



# INFORMATION-EXCHANGE WEBINAR



An American Ground Water Trust program

SOLUTIONS TO GROUNDWATER CONTAMINATION

## PFAS AND RELATED COMPOUNDS

**Thursday, September 24, 2020**

**MORNING SESSION 9:00 TO 12:10 – AFTERNOON SESSION 12:50 TO 4:00 PST**

“110 million Americans have some PFAS in their drinking water”

(Estimate from EWG—Environmental Work Group)

### What about water supply in Arizona and surrounding states?

An AGWT program organized with support from the Arizona Hydrological Society, Environmental Professions of Arizona, Arizona Water Association and the Air & Waste Management Association-Grand Canyon Section. See web-site for registration rates for members.



This program has been held as a workshop in Cincinnati, OH, Grand Rapids, MI, Sacramento, Montclair, Fresno and Bakersfield, CA, Pittsburgh, PA, Mount Laurel, NJ, Phoenix, AZ, Albuquerque, NM, Westford, MA and Tallahassee, FL and as a webinar for GA, FL, WA, OR and ID.

The American Ground Water Trust (AGWT) is a 501(c)(3) non-profit education organization



### CONTINUING EDUCATION

#### Continuing education credit approval:

Water and Wastewater Operators (Qualifies by ADEQ) – 6 PDHs  
Certificate of Attendance available for all attendees upon completion of CE Form



Many states are confronting contamination of groundwater and surface water from so-called emerging contaminants. There are technical, regulatory and legal challenges for communities responding to 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. The webinar will provide objective information to facilitate water providers, elected officials, citizens and community leaders with policy, planning and management decisions.



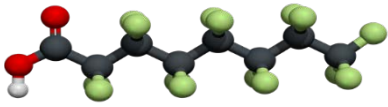
Over 5,000 PFAS (per- and polyfluorinated alkyl substances) occur in the world today and many PFAS compounds transform into highly persistent perfluorinated chemicals in the environment. The compounds are connected to several cancers, liver, kidney and reproductive disorders and other health effects.

Webinar participants will learn about the chemistry background, sampling & testing protocols, treatment technologies, cost recovery options and the characteristics of environmental persistence of contamination. Presenters will provide case studies of technical solutions for treatment and remediation. The program will also discuss regulatory and legal solutions to protecting drinking water integrity from a range of contaminants and will consider ways to find funding to pay for treatment of contaminated groundwater.

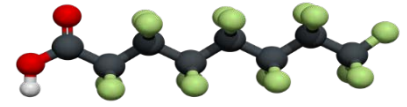
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To become a webinar sponsor, call 800 423 7748 or visit our website for this event at [www.agwt.org/events](http://www.agwt.org/events)



## Webinar Details



**Webinar morning session – 9:00am-12:10pm (PST) Thursday, September 24th**

**8:55am - Log-in available – code provided via e-mail to registered participants.**

**THE EDUCATION CHALLENGE: DEPTH AND EXTENT OF PFAS CONTAMINATION IMPACTS**

Andrew Stone, Executive Director, American Ground Water Trust, Concord, NH

**THE COMPLEX CHEMISTRY OF PFAS COMPOUNDS AND THE CHALLENGES OF THEIR ENVIRONMENTAL PERSISTENCE**

Elizabeth Denly, PFAS Group Program Director and Quality Assurance & Chemistry Director, TRC Companies, Lowell, MA

**PFAS: BASIC CHEMISTRY, SAMPLING PROTOCOLS AND LABORATORY ANALYSIS PROCEDURES**

Tom Smith, Lab Manager, ResinTech, West Berlin, NJ

**10-minute break**

**PFAS RESEARCH PROJECT: OBJECTIVES, METHODS AND ANY PRELIMINARY FINDINGS**

Sarah Van Glubt, PFAS Researcher, Dept. of Soil, Water & Environmental Science University of Arizona, Phoenix, AZ

**PFAS: WIDE-RANGING SOURCES AND IMPACTS TO WATER SUPPLIES**

Gregory Schnaar, PhD, PG, Principal Environmental Scientist, Daniel B. Stephens & Associates, Inc., Silver Spring, MD

**CARBON AND RESIN CASE STUDIES FOR REMOVAL OF PFAS AND OTHER CONTAMINANTS FROM GROUNDWATER**

Dave Kempisty, Ph.D., P.E., Business Development Manager, Evoqua Water Technologies LLC, Colorado Springs, CO

