

**Fall 2019**



## AMERICAN GROUND WATER TRUST NEWSLETTER

*Water issues programs and education since 1986*

A 501(c)(3) non-profit  
education  
organization

### BUSY SUMMER, BUSY FALL...

#### CENTRAL VALLEY DRINKING WATER QUALITY WORKSHOPS

**August, Fresno and Bakersfield, CA**

The AGWT in cooperation with Fresno State California Water Institute held two educational information-exchange workshops about protecting Central Valley drinking water and finding solutions for groundwater contamination, whether naturally occurring or manmade. Some of the water quality challenges are from agricultural chemicals, legacy compounds such as PFAS and naturally occurring metals such as arsenic. Fifty free registrations were provided for attendees from non-profit organizations and for community leaders working in "disadvantaged" areas of the Central Valley California where there is poor quality drinking water. The free places were made possible with funding from Registration Sponsors: ABS Energy, California Water Services, TechnoFlo, Hose Solutions, GEI Consultants, IEC, and W. M. Lyles Co. Thank you!

#### NEW ENGLAND PFAS WORKSHOP

**September, Westford, MA**

Over 100 people attended the PFAS Workshop which was convened by the AGWT to provide objective information to facilitate water providers, elected officials, citizens and community leaders with policy, planning and management decisions. The New England states are all confronting PFAS contamination of groundwater and surface water. The program discussed the technical, regulatory and legal challenges for communities responding to this legacy groundwater contamination. Water providers are faced with an urgent need to deal with concerns about health issues, regulations, property values, remediation options and infrastructure costs. (See page 2 for more details.)



#### CONFERENCE: MANAGING FLORIDA'S AQUIFERS

**October, Orlando, FL**

Our 19th year organizing this event! The Conference program had an emphasis on the science, engineering and operation of Aquifer Storage projects. Among the speakers were keynote presentations on market-based incentives for sustainability, (Ernie Cox, President, Family Lands Remembered, Florida's Water Quality Challenges, (Senator David Simmons, Florida Senate District 9) and Innovative Technologies to Manage Lake Okeechobee, (Ernie Barnett, Executive Director, Florida Land Council). The Orlando conference included a special session on the water quality challenges of PFAS legacy compounds. See Web for details on our PFAS Workshop in Tallahassee, FL in January. Planning is also underway for the 20th Annual Florida Conference in 2020.



#### ANNUAL GROUNDWATER CONFERENCE IN COLORADO

**November, Denver, CO**

This year's AGWT Conference will include a smörgåsbord of updates on Colorado groundwater projects. There is a session focused on policies to achieve long-term aquifer sustainability and a special session on PFAS contamination issues and solutions for drinking water protection. Other topics among the 24 presentations will include "geophysics by drones", what to do about acid mine drainage, legal aspects of water ownership in aquifer storage recovery programs and the economic consequences of farmers selling water rights to urban water utilities.



#### AGWT Events



**Colorado Groundwater**  
Denver, CO  
November 20 & 21

**PFAS Issues**  
Tallahassee, FL  
January 8 (2020)

**AGWA AGWT  
Annual Groundwater  
Conference (2020)**  
Ontario, CA  
February 19 & 20

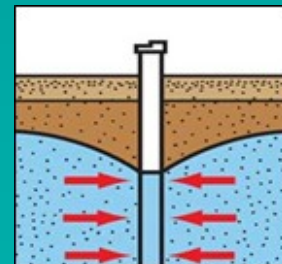
**Source Water Protection**  
NH DES and AGWT  
Concord, NH  
May 14

**Texas Groundwater**  
Austin, TX  
June 3 & 4

**New Mexico Groundwater**  
Albuquerque, NM  
July

+ more!

[www.agwt.org/events](http://www.agwt.org/events)  
for 2020 calendar



[www.agwt.org/events](http://www.agwt.org/events)

**For program details, registration and sponsor & exhibit opportunities  
for all AGWT education/conference/workshop programs**

## HEADLINE

**“New England experts: PFAS pollution is extraordinarily widespread and causing increasing concern”**



GREGORY B. HLADKY Reporter, SEP 25, 2019

**Hartford Courant**

Gregory Hladky, Reporter for the Hartford Courant, participated as a panelist in the discussion session at AGWT's PFAS Workshop held in Westford, Massachusetts. Gregory's report on the workshop was published in the Hartford Courant, the principal newspaper for Connecticut, and is reproduced below:

WESTFORD, Mass. – Polar bears. Pizza boxes. Breast milk. Stain-resistant carpeting. These seemingly unrelated things do have something in common: the hazardous chemical compounds known as PFAS. Facts about PFAS contamination were highlighted at a recent regional workshop that drew experts from all across New England to discuss these “forever chemicals.” More than 100 state regulators, consultants, medical experts, water district officials and environmental activists concerned about how to deal with the growing problem of PFAS attended the conference.

