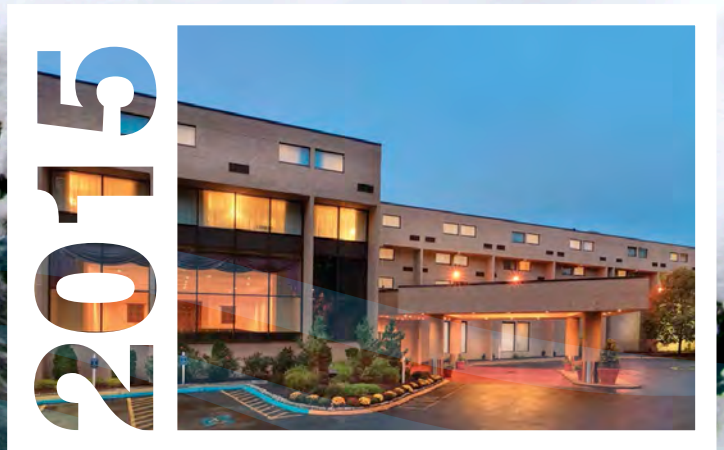


InFlow-Line

The Magazine of the CT Section American Water Works and the Connecticut Water Works Associations Winter 2014/15

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CWWA's 2015 Legislative Outlook • WQT Symposium Recap • Water Well Asset Management



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Volume 9 – Number 4

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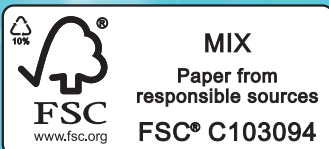
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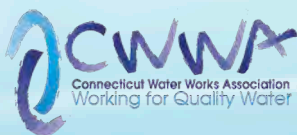
Cover photo: The Mill on Millstone in Wilton, CT. Photo by Kathy Fortin



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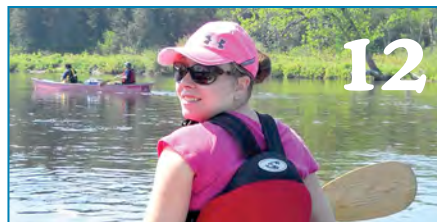


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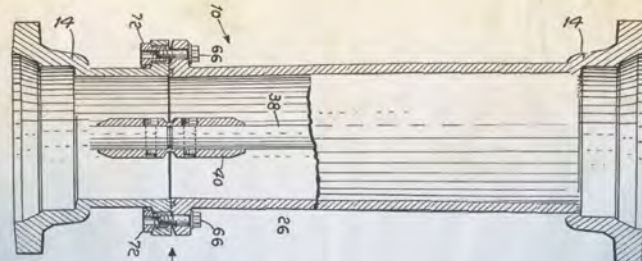
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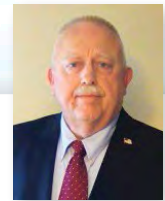
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Busy Legislative Session Ahead

There has been significant positive movement in the Statewide Planning Process.

First of all, the Water Planning Council (WPC) and the University of Connecticut (UConn) have entered into a Memorandum of Understanding (MOU). UConn will be providing assistance to the WPC to develop a State Water Plan and budget request.

Secondly, the Department of Health (DPH) Commissioner Jewel Mullen, MD, MPH, MPA, has signed the document that reduces the seven Water Utility Coordinating Committee areas to three. This process will allow the members to consolidate supply planning activities along similar boundaries as Council of Governments (COG). A more thorough detailed discussion of these activities can be found in this issue in an article by CWWA's Executive Director, Betsy Gara.

The Annual Fall Conference, which was held on October 21, was a huge success, and the attendance was one of our highest. A special thank you goes out to Betsy Gara for coordinating the speakers and event. Further details on the event can be found in Betsy's Fall Meeting wrap-up.

Our Nominating Committee has been selected and our slate of Officers will be announced in the upcoming issues of *InFlow-Line*. If you are interested in serving on the Board, then please contact Betsy Gara, Executive Director at gara@gmlobbying.com or 860-841-7350.

