2026 ARKANSAS GROUNDWATER SUMMIT

Tuesday, November 10th, 2026
8:30 a.m. - 4:30 p.m.



Winthrop Rockefeller Institute
1 Rockefeller Drive
Morrilton, Arkansas 72110

AGENDA

8:30 – 9:00 a.m.	Registration & Coffee
9:00 – 9:20 a.m.	Welcome & Opening Remarks *Chris Colclasure, Arkansas Department of Agriculture; Kimberly Bolin, Winthrop Rockefeller Institute*
9:20 – 9:50 a.m.	2025 Annual Groundwater Report *Aaron Baggett, Arkansas Department of Agriculture*
9:50 – 10:20 a.m.	Karst Hydrogeology *Dr. Matthew Covington, University of Arkansas*
10:20 – 10:50 a.m.	Mississippi Alluvial Plain Availability & Critical Areas *Dr. Laura Ruhl-Whittle, U.S. Geological Survey Lower Mississippi–Gulf Water Science Center*
10:50 – 11:05 a.m.	Break
11:05 – 11:35 a.m.	Forecast Modeling Update: Cache River & Grand Prairie *J.P. Traylor, U.S. Geological Survey Central Plains Water Science Center*
11:35 – 12:05 p.m.	Machine-Learning Estimation of Groundwater Levels *Courtney Killian, U.S. Geological Survey Pennsylvania Water Science Center*
12:05 – 1:05 p.m.	Lunch *(Provided)*
1:05 – 1:35 p.m.	Ozark Challenge: Nutrients & Land Use *Dr. Mike Daniels, University of Arkansas Division of Agriculture Cooperative Extension Service*

AGENDA

1:35 – 2:05 p.m.	Source Water Protection in Karst Country *Dr. James McCarty, Beaver Water District*
2:05 – 2:20 p.m.	Break
2:20 – 2:50 p.m.	Shallow Groundwater & Response to 100-Year Flooding *Dr. Kevin M. Befus, University of Arkansas*
2:50 – 3:20 p.m.	Delta Water Management Research Unit Update *Dr. Michele Reba, USDA Agricultural Research Service*
3:20 – 3:45 p.m.	Implementing the Strategies to Reduce Groundwater Use – Rice Stewardship *Dr. Scott Manley, Ducks Unlimited*
3:45 – 4:10 p.m.	Groundwater Irrigation Targets & Master Irrigator Program *Dr. Jeff Fore, The Nature Conservancy; Will Gray, The Nature Conservancy*
4:10 – 4:30 p.m.	Closing Panel: Sand vs. Stone *Moderated by Corbin Cannon, Arkansas Department of Agriculture*

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PRESENTERS

Dr. Matthew Covington, a researcher at the University of Arkansas, specializes in karst hydrogeology and groundwater flow in complex geologic systems. His session explores the characteristics of karst terrains and the implications for water availability, recharge, and long term resource management.

Dr. Laura Ruhl Whittle of the U.S. Geological Survey's Lower Mississippi–Gulf Water Science Center provides scientific leadership on water availability across the Mississippi Alluvial Plain. Her presentation focuses on critical areas, challenges affecting regional aquifers, and ongoing efforts to support sustainable water use.

J.P. Traylor, U.S. Geological Survey Central Plains Water Science Center, works on hydrologic modeling and forecasting tools designed to support water planning. He will share updates on forecast modeling for the Cache River and Grand Prairie regions, highlighting how predictive tools can inform conservation decisions.

Courtney Killian from the USGS Pennsylvania Water Science Center specializes in applying machine learning techniques to groundwater assessment. Her session introduces new approaches for estimating groundwater levels using computational methods that enhance precision and long term monitoring capabilities.

Dr. Mike Daniels of the University of Arkansas Division of Agriculture Cooperative Extension Service focuses on nutrient management, land use, and watershed stewardship. His talk addresses the challenges facing the Ozarks and strategies for balancing agricultural productivity with resource protection.

Dr. James McCarty, Beaver Water District, works on source water protection and the unique considerations of managing drinking water supplies in karst regions. He will outline current initiatives designed to safeguard water quality for communities relying on karst aquifers.

Dr. Kevin M. Befus of the University of Arkansas researches groundwater surface water interactions, with special attention to extreme hydrologic events. His presentation examines how shallow groundwater systems respond to 100 year flood events and what this means for future resilience planning.

Dr. Michele Reba leads the Delta Water Management Research Unit for the USDA Agricultural Research Service. Her work supports producers through applied research on irrigation, conservation practices, and water use efficiency across the Delta. She will provide updates on current research and emerging technologies.

Dr. Scott Manley of Ducks Unlimited collaborates with agricultural producers to advance conservation practices that strengthen wildlife habitat and improve irrigation outcomes. He will discuss practical impacts of conservation strategies on working lands.

Dr. Jeff Fore and Will Gray of The Nature Conservancy contribute to statewide efforts supporting groundwater sustainability, irrigation efficiency, and producer training. Their presentation outlines groundwater irrigation targets and the development of the Master Irrigator Program.

Chris Colclasure, Natural Resources Director for the Arkansas Department of Agriculture, leads efforts focused on water resource planning, conservation, and management. He will provide an overview of Arkansas' groundwater efforts and highlight key priorities and updates from the recently updated Arkansas Water Plan.

Aaron Baggett, a geologist with the Arkansas Department of Agriculture, will provide an overview of groundwater conditions across Arkansas. His presentation will highlight key findings from the latest Arkansas Groundwater Protection and Management Report, including groundwater levels, water use trends, and monitoring data that help inform long-term water resource management.