

MANAGING FLORIDA'S AQUIFERS

Holiday Inn Hotel, Orlando Airport, Orlando, FL, Monday Sept 21 & Tuesday Sept 22, 2015

Day one 8:30 to 5:00 – Reception 5:30- 6:45 Day two 8:30 to 4:00

Topics to be covered include:

National & state score-sheet for ASR

New USGS Assessment of Floridan Aquifer

Updates on Florida's Aquifer Storage Recovery projects

Federal Government's Waters of the U.S. Rule (WOTUS)

Aquifers for thermal energy storage – best way to save energy

Aquifer Recharge as a feasible antidote to climate change effects

What are the implications of "sole source aquifer" designation of the Floridan?

How serious is the threat to Florida's groundwater from Oil & Gas well stimulation?

Does aquifer recharge have a future in managing Everglades environmental flows and water quality issues?



This is the American Ground Water Trust's 15th annual aquifer recharge program with a focus on Florida water management issues. The event is an essential one-stop-shop for all professionals, end-users and citizens who have an interest in the management of Florida's aquifers. Year after year the attendees tell us that this is the one water-issues conference in Florida that they don't want to miss. The invited program presenters will provide updates on projects and technology innovations and the regulatory framework that allows for the development and the conservation of the state's groundwater. In the two days of the conference there will be opportunity to discuss and assess progress and roadblocks for effective integrated management of Florida's water resources.



WHO SHOULD ATTEND?

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

CONTINUING EDUCATION

The AGWT will issue certificates of attendance

Approved - Water Well Contractors – 10 Credits – 4 S/B and 6 R/R. Course ID 124-092115-101

Approved - FL Prof Engineers Provider #306 – 13 PDH (Day 1 – 6.75 - #0009166/ Day 2 - 6.25 PDH ~ #0009941)

Approved - Water/Wastewater Operators 12.5 PDHs (Day 1 – 6.5/Day 2 – 6.0)



Endorsed by the IAH Commission: Groundwater for Decision-makers

↓ Scroll Down for program, hotel and registration information ↓

Day one Program – Monday, September 21st

7:00 REGISTRATION

8:20 Introduction

- 8:30 LARGE-SCALE ARTIFICIAL GROUNDWATER RECHARGE OVER LONG-TIME PERIODS IN RESPONSE TO CLIMATE CHANGE IN ARID REGIONS AND FLORIDA
Dr. Thomas M. Missimer, U. A. Whitaker College of Engineering, Florida Gulf Coast University, Fort Myers, FL
- 9:00 SB 536: PROGRESS UPDATE ON THE USE OF RECLAIMED WATER, STORMWATER, AND EXCESS SURFACE WATER IN FLORIDA
Janet G. Llewellyn, Policy Administrator, Office of Water Policy, Florida DEP, Tallahassee, FL
- 9:30 UPDATE ON FLORIDA'S AQUIFER RECHARGE REGULATIONS AND RECENT PERMITS
Joe Haberfeld, UIC Program Manager, Florida DEP, Tallahassee, FL
- 10:00 FEDERAL GOVERNMENT'S WATERS OF THE U.S. RULE (WOTUS) (Takes effect August 28th) IMPLICATIONS FOR FLORIDA'S LANDOWNERS AND WATER MANAGERS
Greg Munson, Shareholder, Gunster Law Firm, Tallahassee, FL

10:20 BREAK

- 10:45 REVISED HYDROGEOLOGIC FRAMEWORK OF THE FLORIDAN AQUIFER SYSTEM IN FLORIDA
Dr. Eve Kuniansky, Groundwater Specialist, United States Geological Survey, Norcross, GA
- 11:15 NUTRIENT REDUCTION DURING ASR CYCLE TESTS IN THE UPPER FLORIDAN AQUIFER
Dr. June Mirecki, Geochemist, US Army Corps of Engineers, Jacksonville FL
- 11:45 POTENTIAL OPPORTUNITIES FOR AQUIFER RECHARGE IN THE JACKSONVILLE AREA
Mike Dykes, Engineer, CH2M, Jacksonville, FL and Erik Svenson, Hydrogeologist, CH2M, Charlotte, NC