Based on input from a Legislative Planning meeting attended by a number of utility representatives, CWWA drafted a preliminary Government Affairs Agenda, which outlines recommendations on state legislation and regulations. CWWA's Board and Legislative Committee are reviewing the draft Agenda and providing suggestions on which recommendations will be our top priorities when the legislature convenes on January 7. The agenda will be formally approved at our December meeting. Our Tri-Chairs, Maureen Westbrook (Connecticut Water), Lori Vitagliano (South Central Connecticut Regional Water Authority) and Vinny Susco (East Hampton) have done an

incredible job in analyzing and developing recommendations based on emerging legislative and regulatory issues.

CWWA's primary focus is shaping laws and policies affecting the water industry

to ensure that we may continue to provide a safe, adequate supply of quality water to our customers at a reasonable cost. Our members are critical to this effort, and we thank them for their input and expertise. 💧

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Addressing Our Cybersecurity

I am pleased to report the fall joint CWWA/CT-AWWA conference was well attended and provided a variety of important topics and interesting presentations such as the review of existing and potential regulations and managing water quality in reservoirs.

We even had a surprise visit from Governor Malloy who just happened to be in the building for another event. The governor took a few minutes to recognize the essential work of our industry professionals and the importance of water resources to our communities and our future.

The broader message is we all need to continue to strive for reasonable regulation, appropriate funding sources, scientific research, and infrastructure improvement. And we cannot forget security, which leads me into the remainder of my article on cybersecurity. Hopefully this information can help utilities evaluate their current cybersecurity situation and utilize available tools to tighten things up.

There are a lot of 10 year old fences around drinking water treatment plants!

Back in 2002, the federal government passed the Bioterrorism Response Act in response to the September 11th terrorist attacks. Community water systems serving a population of more than 3,300 people were required to assess their vulnerability to terrorist attack. In the following years, water utilities secured treatment facilities, storage tanks, and pump stations using what is now referred to as a locks and fences approach.

Since then, the landscape of security threats to water system operations has changed drastically because utilities are increasingly reliant on control systems and electronic records. Assets are accessed with the click of a button rather than the turn of a key. The measures that were put into place 10 years ago are not capable of securing these new entrance routes.

The Federal Bureau of Investigation (FBI), the National Intelligence Agency (NIA), and the Department of Homeland Security (DHS) have all identified cybersecurity as the top threat facing U.S. businesses and critical infrastructure. You have probably heard about recent security breaches at big box stores and banks including Home Depot and JP Morgan Chase. In those cases, hackers remotely gained access to company data and stole customers' personal information. Although less widely publicized, there have also been documented incidents of hackers remotely operating water system equipment (Queensland, Australia, 2001) and infecting computer networks with malware that disrupted water system operations (Harrisburg, PA, 2006).

As a utility operator, you may not know how to go about securing your cyber networks. Fortunately, there are resources specific to water utilities that can help you identify and mitigate risks to these valuable assets. Perhaps the most useful to operators is the Cybersecurity Guidance Tool (Tool), which was released in February of 2014. This interactive resource allows operators to input water system and cyber network characteristics and generate a customized, prioritized list of recommended strategies for reducing the risk of cyber-attack. The Tool essentially makes the standards, methodologies, and procedures presented in the National Institute of Standards and Technology (NIST) Cybersecurity Framework – a resource which is not water utility-specific – accessible to water system operators and applicable to water systems. The Tool includes 82 security controls, which it defines as “measures to support effective cyber defense.” Depending on the weaknesses that the Tool identifies in your cyber networks, the Tool will

assign priority levels (1 through 4) to each of these controls. Some examples of the controls include:

- Defined and approved security roles and responsibilities of all employees, contractors, and third party users;
- Procedure modification tracking program in place to manage and log changes to policies and procedures;
- Organization-wide clock synchronization system in place;
- Information exchange protection program in place to protect data in-transit through any communication system including the Internet, email, and text messaging and approved policies and procedures.

