EP WELL INJECT

MIAMI CONFERENCE

TECHNICAL, ECONOMIC, ENVIRONMENTAL AND POLICY ISSUES



An educational information-exchange program from the **American Ground Water Trust on disposal wells**

Monday, March 2 and Tuesday, March 3, 2020

Hosted by:

Miami Dade Water and Sewer Department

Conference venue - 3071 SW 38th Ave. Miami, FL 33146 (Optional field trip opportunity, Sunday March 1)



CONTINUING EDUCATION



The AGWT will issue Certificates of Attendance Approved by FUSE for Water and Wastewater Operators - Course #8118001, 1.05 CEUs (10.5 hrs) Approved for FL Professional Engineers

The objective of the conference is to provide an update on the status of deep well injection disposal in Florida and to showcase the "state-of-the-art" and operation-economics for current users and for potential adopters of the technology. The presentations will include information on disposal policies that are the drivers for DWI installations. Experts will present information about the latest technologies in design, construction, operation, maintenance and monitoring of deep well injection and will include case studies from DWI operations in the US and overseas. The conference will provide a focused information exchange and discussion opportunity among presenters and participants.

> The March 2 & 3 conference venue is close to the Douglas Road Rail Station. Any hotel accommodation close to the Miami Rail System (Miami Airport - Dadeland South) will allow attendees easy access to the conference without the hassles of downtown parking.

Join our Conference Sponsors:































For exhibiting and sponsorship opportunities visit www.agwt.org/events



Happy Hour Sunday - after the field trip: - Black Point Ocean Grill, 24775 S.W. 87th Avenue, Cutler Bay, FL 33032 Happy Hour Monday - after conference first day: - Yardhouse, 320 San Lorenzo Ave Space 1320, Coral Gables, FL 33146

Sunday, March 1st 2:30 - 5:00pm



Field Trip Opportunity:

Miami-Dade Water and Sewer Department South District Wastewater Treatment Plant Deep Injection Well Drilling Projects

The meeting place and starting point for the field trip is at the Security gate located at 8950 SW 232nd St, Miami, FL 33190. Field trip participants must make their own travel arrangements to and from South District Wastewater Treatment Plant. Coffee and snacks will be provided. The field trip will be led by Dr. Virginia Walsh and will include a presentation by Project Professional Geologist Neil Johnson. See the website www.agwt.org for more details. Field trip is only available for those registered for the conference.

Monday, March 2nd 8:30 - 5:00

7:30 - 8:30 REGISTRATION

8:30 - 8-40

PROTECTING THE INTEGRITY OF DRINKING WATER SOURCES: A NUMBER ONE PRIORITY

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

8:40 - 9:20

THE LONG-TERM FUTURE FOR DEEP WELL INJECTION IN THE US

Monte Markley, PG, Vice President/Project Director, National Expert: Deep Well and Underground Injection, SCS Engineers, Wichita, KS

9:20 - 10:00

OVERVIEW OF CLASS I INJECTION WELL PRACTICES IN THE UNITED STATES AND SIMILAR WELLS OVERSEAS

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

10:00 - 10:20 BREAK

10:20 - 11:00

SEISMIC-REFLECTION IMAGING OF GEOLOGIC STRUCTURES THAT COULD IMPACT DEEP WELL INJECTION IN SOUTHEAST FLORIDA

Kevin Cunningham, PhD, PG, Research Hydrogeologist, U.S. Geological Survey, NSU Center for Collaborative Research, Carbonate Aquifer Characterization Laboratory, Davie, FL

11:00-11:40

BOULDER ZONE REVEALED: THE FIRST 3D SEISMIC IMAGES OF THE BOULDER ZONE IN SOUTH FLORIDA

John Jansen, PG, PGp, PhD, Senior Geophysicist/Hydrogeologist, Collier Geophysics, West Bend, WI

11:40 -12:20

EXPANDING AN ACTIVE INJECTION WELL SYSTEM - DO'S AND DON'TS

Albert Muniz, PE, Vice President, Hazen and Sawyer, Boca Raton, FL

12:20- 1:30 LUNCH

1:30 - 3:20

Session - THE MIAMI DADE INJECTION PROGRAM: (Four presenter panel)

Operations and Management of Large Scale Deep Injection Well Systems

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

Technical Design of the Deep Injection Wells

Ed Rectenwald, PG, Water Resources and Hydrogeology National Practice Leader, Black & Veatch Corp., Fort Myers, FL

Integrating Deep Injection Well Program into an Overall WWTP Capital Improvements Upgrades