There are an estimated 4,500 different man-made chemical compounds that are collectively known as PFAS and experts warned that they are both dangerous and everywhere: in the human body, in drinking water supplies, near old industrial sites, military bases, closed landfills and in streams and rivers. The “forever” nickname relates to the way PFAS lingers in the body and the environment.

PFAS contamination became a major issue in Connecticut when tens of thousands of gallons of PFAS firefighting foam spilled into the “wild and scenic” Farmington River in June. State officials have found high levels of these chemicals in drinking water wells in Greenwich, Willimantic and Ellington. A state task force is expected to issue a draft action plan for dealing with PFAS pollution on Oct. 1.

Although there are currently no legally enforceable federal standards for PFAS pollution, studies have linked these compounds to different types of cancers, immune system issues, reproductive and childhood development problems, high cholesterol, obesity and diabetes.

The recent day-long regional workshop hosted by the American Ground Water Trust offered a look at what states in New England are doing to combat the PFAS threat and provided a lot of information.

**Here's a quick look at some of the information discussed at the event:**

**POLAR BEARS:** PFAS contamination is now such a global phenomenon that the chemicals have been detected in polar bear blood in the Arctic, according to Norman Farmer, a PFAS expert with a major chemical inspection and certification company called SGS North America.

**BREAST MILK:** Studies have shown that PFAS in the body of a nursing mother tends to concentrate in her breast milk, said Dr. Philippe Grandjean, an adjunct professor of environmental health at Harvard University. “A baby can get up to 10 times as much PFAS as the mother has,” he warned. Grandjean said he is most worried by research showing PFAS can compromise the human immune system.

**WHAT IS SAFE:** The U.S. Environmental Protection Agency has issued a safety recommendation that levels of two types of PFAS chemicals in drinking water should total no more than 70 parts-per-trillion. Despite increasing pressure from Congress, experts said they doubt the EPA will act any time soon to set strong standards over PFAS pollution.

Connecticut toughened its state standard slightly by adding in three more types of PFAS compounds. But states like New Hampshire and Vermont have recently adopted significantly stricter safety standards for various types of PFAS, down as low as 12 parts-per-trillion for drinking water. “We don’t really know what is a safe dose,” Grandjean said, “so we have to minimize it as much as we can.” Grandjean said he is glad some New England states have adopted tougher PFAS drinking water standards, then added: “I’m sorry, it’s not enough. We’ve got to do more.”

**CARPETS AND PIZZA BOXES:** PFAS chemicals have for decades been used as a key ingredient in stain-resistant carpeting and pizza boxes to keep grease and oil from penetrating. Some studies have found that indoor carpeting can release PFAS into the air of people’s homes, and Home Depot recently announced that it will cease selling carpet treated with PFAS by the end of 2019. Farmer said the EPA has estimated that 4-5 billion pounds of carpet end up each year in landfills or trash-to-energy plants. He said he’s seen corresponding estimates that three billion pizza boxes a year are disposed of in this nation. PFAS leaching in groundwater from landfills is considered a prime source of PFAS pollution around the U.S. In Connecticut, the state has so far tested only two closed landfills for PFAS pollution – one in Hartford and another in Ellington – and found the chemicals leaking out from both.

**DRY CLEANERS:** “Every time we turn around there seems to be more potential sources [of PFAS pollution],” Farmer told those attending the workshop. He said he’d been surprised to find high levels of PFAS contamination coming from dry cleaners’ wastewater.

**DEAD MONKEYS:** One of the leading manufacturers using PFAS in their products was 3M, which provided the chemical compounds for use in non-stick cookware, water-resistant clothing and other consumer products. Richard Head, a lawyer who deals in environmental contamination cases involving PFAS, said that documents obtained during lawsuits show that 3M conducted PFAS tests on rhesus monkeys in 1979 but stopped the experiment after 20 days because all the monkeys had died. Those results weren’t reported to the EPA at the time, according to Head. At a recent congressional hearing, top executives denied they should be held responsible for medical bills and clean-up programs associated with PFAS pollution.

### **HOLLYWOOD:**

PFAS is now the topic of two new feature films and experts at the New England workshop said they hope this kind of increasing attention to the pollution issue will do a lot to alert the general public to the problem.

One is an award-winning documentary called “The Devil We Know” about PFAS pollution in West Virginia near a DuPont chemical plant. The film was released in 2018 and won a top award at the Sundance Film Festival.

The second is titled “Dark Waters,” a feature film starring Mark Ruffalo, Tim Robbins and Anne Hathaway about the same West Virginia PFAS pollution case and the lawyer who sued DuPont on behalf of area residents who saw their cows die and family and friends suffer increased incidences of disease. That movie is scheduled for release in November.