If all your network passwords are the same, and you are still using a Windows XP operating system, you might want to think about using the AWWA Cybersecurity Guidance Tool or updating your vulnerability assessment to include cybersecurity threats.

Some more basic recommendations for improving cybersecurity include:

- Limiting the number of individuals with access to certain networks;
- Regularly updating software;
- Requiring strong passwords;
- Using anti-virus software, intrusion detection systems, and firewalls.

So the good news is you don't have to build a 6-foot, barbed wire fence around your desk to protect utility assets. However, cyber-attack is an ever growing concern, and it is increasingly important that water utilities become aware of their vulnerabilities and the ways to address them.

Now that the winter and holiday season is upon us I would like to take this time to wish all our members and their families a happy and healthy holiday season. 💧



Water utilities play an essential role in our nation's critical infrastructure. And today that critical infrastructure is falling victim to cyber attacks.

Today's water plants and stations are controlled by sophisticated SCADA systems; systems that are subject to both insider and outsider cyber attacks.

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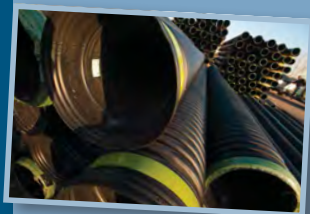


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“It can be hard to know what other utilities are out there doing, so I think AWWA is very important in bringing all water professionals together to share experiences and knowledge.”



Tiffany Lufkin

Regional Water Authority, New Haven

Volunteer with CTAWWA:

Chair, Young Professionals Committee since the fall of 2011, as well as participating on some of the national AWWA YP committee calls, representing our section.

Day job:

Asset Management Engineer with the South Central Connecticut Regional Water Authority (RWA), New Haven.

Personal stats, pets:

I am from a small town in mid-coast Maine. I started at RWA after graduating from Worcester Polytechnic Institute (WPI) in 2008 with a degree in Civil Engineering. I was certified as a Professional Engineer in July! I live in New Haven with my miniature schnauzer and enjoy being able to run to the beach from my apartment.

Recent gig with YP:

I served on the ACE Boston 2014 planning committee as co-chair of young professional events. This involved coordinating with the national YP committee and the AWWA conference planning staff. It was a great experience and I hope everyone enjoyed the events we put on!

Why volunteer for CTAWWA?

I have had the fortune to meet many other YPs through my volunteer work with AWWA and attending both CT and National AWWA events. It can be hard to know what other utilities are out there doing, so I think AWWA is very important in bringing all water professionals together to share experiences and knowledge. I am very grateful for all the other professionals I have met through my involvement at AWWA.

What would you like to share?

My hobbies include canoeing, kayaking, alpine skiing, running, and hiking. I have climbed Mt. Katahdin in Maine 18 times and it is one of my favorite places.

Favorite water memory:

In the summer of 2003 I had an incredible experience on the Chewonki Foundation Canoe Expedition for Maine Girls; a three week, 179 mile canoe trip along the Allagash Wilderness Waterway in northern Maine, from Lobster Lake (on the West branch of the Penobscot River) to the junction of the St. John and St. Frances River. Learning to navigate whitewater in a two-person canoe and exploring the Waterway is one of the greatest experiences I have had and one that fostered a love of wilderness preservation and natural waters. 💧



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EPA Emergency preparedness for Water Systems

Major storms and other types of incidents can be highly disruptive for water systems. Learn what water consumers can do to protect their water and what utility operators can do to protect their drinking water and wastewater systems. Visit <http://water.epa.gov/drink/> for information on 1) Water Emergency/Incident Information; 2) EPA's Natural Disasters website for information on how to prepare for emergencies; and 3) FEMA's Ready.gov website for more information to help you Plan, Prepare, and Be Informed.