12:15 LUNCH

- 1:30 CLEARWATER: RESULTS FROM THE FIRST FLORIDA POTABLE REUSE PILOT WITH POST-TREATMENT FOR AQUIFER PROTECTION
Dr. Dave MacNevin, Project Engineer, Tetra Tech, Miami, FL
- 2:00 UPDATE ON RULE MAKING AND LEGISLATION RELATED TO MINIMUM FLOWS AND LEVELS AND SPRINGS
Eric Olsen, Shareholder, Hopping Green & Sams, Tallahassee, FL
- 2:30 ECONOMICS OF MANAGED AQUIFER RECHARGE - COSTS, BENEFITS, AND RISKS
Dr. Bob Maliva, Principal Hydrogeologist, Schlumberger Water Services, Fort Myers FL

3:00 BREAK

3:15 Panel Session

**AQUIFER STORAGE AND RECOVERY (ASR) SYSTEMS:
THE SUCCESS SCORE-SHEET FOR UNITED STATES PROJECTS**

- Panel Moderator: Tracey Mercer, Public Utilities Director, City of Clearwater, FL
- ASR CHALLENGES AND SOLUTIONS: SOME NATIONWIDE PERSPECTIVES
David Pyne, President, ASR Systems, LLC, Gainesville, FL
- TECHNICAL AND REGULATORY ISSUES: AN OVERVIEW OF WEST COAST ASR PROJECTS
Jeff Barry, Principal Hydrogeologist, GSI Water Solutions Inc. Santa Barbara, CA
- WICHITA, KANSAS: AQUIFER STORAGE RECOVERY PROJECT
Brian Meier, Associate Environmental Engineer, Burns & McDonnell, Wichita, KS
- FLORIDA ASR PROJECTS TRACK RECORD
Donald Ellison, Senior Professional Geologist, Southwest Florida Water WMD, Brooksville, FL

5:15 RECEPTION (cash bar)

Day two Program – Tuesday, September 22nd

7:30 REGISTRATION

- 8:15 SUMMARY OF DAY ONE
Mike Weatherby, CEO, HydroGeo Consulting LLC, Tampa, FL
- 8:30 WEST PALM BEACH WATER QUALITY CRITERIA EXEMPTION ALLOWS CYCLE TESTING WITHOUT DISINFECTION
Dr. Poonam Kalkat, Assistant Director of Utilities, City of West Palm Beach, FL and James Andersen, JLA Geosciences, Jupiter, FL
- 9:00 UPDATE REPORT ON RECLAIMED WATER ASR PROJECTS - SARASOTA COUNTY AND CITY OF PALMETTO
Thomas Farkas, Senior Hydrogeologist, Water Systems Engineering, Atkins Global, Tampa, FL

- 9:30 A REGULATORY INSTITUTIONAL CONTROL FOR ASR UIC PERMITS: MEETING THE TEST OF REASONABLE ASSURANCE
John Mayhut, Senior Project Hydrogeologist and Mike Waldron, Senior Hydrogeologist, Water Resources Management, Kadrmass Lee & Jackson, Lake Worth, FL
- 10:00 EXPANDING ALTERNATIVE WATER SUPPLY OPPORTUNITIES IN CENTRAL FLORIDA THROUGH CLASS V INJECTION WELL PERMITTING
Mark McNeal, President, ASRus, LLC, Tampa, FL