**AIR EMISSIONS/DEPOSITION AS A POTENTIAL PATHWAY TO GROUNDWATER CONTAMINATION**

Stephen Zemba, PhD, PE, Project Director, Sanborn Head Associates, Concord, NH

**40-minute break for lunch – 12:10pm to 12:50pm new log-in code for afternoon session provided via e-mail**

**12:45pm - Log-in available for afternoon session – code provided via e-mail to registered participants**

**PFAS COMPOUNDS ARE RARELY THE ONLY WATER QUALITY PROBLEM WHEN SELECTING TREATMENT: LABORATORY TESTING PROTOCOLS FOR PFAS ANALYTES AND “OTHER” CHEMICAL CONTAMINANTS**

AnnieLu DeWitt, Remediation Technologies, Clean Harbors, South Portland, ME

**PFAS: AN ENGINEERED APPROACH FOR DRILLING, SITE EVALUATION, AND THE SELECTION OF TREATMENT SOLUTIONS FOR CONTAMINATED GROUNDWATER SOURCES**

Jim Benjamin, Area Manager, Layne Christensen, Mesa, AZ

**EQUIPMENT AND MEDIA SOLUTIONS FOR TCP, VOC'S, AND PFAS**

Kelsey Hakes, Business Development Engineer, AqueoUS Vets, Redding, CA

**10-minute break**

**CHAIN PFAS REMOVAL WITH SINGLE-USE SELECTIVE ION EXCHANGE RESIN**

Cathy Swanson, Groundwater Remediation Specialist, Purolite Corporation, Fullerton, CA

**EXPLORING PFAS TREATMENT SOLUTIONS AND THEIR EFFICACY: COMPARISON OF NOVEL ADSORBENTS, GRANULAR ACTIVATED CARBON, AND ION EXCHANGE RESINS**

Matt Geary, Technical Sales Manager, CETCO, FLUORO-SORB, Philadelphia, PA

**POLLUTER SHOULD PAY: LITIGATION AS A MEANS TO RECOVER COSTS**

Richard Head, JD, Attorney, SL Environmental Law Group PC, San Francisco, CA

**End of Webinar – 4:00pm – Continuing Education – complete & email CE Form**





# Arizona Webinar

## Thursday, September 24, 2020

### Registration Form



**Registration and payment can be made on-line at [www.agwt.org/events](http://www.agwt.org/events)**  
**Morning session (9:00am to 12:10pm) and Afternoon session (12:50pm to 4:00pm) PST**

- General Registration \$200
- AZ Professional Assn Member \$175
- Continuing Education Units (check if applying for credit)

**Please send in separate registrations for each person participating in the webinar.**  
**Instructions for webinar log-in will be sent on receipt of registration.**

All registrants will receive pdf copies of the PowerPoint slides used by presenters during the webinar.  
 These pdf files contain detailed information about the presentation topics and are for the personal use of webinar registrants.  
 They will be sent by e-mail the day following the webinar.

**Payment Information:**

**CHECK** [payable to: AGWT]     **AMEX/VISA/MC/Discover**     **PO #** \_\_\_\_\_

**AMOUNT AUTHORIZED \$** \_\_\_\_\_

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\*The CEU verification process requires that participants are able to receive e-mails during/after the webinar. Participants requesting CEUs must use the e-mail address listed above to receive messages during/after the webinar.

Position/ Job Title \_\_\_\_\_

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City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

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**REGISTER ONLINE:**  
[agwt.org/events](http://agwt.org/events)

**MAIL TO:**  
 American Ground Water Trust  
 50 Pleasant Street, Suite 2  
 Concord, NH 03301-4073

**FAX:** (603) 228-6557

**TEL:** (603) 228-5444

**? QUESTIONS:**  
 (800) 423-7748  
 9:00-4:00pm (Eastern Time)

### AMERICAN GROUND WATER TRUST

The AGWT was formed in 1986 as a non-profit education organization with the mission of promoting interest and awareness in groundwater issues. The AGWT's conference, workshop and webinar programs and educational materials:



- ◆ Communicate the environmental and economic value of groundwater
- ◆ Showcase groundwater science and technology solutions
- ◆ Increase citizen, community and decision-maker awareness
- ◆ Facilitate stakeholder participation in water resource decisions
- ◆ Promote efficient and effective groundwater management