



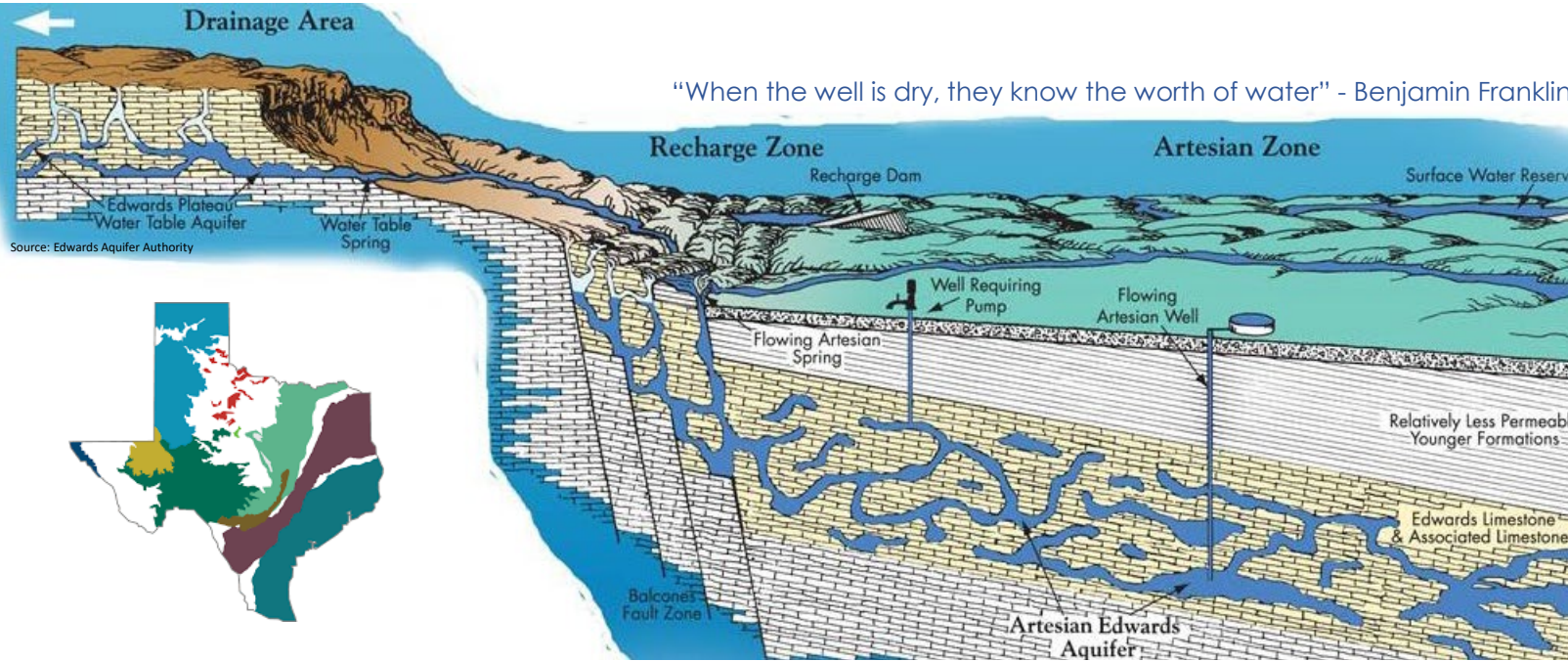
American Ground Water Trust

# 30<sup>TH</sup> TEXAS GROUNDWATER PROGRAM

Tuesday & Wednesday, June 6-7, 2023

Norris Conference Center

2525 W. Anderson Ln., Austin, TX 78757



“When the well is dry, they know the worth of water” - Benjamin Franklin

## “EVERYTHING AQUIFERS AND GROUNDWATER MANAGEMENT”

Legal, Policy, Management, Scientific, Engineering, and Technical Issues about Texas' Aquifers

### Welcome to the 2023 Texas Groundwater Conference!

The objective of American Ground Water Trust conference is to showcase pertinent 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

