

FLORIDA UNDERGROUND INJECTION WORKSHOP

FLORIDA'S DEEP-WELL INJECTION PROGRAMS: ECONOMIC AND ENVIRONMENTAL ISSUES



Friday, September 22, 2017

An educational workshop program from the
American Ground Water Trust

Florida Hotel & Conference Center
1500 Sand Lake Rd, Orlando, FL 32809



The objective of the workshop is to provide an update on the status of deep well injection disposal operations in Florida and to showcase the “state-of-the-art” and operation-economics for potential future municipal or industrial adopters of the technology. The presentations will include information on the latest technologies in design, construction, operation, maintenance and monitoring of deep well injection in Florida. The workshop will provide information exchange and discussion opportunity among presenters and participants.



CONTINUING EDUCATION

The AGWT will issue certificates of attendance

Approved - FL Prof Engineers Provider #306 – 6.0 PDH - Course #0009165



PROGRAM SPONSORS (JOIN THIS LIST – AGWT.ORG/EVENTS)



7:15 - 8:15 REGISTRATION

8:15 – 8:45
DEEP WELL INJECTION: PAST PRESENT AND FUTURE IN FLORIDA
Mark McNeal, CEO, ASRus, Tampa, FL

8:45 – 9:15
OVERVIEW OF FLORIDA'S DEEP INJECTION WELL PROGRAM: FOCUS ON RECENT ISSUES
Joe Haberfeld, Environmental Administrator, FL Dept Env. Protection, Tallahassee, FL

9:15 – 9:45
CLASS 1 WELL CONSTRUCTION
Michael Sordan, General Manager, Florida Operations, Layne Christensen, Ft. Myers, FL

9:45 – 10:15
EVALUATING CONFINEMENT IN FLORIDA DEEP INJECTION WELLS - GEOPHYSICAL LOGGING AND
MODELING APPROACHES
Bob Maliva, Principal Hydrogeologist, WSP Parsons Brinckerhoff, Fort Myers, FL

10:15 – 10:35 BREAK

10:35 – 11:05

THE DESIGN, OPERATION AND INTEGRITY-TESTING OF INJECTION SITE MONITORING WELLS

Helen Madeksho-Hickman, Aquatech GeoSciences, Inc., Lake Clarke Shores, FL

11:05 – 11:35

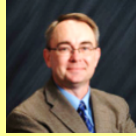
PASCO COUNTY: UNCHARTERED TERRITORY FOR LANDFILL LEACHATE CLASS I INJECTION

Mike Weatherby, CEO, HydroGeo Consulting LLC, Tampa, FL

11:35 – 12:15

Keynote Presentation

NATIONAL TRENDS, DRIVERS AND CONSTRAINTS FOR DEEP WELL DISPOSAL



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

12:15 – 1:15

LUNCH

1:15 – 1:45

TECO BIG BEND POWER STATION CLASS I WELL FEASIBILITY FOR FLUE-GAS DESULFURIZATION
WASTEWATER DISPOSAL AND WATER MANAGEMENT

Mike Condran, Principal, GHD, Tampa Florida and Mike Weatherby, CEO, HydroGeo Consulting LLC, Tampa, FL

1:45 -2:45

THE DEPTH OF TREATED WASTEWATER FOR MIAMI-DADE, FL

Ocean Outfall Legislation Background – Hydrogeology of Miami-Dade

Operation Protocols and Economics – Expansion Plans and the System of Tomorrow

Panel Moderator:

Ed Rectenwald, Senior Principal, MWH/Stantec, Fort Myers, FL

Presentation team:

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

Ed Rectenwald, Senior Principal, MWH/Stantec, Fort Myers, FL

Gerrit Bulman, South Florida Operations Lead, CH2M, Fort Lauderdale, FL

2:45 – 3:00

BREAK

3:00 – 4:00

Deep Well Injection Discussion Panel

**OKEECHOBEE – EVERGLADES - UNDERGROUND INJECTION FOR DISPOSAL OF STORM WATER
A WATER RESOURCES AND ENVIRONMENTAL CONUNDRUM:**

Panel Moderator:

Pete Quasius, Advocacy Director, Audubon of the Western Everglades, Fort Myers, FL

Presentation team:

Bob Verrastro, Lead Hydrologist, South Florida Water Management District, West Palm Beach, FL

Thomas MacVicar, President, MacVicar Consulting Inc., West Palm Beach, FL (invited)

Jason Totoiu, Executive Director & General Counsel, Everglades Law Center, Winter Haven, FL

4:00

WRAP-UP and ADJOURN

↓Scroll down for registration information↓

Registration – www.agwt.org/events

Registration is available for the Sept 22 Underground Injection workshop only, or
for the workshop and the Sept 20-21 Conference.

