



EDUCATION, AWARENESS, & TECHNOLOGY

# MISSISSIPPI RIVER ALLUVIAL AQUIFER STATES GROUNDWATER CONFERENCE

April 22 & 23, 2025 SpringHill Suites Memphis Downtown 85 West Court Ave. Memphis, TN 38103

# PROGRAM



## Welcome to the 2025 AGWT-NCAAR Mississippi River Alluvial Aquifer States Groundwater Conference!

The objective of American Ground Water Trust conferences is to showcase topical and/or controversial groundwater issues and to facilitate information sharing among landowners, groundwater end-users, regulators, management agencies, scientists, engineers, lawyers, and citizens who have economic or environmental interests in water resources.

### **Continuing Education**

Certificates of attendance are available for all attendees upon completion of CE Form

### **Conference Sponsors**









A WILO BRAND

#### Tuesday, April 22

7:30-8:20 am	Registration & Refreshments	
8:30-8:40 am	<b>Welcome and Overview</b> Sara Chudnoff, PG, Executive Director, AGWT, Pinetop, AZ	
8:40-9:00 am	<b>Groundwater Sustainability Strategies: The National Center for Alluvial Aquifer</b> <b>Reserach's Role in the Lower Mississippi River Basin</b> Chris Delhom, PhD, Supervisory Research Engineer/Research Leader, Sustainable Water Mngt. Reserach Unit, National Center for Alluvial Aquifer Reserach, Leland, MS	
9:00-9:30 am	<b>Sparta Groundwater Policy - Trials and Tribulations</b> Lindsay Gouedy, Executive Director, Sparta Groundwater Commission, Ruston, LA	
9:30-10:00 am	Overview of Groundwater Sustinability Investigations for Highly Urbanized and Rural Areas of West TN Brian Waldron, PhD, Director, CAESER - University of Memphis, Memphis, TN	
10:00-10:30 am	Break and Exhibitor Introductions	
Moderator	Drew Gholson, PhD, Assistant Professor & Extension Irrigation Specialist, Coordiantor, NCAAR, Delta Reserach and Extension Center, Stoneville, MS	
10:30-11:00 am	<b>USACE Groundwater Projects in the Upper Mississippi Embayment</b> Mike Clay, PE, District Chief, Hydraulics and Hydrology Branch, USACE Memphis District, Memphis, TN	
11:00-11:30 am	<b>Mississippi Groundwater Management Challenges and Opportunities</b> Kay Whittington, PE, MDEQ Office of Land and Water Resource's Division of Permitting, Jackson, MS	
11:30-12:00 pm	<b>2024 Arkansas Groundwater Protection and Management Report</b> Corbin Cannon, Arkansas Dept. of Agriculture, Natural Resources Division, Groundwater Section, Little Rock, AR	
12:00-1:00 pm	Lunch (provided)	
Moderator	Kevin McGillicuddy, PG, Chief Hydrogeologist, Roscoe Moss Company, Los Angeles, CA	
1:00-1:30pm	Navigating Sustainability in Groundwater Management: Lessons from Mississippi v. Tennessee Nimisha Wasankar, PhD Candidate and T. Prabhakar Clement, Professor, Director of the Center for Water Quality Research, Dept. of Civil, Construction and Envrionmental Engineering University of Alabama, Tuscaloosa, AL	
1:30-2:00 pm	Statewide Groundwater Model Initiative to Support Louisiana's Groundwater Management Frank Tsai, PhD, PE, PG, FASCE, Chevron Professor of Engineering/Director - LA WRRI, LSU, Dept. of Civil and Environmental Engineering, Baton Rouge, LA	
2:00-2:30 pm	Water Availability Modeling in the Mississippi Embayment Leslie Duncan, Hydrologist, USGS, Lower MIssissippi-Gulf Water Science, Nashville, TN	

