



**DAVIS COLLEGE OF
AGRICULTURAL SCIENCES
& NATURAL RESOURCES**

TEXAS TECH



AWSS

Agricultural **W**ater
Sustainability **S**ummit

OCT 14 - 15

2025
**CONFERENCE
PROGRAM**

LUBBOCK, TX



TEXAS

Section • American Water Works Association



Brooke Paup

Keynote Speaker

Brooke Paup is the chairwoman of the Texas Commission on Environmental Quality. Prior to her appointment to TCEQ, Brooke Paup served on the Texas Water Development Board beginning in 2018. In 2021, Governor Abbott appointed Paup as the first woman chair in the history of the TWDB. She also served as the Director of Legislative Affairs for the Texas Comptroller of Public Accounts, in the Office of the Attorney General, and at the Office of State-Federal Relations in Washington, D.C. Brooke has 19 years of state government experience.

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OCT
14

TUESDAY

Schedule of Events (at a Glance)



9:00 - 9:15
a.m. a.m.

Welcome Remarks (Banquet Hall)

Dr. Clint Krehbiel
Davis College of Agricultural Sciences
& Natural Resources Dean

Daniel Nix
Executive Director of the Texas Section
AWWA

9:15 - 9:45
a.m. a.m.

Opening Session (Banquet Hall) Keynote Speaker

Brooke Paup
TCEQ Chairwoman

9:45 - 10:30
a.m. a.m.

Legislative Update (Banquet Hall) Senator Charles Perry

Texas Legislator

10:30 - 11:15
a.m. a.m.

Regional Water Planning (Banquet Hall) Panel

11:15 - 12:00
a.m. p.m.

Agriculture Meets Municipal (Banquet Hall) Panel

12:00 - 1:00
p.m. p.m.

Lunch

1:00 - 1:45
p.m. p.m.

Texas Outlook on Climate Variability (Banquet Hall)

Dr. John Nielsen-Gammon
State Climatologist

1:45 - 2:30
p.m. p.m.

Concurrent Sessions (More Information in Page 4)

Hot Topic 1 (Banquet Hall)
Water Conservation (Room 101)
Graduate Student Presentation (Room 102)
Climate Conscious Sorghum (Room 103)

2:30 - 3:15
p.m. p.m.

Concurrent Sessions (More Information in Page 4)

Hot Topic 2 (Banquet Hall)
Ground Water Subsidence (Room 101)
Graduate Student Presentation (Room 102)
Panel - Managing Water Regulation and Data (Room 103)

3:15 - 3:30
p.m. p.m.

Break

3:30 - 4:15
p.m. p.m.

Concurrent Sessions (More Information in Page 4)

Hot Topic 3 (Banquet Hall)
Data Analysis for Water Protection (Room 101)
Graduate Student Presentation (Room 102)
Mobile Drip Irrigation (Room 103)

4:15 - 5:00
p.m. p.m.

Concurrent Sessions (More Information in Page 4)

Water Protection Program (Room 101)
Panel - Thirsty Crops, Limited Drops (Room 103)



Hot Topic Session

1:45 – 4:15 pm (Banquet Hall)

1:45
p.m.

Hot Topic 1: Agriculture Water 2050

The American Water Works Association (AWWA) has initiated a think tank to explore water sustainability around five core subjects: Sustainability, Technology, Governance, Finance, and Social/Demographics. If a similar initiative were started for Agriculture Water, what would that look like, and who would be invited to the "Think Tanks"?

2:30
p.m.

Hot Topic 2: Agriculture Research Needs

Academic institutions, such as Texas Tech University and others in Texas, are interested in what agricultural producers need to make their farms and ranches more productive while conserving water at the same time. What needs to be researched to make an impact in the near and distant future for water sustainability?

3:30
p.m.

Hot Topic 3: Future of Agriculture Water Law

Water law in Texas determines who has rights to specific sources of water, dictates treaties with other states and countries, and regulates the use of water across the state for various sectors. What legal issues need to be addressed in the future to meet the needs of securing sustainable water for agriculture and municipalities in Texas?

Breakout Sessions

1:45 – 5:00 pm

Room 101

1:45
p.m.

Water Conservation: Correlative Allocations Saving Texas Groundwater

Dr. Robert Mace

Executive Director, Meadows Center for Water & the Environment, Texas State University

2:30
p.m.

Groundwater Subsidence

Mike Turco

Harris-Galveston Subsidence District

3:30
p.m.

Data Analysis for Water Protection: Application of NASA SWOT Lake Products in Texas

Dr. John Zhu

Texas Water Development Board

4:15
p.m.