Ebola Virus Information

The State of Connecticut has launched a website to keep residents informed regarding the Ebola virus - www.ct.gov/ebola. The site also includes resources for health care providers, including new guidance from the Centers for Disease Control and Prevention (CDC) on the use of personal protective equipment by health care personnel. AWWA is also compiling resources being developed to help water and wastewater utilities manage health risks associated with the Ebola virus, including a webinar that can be viewed by AWWA members for free. Visit www.awwa.org to access the resources.

EPA Releases Climate Plans

EPA released plans for reducing greenhouse gas emissions and preparing for climate change impacts such as flooding, sea level rise, severe weather and temperature extremes, including: 1) Incorporating climate adaptation criteria in the Brownfields grants process to ensure cleanup actions taken by communities are effective as the climate changes; 2) Integrating considerations of climate change into the Clean Water State Revolving Funds process and continue working with States to ensure investments in water infrastructure are resilient to changes in climate; and 3) Providing communities with the tools they need to increase their resilience, such as a Stormwater Calculator and Climate Adaptation Tool to empower community planners to estimate the amount of stormwater runoff that they'll have to manage today and in the future. For more information, visit www.epa.gov/climatechange/effects/adaptation.html



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Labor Department – Employer Update

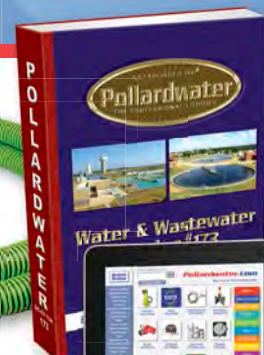
The agency's Internet Tax and Wage Reporting System, updated November 10, 2014, now allows registered employers to file original returns for any quarter due, update name and address information, and make payments on unemployment contributions, assessments and billings. 💧



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- because of pressure from a friend or relative or a boss
- satisfaction from accomplishment
- to keep busy
- for recognition
- to donate your professional skills
- because there is no one else to do it
- to have an impact
- to learn something new
- to become an “insider”
- to be challenged
- to be a watchdog
- to feel proud
- to make new friends
- to explore a career
- to help someone
- to do something different from your job
- for fun!
- to keep skills alive
- because an agency is geographically close
- to have an excuse to do what you love
- to be able to criticize
- to assure progress
- to feel good
- to be part of a team
- to gain status
- because you were asked
- to test yourself
- to build your resume
- to be an agent of change
- because of personal experience with the problem, illness, or cause
- to stand up and be counted

Do you want to help out on a CTAWWA committee?

You can network and learn about the latest information in an area that interests you. Serving on a committee for CTAWWA gives you the opportunity to show your skills, learn a new one, and be a better person at your job.

Visit the CTAWWA website at CTAWWA for a list of committees and contact information. Currently, the section is looking for members for all committees, especially:

- Membership Committee
- Water for People Committee
- Young Professionals

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Dam Asset Management

Hetal Shah, Aquarion Water Company

This presentation will discuss how Aquarion Water Company inspects, maintains, and rehabilitates their many dams, including budgetary planning.

Rehabilitation of Concrete Gravity Dams

William S. Andres, P.E., Tata & Howard, Inc.

This presentation based on a technical paper will present three case studies where Tata & Howard has assisted clients with rehabilitation of their gravity dams.

Connecticut Department of Public Health: Regulatory Update

Connecticut Department of Public Health- Drinking Water Section Staff

The CT-DPH staff will provide information on a specific regulatory topic.

► **SECTION A-2:**
WATER SUPPLY AND TREATMENT
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Granular Activated Carbon Filtration: The Good, The Bad, The Ugly

Richard Davee, P.E., Wright-Pierce

Granular Activated Carbon (GAC) media is used in many water treatment plants. This presentation will discuss the effects of an outbreak of iron bacteria within a GAC filter.

Old Dog New Tricks – Pilot Testing For Upgrading the Rockville, CT Water Treatment Plant

Larry VandeVenter, Vice President, Kleinfelder

The Connecticut Water Company has embarked on a project to construction a new 9.0 mgd facility at Lake Shenipsit, in Rockville, Connecticut. This presentation will review the Dissolved Air Flotation (DAF) conducted in support of the design.