Gerrit Bulman, PG, Senior Project Manager, Jacobs, Miami, FL

Implementing the Construction of Deep Injection Wells

Neil Johnson, PG, PMP, Senior Principal, Stantec, West Palm Beach, FL

3:20 - 3:35 BREAK

3:35 - 4:15

MODELING OF THE BOULDER ZONE AT A MACRO AND MICRO SCALE

Angela Montoya, PE, Groundwater Modeling Program Coordinator, Miami-Dade Water and Sewer Department, Miami, FL Vladislav Sumin, Analyst, The Sharpton Consulting Group, Miami, FL

Jorge Restrepo, PhD, Professor Emeritus, Dept. of Geosciences, Florida Atlantic University, Boca Raton, FL

4:15 – 4:55

DEEP WELL INJECTION: LESSONS LEARNED FOR SYSTEM COMPLIANCE, OPERATIONS AND MAINTENANCE

Stewart Magenheimer, PG, Principal Hydrogeologist, CDM Smith, Boca Raton, FL

4:55 – 5:00 WRAP-UP OF DAY ONE

Tuesday, March 3rd

8:30 - 1:15

7:30 - 8:30 REGISTRATION

8:30 - 8:40

REVIEW OF DAY ONE PRESENTATIONS

8:40 - 9:20

FLORIDA KEYS INJECTION WELLS.... HINDSIGHT IS 2020

Michael Alfieri, PG, PHg, CGWP, Principal Hydrogeologist/Director of Hydrogeologic Services, Water Resource Associates, LLC, Tampa, FL

9:20 - 10:00

NEXT GENERATION FIELD DATA ACQUISITION AND MANAGEMENT FOR LARGE SCALE DEEP INJECTION WELL PROJECTS

Kevin Malone, Ocean Outfall Legislation Program – Systems Architect, Jacobs Engineering Group, Miami, FL Anamaria Sarmiento, PG, Hydrogeologist, Stantec, Miami, FL Manuel Arias, Staff Geologist, HBC Engineering Co., Doral, FL

10:00 - 10:15 BREAK

10:15 - 10:55

NORTH LEE COUNTY INJECTION WELL 2

Tyler S. Weinand, P.G., Hydrogeologist, Lee County Utilities, Fort Myers, FL Wyatt Stutts, P.G., Hydrogeologist, Johnson Engineering, North Fort Myers, FL

10:55 - 11:35

VERTICAL WELL PROFILING OF WELLS TO DETERMINE DEPTH-DEPENDENT ZONES OF FLOW AND THEIR WATER QUALITY CHARACTERISTICS

Noah Heller, PG, President, BESST Inc., San Rafael, CA

11:35 - 12:15

A DRILLER'S PERSPECTIVE: CONSTRUCTING DEEP INJECTION WELLS

David Webb, Vice-President, All Webbs Enterprises, Jupiter, FL

12:15 – 1:15 LUNCH and CLOSING KEYNOTE SPEAKER

12:15 - 12:30

DEEP WELL INJECTION IN FLORIDA:

Where does deep well injection fit with state water policy, economic reality and Florida's environmental issues?

Brandon D. Tucker, PA, President, The Tucker Group, LLC, Okeechobee, FL



Brandon was born and raised in Okeechobee, a third-generation Floridian, and has resided in Martin County for the past 20 years. From 2017 to 2019 he was a Governing Board Member of the South Florida Water Management District, Appointed by Governor Rick Scott. As a businessman, he has successfully sold over \$550,000,000 in farm and ranch real estate over the past decade throughout South-Central Florida.

1:15 Conference Ends



REGISTRATION/EXHIBIT/SPONSORSHIP PAYMENT FORM

Deep Well Injection Conference - Miami-Dade Water and Sewer Department - March 2 & 3, 2020

REGISTRATION:

SPONSOR: Sponsor Levels:

Deep Well Injection – Miami March 2020	March 2 & 3		March 2 only	March 3 only		
YOU MUST CHECK ONE: →						
General Registration	□ \$350		□ \$250	□ \$150		
AGWT Corporate Member	□ \$300		□ \$210	□ \$120		
Full-Time Student (ID required at Registration)	□ \$75		□ \$50	□ \$25		
Field trip (March 1, 2:30-5:00pm)	□ \$40					
Presentation PowerPoints download (Registrant Price)		□ \$30				
Speaker – Day of Presentation Marc	a 2 □ \$0 March 3 □ \$0 (complimentary)		entary)			
Speaker - Additional Day Mare	h 2 □ \$100 March 3		3 □ \$100			
Registration includes: breaks, and lunch						

□ \$3,000 **□** \$2,000 **□** \$1,000 **□** \$500

EXHIBITOR: Exhibit Table - Personal registration (above) also required □ \$ 300

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

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