2:30-2:45 pm	A Benchmark Study for Delta region Food-Water Nexus: An Integrated Modeling and Remote Sensing Approach Prathiksha Raghava, Mississippi State University Graduate Student, Starkville, MS
2:45-3:15 pm	High-Value Groundwater-Level Monitoring Using Submersible Pump Wells – Enhancing Operational and Management Insight Charles Dunning, Vice President of Hydrology, Wellntel Inc., Milwaukee, WI
3:15-3:45 pm	Break
Moderator	Drew Gholson, PhD, Assistant Professor & Extension Irrigation Specialist, Coordiantor, NCAAR, Delta Reserach and Extension Center, Stoneville, MS
3:45-4:15 pm	<b>LEAD, Is It Where We Thought It Would Be?</b> Jason Barrett, PhD, Associate Extension Professor & Interim Director, MS WRRI, MS State University Extension, Mississippi State, MS
4:15-4:45 pm	Chemical Tracers as Indicators of Potential Water Quality Issues in the Memphis Aquifer, Shelby County, Tennessee Raka Sunderland, PhD Candidate, Daniel Larsen, PhD, Professor of Earth Science, CAESER - University of Memphis, Memphis, TN
4:45-6:00 pm	Reception, Networking & Aquifer in a Cup Activity led by University of Memphis - CAESER
Wednesday, A	April 23
7:30-8:20 am	Registration and Refreshments
8:20-8:30 am	<b>Welcome - Day 2</b> Drew Gholson, PhD, Assistant Professor & Extension Irrigation Specialist, Coordinator, NCAAR, Delta Reserach adn Extension Center, Stoneville, MS
Moderator	Colby Lubanowski, Regional Sales Manager, US Groundwater, SkyTEM, Denver, CO
8:30-9:00am	Applied Geophysics for Managed Aquifer Recharge Projects in The Mississippi Alluvial Aquifer John Jansen, PG, PGp, PhD, Senior Geophysicist & Hydrogeologist, Collier Geophysics, Lakewood, CO
9:00-9:30 am	Feasibility Assessment of MAR in the Mississippi Delta Utilizing Riverbank Filtration and Groundwater Transfer and Injection Through Pilot Testing and Regional Hydrogeologic Modeling Andrew M. O'Reilly, PhD, Research Hydrologist, Watershed Physical Processes Reserach Unit, National Sedimentation Laboratory, USDA - ARS, Oxford, MS
9:30-10:00 am	The Overlooked Importance of Oxbow Lake-Wetlands in Alluvial Aquifer Recharge and Regional Groundwater Flow Gregg R. Davidson, PhD, Professor, Geology & Geological Engineering, University of Mississippi, University, MS
10:00-10:30 am	Break
Moderator	Frank Tsai, PhD, PE, PG, FASCE, Chevron Professor of Engineering/Director - LA WRRI, LSU, Dept. of Civil and Environmental Engineering, Baton Rouge, LA

10:30-11:00 am	Hydrogeologic Digital Twin of the Mississippi River Valley Alluvial Aquifer: Integrating Geological and Airborne EM Data Yuqi Song, PhD Candidate, Department of Civil and Environmental Engineering, Louisiana State University, Baton Rouge, LA
11:00-11:30 am	Next-Gen Groundwater Flow and Saltwater Intrusion Modeling for the Mississippi River Valley Alluvial Aquifer: Integrated Airborne Geophysics, Borehole Data, and Water Samples Michael Attia, PhD Candidate, Department of Civil and Environmental Engineering, Louisiana State University, Baton Rouge, LA
11:30-11:50 am	Life Cycle Analysis Cost of a Water Well David Branham - Regional Director, Roscoe Moss, Kansas City, MO
11:50-12:20 pm	The Challenges and Importance of Developing an Accurate CSM When Constructing a Water Well in Folded or Faulted Geology Boone Abbott, PG, Project Geologist, Geosyntec Consulting, Inc., Birmingham, AL
12:20-1:30 pm	Lunch (provided)
Moderator	Sara Chudnoff, PG, Executive Director, AGWT, Pinetop, AZ
1:30-2:00 pm	Working With Your Contractor for a Successfull Water Well Campaign Verlin Johnson, Co-President, National Water Services, LLC, Lawrenceburg, TN
2:00-2:30 pm	Advancements in Water Well Screen Hydraulics for Production Wells Kevin McGillicuddy, PG, Chief Hydrogeologist, Roscoe Moss Company, Los Angeles, CA
2:30-3:00 pm	<b>Chemical Well Rehab</b> Lynn Templeton, Southeast Sales Manager – Water Well, Johnson Screens, Columbia, SC
3:00-3:30 pm	Well Rehab and Well Efficiency Case Studies Kevin McGinnis, President, Cotey Chemical Corp., Lubbock, TX
3:30-4:00 pm	Submersible and Turbine Pump Selection, and Troubleshooting Charles Higgins, Director, FloWise Engineer at Preferred Pump & Equipment, Red Banks, MS

#### **Conference Exhibitors**

Cotey Chemical Corporation Johnson Screens Layne (a Granite Company) National Center for Alluvial Aquifer Reserach National Water Services Preferred Pump Roscoe Moss Company Southern Products & Silica Co. Wellntel, Inc.

## **Registration Information**

2025 AGWT-NCAAR Mississippi Alluvial Aquifer States Groundwater Conference April 22 & 23, 2025

#### Register online at agwt.org/events

#### **Registration Overview**

General Registration	
2 Day Registration	\$450.00
2 Day Full-Time Student	\$100.00
1 Day Registration (April 22 or 23)	\$245.00
1Day Full-Time Student (April 22 or 23)	\$ 50.00
AGWT Members (2 Day Registration)	\$425.00
AGWT Members (1 Day Registration)	\$220.00
Speaker Registration	
Speaker (April 22)	\$ 0.00
Speaker (April 23)	\$ 0.00
Attend - Not Speaker (April 22)	\$100.00
Attend - Not Speaker (April 23)	\$100.00
Moderator Registration	
2 Day Registration	\$400.00
1 Day Registration	\$200.00
Download of Presentations in PDF - attendees	\$ 30.00
Download of Presentations in PDF - non-attendees	\$100.00

**Sponsor and Exhibit Opportunities** - See our event webpage for more information or choose options(s) during on-line registration

Checks should be made payable to AGWT Mail to: American Ground Water Trust 50 Pleasant St., Suite 2 Concord, NH 03301

For questions please call: (603) 228-5444