

Fall 2018



AMERICAN GROUND WATER TRUST NEWSLETTER

Water issues programs and education since 1986

MANAGING FLORIDA'S AQUIFERS

The AGWT's 18th Annual Conference in Orlando focused on the role of aquifer recharge in managing Florida's groundwater. There were twenty-four technical presentations that included modeling, well design, minimum flows and levels compliance, sea level rise impact on groundwater, estuary protection wells, how geothermal saves water, and project updates on the state's many active recharge projects. The keynote presenter was Robert Beltran, President, Hydro Solutions Consulting, formerly Executive Director of the Southwest Florida Water Management District, who spoke about Florida's groundwater management challenges.



One hundred twenty water professionals attended the program, which also provided updates on the regulatory framework that allows for the development and the conservation of the state's groundwater for economic and environmental needs.

Make a plan to join us in Orlando in September 2019

CALENDAR

PFAS and Water Supply
Sacramento, CA
October 11

Colorado Groundwater Issues
Denver, CO
October 17-18

Water Well Efficiency
Bakersfield, CA
December 10

Groundwater & Coal Combustion Residuals
Atlanta, GA
January 16 2019

AGWA-AGWT Annual Groundwater Issues Conference
Ontario, CA
February 11-12, 2019

Deep Well Injection Conference
Miami, FL
February 25-26, 2019

To exhibit or sponsor call
800-423-7748

WHO CONTROLS GROUNDWATER?



The AGWT Annual New Mexico Groundwater Issues Conference in July included over twenty engineering, scientific, management and legal presentations with a focus on states' rights and the control of groundwater. Among the seven



attorneys who spoke at the program were Samantha Waterman, Cadiz, (left photo) and Amy Steinfeld, Brownstein Hyatt Farber Schreck (right photo) who spoke about the Cadiz water project that will tap some of the huge reserves of groundwater in the Mojave Desert. They highlighted the basic "politics vs. science" issue and explained the legal challenges involved in overcoming federal and state agency roadblocks and legal hurdles. [See www.cadizwaterproject.com for project information]

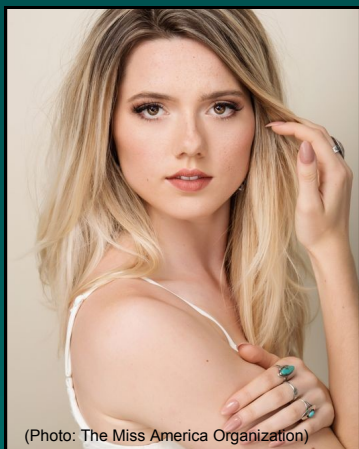
Among other conference topics were seven presentations on tribal water rights, an issue that has gained national attention following the Coachella v Agua Caliente case in California, in which the court backed the Agua Caliente Tribe's claim that it holds a federally granted reserved right to groundwater beneath the Tribe's reservation. Presenting the groundwater management implications of the Agua Caliente decision was attorney Roderick Walston, Best Best & Krieger, who was one of the attorneys involved in the case.



SGS

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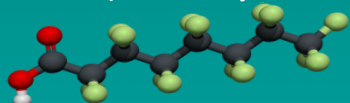


(Photo: The Miss America Organization)

Miss Michigan didn't shy away from water politics at this year's Miss America Pageant. She introduced her state by saying:

"From the state with 84% of the U.S. freshwater but none for its residents to drink, I am Miss Michigan Emily Sioma."

Emily was primarily talking about Flint's drinking water problems, but there are also serious PFAS issues in Michigan. The state's PFAS Contamination was the subject of an AGWT workshop in Grand Rapids in July.



Utility managers and drinking water providers are faced with the need to respond to concerns about health issues, regulations, property values, remediation options and infrastructure costs.

Our next PFAS workshop is in Sacramento, CA on Thurs, October 11, 2018

The Sacramento program will provide objective information about quality testing, health risks and treatment solutions.

The workshop will include legal perspectives about litigation as a possible solution to find the capital to fund solutions for a safe water supply.

COLORADO GROUNDWATER - Denver, Oct 17 and 18

AQUIFER STORAGE

Regulatory constraints, Who benefits, Who owns recharged water?