↓Scroll down for registration information↓

Registration – www.agwt.org/events

Call us at 800 423 7748 if you have questions

OPTION #1: FLORIDA AQUIFER CONFERENCE: Groundwater Issues – Aquifer Management
Wednesday & Thursday, September 20 & 21 – Register below or online at www.agwt.org

Call to be an event sponsor (800 423 7748)

	Two Day Sept 20 & Sept 21	One Day Sept 20 or Sept 21
YOU MUST CHECK ONE: →	<input type="checkbox"/>	<input type="checkbox"/> or <input type="checkbox"/>
General Registration	\$385 <input type="checkbox"/>	\$230 <input type="checkbox"/>
AGWT Member/Gov't Employee	\$355 <input type="checkbox"/>	\$205 <input type="checkbox"/>
Full-Time Student (ID required at Registration)	\$130 <input type="checkbox"/>	\$80 <input type="checkbox"/>
Download of presentation ppts (Registrant Price)	\$30 <input type="checkbox"/>	
Exhibit Table (personal registration also required)	\$300 <input type="checkbox"/>	
<i>Includes: access to exhibits, reception, breaks and lunch(s)</i> Total for all checked boxes \$		

SPEAKER REGISTRATION - SEE OPTION #4

PAYMENT: Check *[payable to: AGWT]*
 AMEX Visa/MC Expiration ----- PO
 CC or PO # _____
 Cardholder Name _____
 Registration Name _____
 Title/Position _____
 Company _____
 Address _____
 City State Zip _____
 Phone _____
 E-Mail _____

OPTION #2: UNDERGROUND INJECTION WORKSHOP: UI Engineering/Design/Drilling/Modeling
Friday, September 22, 2017 – Register below or online at www.agwt.org

Call to be an event sponsor (800 423 7748)

General Registration	\$255 <input type="checkbox"/>
AGWT Members/Gov't	\$220 <input type="checkbox"/>
Full-time Student (ID required)	\$100 <input type="checkbox"/>
Download of presentation ppts (Registrant Price)	\$ 30 <input type="checkbox"/>
Exhibit Table (personal registration also required)	\$250 <input type="checkbox"/>
Registration includes handouts, coffee breaks & lunch	
TOTAL \$ _____	

SPEAKER REGISTRATION – SEE OPTION #4

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 Cardholder Name _____
 Registration Name _____
 Title/Position _____
 Company _____
 Address _____
 City State Zip _____
 Phone _____

**OPTION #3: REGISTER FOR BOTH EVENTS - Sept 20, 21 and 22, 2017
(three days)
FL AQUIFER CONFERENCE AND UNDERGROUND INJECTION
Register below or on-line at www.agwt.org**

Call to be an event sponsor (800 423 7748)

General Registration	\$550 <input type="checkbox"/>
AGWT Members/Gov't	\$515 <input type="checkbox"/>
Full-time Student (ID required)	\$180 <input type="checkbox"/>
Download of BOTH presentation ppts (Registrants)	\$ 60 <input type="checkbox"/>
FL Aquifer Conference ONLY	\$ 30 <input type="checkbox"/>
FL Underground Injection Workshop ONLY	\$ 30 <input type="checkbox"/>
Exhibit Table - BOTH EVENTS	
(personal registration also required)	\$425 <input type="checkbox"/>
Registration includes handouts, coffee breaks & lunch	
TOTAL \$	_____

SPEAKER REGISTRATION – SEE OPTION #4

PAYMENT: Check [payable to: AGWT]

AMEX Visa/MC Expiration ----- PO

CC or PO # _____

Cardholder Name _____

Registration Name _____

Title/Position _____

Company _____

Address _____

City State Zip _____

Phone _____

E-Mail _____

**OPTION #4: SPEAKER REGISTRATION
FL AQUIFER CONFERENCE and/or WATER SUPPLY SYSTEMS WORKSHOP
Register below or on-line at www.agwt.org**

Speakers receive complimentary registration for the day of their presentation.

Speaker Presentation Date	Sept 20 <input type="checkbox"/>	Sept 21 <input type="checkbox"/>	Sept 22 <input type="checkbox"/>
Speaker Additional Attend Date(s)	Sept 20 - \$100 <input type="checkbox"/>	Sept 21 <input type="checkbox"/> - \$100	Sept 22 <input type="checkbox"/> - 100

Total (checked "additional attend" boxes x \$100) \$ _____

Note: Each additional attend date is specially priced at \$100 per day.

PAYMENT: Check [payable to: AGWT]

AMEX Visa/MC Expiration ----- PO

CC or PO # _____

Cardholder Name _____

Registration Name _____

Title/Position _____

Company _____

Address _____

City State Zip _____

Phone _____

E-Mail _____