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## 2019 AMERICAN GROUND WATER TRUST SCHOLARSHIP RECIPIENTS

Scholarship sponsored by **Flexcon Industries**, Randolph, MA

\$2,000 - Vivek Kampa of Livingston, NJ - attending Northeastern University

Scholarship sponsored by **Baroid IDP**, Houston, TX

\$2,000 - Chad Niemeier of Beatrice, NE - attending University of Nebraska – Lincoln

Scholarship sponsored by **Stetson Engineers**, San Rafael, CA

\$2,000 - Sadie Jonson of Aruada, CO - attending Colorado School of Mines

Scholarships sponsored by **Amtrol**, West Warwick, RI

\$1,500 - Maggie Florino – Goffstown, NH - attending the University of Vermont

\$1,500 - Michaela Layman – Orange, TX - attending Colorado State University



**Congratulations to all of our Scholarship Recipients!**

**Best of luck for a successful school year to all who applied.**

If you are interested in offering a scholarship in your company name, please contact AGWT. We will administer the program, advertise the scholarship and select award winners. The amount funded for a scholarship is awarded in full.



### AGWT CORPORATE SUPPORTER CORNER

FEATURING...

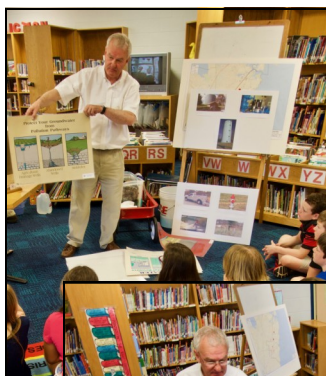
Layne, A Granite Company



Layne, formerly known as Layne Christensen, has been an annual corporate supporter of the American Ground Water Trust for over 20 years. Layne provides sustainable solutions for water resources and mineral exploration. The company's Water Resources Division manages water throughout the full lifecycle: supply, treatment, delivery and maintenance and identifies and develops new water sources, recharges aquifers, and delivers potable water to communities and facilities throughout the Americas.

### It is never too early to start learning about where our drinking water comes from

Rye is a town of about 5,000 on the New Hampshire seacoast. The town is dependent on groundwater for supply. The District believes in the importance of having its citizens informed about the importance of protecting water sources. Tom Clifford is a Rye Water District Commissioner and in the pictures below you can see him in action as an educator as he uses posters and models provided by AGWT to speak to Rye 3rd graders.



### Water Issues Programs and Education since 1986



Please consider American Ground Water Trust when budgeting for 2020  
We appreciate your support!



## AMERICAN GROUND WATER TRUST

**AGWT's 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

## 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/organization
- ◆ Underwriting specific direct costs such as:  
Computers, web-site maintenance, printing, travel etc.

## WELCOME ABOARD!

**Scott Honeyfield, PE, elected to the AGWT Board for a three-year term**



Scott is a water engineer with Parkhill Smith & Cooper Inc., Amarillo, TX. Scott joined the company in 1982, in 2000 he became a Corporate Associate and in 2007 a firm Principal. Scott is the company's Water Resources Team Leader. Water infrastructure projects are his specialty and he has been involved with the inception, study, design, and management of numerous, significant, civil engineering projects. Parkhill, Smith & Cooper Inc. is a Texas based full-service engineering and architectural design firm with over 300 professional, technical and support personnel.



### Current American Ground Water Trust Board members:

Chairman: David Kill, St Paul, MN - Training Consultant, Xylem Goulds Water Technology  
Secretary/Treasurer: Fred Rothauge, Fort Lupton, CO - Manager, Hydro Resources  
Hughbert Collier, Stephenville, TX - Senior Vice President, Collier Consulting  
Stephen Cullen, Santa Barbara, CA - VP and Principal Hydrogeologist, Daniel B. Stephens & Associates  
Chuck Hammock, Jr, Macon, GA - Professional Engineer, Andrews Hammock & Powell, Inc.  
Scott Honeyfield, Amarillo, TX - Water Resources Team Leader, Parkhill Smith & Cooper Inc.  
Kevin McGinnis, Lubbock, TX - President, Cotey Chemical  
Tony Morgan, Santa Barbara, CA - Vice President and Principal Hydrologist, Geo-Logic Associates  
Ron Peterson, Salt Lake City, UT - Senior Account Representative, Baroid IDP  
Todd Peterson, Old Greenwich, CT - Private Equity Lawyer, New Market Solutions  
Kriss Schneider, St. Paul, OR - President, Schneider Water Services  
Nicolas Steverlynck, Scottsdale, AZ - President, Hose Solutions, Inc.

## INVEST IN THE AMERICAN GROUND WATER TRUST

A 501(c)(3) non-profit education organization

**Our Patron Sponsors**  
(Investors at \$5,000+ level)



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[catherine@agwt.org](mailto:catherine@agwt.org)

(The electronic version has a nation-wide circulation of over 30,000)