Applicable for **Texas Professional Geoscientists – 1 hour CE Ethics Credit**

Approved by TCEQ for **TX Water Operators – Course Code 0548, 12 Credit Hours**

Approved by TDLR for **TX Water Well Drillers/Pump Installers – Course No 27451, 4 Credit Hours**

Approved by State Bar of TX for **TX Attorneys – Course No. 174195912, Sponsor No. 13854, 4.75 Accredited CLE Hrs**

Certificates are available for all attendees upon completion of CE Form

## THANK YOU TO OUR CONFERENCE SPONSORS!



# SCHEDULE

## Tuesday, June 6

- 7:30-8:30 am **Registration**
- 8:30-8:40 am **Welcome and Overview of June 6<sup>th</sup> Presentations**  
Sara Chudnoff, Hydrogeologist, American Groundwater Trust, Pinetop, AZ
- Moderated by Stephanie Wong, PhD, GIT, Staff Hydrogeologist, LRE Water, Round Rock, TX**
- 8:40-9:10 am **Groundwater Rundown: Texas Water Development Board Updates**  
Natalie Ballew, PG, Groundwater Division Director, Water & Science Division, Texas Water Development Board, Austin, TX
- 9:10-9:40 am **The Inextricable Link Between DFCs and Water Planning in Texas**  
Vanessa Pluig-Williams, JD, Director, Texas Water, Environmental Defense Fund, Austin, TX and Carlos Rubinstein, Principal, RSAH2O, Austin, TX
- 9:40-10:10 am **Private Supply Wells – The Untapped Groundwater-Level Monitoring Asset**  
Charles Dunning, PhD, VP Hydrology, WellIntel, Milwaukee, WI
- 10:10-10:45 am **Break and Exhibitor Introductions**
- 10:45-12:15 pm **PANEL – Whiskey is For Drinking, Water is For Fighting: How Water Districts, Citizens and Scientists are Coming Together to Manage Groundwater**  
Moderator: Dirk Aaron, General Manager, Clearwater Underground Water Conservation District, Belton, TX  
Panel:  
Kristen Fancher, JD, Founder, Fancher Legal, PLLC, Frisco, TX  
Cole Ruiz, JD, Associate, Lloyd Gosselink, Austin, TX  
Vince Clause, GISP, Project Manager-Texas Groundwater Lead, LRE Water, Round Rock, TX  
Keith Elliston, President, Aquifer Conservation Alliance, TX
- 12:15-1:15 pm **Lunch (provided)**
- 1:15-1:45 pm **Keynote Presentation**  
**Water Markets for Water Conservation**  
Jeremy Mazur, Senior Policy Advisor, Texas 2036, Austin, TX and  
Todd H. Votteler, PhD, President, Collaborative Water Resolution, LLC., Austin, TX
- 1:45-2:30 pm **Ethics in Geosciences (Applicable for 1hr PG CE Ethics Credit)**  
Mark Varhaug, PG, CPG, Member, Texas Board of Professional Geoscientists, President, Beacon Hill Energy, Dallas, TX
- 2:30-2:50 pm **Break**
- 2:50-4:20 pm **PANEL – Legal Perspectives on Key Groundwater Issues**  
Moderator: Ed McCarthy, JD, Attorney, Partner, McCarthy & McCarthy, LLP, Austin, TX  
Panel:  
Kristen Fancher, JD, Founder, Fancher Legal, PLLC, Frisco, TX  
Mike Gershon, JD, Water Practice Group Chair, Lloyd Gosselink, Austin, TX  
Russell Johnson, Of Counsel, McGinnis Lochridge, Austin, TX  
Eddie McCarthy III, JD, Attorney, Partner, McCarthy & McCarthy, LLP, Austin, TX

Moderated by Mark Varhaug, PG, CPG, Member, TBPG, President, Beacon Hill Energy, Dallas, TX

4:20-5:00pm **Student Presentations**

**“Transboundary Index” as a Measure of the Magnitude of Groundwater Flow Across Political Boundaries: Development and Application on the Allende-Piedras Negras Aquifer**

