

PROGRAM

FLORIDA GROUNDWATER CONFERENCE

Everything Aquifers and Groundwater Management



EDUCATION, AWARENESS, & TECHNOLOGY

January 23 & 24, 2024
Florida Hotel and Conference Center
1500 San Lake Rd., Orlando, FL 32809

Groundwater Champions



Welcome to the 2024 Florida Groundwater Conference!

The objective of American Ground Water Trust conference programs 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

Approved for **FL Water and Wastewater Operators – 2-day Conference-Course #8118005, 1.1 CEUs; 1-day January 23rd-Course #8118006, .6 CEUs, 1-day January 24th-Course #8118007, .5 CEUs**

Approved for **FL Water Well Drillers – Course #124-082923-101, 3 R/R, 8 B/S**

Approved provider by Florida Board of Professional Engineers

Certificates are available for all attendees upon completion of CE Form

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Bronze Sponsors



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Tuesday, January 23

- 7:30-8:20 am **Registration – Refreshments sponsored by FGWA**
- 8:20-8:30 am **Welcome and Overview of the Florida Conference**
Sara Chudnoff, PG, Executive Director, American Groundwater Trust, Pinetop, AZ
- Moderator** Sammy Smith, GIT, Water Supply Supervisor, Water Resources Bureau, SWFWMD, Brooksville, FL
- 8:30-9:00 am **Florida Geological Survey – Groundwater Research Projects**
Guy “Harley” Means, PG, Director & State Geologist, Florida Geological Survey, Tallahassee, FL
- 9:00-9:30 am **Where and Why Freshwater in the UFA**
Kirk Martin, PG, Principal Scientist, President, Water Science Associates, Fort Myers, FL
- 9:30-10:00 am **3-D Tools Reveal the Hydrostratigraphy of the Southwest Coast of Florida**
Justin Zumbro and Aurora Bouchier, Lead Hydrogeologists, Stacey Coonts, Hydrogeologist, South Florida Water Management District, West Palm Beach, FL
- 10:00-10:30 am **Break and Exhibitor Introductions**
- 10:30-11:00 am **Seismic Reflection Surveys to Support the Lake Okeechobee Watershed Restoration Project: Unlocking the Mysteries of the FAS**
Bob Verrastro, PG, (SFWMD-Retiree), West Palm Beach, FL, Aaron Collier, PG, Vice President, Ted Stieglitz, Senior Geophysicist, Collier Consulting, Stephenville, TX and John Jansen, PG, PGp, PhD, Senior Geophysicist & Hydrogeologist, Collier Consulting, Milwaukee, WI,
- 11:00-11:30 am **A One Water Approach to Regionally Integrated Projects for Aquifer Recharge Benefits**
Sam Miller, Black & Veatch, Water Resources Engineer, Winter Garden, FL and Mike Britt, One Water Project Manager, City of Winter Haven, Winter Haven, FL
- 11:30-12:45 pm **Lunch - Sponsored by Florida Design Drilling**
- Moderator** Bob Verrastro, PG, West Palm Beach, FL
- 12:45-1:15 pm **Treatment Wetlands for Groundwater Recharge in Florida**
Rafael Vazquez-Burney, PE, Principal Technologist, US South Region Wastewater Solutions Leader, Jacobs, Tampa, FL
- 1:15-1:45 pm **Progress of the Lake Okeechobee ASR System**
Sunny Saini, Hydrogeologist, GIT, South Florida Water Management District, West Palm Beach, FL
- 1:45-2:15 pm **Geochemistry of the Aquifer Rock Matrix for the North Lake Okeechobee ASR Project with Emphasis on Heavy Metals**
Thomas M. Missimer, PhD, PG, Professor, Florida Gulf Coast University, Fort Myers, FL, and Zoie R. Kassis, Research Assistant, Florida Gulf Coast University, Fort Myers, FL
- 2:15-2:45 pm **Lake Okeechobee Watershed Restoration Project (LOWRP) ASR Wells, ASR Test Well Construction and Testing – An Update**
Caroline Smith, GIT, Senior Hydrogeologist, Stantec, West Palm Beach, FL
- 2:45-3:05 pm **Break**
- 3:05-3:35 pm **The Use of Quantitative Microbial Risk Assessment to Assess Human Health Risks Associated with Recovered Recharge Water at ASR Facilities in Florida**
John T. Lisle, PhD, Microbial Ecologist, USGS, St. Petersburg, FL
- 3:35-4:05 pm **The ASR Buffer Zone: Mythology or Real?**
R. David Pyne, PE, President, ASR Systems LLC, Gainesville, FL

