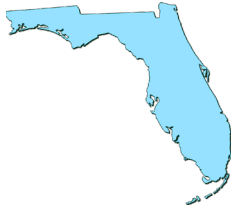


# ANNUAL FLORIDA GROUNDWATER CONFERENCE

## Aquifer management and Groundwater Issues – ASR 22 (twenty-second year of this event)

The conference was originally scheduled for September. New dates because of Hurricane Ian]  
 Florida Hotel & Conference Center, 1500 Sand Lake Rd, Orlando, FL 32809  
 Tuesday, November 1 and Wednesday, November 2, 2022  
 Field trip to Lake Okeechobee – Monday, October 31, 2022 ~ 10:00am – 1:00pm

The American Ground Water Trust Annual Florida Groundwater Program  
 In cooperation with the Florida Ground Water Association



### Continuing Education



Approved by FUSE for Water and Wastewater Operators - Course #8118004, 1.2 CEUs  
 Approved by FWWC for Water Well Contractors – Course #124-092822-101, 10 Bus/Safety Practices CECs  
 AGWT is an approved provider by FL Board of Professional Engineers  
 Certificates of Attendance available for all other professions



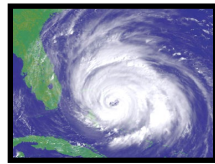
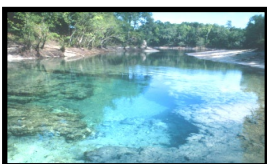
## Conference Sponsors



More information on registration, sponsorship and exhibiting at [www.agwt.org/events](http://www.agwt.org/events).

### Who should be at the conference?

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.



**FIELD TRIP**

LAKE OKEECHOBEE NUTRIENT REDUCTION PROGRAM – REMOVING AQUATIC VEGETATION FOR LAND APPLICATION  
October 31<sup>st</sup> – 10:00am – 1:00pm

Conference Day One

Tuesday, November 1st

**7:30 – 8:30 REGISTRATION (Networking & visiting exhibitors)**

8:30 – 8:45  
CONFERENCE BACKGROUND AND INTRODUCTION  
Andrew Stone, Executive Director, American Ground Water Trust, Concord, NH

**Session 1 Everglades and Okeechobee**

8:45 – 9:15  
UPDATE TO THE LAKE OKEECHOBEE WATERSHED RESTORATION ASR PROGRAM  
Robert Verrastro, PG, Principal Hydrogeologist, SFWMD, West Palm Beach, FL

9:15 – 9:45  
LAKE OKEECHOBEE WATERSHED RESTORATION PROJECT (LOWRP) C-38S UFA AND APPZ ASR TEST WELL CONSTRUCTION AND TESTING  
Caroline Smith, Senior Hydrogeologist, Stantec, West Palm Beach, FL

9:45 -10: 15  
OKEECHOBEE NUTRIENT AND BIOMASS REDUCTION VIA NUISANCE AQUATIC PLANTS APPLIED TO AGRICULTURE PROCESSES AS A LIQUID FORM COMPOST.  
Mike Elfenbein, Conservation Chair, Cypress Chapter of the Izaak Walton League of America, Babcock Ranch, FL

**10:15 – 10:40 BREAK (Networking & visiting exhibitors)**

**Session 2 Geophysics, sinkholes, and pumping tests**

10:40 – 11:10 A HIGH-RESOLUTION SEISMIC REFLECTION SURVEY TO MAP KARST AND FAULTING IN THE FLORIDAN AQUIFER IN CAPE CORAL  
John Jansen, PG, PGp, PhD, Senior Geophysicist & Hydrogeologist, Collier Consulting, Stephenville, TX  
Rand Edelstein Jr., PG, Hydrogeologist, City of Cape Coral Utilities Department, Cape Coral, FL

11:10 – 11:40  
APPLICATION OF A NEW GEOPHYSICAL TECHNIQUE TO LOCATE SINKHOLES  
Glen Andersen, ScD, PE, Principal Engineer, Wood Environment & Infrastructure Solutions, Inc., Tampa, FL

11:40 – 12:10  
SUSTAINABILITY AND RESILIENCY FOR UTILITY’S GROUNDWATER SUPPLY APPLYING ADAPTATIVE WELLFIELD MANAGEMENT TOOLS  
Anamaria Sarmiento, PG, Supervising Hydrogeologist, Black & Veatch Corporation, Miami, FL and Sam Miller, PE, Civil Engineer, Black & Veatch Corporation, Ocoee, FL

