nation, whose family comes from the village of San Miguel in the Chukut Kuk District. He has more than 25 years of experience working in media and communications, extensive history working with Tribal,

state, and federal governments, and an entrepreneurial background having operated an independent Tribal publishing company for more than 10 years. Throssell produced the Tohono O'odham Nation's The Runner newspaper and online media outlets, which were distributed to all four O'odham sister Tribes and throughout the United States. More recently, He served as Tribal liaison for the Central Arizona Project, where he developed and maintained relationships with many Tribal sovereign nations in Arizona, as well as federal and state agencies, to address the ongoing drought and Colorado River shortage. He now serves as the Inter Tribal Council of Arizona's Assistant Director, where he works to address common issues that impact Tribal communities in Arizona by strengthening Tribal governance and Tribal sovereignty.

Chris Udall, Executive Director, Arizona Agribusiness & Water Council



Chris Udall joined the Agribusiness & Water Council of Arizona in November 2004, after serving as a Congressional Aide to U.S. Representatives J.D. Hayworth and Rick Renzi. As an agricultural Economics graduate of Brigham Young University, Chris brings

extensive experience in federal and state natural resource issues to this position. He is especially aware of the importance of secure water resources to rural Arizona families and agricultural enterprises. The Arizona Agribusiness & Water Council of Arizona was incorporated in 1978. Chris is the fifth Executive Director in the history of the organization and the third native Arizonan to hold the position.

David L. Wegner, Scientist and Public Policy Strategist, Woolpert Engineering



David L. Wegner is retired from the U.S. House of Representatives where he was a senior staff specialist on water, energy, climate change, and science applications. His portfolio while working in the House included the USGS, Bureau of Reclamation. Army Corps of Engineers.

public power agencies, transportation, and tribal water settlements. His expertise in public policy and legislative process continues to be used by legislators and agencies. He has multiple publications on the use of science in decision-making and is on the board of national and international scientific and non-profit organizations. He is an appointed member of the National Academy of Scientists, Water Science and Technology Board, the NAS Everglades Restoration program, the EPA Environmental Finance Advisory Board, and the DOI Advisory Council for Climate Adaptation Science. His current research focuses on climate resiliency and the use of science in policy and adaptive management applications.

Francisco Zamora, Senior Director of Programs, Sonoran Institute

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Francisco Zamora Arroyo joined the Sonoran Institute in April 2002 to manage activities in the Delta of the Colorado River. Dr. Zamora has more than fourteen years experience working in the Delta as a researcher and project manager. As the senior director of

programs he is responsible for integrating community stewardship, applied science, and local values in an alliance to reform water policy, conserve and restore priority areas, and build knowledge and capacity for collaboration between water managers and local leaders. Dr. Zamora has developed close relationships with Mexican and U.S. agencies involved in water and land management, and communicates frequently with regional or national officials dealing with issues in the Colorado River Delta. He spends a good portion of his time in the field working with communities, visiting potential restoration areas, and doing field research and restoration work. He obtained his Ph.D. in resource geography from Oregon State University in October 2002, with a minor in natural resource economics.

Student Poster Presenters

Ibrahim Alyami, University of Arizona



Alyami is a PhD candidate in Chemical and Environmental Engineering. Alyami's research is focusing on photolytic mechanisms of trace organic compounds in an effluent dependent stream.

Alma Anides Morales, University of Arizona

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Anides is a PhD Candidate in the Department of Environmental Science, a Pathways Student Trainee with the US Geological Survey, and a 2023 Fulbright Student Researcher stationed in Ensenada, Mexico. She believes in the

importance of binational cooperation between the U.S. and Mexico to build transnational climate and ecological resilience in the Borderlands and beyond.

Breanna Gately, Northern Arizona University



Breanna Gately is a second year master's student at Northern Arizona University. She is currently working with Dr. Propper to investigate depleted uranium's impact on cells vital for hearing and balance.

Dylan James Girone, University of Arizona



Dylan James Girone is part of the Integrated Climate Research: Ecology, Water, and Weather team. The ICREWW is a vertically integrated project that brings together interdisciplinary undergraduate students in their third year to

work together. This team includes Brandolyn Baeza, Dylan Girone, and Ava Lasater who are working closely with Dr. Theresa Crimmins and Dr. Martha Whitaker.

Justin Headley, University of Arizona



Justin Headley is a second-year master's student in the Department of Hydrology and Atmospheric Sciences. He served in the United States Air Force as an aviation weather forecaster before attending the University of

Arizona, where he earned his BS in Environmental Hydrology and Water Resources in 2022. His research interest is aqueous geochemistry.

Rishivanthi Jayalakshmi Srinivasan, *University of Arizona*



Rishivanthi Jayalakshmi Srinivasan is a Master's student in Applied Biosciences (Industrial Microbial Biotechnology) at the University of Arizona. She is currently working under Dr. Luisa Ikner. With a strong background in

microbiology, Rishi has conducted research in detection of microbial indicators in wastewater, viral infective and circular bioeconomy principles.

Raquel Neri Barranco, Arizona State University



Raquel Neri Barranco is a PhD researcher at Arizona State University, specializes in using earth observations for decision making in water management, focusing on the US-Mexico border area. With a background in Biology and

Bioinformatics from the National Autonomous University of Mexico, she has explored various fields before dedicating herself to water sustainability. Beyond academia, she is an avid swimmer, hiker, and a dedicated dog rescuer.

