

AQUIFER STORAGE ISSUES IN THE MID-ATLANTIC REGION

Conference, Atlantic City, Monday, March 23, 2009

8:30 – 5:00 pm



Harrah's Resort Atlantic City
777 Harrah's Blvd, Atlantic City, NJ 08401
Phone: (800) 645-6774

Background

WHAT IS THE CONFERENCE ALL ABOUT?

This is the American Ground Water Trust's 20th Conference focused on Aquifer Storage; bringing together scientists, engineers, planners, water-resource managers, concerned citizens, etc.

Conference presentations will address many issues, including:

- Making greater use of ground water storage potential
- Assessing the real economics of building storage dams
- Comparison of environmental impact of aquifer storage and non-aquifer storage solutions
- Updates on existing projects, the latest engineering designs and pilot testing results
- Legal and regulatory authority over water management options
- Where is the recharge water? (Recycle? Storm runoff? Desalination?)
- Aquifer management success stories from around the United States

MAJOR CONFERENCE QUESTIONS

- Can aquifer recharge become a more significant part of the region's water management toolbox?
- What can we learn from states where water management includes aquifer recharge?
- If the hydrology and the engineering will work – is water available for recharge?
- Do we need new legislation or rules & regulations to facilitate artificial recharge?

WHO SHOULD ATTEND?

- Municipal and Water Utility Managers, Water Planning Specialists, Water Commissioners
- Geologists, Hydrogeologists, Engineers, Well contractors
- Landowners, Irrigators, Industry Leaders
- State and Federal Agencies, Water Supply Regulators, Health Officials
- Concerned Citizens, Environmentalists, Politicians, Attorneys

SPONSORS AND EXHIBITORS

(See website www.agwt.org for sponsorship & exhibiting opportunities)

PROGRAM

7:30 – 8:30 **REGISTRATION** (Coffee and donuts)

8:30 – 8:45

Andrew Stone, Executive Director, American Ground Water Trust, Concord, NH
The American Ground Water Trust Position on Aquifer Recharge, Storage and Recovery

8:45 – 9:15

Morning Keynote Presentation
Vincent Monaco, P.E. - Asset Planning Manager,
New Jersey American Water, Delran, NJ
Ground Water and Surface Water: Perfect Together
[ASR makes the marriage!]

Prior to joining NJ American Water last year, Vince Monaco was Chief of the Bureau of Water System & Well Permitting in the Division of Water Supply, NJ Department of Environmental Protection. As Bureau Chief he was responsible for all permitting activities associated with water system infrastructure in the state. In his 30 year+ career with the NJ DEP he had firsthand knowledge of technical innovations relating to proposed and implemented water supply and storage projects.

9:15 – 9:45

Mark Lucas, CH2M Hill, Philadelphia, PA
The Use of ASR to Restore System Capacity

9:45 – 10:15

Joe Dugandzic, New Jersey American Water Company, Delran, NJ
Lessons Learned from Fourteen Years of Operational Experience with a Successful ASR Program

10:15–10:30 **BREAK**

10:30 – 11:100

Gary Ziegler, Executive Director, The Wildwood Water Utility, Wildwood, NJ
Forty Years of Maximizing Water Resources with ASR Projects in the Mid-Atlantic Area

11:00– 11:30

Robert G. Maliva, Schlumberger Water Services USA Inc., Fort Myers, FL
Hydrology of ASR and its Water Resources Management Benefits and Limitations

11:30 – 12:00

Jim Bailey, Principal Hydrologist, Kleinfelder, Bellevue, WA
Assessment of Recharge-Well Performance: Techniques for Development and Rehabilitation

12:00 -12:15

Questions & Discussion of Morning Session Presentations

12:15 – 1:15 **LUNCH / NETWORKING / EXHIBITS** (lunch provided)

1:15 – 1:45

Brian Butters, President, Purifics, London, Ontario
A Technical & Economic Review of Technologies Available for Pre-Treatment of Recharge Water

1:45 – 2:15

Kent Madison, President, 3R Valve, Echo, OR
Maximizing Recharge Efficiency: Options for the Design and Operation of Recharge-Well Valves

2:15 – 3:00

Invited Presentation

Lynn Stiles, Vice-President, NJHEPS; and Professor, Physics, Natural Science and Mathematics, Richard Stockton College, NJ; *Aart L. Snijders and A. Willemsen, IF Technology bv, Arnhem, The Netherlands*

ASR and ATES (Aquifer Thermal Energy Storage): Similarities and Differences - an Update on the ATES Project at Richard Stockton College, Pomona, NJ

AQUIFER THERMAL ENERGY STORAGE systems store winter's natural cold by chilling ground water and putting it back into the aquifer for storage. Ground water is chilled by being run through a cooling tower when conditions of temperature and humidity are favorable. In summer, the chilled water is withdrawn, used for air conditioning and put back into the aquifer.

