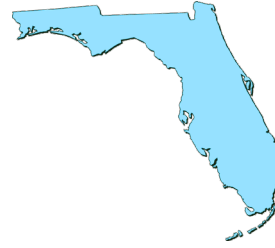
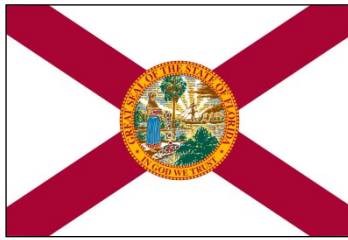
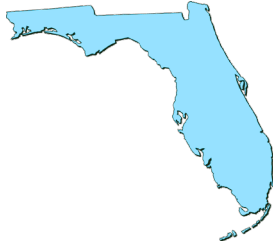


Managing Florida's Aquifers: Annual Conference

Groundwater Issues – ASR 21 (twenty-first year of this event)

Florida Hotel & Conference Center, 1500 Sand Lake Rd, Orlando, FL 32809
Tuesday, September 28 & Wednesday, September 29, 2021

The American Ground Water Trust Annual Florida Groundwater Program



Continuing Education

Approved by FUSE for **Water and Wastewater Operators** – Course #8118003, 13 hours (1.3 CEUs)
Approved by FWWA for **Water Well Contractors** – Course #124-092821-101, 2 R/R, 9 S/B
Approved provider by FL Board of **Professional Engineers**
Certificates of Attendance available for all other professions



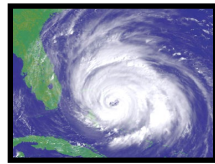
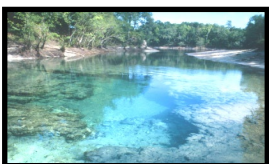
Conference Sponsors

Join our conference sponsors – more information on sponsorship and exhibiting at www.agwt.org/events.



WHO SHOULD BE HERE?

Water professionals and groundwater end-users, engineers, geologists, hydrogeologists, planners, utility operators, water re-use and aquifer recharge consultants, water treatment specialists, water well contractors, industry & agriculture end-users, city & county government, regulatory authorities, legislators, elected officials, environmental NGOs, planners, water attorneys and interested citizens.



7:30 – 8:30 REGISTRATION Tuesday, September 28, 2021

8:30 – 8:45

CONFERENCE BACKGROUND AND INTRODUCTION

Andrew Stone, Executive Director, American Ground Water Trust, Concord, NH

8:45 – 9:15

CLIMATE CHANGE AND GROUNDWATER IN FLORIDA: POTENTIAL IMPACTS AND ADAPTATION OPTIONS

Robert Maliva, PhD, PG, Principal Hydrogeologist, WSP Parsons Brinckerhoff, Fort Myers, FL

9:15 – 9:45

LEGAL ISSUES: "REASONABLE ASSURANCE", THE SUPREME COURT MAUI DECISION, SENATE BILL 64, AND CHANGES IN STATE RULE GOVERNING POTABLE REUSE

Eric T. Olsen, JD, Shareholder, Gunster, Tallahassee, FL

9:45 – 10:15

PINEY POINT: CHALLENGES, AND SOLUTIONS TO THE IMPACTS OF PHOSPHATE MINING ON FLORIDA'S WATER RESOURCES

Don McCormick, Member of Charlotte County Zoning Commission, Charlotte Beaches & Shores Advisory Committee and Chairman, Southwest Florida Regional Planning Council, Punta Gorda, FL

10:15 – 10:45 BREAK (Networking and exhibits)

10:45 – 11:15

CHALLENGES AND POTENTIAL SOLUTIONS FOR MANAGING WATER VOLUME AND QUALITY IN LAKE OKEECHOBEE

Newton Cook, President, United Waterfowlers Florida, Plantation FL

11:15 – 11:45

PAST, PRESENT, AND FUTURE ROLE OF GROUNDWATER IN THE EVERGLADES ECOSYSTEM

Paul Julian, PhD, Hydrologic Modeler, Sanibel Captiva Conservation Foundation, Sanibel, FL

11:45 – 12:15

STATE APPROPRIATION TO ACCELERATE THE LAKE OKEECHOBEE ASR PROGRAM. HOW WILL THE MONEY BE SPENT?