**12:10 – 1:10 LUNCH - Sponsored by Florida Design Drilling Corp (Networking & visiting exhibitors)**

**Session 3 PFAS - Maybe not as “forever” as we first thought**

1:10 – 1:40



**KEYNOTE CONFERENCE PRESENTATION**

**PFAS, WHAT’S HAPPENING? US ENVIRONMENTAL PROTECTION AGENCY PFAS ROADMAP**  
Aaryn Jones, Emerging Contaminants Coordinator,  
Office of the Regional Administrator, Region 4, U.S. EPA, Atlanta, GA

1:40 – 2:10

**ECONOMICS OF PFAS TREATMENT OPTIONS FOR WATER SUPPLY**

Catherine Swanson, Groundwater Remediation Specialist, Purolite Corporation, Fullerton, CA

2:10 – 2:40

**WHAT DOES THE FUTURE HOLD FOR PFAS TREATMENT TECHNOLOGY?**

Larry Gottlieb, President, ResinTech, Inc., Camden, NJ

2:40 – 3:00

**BREAK**

(Networking & visiting exhibitors)

**Session 4**

**Potable reuse and seawater intrusion challenges**

3:00 – 3:30

**DEVELOPING ALTERNATIVE GROUNDWATER SUPPLIES IN CENTRAL FLORIDA: TECHNICAL AND REGULATORY CHALLENGES AND SOLUTIONS**

Robert Maliva, PhD, PG, Principal Hydrogeologist, WSP USA, Fort Myers, FL

3:30 – 4:00

**THE AQUIFER RECHARGE, WATER QUALITY, DISPOSAL, AESTHETIC, AND PUBLIC RECREATION BENEFITS OF USING CONSTRUCTED WETLANDS FOR LAND APPLICATION AQUIFER RECHARGE OF WASTEWATER, RECLAIMED WATER, REUSE WATER, AND STORMWATER**

Amanda Berens, PE, PG, Senior Engineering Technologist, Jacobs, St. Petersburg, FL

4:00 – 4:30

**SOUTH FLORIDA'S APPROACH TO MONITORING AND REDUCING SALTWATER INTRUSION POTENTIAL**

Mark Elsner, PE, Water Supply Bureau Chief, South Florida Water Management District, West Palm Beach, FL

4:30 – 4:45

WRAP-UP OF DAY ONE PRESENTATIONS - General Q & A

**4:45 - 6:15**

**RECEPTION**

(Reception sponsor availability) (Networking visit exhibitors)



Conference Day Two

Wednesday, November 2nd

7:30 – 8:30

**REGISTRATION**

(Networking & visiting exhibitors)

8:30 – 8:40

REVIEW OF DAY ONE

**Session 5**

**Managed Aquifer Recharge and ASR**

8:40 – 9:10

**ENVIRONMENTAL PROTECTION AGENCY UPDATE ON MANAGED AQUIFER RECHARGE**

Jason B. Meadows, Hydrologist, EPA Region 4, Water Division, Safe Drinking Water Branch, Atlanta, GA

9:10 – 9:40

**MANAGEMENT OF UPCONING IN A BRACKISH LIMESTONE AQUIFER SYSTEM: ASR WELLFIELD FOR NEW BRAUNFELS, TEXAS**

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

9:40 – 10:10

**WHAT DOES A COLIFORM POSITIVE GROUNDWATER SAMPLE REALLY MEAN?**

John T. Lisle, PhD, Microbial Ecologist, US Geological Survey, St. Petersburg, FL

10:10 – 10:30

**BREAK**

(Networking & visiting exhibitors)

**Session 6****Update on aquifer recharge and deep well injection projects**

10:30 – 11:00

THE GROUNDWATER RECHARGE PROJECT AT FLATFORD SWAMP

Sammy Smith, Hydrogeologist, Southwest Florida Water Management District, Brooksville, FL

11:00 – 11:30

FLORIDAN AQUIFER RECHARGE: THE BLACK CREEK WATER RESOURCE DEVELOPMENT PROJECT

Robert Nateway, PE, Bureau Chief, District Projects and Construction, Saint Johns River Water Management District, Palatka, FL

11:30 – 12:00

PROGRESS, CHALLENGES AND SOLUTIONS IN IMPLEMENTING THE MIAMI-DADE WASTEWATER DEEP WELL INJECTION PROJECTS

Christina Garcia, Hydrogeologist, Miami-Dade Water and Sewer Department and Felipe Franco, Hydrogeologist, Black &amp; Veatch, Miami, FL

12:00 – 1:00

LUNCH

(Networking &amp; visiting exhibitors)