Connecticut Regulation of Water Treatment Wastewater/Residuals

Jim Creighton, CT- DEEP

This presentation will provide the latest information on Connecticut regulations for water treatment wastewater/residuals.

► **SECTION B-1:**
DISTRIBUTION AND STORAGE
 2 T.C.H.* (.2 CEU)
 9:00 AM to 11:00 AM
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Smart Analysis for Smart Water Distribution Management

Zheng Yi Wu, Ph.D., Director Applied Research, Bentley Systems, Inc.

This talk presents the latest research and applications of the innovative water distribution analysis methods using emerging computing technologies.

Rehabilitating Below Grade Water Storage Basins to Meet DPH Guidelines

Peter J. Grabowski, P.E., Vice President, Tighe & Bond, Inc.; Eric Pizzoferrato, Project Manager, The Metropolitan District

This presentation will discuss basin improvements including mixing systems, membrane liner systems, manhole and vent upgrades, interior basin concrete repairs, new rechlorination system, and electrical upgrades at the District's 4.5 MG below grade water storage basins.

Avon Water Company Concrete Repairs

Kevin Schwabe, Avon Water Company

Tom Marston, Tata & Howard

The Avon Water Company required repairs to two cast-in-place concrete tanks that were cracking and leaking. This presentation provides an overview of the Water Company and their Consultant planned to make the repairs.

► **SECTION B-2:**
DISTRIBUTION AND STORAGE
 2 T.C.H.* (.2 CEU)
 1:30 PM to 3:30 PM
 Price: \$100.00 includes
 course materials and Expo lunch

Connecticut Department of Public Health: Regulatory Update

Connecticut Department of Public Health- Drinking Water Section Staff

The CT-DPH staff will provide information on a specific regulatory topic.

Look Out Below!

Replacement of Pumps at Deep River – Norwich, CT

Stephen K. Rupa, P.E., Tata & Howard, Inc.

Mark Decker, P.E., Norwich Public Utilities

Tata & Howard, Inc. is currently working with Norwich Public Utilities on a project to replace the distribution pumps at the Deep River WTP. The existing pump room is approximately 30-feet below grade, and the plant will remain in service throughout construction. The project also involves modifying plant operation along with construction of new distribution storage. The presentation will highlight how the project team worked on design challenges of equipment placement, scheduling and operational changes.

Locating Buried Pipe – Tools and Techniques

Eric Denslow, Eastcom Associates, Inc.

The discussion will cover basic theory of pipe locating for both metallic and non-metallic utilities including Ground Penetrating Radar. Presentation will cover how locators work, troubleshooting challenging locales, frequencies, bleed off, how GPR works and the difference between metal detectors and ferro-magnetic locators.

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► SECTION C-1:

MANAGEMENT

2 T.C.H.* (.2 CEU)

9:00 AM to 11:00 AM

Price: \$100.00 includes course materials and Expo lunch

Connecticut Department of Public Health: Regulatory Update

Connecticut Department of Public Health - Drinking Water Section Staff
The CT-DPH staff will provide information on a specific regulatory topic.

Chemical and Biological Water Quality Assessment of Clear Brook and Nepaug River

Robyn Hall, The Metropolitan District
New and extreme weather patterns are presenting new challenges for the drinking water industry. This presentation discusses the importance of long-term monitoring of individual tributary streams that supply reservoirs.

Flood Resilience: A Basic Guide for Water and Wastewater Utilities

Mary Sceery, U.S. Department Environmental Protection Agency
This presentation will discuss a new EPA tool called *Flood Resilience: A Basic Guide for Water and Wastewater Utilities*. This Guide outlines a simple, 4-step assessment process to help water utilities assess flooding vulnerabilities and identify practical mitigation options.

