



INFORMATION-EXCHANGE WORKSHOP



An American Ground Water Trust program organized in cooperation with the Arizona Hydrological Society, Environmental Professionals of Arizona, Arizona Water Association and support from Air & Waste Management Association—Grand Canyon Section

SOLUTIONS TO GROUNDWATER CONTAMINATION PFAS and other emerging contaminants

Phoenix/Chandler, AZ - Thursday July 11, 2019

Holiday Inn Hotel & Suites Chandler, 1200 W Ocotillo Rd, Chandler, AZ 85248

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

(Estimate from EWG—Environmental Work Group)

What about water supply ARIZONA and surrounding states?

The American Ground Water Trust (AGWT) is a 501(c)(3) non-profit education organization. See web-site for registration rates for students, members of the Arizona Hydrological Society, Environmental Professionals of Arizona, Air & Waste Management Association, Arizona Water Association and employees of AGWT corporate members.



Arizona Hydrological Society



AIR & WASTE MANAGEMENT ASSOCIATION
SINCE 1907



Professionals Dedicated To Arizona's Water

This workshop program has been held in Mt Laurel, NJ, Pittsburgh, PA, Cincinnati, OH, Grand Rapids, MI and Sacramento and Montclair, CA. Additional programs are scheduled for Albuquerque, NM and at Fresno and Bakersfield in California's Central Valley.

Continuing Education

The AGWT will issue Certificates of Attendance
Approved for Water and Wastewater Operators by ADEQ – 6 PDHs



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 workshop program will provide objective information to facilitate water providers, elected officials, citizens and community leaders with policy, planning and management decisions.



Over 4,700 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. Other contaminants resulting from fuel spills, manufacturing processes and improper disposal practices pose additional health risks and are reducing the inventory of economically usable groundwater.

Workshop 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.

Exhibit and sponsorship opportunities are available – www.agwt.org/events or call 1-800-423-7748

REGISTER NOW at www.agwt.org/events – SPACE FOR THIS TOP RATED WORKSHOP IS LIMITED.

Join our Conference Sponsors:



Workshop Schedule – July 11

7:30 – 8:30

REGISTRATION

8:30 – 8:40

THERE IS A LITTLE BIT OF SOMETHING IN EVERYTHING

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

8:40 - 9:15

PERSPECTIVE MATTERS: PFAS OCCURRENCE, THE LEGAL LANDSCAPE, AND THE BUMPY ROAD AHEAD

Joan Card, JD, Attorney and Partner, Culp & Kelly, LLP, Boulder, CO and Phoenix, AZ

9:15 – 9:50

EMERGING CONTAMINANTS IN ARIZONA

Mark L. Brusseau, PhD, Professor, and Sarah Van Glubt, PFAS Researcher, Department of Soil, Water and Environmental Science, University of Arizona, Tucson, AZ

9:50 – 10:25

THE TUCSON INTERNATIONAL AIRPORT AREA GROUNDWATER REMEDIATION PROJECT

Jeff Biggs, Strategic Initiatives, Tucson Water, Tucson, AZ

10:25 – 10:45

BREAK

10:45 – 11:20

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

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

11:20 – 11:55

THE USE OF QUANTITATIVE RISK ASSESSMENT TO DETERMINE HEALTH RISKS FROM WATER CONTAMINANTS

Kelly A. Reynolds, PhD, Professor & Chair, Community, Environment and Policy, Director, Environment, Exposure Science and Risk Assessment Center (ESRAC), Zuckerman College of Public Health, University of Arizona, Tucson, AZ

11:55 – 12:30

PFAS: WIDE-RANGING SOURCES AND IMPACTS TO WATER SUPPLIES

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

12:30– 1:25

LUNCH *(Sponsor Opportunity)*

(Refreshments available throughout the afternoon)

1:25 – 2:00

ION EXCHANGE TREATMENT FOR PFAS REMOVAL

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

2:00 – 2:35

REMOVING PFOA AND PFOS FROM DRINKING WATER: A CASE STUDY AT AN ARIZONA WELLFIELD

Dean Alford, PG, Water Resources Hydrologist, City of Tempe, Tempe, AZ and
Mark Gross, PE, VP/Project Manager, Carollo Engineers, Phoenix, AZ

2:35 – 3:10

MOLECULAR TOOLS FOR EVALUATING IN SITU BIOREMEDIATION OF CHLORINATED SOLVENTS AND EMERGING CONTAMINANTS

Laurie LaPat-Polasko, PhD, Vice President/National Director of Remediation, Matrix New World Engineering, Southwest Groundwater, Phoenix, AZ

3:10 – 3:45

SHIFTING CONTAMINATION COSTS FROM RATE PAYERS TO POLLUTERS

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

3:45 – 4:20

CONTAMINATION ISSUES AND DRINKING WATER QUALITY CHALLENGES IN ARIZONA

Chelsey McGuire, Environmental Scientist, Arizona Department of Environmental Quality, Phoenix, AZ

4:20 – 4:30

WRAP-UP – FINAL Q & A – CONTINUING EDUCATION SIGN-OUT



ARIZONA
HYDROLOGICAL
SOCIETY



AIR & WASTE MANAGEMENT
ASSOCIATION
SINCE 1907



AZ
Water
ASSOCIATION
Professionals Dedicated To Arizona's Water



Registration Form

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Holiday Inn Hotel & Suites Chandler, 1200 W Ocotillo Rd, Chandler, AZ 85248
8:30am - 4:30pm

WORKSHOP REGISTRATION: Register on-line at www.agwt.org/events

General Registration	\$200	<input type="checkbox"/>
AGWT Corp Member Employee	\$175	<input type="checkbox"/>
Arizona Hydrological Society Members	\$175	<input type="checkbox"/>
AWMA-Grand Canyon Sect. Members	\$175	<input type="checkbox"/>
Environmental Prof. of Arizona Members	\$175	<input type="checkbox"/>
Arizona Water Association Members	\$175	<input type="checkbox"/>
Full-time Student (ID required)	\$ 80	<input type="checkbox"/>

PDF - Workshop presentations (Attendee price) \$ 30

Exhibit Table (registration required) \$250

Event Sponsor: \$1,000 and above sponsors have the option of an exhibit table
(See website Exhibit & Sponsorship Information for more details).

\$2,000 \$1,000 \$500 \$250

(\$1K and above, please indicate if you plan to exhibit: YES NO

TOTAL \$ _____

Registration includes handouts, coffee break & lunch

Payment Information:

CHECK [payable to: AGWT] AMEX/VISA/MC/Discover PO # _____

AMOUNT AUTHORIZED \$ _____

Name on Card _____

Card No. _____ Expiration Date _____

Cardholder Email _____

Company Name _____

Attendee Name _____

Attendee Email _____

Position/ Job Title _____

Address _____

City _____ State _____ Zip _____

Phone _____

REGISTER ONLINE:
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)