Robert Verrastro, PG, Principal Hydrogeologist, South Florida Water Management District, West Palm Beach, FL

12:15 – 1:15 LUNCH - Sponsored by Florida Design Drilling Corporation (Networking and exhibits)

1:15 – 1:45

LAKE OKEECHOBEE WATERSHED RESTORATION PROJECT (LOWRP) AQUIFER STORAGE AND RECOVERY WELLS CONTINUOUS CORING PROGRAM

Cora Summerfield, GIT, Hydrogeologist, Stantec, West Palm Beach, FL

1:45 – 2:10

LAKE OKEECHOBEE SYSTEM OPERATING MANUAL (LOSOM)

Jason Engle, PE, Chief of the Water Resources Engineering Branch, Jacksonville District, U.S. Army Corps of Engineers, Jacksonville, FL

2:10 – 2:40

CONTINUOUS DATA COLLECTION FOR SWFWMD'S WATER QUALITY MONITORING PROGRAM

Robin Speidel, Environmental Data Project Manager, Water Quality Monitoring Program, Southwest Florida Water Management District, Brooksville, FL

2:40 – 3:10

RESTORING CAPACITY AND USEFULNESS OF WATER WELLS IN NORTHEAST FLORIDA

Dustin Dykes, PE, Project Manager, and Blake Roberts, GIT, Staff Geologist, Jacobs Engineering Group Inc., Jacksonville, FL

3:10 - 3:30 BREAK (Networking and exhibits)

NATIONWIDE ISSUES RELATED TO GROUNDWATER CONTAMINATED BY PFAS

3:30 – 4:00

THE DIVISION OF WASTE MANAGEMENT'S PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) DYNAMIC PLAN

Tim J. Bahr, P.G., Director, Division of Waste Management, Florida DEP, Tallahassee, FL

4:00 – 4:30

REDUCING "DOWNSTREAM" PFAS TREATMENT OF DRINKING WATER BY TREATMENT AND MANAGEMENT OF PFAS AT "UPSTREAM" SOURCES

AnnieLu DeWitt, Remediation Technologies, Clean Harbors, South Portland, ME

4:30 – 5:00

PFAS CHALLENGES FOR WATER SUPPLIERS: EVOLVING REGULATIONS, UNCLEAR JURISDICTIONAL AUTHORITY, LIMITED BUDGETS AND AN EVER-INCREASING PRICE-TAG

Nancy Mortvedt, Director of Client Engagement, SL Environmental Law, San Francisco, CA

5:00

WRAP-UP OF DAY ONE PRESENTATIONS

5:00 - 6:30 RECEPTION (Cash bar) (Reception sponsored by AsrUS)



7:30 – 8:30 REGISTRATION Wednesday, September 29, 2021

8:30 – 8:35 SUMMARY OF DAY ONE PRESENTATIONS – INTRODUCTION DAY TWO

Andrew Stone, Executive Director, American Ground Water Trust, Concord, NH

8:35 – 9:05

REGULATORY ISSUES FACED BY FLORIDA'S WATER UTILITIES AND GROUNDWATER END-USERS IN IMPLEMENTING WATER SUPPLY PROJECTS

Laura Jacobs Donaldson, Shareholder, Manson Bolves Donaldson Varn, PA, Tampa, FL

9:05– 9:35

UTILIZATION OF AN INTEGRATED MODEL TO COMPUTE WELLHEAD PROTECTION AREAS

Renee Murch, PE, Senior Engineer-Tampa Operations Manager, INTERA Inc., Lutz, FL

9:35 – 10:05

UPDATE ON MIAMI-DADE COUNTY INJECTION WELL PROGRAM AND UIC CHALLENGES

Virginia Walsh, PhD, PG, Chief of Hydrogeology, Miami-Dade Water and Sewer Department, Miami, FL