**Session 7****Wells, well maintenance and wellfield management**

1:00 – 1:30

WASTE TO ENERGY ASH LEACHATE DISPOSAL THROUGH DEEP WELL INJECTION IN PASCO COUNTY

Justin G. Roessler, PhD, PE, Solid Waste Director, Waste &amp; Resource Recovery Dept., Pasco County, Spring Hill, FL and, Mike Weatherby, PG, President, HydroGeo Consulting LLC, Tampa, FL

1:30 – 2:00

UNIQUE PUMPING TEST: LOWERING CANAL WATER LEVEL AND MONITORING WELL TRANSECTS TO DETERMINE GROUNDWATER/SURFACE WATER INTERACTION

Patrick Tara, PE, Principal Engineer, INTERA Inc., Tampa, FL

2:30 – 3:00

PREVENTIVE WELL MAINTENANCE "CREATING SUSTAINABLE WATER WELL SYSTEMS" MAINTAINING WELL PRODUCTION AND WATER QUALITY WITH CO2

Stephen Fisher, PG, Technical Director/Hydrogeologist, Subsurface Technologies, Palm Beach, FL

3:00 – 3:30

CONSISTENT PERFORMANCE TESTING: A CRITICAL ELEMENT FOR MEASURING AND IMPROVING THE EFFECTIVENESS OF WELL ACIDIFICATION

Andrew McThenia, PG, Senior Hydrogeologist and W. Kirk Martin, PG, Principal Scientist, President, Water Science Associates, Fort Myers, FL

3:30 – 4:00

REVIEW OF DRILLING TECHNIQUES AND METHODS FOR GROUNDWATER SUPPLY APPLICATIONS THAT MAXIMIZE YIELD POTENTIAL AND MINIMIZE COST

Awaiting speaker confirmation

4:00

Conference wrap-up, door prizes and adjourn

**DOOR PRIZES (must be present to win!) Door prize sponsors:**

**Landshark Consulting  
HDR Engineering  
Water & Air Research  
Hazen & Sawyer**



## REGISTRATION, EXHIBIT and SPONSORSHIP FORM

Florida Groundwater Conference – November 1-2, 2022  
 Florida Hotel & Conference Center, 1500 Sand Lake Road, Orlando, FL 32809

Register online at [www.agwt.org/events](http://www.agwt.org/events)

	Nov 1 and 2	Nov 1 or Nov 2
<b>YOU MUST CHECK ONE: →</b>	<input type="checkbox"/>	<input type="checkbox"/> or <input type="checkbox"/>
General Registration*	<input type="checkbox"/> \$450	<input type="checkbox"/> \$245
AGWT Corporate Member* and FGWA members	<input type="checkbox"/> \$425	<input type="checkbox"/> \$220
Full-Time Student* (ID required at Registration)	<input type="checkbox"/> \$120	<input type="checkbox"/> \$80
Presentation ppts download (Registrant Price)	<input type="checkbox"/> \$30	
Speaker – Day of Presentation (Complimentary)	Nov 1 <input type="checkbox"/> \$0	Nov 2 <input type="checkbox"/> \$0
Speaker – Attend Additional Day	Nov 1 <input type="checkbox"/> \$100	Nov 2 <input type="checkbox"/> \$100
<i>*Registration Includes: morning refreshments, lunches, and day 1 reception</i>		

**Field trip to Lake Okeechobee – October 31<sup>st</sup> (Option no longer available, max number of attendees reached)**

**EXHIBITOR:** Exhibit Table (personal registration also required)  \$ 300

**SPONSOR:** Sponsor Levels:  \$3,000  \$2,000  \$ 1,000  \$ 500

\$1,000 and above sponsors have the option of a complimentary registration or exhibit table:

Complimentary registration  or Complimentary exhibit table

**If you're interested in sponsoring the coffee & pastries, lunch or reception, please call (800) 423-7748.**

**Registrant/Sponsor/Exhibitor Information:**

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Organization Name \_\_\_\_\_

Attendee Email \_\_\_\_\_

Position/Job Title \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

**Payment Information:**

- CHECK [payable to: American Ground Water Trust]
- AMEX/VISA/MC/Discover
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 50 Pleasant Street, Suite 2  
 Concord, NH 03301-4073

**☎ FAX:** (603) 228-6557

**☎ TEL:** (603) 228-5444

**✉ E-mail:**  
 trustinfo@agwt.org

[www.agwt.org/events](http://www.agwt.org/events)

The American Ground Water Trust is a non-profit 501(c)(3) membership organization dedicated to providing accurate information about water resources, groundwater and wells to citizens, communities and decision makers. Contributions are tax deductible to the extent permitted by law.