WELL CONSTRUCTION

New technology, Success stories, Maximizing pump efficiency.

IRRIGATION WATER QUALITY

Reuse impacts, Water quality statutes, Crop tolerance.

ASR IN DESIGNATED BASINS

Joint Parties & Districts' perspectives on rule-making.

GEOPHYSICS APPLICATIONS

Find old wells, Identify permeable zones.

**Farmer Panel
Legislator Panel**



WATER WELL AND PUMPING TECHNOLOGY WORKSHOP

Bakersfield, CA ~ December 10, 2018

The program will be a great learning opportunity for irrigation growers, well owners, and farm management water professionals on practical, cost-effective solutions to optimize groundwater. With the specter of Sustainable Ground Water Management (SGMA) requirements looming, "crop for drop" is a priority for growers.

The workshop will cover how to maximize the economic return on groundwater by correct pump selection, well operation and the use of real-time data for precision agriculture. Descriptions of software to enable end-users to effectively match well pumping to aquifer conditions and water demands will be included.

GROUNDWATER AND COAL COMBUSTION RESIDUALS ENVIRONMENTAL AND REGULATORY ISSUES

Atlanta, GA ~ January 16, 2019

Coal combustion residuals (CCR) stored in ponds and dumps can generate contaminated leachate that impacts rivers wetlands and groundwater. The primary sources of coal combustion residuals are coal-burning power stations. There are close to 250 facilities in the US that generate CCR and approximately 700 places where combustion residuals are stored in landfills, disposal sites and ponds. CCR may contain complex suites of heavy metals in addition to other contaminants.

The AGWT's program will be held at the Georgia State Bar in Atlanta, GA. It will include discussion of rules being developed by states for environmental protection, site assessment guidelines for CCR management, solutions to groundwater analysis and remediation and advances in economic uses for ash deposits as concrete aggregate and as a source for metals for electronics applications.

In addition to attorneys, regulators, consultants and engineers, the conference will be an opportunity for water managers, environmental organizations and elected representatives to gain an informed perspective on the issues.



DEEP WELL INJECTION CONFERENCE

Miami, FL ~ February 25 & 26, 2019

The Miami program will provide a national update on the current status of deep well injection disposal (DWI) of fluids. DWI technology is typically used for fluids we don't want, such as municipal waste water, excessive storm water, reverse osmosis brines, landfill leachate, hydraulic fracturing fluids and fluids from industrial process. The main driver for adopting the technology is the economic cost of treatment and may be triggered by environmental regulations. The principal concerns of objectors to DWI are the potential threats to groundwater integrity in aquifers used for drinking water supply.

The Miami program is aimed at industrial and municipal users of the technology and at potential adopters of fluid injection strategies. There is an optional pre-conference field-trip (Feb 24) to Miami Dade deep well injection drilling sites.



www.agwt.org/events - For program details, registration and sponsor & exhibit opportunities for all AGWT education/conference/workshop programs

THE AMERICAN GROUND WATER TRUST'S 2018 SCHOLARSHIP RECIPIENTS

Congratulations to Samia, Nathan, Katherine and Ethan.

Special thank you to our scholarship fund sponsors!

AMTROL, Inc., Rhode island

Samia Shell, Glenn Dale, MD, attending St. John's University (NY) ~and~

Nathan Mehrer, Monroe City, MO, attending Missouri University of Science and Technology



STETSON ENGINEERING, California

Katherine Ramos Sarmiento, Winchester, CA, attending University of California San Diego



BAROID DRILLING PRODUCTS, Texas

Ethan Skuches, Milford, CT, attending Vassar College, NY



Scholarships are for entry level college students intending to pursue a career in the field of groundwater.



AGWT is pleased to announce that Flexcon Industries (Massachusetts) will be joining our corporate scholarship sponsors for the 2019/2020 academic year. Welcome!

PFAS Report Released: NEW CDC DATA INTENSIFIES DRINKING WATER CONCERNS

The U.S. Centers for Disease Control and Prevention (CDC) recently released an 852-page review of the health risks of perfluoroalkyl substances (PFAS). The study suggests that current health advisories for PFAS, established by the U.S. Environmental Protection Agency (EPA), may not be strict enough to address serious public health risks.