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Lia Ossanna, University of Arizona



Lia Ossanna is a PhD candidate at the University of Arizona in the School of Natural Resources and the Environment studying ecological restoration and invasive species management. She works with local partners

such as Saguaro National Park and the Altar Valley Conservation Alliance to provide managers with data-driven, scientific-backed land management practices. In her free time, she likes to read.

Holland Sterling, University of Arizona



Holland Sterling is a senior at the University of Arizona studying geographic information systems and hydrology. She is working with a UA Vertically Integrated Project with other students to create the Arizona Streamgage Catalog.

Héctor Venegas-Quiñones, University of Arizona

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Hector Venegas-Quiñones is a passionate and dedicated student author, presenting innovative research on atmospheric water generation. Currently enrolled in Hydrology at University of Arizona, Venegas-Quiñones

brings a unique perspective and commitment to addressing global water scarcity challenges through sustainable solutions.

Zhaocheng Wang, Arizona State University



Wang is a hydrologist interested in remote sensing and numerical modeling. He obtained his MSE and PhD in Civil, Environmental, and Sustainable Engineering from the School of Sustainable Engineering and the Built

Environment at ASU in 2020 and 2023, respectively.

Xueyan Zhang, University of Arizona



Xueyan Zhang is a fourth year PhD student at the department of Hydrology and Atmospheric Sciences from the University of Arizona. Zhang's research passion is centered on ecohydrology and land surface modeling.



WRRC 2024 ANNUAL CONFERENCE



Conference Info:

- Livestreaming
- Conference
 Packet (Agenda,
 Speaker Bios,
 and More)



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Dedicated to the Memory and Legacy of Thomas Meixner

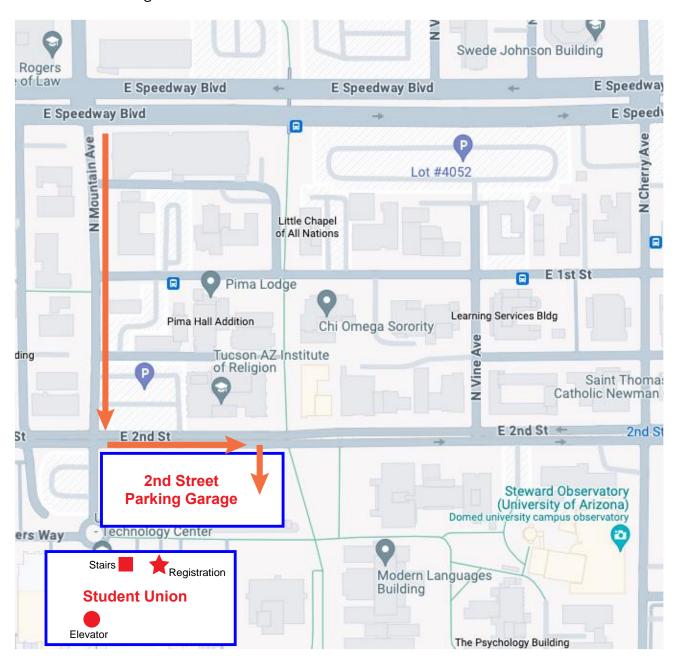
We respectfully acknowledge the University of Arizona is on the land and territories of Indigenous peoples. Today, Arizona is home to 22 federally recognized tribes, with Tucson being home to the O'odham and the Yaqui. Committed to diversity and inclusion, the University strives to build sustainable relationships with sovereign Native Nations and Indigenous communities through education offerings, partnerships, and community service.



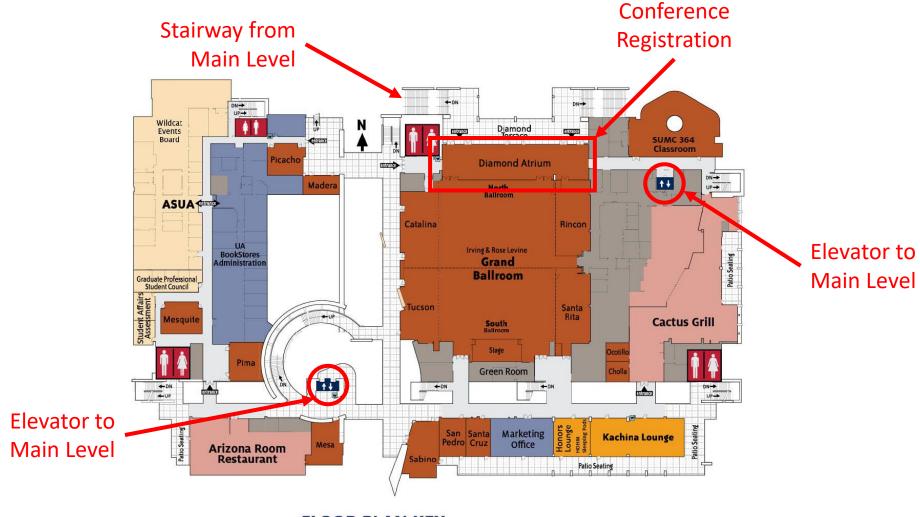
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- Use the southwest stairwell to exit the garage and walk south to the Student Union.
- Proceed upstairs and inside to the registration table to check in and receive your parking voucher. This voucher is **only** valid at the 2nd Street Garage.
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