The New Jersey Higher Education Partnership for Sustainability (NJHEPS) is a consortium of 40+ higher education institutions in New Jersey. The Partnership's mission is to promote the implementation and integration of sustainability.

3:00 – 3:15 **BREAK**

3:15 – 4:00

Afternoon Keynote Presentation

David Pyne, PE, President, ASR Systems, Gainesville, FL *National and Regional Perspective on the Economics of ASR as a Water Management Strategy*

David Pyne has pioneered development of ASR technology during the past 25 years and has directed or provided technical consultant assistance during development of about half of the 72 operating ASR well fields in the United States, including 10 of the 13 ASR well fields in Florida. He is a civil engineer with extensive national and international experience. He is the author of the 600 page book, *Aquifer Storage Recovery: A Guide to Ground Water Recharge Through Wells*, second edition (2005).

4:00 – 5:00

Regional and State Perspectives on Regulatory Issues related to Managed Aquifer Recharge/ Artificial Recharge/ Aquifer Storage Recovery etc.

Panel Presentations and Discussion

- ◆ Cat Shrier, President, Water Cat Consulting, Washington DC
Overview of the water use management programs for Mid Atlantic states
 - ◆ William Cocke, Manager - Water Allocations, DNREC - Division of Water Resources, Dover, DE
 - ◆ Fritz Wise, Principal Environmental Specialist, and
 - ◆ Lisa Hoare, Senior Environmental Specialist,
Bureau of Nonpoint Pollution Control, NJ DEP, Trenton, NJ
- Regulatory Issues: implementation and operation of Managed Aquifer Recharge**

5:00 – 6:00 Cash bar - **RECEPTION**

CONTINUING EDUCATION CREDIT



An attendance certificate can be provided to all participants seeking to use this workshop for continuing education credit. Each attendee is responsible for determining the applicability of the program for educational credit through their specific certifying entity or agency.

HOTEL INFORMATION

Hotel Rooms

Each individual is responsible for making his/her own reservations with Harrah's Resort Atlantic City. A block rate has been arranged at \$89.00 per room, per night in the Harbour Tower (single or double occupancy). Reservations must be made through Harrah's Convention Reservations Department by calling 1-609-441-5776 between the hours of 8:30AM and 4:30PM, Monday through Friday, before March 6, 2009. Each individual must identify themselves with American Ground Water Trust in order to receive the discounted rate. Any reservations made after the cut-off date are on a space availability basis at the current rack rates.

Directions

From New York:

Take NJ Turnpike Exit 11 to the Garden State Parkway. Take Exit 38 to the Atlantic City Expressway. At the end of the Expressway, take Exit 1 (the Marina Exit) to the Atlantic City Connector. Follow the signs to Harrah's Resort.

From Philadelphia:

Take the Ben Franklin or Walt Whitman Bridge to the North South Freeway (Rte. 42) south, to the Atlantic City Expressway. At the end of the Expressway, take Exit 1 (the Marina Exit) to the Atlantic City Connector. Follow the signs to Harrah's Resort.

↓ Registration information ↓

REGISTRATION FORM

AQUIFER STORAGE ISSUES IN THE MID-ATLANTIC REGION

Harrah's Resort Atlantic City, 777 Harrah's Blvd, Atlantic City, NJ 08401

Monday, March 23, 2009

Register online: <http://www.agwt.org/programs.htm>

Pre-registration	(General)	<input type="checkbox"/>	\$230.00
Pre-registration	(Employees of AGWT Members) (\$250+ Level)	<input type="checkbox"/>	\$180.00
Pre-registration	(Full-Time Student) (ID Required at Registration)	<input type="checkbox"/>	\$110.00
Exhibit Table	(Registration not included; you must also register above.)	<input type="checkbox"/>	\$250.00
CD of presentations for Attendees	(Mailed post event) (Non-Attendees Price \$50)	<input type="checkbox"/>	\$ 15.00

(Registration includes on-site lunch and breaks)

(Walk-in registration: General \$270, AGWT Member \$210, Student \$130)

PAYMENT TOTAL \$ _____

CHECK (Payable to: American Ground Water Trust)

VISA/MC AMEX PO # _____

Card # _____ Exp. Date _____

Cardholder Name _____ Cardholder E-mail _____
(Payment receipt will be sent via email)

Name for Registration _____ Registrant E-mail _____
(Registration confirmation will be sent via email)

Title _____ Phone _____

Company _____ Fax _____

Address _____

City _____ State _____ Zip _____

Mail to: American Ground Water Trust , 50 Pleasant Street, Suite 2, Concord, NH 03301-4073
PHONE: 1-800 423-7748 OR 603-228-5444 6
FAX: (603) 228-6557