TCEQ Source Water Protection Program

Mason Miller

Texas Commission on Environmental Quality

Room 103

1:45
p.m.

Climate Conscious Sorghum

Melinda Yerka

University of Nevada at Reno (UNR)

3:30
p.m.

Understanding the Benefits of Mobile Drip Irrigation

Monty Teeter

Dragon-Line, LLC

Panel Sessions

10:30 – 5:00 pm

10:30
a.m.

Regional Water Planning (Banquet Hall)

Ken Rainwater

Region O Chair

Neil Weems

Director of Public Works, Plainview

11:15
a.m.

Agriculture Meets Municipal (Banquet Hall)

Julie Hunt

TAWWA

Samantha Borgstedt

TAWC

2:30
p.m.

Managing Water Regulation & Data: Implications for Ranchers /Farmers in 2026 and Beyond (Room 103)

James Clement III

Rancher, Member Texas State
Soil and Water Board

Gage Dobell

Water Attorney and Partner
Dorsey and Whitney

Andrew Coppin

Ranch-Bot CEO and
Technologist in Water Tech

4:30
p.m.

Thirsty Crops, Limited Drops: Integrating Wine Grapes into Agricultural Operations (Room 103)

Keith and Brenna Burch

Lazbuddie, Texas

Brent Van Dyke

Hobbs, New Mexico

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WEDNESDAY

Schedule of Events (at a Glance)



International Perspective - The Danish Way

- 8:45 - 9:00**
a.m. a.m. **How water regulation drives development in Denmark (Banquet Hall)**
Rasmus Hammer-Jakobsen
WTA DC
- 9:00 - 9:30**
a.m. a.m. **Denmarks approach to Non-revenue water (Banquet Hall)**
Lars Ravnborg
WTA CA

9:30 - 9:45
a.m. a.m. **Break**

International Perspective - The Danish Way

- 9:45 - 10:30**
a.m. a.m. **Slurry Handling with Chopper Pumps and Mixers for Simple and Long-Lasting Solutions (Banquet Hall)**
Art Savage
Landia
- 10:30 - 11:15**
a.m. a.m. **A Review of Danish Pump Solutions for Groundwater and Irrigation Applications (Banquet Hall)**
Lance Sykes
Grundfos
- 11:15 - 12:00**
a.m. p.m. **Energy production from Biogas - Your way to independence and stability (Banquet Hall)**
Michael Nissen
Nissen Energy

12:00 - 1:00
p.m. p.m. **Lunch**

- 1:00 - 1:45**
p.m. p.m. **Texas Tech Water Research (Banquet Hall)**
Panel
- 1:45 - 2:30**
p.m. p.m. **Concurrent Sessions (More Information in Page 6)**
Hot Topic 4 (**Banquet Hall**)
Municipal Drought Planning (**Room 101**)
Panel - Tackling Limited Water Supplies (**Room 102**)
Graduate Student Presentation (**Room 103**)
- 2:30 - 3:15**
p.m. p.m. **Concurrent Sessions (More Information in Page 6)**
Hot Topic 5 (**Banquet Hall**)
Panel - Golf Courses and Water Conservation (**Room 101**)
Produced Water Uses in Agriculture (**Room 102**)
Graduate Student Presentation (**Room 103**)

3:15 - 3:30
p.m. p.m. **Break**

- 3:30 - 4:15**
p.m. p.m. **Concurrent Sessions (More Information in Page 6)**
Hot Topic 6 (**Banquet Hall**)
Source Water Protection (**Room 101**)
Conservation Plan Triggers (**Room 102**)
Graduate Student Presentation (**Room 103**)
- 4:15 - 5:00**
p.m. p.m. **Concurrent Sessions (More Information in Page 6)**
Water Art (**Room 101**)
Graduate Student Presentation (**Room 103**)



Hot Topic Session

1:45 – 4:15 pm (Banquet Hall)

1:45 p.m.

Hot Topic 3: What can Municipal & Agriculture Do Better to Protect Water

When droughts occur and water needs are curtailed, professionals from both the agricultural and municipal sectors make adjustments to how water is used and in what aspects of each operational requirement. Both watch what the other is doing and make judgments on whether the cuts are adequate or even enforced. What should municipal and agricultural entities do to improve the protection of available water sources, and can they communicate more effectively about these protections?

2:30 p.m.

Hot Topic 4: What would a Conservation & Drought Plan look like for Agriculture

The Texas Commission on Environmental Quality requires municipalities to develop and implement Conservation Plans and Drought Plans in an effort to extend the duration of water supplies before and during droughts. If the State of Texas required such plans for the agriculture sector, what components would be the most effective to include, and what situations would trigger the different drought conditions in an agricultural Drought Plan?