Laura Rodriguez, PhD Candidate, Interdisciplinary Water Management and Hydrological Science Program, College and Arts and Sciences, Texas A&M, College Station, TX

**Can Short Term Recover Data from Domestic Wells Provide Useful Aquifer Transmissivity Values?**

Will Brewer, PhD Candidate, Department of Geosciences, Baylor University, Waco, TX

**Perched Aquifers in the Monahans and Kermit Dune Field, West Texas, USA**

Alix Fournier, PhD Candidate, Department of Geosciences, Baylor University, Waco, TX

5:00-6:30 pm **Reception (Cash bar)**

## Wednesday, June 7

7:30-8:30 am **Registration**

8:30-8:35 am **Summary of June 6 Presentations**

Sara Chudnoff, Hydrogeologist, American Groundwater Trust

### Innovation For a Secure Water Future

Moderated by Lakin Beal, PG, Hydrogeologist, INTERA, Inc., Austin, TX

8:35-9:05 am **Water in the 22<sup>nd</sup> Century: What We Can Learn From Austin’s 100-Year Water Plan**

Robert Mace, PhD, PG, Executive Director and Chief Water Policy Officer, Meadows Center, Texas State University, San Marcos, TX

9:05-9:35 am **What is Now Proved Was Once Only Imagined – Innovative Water Technologies of Texas**

Andrea Croskrey, PG, Geologist, Innovative Water Technologies, Texas Water Development Board, Austin, TX

9:35-10:05 am **Purified Water for El Paso**

Scott Reinert, PE, PG, Water Resources Manager, El Paso Water, El Paso, TX

10:05-10:35 am **SAWS Resiliency Planning – A Brackish Groundwater Project Case Study**

Kevin Morrison, PG, Project Coordinator, Water Resources Dept., San Antonio Water System, San Antonio, TX

10:35-11:00 am **Break and Exhibitor Introductions**

11:00-11:30 am **Technical and Regulatory Challenges of Beneficial Oil & Gas Produced Water**

Dan Mueller, PE, Senior Manager, Climate Resilient Water Systems, Environmental Defense Fund, Austin, TX

11:30-12:00 **How Clean is Clean Enough for the Beneficial Reuse of Produced Water**

Zachariah Hildebrand, PhD, Research Professor, Department of Chemistry and Biochemistry, University of Texas at El Paso, El Paso, TX

12:00-1:20 pm **Lunch (provided)**

1:20-1:50 pm

## **Keynote Presentation**

### **Something Old, Something New, Something Borrowed = Something Blue: Keys to Texas' Continued Wetted Bliss**

Aaron Collier, Vice President, Collier Consulting, Stephenville, TX

## **Wells and Wellfield Management**

**Moderated by Andrew Worsley, PG, Senior Hydrogeologist, Wet Rock Groundwater Services, LLC, Austin, TX**

1:50-2:20 pm

### **A Life-Cycle, Cost Analysis of Your Municipal Supply Well**

Jeremy Kuhn, Director of North American, Roscoe Moss Company, Phoenix, AZ

2:20-2:50 pm

### **A New Downhole Diagnostic Approach for Texas Groundwater Exploration and Pilot Holes for Potable Water Supply**

Noah Heller, PG, CEO-President/Senior Hydrogeologist, BESST, San Rafael, CA

2:50-3:20 pm

### **Borehole Magnetic Resonance – An Emerging Technology for Aquifer Characterization for Water Resource Applications: Texas Case Studies**

Jordan Furnans, PhD, PE, PG, Vice President – TX Operations, LRE Water, Round Rock, TX

3:20-3:50 pm

### **Applying Adaptive Well Field Management Tools for Sustainability and Resilience for a Utilities Water Supply**

Dylan Hart, PE, Hydrogeological Engineer, Black & Veatch Corporation, Austin, TX

3:50-4:20 pm

### **Revitalizing a Key Water Source**

Daniel Albus, PE, Principal and Team Lead, Parkhill, Lubbock, TX and  
Kevin Krueger, PE, Senior Project Manager, Parkhill, Big Spring, TX

4:20 pm

### **End of Conference, Door Prize Awards**