Polyfluoroalkyl Substances (PFAS)—also known as Perfluorinated Compounds (PFCs)—are a diverse group of manufactured compounds frequently used as surfactants in industrial, consumer, military, and firefighting applications across the United States, such as Aqueous Film Forming Foam (AFFF) firefighting products, textiles, carpeting, metal plating, paper food packaging, cleaning products, coating additives, and pesticides.



PFAS compounds exhibit distinctive chemical characteristics that make them stable in the environment and resistant to degradation, allowing them to bioaccumulate in soil, sediment, groundwater, and animal tissue over time. Two types of PFAS are particularly persistent: Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA). PFOS and PFOA are fully fluorinated organic compounds which happen to be the most commonly produced PFAS in the U.S. Both the U.S. EPA and the California

State Water Resources Control Board (State Board) have identified various PFAS as having potential adverse effects on the environment and public health. The CDC's provisional risk level translates to 11 parts per trillion (ppt) for PFOA and 7 ppt for PFOS in drinking water using the EPA's 2016 health advisory methods and assumptions, according to water quality research scientist Dr. Laurel Schaider. These limits are considerably lower than the EPA's current health advisory levels of 70 ppt for both compounds.

(Article and photo acknowledgement: Babcock Laboratories Inc., Riverside, CA)

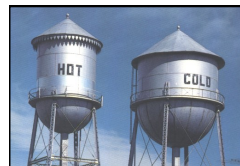


AGWA / AGWT ANNUAL CONFERENCE Ontario, CA ~ February 11 & 12, 2019



The Association of Ground Water Agencies and the American Ground Water Trust have held a joint annual groundwater conference in Ontario, California every February since 2000. This annual event provides an information exchange and networking opportunity for California's water agencies, utilities and water districts and for all water professionals (scientific, engineering, managerial, legal, environmental, regulatory), end-users of water, and local and state elected officials involved with water policy issues.

PHOTO GALLERY



Q - What do you send to someone who has very high municipal water bills?

A - A "Get Well Soon" card



AMERICAN GROUND WATER TRUST

The AGWT mission is to increase awareness about water resources issues, particularly those that involve groundwater

By convening and organizing conferences, workshops and focused training programs, the AGWT:

- Promotes efficient and effective groundwater management
- Showcases groundwater science and technology solutions
- Increases citizen, community and decision-maker awareness
- Facilitates stakeholder participation in water resource decisions
- Communicates the environmental and economic value of groundwater
- Provides a safe haven to discuss "difficult" issues

If you have suggestions for groundwater topics and issues for which AGWT public education programs can be of assistance, please email:
Andrew Stone, Executive Director - astone@agwt.org

CONGRATULATIONS to
American Ground Water Trust
Board Member Tony Morgan on his
new position with
Daniel B. Stephens & Associates, Inc.



DBS&A
Daniel B. Stephens & Associates, Inc.



DBS&A Vice President
Principal Hydrogeologist,
Tony Morgan, P.G., C.Hg.,

WAYS TO SUPPORT GROUNDWATER EDUCATION

AGWT has been providing objective information about groundwater and water resources for over 30 years. Because it is a hidden resource, groundwater is often misunderstood and undervalued. The AGWT mantra is "science as the basis for policy." In local, state and national issues regarding water policy, allocation authority and protection regulations there can sometimes be an atmosphere of exaggeration and spin from vested interests. In framing the issues for our education programs and in inviting presenters, the AGWT strives to maintain balance and inclusion of all points of view.

Some of our educational outreach is grant funded, but in order to meet our mission and provide an independent voice over groundwater issues we also rely on the generosity of individuals and companies. You can help increase our educational impact in several different ways.

- Becoming an individual or corporate member
- Sponsoring and exhibiting at an AGWT event
- Hosting a program for teachers (We have trained over 2,000)
- Sponsoring a scholarship in the name of your company
- Underwriting specific direct costs such as computers, web-site maintenance, printing, travel etc.
- Attending a program!



Connect with us!



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