3:30 p.m.

Hot Topic 6: Vulnerabilities in Water Sustainability

The Agriculture Water Sustainability Summit aims to create a dialogue between the agriculture and municipal sectors regarding water usage. As with all things, there are vulnerabilities that need to be identified so that they can be addressed, and the risk of their impacts reduced. What are some of the vulnerabilities of enacting sustainability efforts, and what are the vulnerabilities of not enacting efforts?

Breakout Sessions

1:45 – 5:00 pm

Room 101

1:45 p.m.

Canadian River Municipal Water Authority 101

Drew Satterwhite
Canadian River Municipal Water Authority

3:30 p.m.

Source Water Protection: The Sako Creek Project and More

Phillip Wright
Society of Range Management

4:15 p.m.

Water Art: Water Culture & Environmental Sustainability Through Art

Carol Flueckiger
Texas Tech School of Art

Room 102

2:30 p.m.

Produced Water Uses in Agriculture

Adrienne Lopez
Texas Pacific Water Resources

3:30 p.m.

Conservation Plan Triggers for Ag & Municipal

Monica Masters
Lower Colorado River Authority

Panel Sessions

1:00 – 3:15 pm

10:30 a.m.

Texas Tech Water Research Panel (Banquet Hall)

Dr. Krishna Jagadish
Davis College of Agricultural Sciences & Natural Resources

Dr. Shane Walker
Whitacre College of Engineering

Dr. Amy Hardberger
Director, Center for Water Law and Policy

11:15 a.m.

Tackling Limited Water Supplies with Smart Conservation: High Plains Underground Water District (Room 102)

Brad Heffington
Lamb County

Jeremy Reed
Swisher County

Randy Criswell
Wolfforth City Manager

Neil Weems
Director of Public Works at Plainview

2:30 p.m.

Golf Courses and Water Conservation (Room 101)

Joey Young
Associate Professor of Turfgrass Science, Texas Tech

Johnny Walker
South Central Field Representative of Golf Course Superintendents of America (GCSAA)

James Stow
Assistant Director of Parks and Rec in Amarillo

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Graduate Student Presentations

1:45 – 4:15 pm

Tuesday, Oct 14th (Room 102)

- 1:45 p.m.** **Ability of Agricultural Conservation Practices to Improve Soil-Water Dynamics & Water Conservation**
Lee Fischel
Dept. of Plant & Soil Science, Texas Tech University
- 2:30 p.m.** **Effects of Growth Stage-Specific Water Stress on Palmer Amaranth**
Gaganjot Singh Sodhi
Dept. of Plant & Soil Science, Texas Tech University
- 3:30 p.m.** **Feasibility of Polished Desalinated Produced Water (PDPW) as a Water Supplement for Irrigated Field-Grown Alfalfa**
Teja Saddapalli
Dept. of Plant & Soil Science, Texas Tech University

Wednesday, Oct 15th (Room 103)

- 1:45 p.m.** **Investigating the Effects of Feed Temperature & Vacuum Pressure on Water Quality from Produced Water**
Raquel Torres
Dept. of Engineering, Texas Tech University
- 2:30 p.m.** **Annode Deep Wells and Protecting Water Resources**
Michael Ames
Corrground Consulting, LLC
- 3:30 p.m.** **Understanding Biomass Production, Agronomic & Nutritional Traits of Novel Prussic Acid Free (PAF) Sorghum**
Alondra Cruz
Dept. of Plant & Soil Science, Texas Tech University
- 4:15 p.m.** **Integrating Remote-Sensing and In-Situ Observations to Quantify Groundwater Extraction & Evaluate Water Use Efficiency in Irrigated Cotton Fields**
Akkarapon Chaiyana
Dept. of Plant & Soil Science, Texas Tech University



AWSS
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Sustainability Summit

Stay tune
for the
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MEMBERSHIP BENEFITS



Professional Development

Access training, certifications, and continuing education tailored to Texas water challenges.



Network Opportunities

Meet water leaders, utilities, regulators, and industry innovators across the state.



Advocacy & Influence

Have a voice in shaping water policy, standards, and best practices in Texas and nationally.



Cutting-Edge Resources

Stay ahead with technical manuals, research, and webinars designed for today's water professionals.



Career Growth

Explore job boards, mentorship programs, and leadership opportunities within AWWA.



Discounts & Saving

Reduced rates for conferences, workshops, and publications



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