► SECTION C-2:

MANAGEMENT

2 T.C.H.* (.2 CEU)

1:30 PM to 3:30 PM

Price: \$100.00 includes course materials and Expo lunch

Facility Master Plan: A Key Building Block of Asset Management

Annie Winter, Hazen and Sawyer, P.C.
A case study will be presented focusing on how a Facility Master Plan is the first step in the asset management plan for a New Jersey utility.

(Please note that all programs are subject to change)
*Application for CEU credits for CTAWWA classes pending.

Is Your Public Utility Protected From a Cyber Attack?

Elizabeth Baldwin, Tighe & Bond, Inc.
Steven Bonafonte, Pullman & Comley, LLC
This presentation will review regulations and best practices for managing risks associated with the ever changing cyber security threats that public utilities face on a daily basis.

Additional topic – to be determined

► EPA GRANT COURSE FOR SMALL SYSTEMS

9:00 AM – 4:00 PM

Separate Registration Required.
Information on subsequent page.

Questions?

Contact Pam Monahan, CTAWWA Executive Manager at 203-714-6096.

► VENDOR EXPO

8:00 AM – 3:00 PM

Location: Grand Ballroom
FREE ADMISSION

The 2015 Vendor Expo is your chance to see the latest in techniques and equipment from dozens of vendors and specialists to the drinking water industry. For many attendees, the knowledge gained and the contacts made at the vendor expo make attendance at ATCAVE extra valuable.

► PRODUCT DEMONSTRATIONS

Product demonstrations are held throughout the day. Please consult the information board near registration to find listing, location and times.

► FRESH IDEAS

The CTAWWA Young Professionals Committee hosts "Fresh Ideas", a nationwide competition with a goal of increasing new member involvement in AWWA, encouraging young professional participation from all areas of the water industry, stimulate progressive thinking and reduce the financial hardship for new members who want to attend the AWWA Annual Conference and Exposition (ACE). Topics presented through Fresh Ideas at ATCAVE in the past have ranged from methods to monitor, model, and remove microbes and contaminants to treatment plant design. The Connecticut Section Fresh Ideas contest will be a poster session located in the main hallway near the end of the Expo.

► DPH POSTER CONTEST

The CT DPH Drinking Water Section will be conducting a poster contest throughout the day. Please visit the contest and vote!

► GENERAL EXPO LUNCHEON

11:30 AM – 1:30 PM

Individual tickets available for \$25.00



EPA CLASS AT ATCAVE FOR SMALL SYSTEMS

As an operator, manager, or governing body of a small system, you face daily challenges to providing reliable, safe drinking water to your customers and avoiding costly violations. CTAWWA is here to help by offering a FREE one-day workshop. Called 'Small System Operator Training to Achieve/Maintain Compliance with the Safe Drinking Water Act,' this class will be offered at ATCAVE on February 24, 2015 at the Crowne Plaza, Cromwell, for small water systems owners/operators in Connecticut of 10,000 connections or fewer. TCHs will be awarded for this workshop, which is made possible by funding through the USEPA and AWWA's partner, the Rural Community Assistance Partnership.

An outline of what will be accomplished and the registration form are below. Registration form is below. If you have any questions, please contact Robert Longo of Bristol Water Department at 860-582-7431, or Pam Monahan, CTAWWA Executive Manager at 203-714-6096 or ctawwa@snet.net.

WHAT TOPICS WILL BE COVERED AT THE WORKSHOP?

- Regulatory Review
 - o Total Coliform Rule
 - o Revised Total Coliform Rule
 - o Groundwater Rule
 - o Surface Water Treatment Rule
 - o Stage 2 Disinfectants/ Disinfection Byproducts Rule
 - o Lead and Copper Rule
- Microbial Contaminants
- Distribution System Operation and Maintenance
- Disinfection Byproducts Formation and Control

ATTEND THIS WORKSHOP, AND YOU WILL BE ABLE TO:

- Achieve and maintain compliance with drinking water regulations and avoid costly violations;
- Apply a multiple barrier approach for prevention of microbial contamination of your water;
- Disinfect your water appropriately and inactivate microbial contaminants;
- Manage distribution system infrastructure and disinfectant residuals to prevent microbial contamination;
- Collect microbiological samples (and corresponding chlorine residual samples) without contaminating the samples;
- Optimize treatment plant and distribution system operations to minimize DBP formation;
- Evaluate the most appropriate in-plant or distribution system treatment alternative that helps minimize DBP formation; and
- Describe the importance of the distribution system in maintaining water quality.