- 4:05-4:35 pm **After the Flush: An Extension Outreach Program for Onsite Sewer Treatment and Disposal System**
Bill Lester, PhD, UF/IFAS Hernando County Extension Agent, and Yilin Zhuang, PhD, UF/IFAS Regional Specialized Agent, Water Resources, Central District
- 4:35-5:00 pm **Student Presentation**
30-Year Particle Tracking Simulation from Septic Returns in Miami-Dade County, Based on the Urban Miami-Dade Groundwater Model
Miguel Valencia, PhD Candidate, Florida International University, Miami, FL
- 5:00-6:00 pm Reception & Networking

Wednesday, January 24

- 7:30-8:25 am Registration
- 8:25-8:30 am **Summary of January 23 Presentations**
Sara Chudnoff, PG, Executive Director, American Groundwater Trust, Pinetop, AZ
- Moderator** Anamaria Sarmiento, Senior Hydrogeologist, Black & Veatch Corp., Miami, FL
- 8:30-9:00 am **Drilling in Florida: Matching the Well Drilling Method to the Geology**
Jeff Hart, Senior Operations Manager, Water Resources Division, Layne, a Granite Company, Denver, CO
- 9:00-9:30 am **Principles of Efficient Gravel Envelope Well Design**
Kevin McGillicuddy, PG, Chief Hydrogeologist, Roscoe Moss Company, Los Angeles, CA
- 9:30-10:00 am **Well Performance Solutions**
Mike Whittaker, Southeastern Sales Manager, Cotey Chemical, Rocky Mount, VA
- 10:00-10:30 am **Break and Exhibitor Introductions**
- Moderator** **Mike Alfieri, PG, Senior Managing Hydrogeologist, Water Science Associates, Tampa, FL**
- 10:30-11:00 am **Well Modification to Reduce or Eliminate Contaminate Treatment**
Noah Heller, PG, President, BESST Inc., San Rafael, CA
- 11:00-11:30 am **Polk Regional Water Cooperative Update: Brackish Groundwater Desalination in Central Florida**
Robert Maliva, Principal Hydrogeologist, WSP, Fort Myers
- 11:30-12:00 pm **Miami-Dade Water and Sewer Department Groundwater and Wastewater Innovations, Challenges and Updates**
Christina Garcia-Alario, Hydrogeologist, Miami-Dade Water and Sewer Department, Sunrise, FL, Felipe Franco, Hydrogeologist, Black and Veatch, Gables, FL, and Jorge Valdes, Geologist, CDM Smith, Miami, FL
- 12:00-1:15 pm Lunch (provided)
- Moderator** Jeremy Eaton, Hydrogeologist, ASRus, LLC, Tampa, FL
- 1:15-1:45 pm **The Status of Direct and Indirect Potable Reuse Projects in Florida and the US**
Charles W. Drake, PG, CPG, Vice-President, RSI Division, Tetra Tech, Orlando, FL

- 1:45-2:15 pm **Piney Point Injection Well for an Abandoned Phosphate Mine**
Pete Larkin, PG, Vice President, ASRus, LLC, Tampa, FL
- 2:15-2:45 pm **Update on PFAS Investigative Work**
Tim J. Bahr, PG, Director, Division of Waste Management, Florida Department of Environmental Protection
- 2:45-3:15 pm **PFAS Monitoring and Cleanup Case Studies**
Olivia Cain, PE, Environmental Engineer, Geosyntec Consultants, Clearwater, FL and Eric Sagar, PG, Senior Principal Geologist, Geosyntec Consultants, St. Petersburg, FL
- 3:15-3:45 pm **GAC, IX Resin, and CETCO Flourosorb: Treatment Option Differences and Case Studies**
Geoff Burdick, PE, Southeast Sales & Business Development Engineer, AqueoUs Vets, Huntersville, NC and Neal Megonnell, Vice President of Technical Services, AqueoUs Vets, Pittsburgh, PA
- 3:45 pm **Door Prize Awards**

Conference Exhibitors

Clean Harbors Environmental Services
Cotey Chemical Corp.
Halliburton
Johnson Screens
Layne, a Granite Company
Mt. Sopris
Orica
Pioneer Water Tanks America
Purolite Corporation
Roscoe Moss Company
Southern Products & Silica Co.