10:05 – 10:35

NATURAL SUBSURFACE TREATMENT PROCESSES: A CHALLENGE AND OPPORTUNITY FOR FLORIDA

R. David G. Pyne, PE, President, ASR Systems LLC, Gainesville, FL

10:35 – 11:00 BREAK (Networking and exhibits)

11:00 – 11:30

2D AND 3D SEISMIC REFLECTION SURVEYS TO IMPROVE THE EFFICIENCY OF ASR SYSTEMS AND THE LESSONS LEARNED ABOUT THE FLORIDAN AQUIFER SYSTEM

John Jansen, PG, PGp, PhD, Senior Geophysicist and Hydrogeologist, Collier Consulting, Stephenville, TX

11:30 – 12:00

TRENDS IN PATHOGEN AND CYANOBACTERIA OCCURRENCE DURING ASR CYCLE TESTS, KISSIMMEE RIVER ASR SYSTEM

June Mirecki, Ph.D., PG, Senior Hydrogeologist, US Army Corps of Engineers, Jacksonville, FL

12:00 -12:30

USING QMRA (Quantitative Microbial Risk Assessment) TO DETERMINE RELATIVE HUMAN HEALTH RISKS ASSOCIATED WITH RECHARGE WATER AT ASR FACILITIES

Kristina D. Mena, MSPH, PhD, Dean of the El Paso Campus of University of Texas – Houston School of Public Health and Associate Professor and Program Head of Environmental & Occupational Health Sciences, El Paso, TX

12:30 – 1:30 LUNCH - Sponsored by Water Science Associates (Networking and exhibits)

1:30 – 2:00

ALTERNATIVE DRINKING WATER SUPPLY DEVELOPMENT CHALLENGES FOR FLORIDA

Philip Waller, PE, President, Waller Consulting Engineering LLC, Tampa, FL

2:00 – 2:30

AN OVERVIEW OF THE HYDROGEOLOGY OF THE LOWER FLORIDAN AQUIFER IN POLK COUNTY – A POTENTIAL NEW WATER SUPPLY SOURCE IN THE REGION

George A. Schlutermann, PG, Senior Hydrogeologist, Southwest Florida Water Management District, Brooksville, FL

2:30 – 3:00

SOLUTIONS TO ENHANCE WATER QUALITY, WATER QUANTITY AND WATER SUPPLY IN CENTRAL FLORIDA

Yilin Zhuang, PhD, Water Resources Regional Specialized Agent, Mid-Florida Research and Education Center, University of Florida Institute of Food and Agricultural Sciences, Apopka, FL

3:00 - 3:10 BREAK (Networking and exhibits)

3:10 – 3:40

UPDATE ON TAMPA'S AQUIFER RECHARGE PROGRAM

Seung Park, PE, Chief Engineer, Water Dept. & Dawn Lei, PhD, Water Quality Assurance Officer, City of Tampa, Tampa, FL

3:40 – 4:10

CENTRAL FLORIDA WATER INITIATIVE: IMPLEMENTATION OF THE NEW WATER USE PERMIT RULES

Charles Drake, PG, CPG, Vice-President, RSI Division, Tetra Tech, Orlando, FL

4:10 – 4:30

PANEL DISCUSSION – 21 YEARS OF THE AGWT ANNUAL FLORIDA GROUNDWATER CONFERENCE

Have Florida's groundwater water management issues changed? What to expect in the next 21 years!

Panel moderator: Mark McNeal, PG, CEO, AsrUS, Tampa, FL



4:30 ADJOURN and DOOR PRIZES (must be present to win!)

- ◆ Complimentary two-day registration to any AGWT event
- ◆ Complimentary one-day registration to any AGWT event
- ◆ Copy of Bob Maliva's book: *Climate Change and Groundwater*
- ◆ Copy of David Pyne's book: *Aquifer Storage Recovery 2nd edition*
- ◆ \$50 Starbucks gift card donated by Subsurface Technologies Inc.
- ◆ \$50 Home Depot gift card donated by Roscoe Moss Company