10:30 **BREAK**

- 10:45 NEXTGEN UNDERGROUND THERMAL ENERGY STORAGE SYSTEM & FLORIDA'S GEOLOGY: A PERFECT FIT:
Chuck Hammock, Partner, Andrews Hammock & Powell, Inc., Consulting Engineers, Macon, GA
- 11:15 TECHNIQUES TO OPTIMIZE A CONVENTIONAL ACID TREATMENT FOR ASR WELLS.
Paul Petrey, Operations Manager, Applied Drilling Engineering, Inc., Tampa, FL
- 11:45 DEEP WELL INJECTION, AQUIFER RECHARGE OR ASR? AN ALTERNATIVES ANALYSIS APPROACH
Marty Clasen, Hydrogeologist, ASRus, LLC, Tampa, FL

12:15 **LUNCH**

- 1:15 EVERGLADES RESTORATION: THE ASR REGIONAL STUDY REPORT ON SCIENTIFIC & ENGINEERING INVESTIGATIONS
Robert Verrastro, Hydrologist, South Florida Water Management District, West Palm Beach, FL
- 1:45 RISKS TO GROUNDWATER FROM OIL & GAS WELL STIMULATION AND RELATED WASTE WATER DISPOSAL IN COUNTIES OVERLYING THE SUNNILAND FORMATION
Jennifer Hecker, Director of Natural Resource Policy, Conservancy of Southwest Florida, Naples, FL
- 2:15 PROTECTION FOR FLORIDA'S GROUNDWATER BY DESIGNATING THE FLORIDAN AQUIFER AS "SOLE SOURCE" DRINKING WATER SUPPLY
Tom Larson, Conservation Chair, Sierra Club, Jacksonville, FL
- 2:45 THE ECONOMIC IMPLICATIONS AND THE IMPACTS ON WATER SUPPLY MANAGEMENT OPTIONS IF THE FLORIDAN AQUIFER IS DESIGNATED "SOLE SOURCE"
Chuck Drake, Saint Johns River Water Management District Governing Board Member, Orlando, FL
- 3:15 WATER MANAGEMENT: WHAT DOES *SUSTAINABLE* MEAN?
Andrew Stone, American Ground Water Trust, Concord, NH

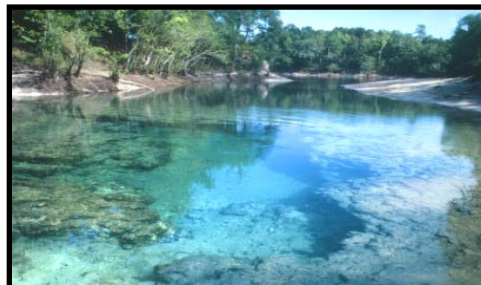
3:45 **ADJOURN**

↓ Scroll Down for hotel and registration information ↓

HOTEL INFORMATION



- ~ Holiday Inn Hotel, 5750, TG Lee Blvd., Orlando, FL 32822
- ~ Free shuttle service available from the airport. (Hotel is 2.0 miles from Airport)
- ~ A block of rooms has been reserved at the *Ground Water Conference* rate of \$103 per night.
- ~ Reservations received after Aug 30h subject to availability and prevailing room rates
- ~ Self-parking is now \$10 per day ☺



Scroll Down for registration information ↓

**THANK YOU TO OUR 2015 FLORIDA AQUIFER PROGRAM SPONSORS!
BECOME A SPONSOR: Call 800 423-7748 or visit web-site – agwt.org**



REGISTRATION - AQUIFER RECHARGE CONFERENCE – ORLANDO 2015

Includes: access to exhibits, reception, breaks and lunch(s)

Call to be an event sponsor (800 423 7748)

YOU MUST CHECK ONE: →

- General Conference Registration
- American Ground Water Trust Member
- Government Employee (Municipal, County, State, Federal)
- Official Representatives of 501(c)(3) non-profits
- Full-Time Student (ID required at Registration)
- Electronic down-load of presentations
- Exhibit Table (You must also register to attend.)

Two Day
Sept 21 & Sept 22

One Day
Sept 21 or Sept 22

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<p align="center">CANCELLATION POLICY</p> See website (Registration)

"The AGWT aquifer program is always a great networking opportunity"