Yes, I will attend the EPA Grant Training on February 24, 2015.

_____ Number of connections served (to be verified with DPH)

Name _____

Address _____

City _____

State/Zip _____

Phone _____

E-mail _____

PLEASE MAIL TO:

Pam Monahan, CTAWWA Executive Manager, 944 Prospect St., Naugatuck, CT 06770, or fax to 203-725-0445.



ATCAVE TECHNICAL TRAINING REGISTRATION FORM

February 24, 2015, Crowne Plaza, Cromwell CT

NAME:		PHONE:	
STREET ADDRESS:			
CITY:		ST:	ZIP:
COMPANY/ORGANIZATION:			
EMAIL ADDRESS:			
CTAWWA MEMBER #:			

INSTRUCTIONS:

- 1) Fill out upper selection, including company name / organization, phone number and email address.
- 2) Select desired sessions. Please be sure to check ALL boxes for each selection.
- 3) Complete the payment section on the second page of the registration form.
- 4) Return to address listed on the second page with appropriate payment.
- 5) Online registration and payment available at www.ctawwa.org.
- 6) **REGISTRATION DEADLINE IS FEBRUARY 13, 2015.** No registrations will be accepted after this date.
- 7) Cancellation Policy. All cancellations must be received February 20th in order to be eligible for a refund. Any cancellations received after February 20th will not receive a refund.

SPECIAL OFFERING: Lunch is included with Member and Non-Member offerings. Select a morning and an afternoon session and pay only \$150.00 for members and \$200 for non members.

SMALL SYSTEMS: CTAWWA will be offering scholarships to operators of Small Systems. CTAWWA will follow the CT DPH guidelines for the determination of a small system. Please note: The scholarship covers the course registration and course material, **lunch not included**. A lunch ticket must be purchased separately

GROUP DISCOUNTS: Group Discounts are available. Please contact Kevin Barber 203-866-4446 ext 2031, or kbarber@snew.org for details.

NOTE: Registration for EPA Grant Class for Small Systems on a separate form. Please do not use this form.

Section	Topics	CEUs	Time	Price	Select
Water Quality and Treatment Program					
A-1	<ul style="list-style-type: none"> Dam Asset Management – Inspection, Maintenance and Rehabilitation Rehabilitation of Concrete Gravity Dams Connecticut Department of Public Health: Regulatory Update 	.2	8:30 AM to 10:30 AM	Member	\$100.00 <input type="checkbox"/>
				Non Member	\$125.00 <input type="checkbox"/>
				Small Systems ¹	\$0.00 <input type="checkbox"/>
A-2	<ul style="list-style-type: none"> Granular Activated Carbon Filtration: The Good, The Bad, the Ugly Old Dog New Tricks – Pilot Testing for Upgrading the Rockville, CT Water Treatment Plant Connecticut Beneficial Use Regulations for Water Treatment Residuals 	.2	1:00 PM to 3:00 PM	Member	\$100.00 <input type="checkbox"/>
				Non Member	\$125.00 <input type="checkbox"/>
				Small Systems ¹	\$0.00 <input type="checkbox"/>

¹ Lunch not included with Small System Scholarship. Lunch Ticket must be purchased separately.

Please continue the ATCAVE Registration on the next page.

ATCAVE TECHNICAL TRAINING REGISTRATION FORM – CONTINUED

¹ Lunch not included with Small System Scholarship. Lunch Ticket must be purchased separately.

Section	Topics	CEUs	Time	Price	Select	
Distribution Operations Program						
B-1	<ul style="list-style-type: none"> Smart Analytic or Smart Water Distribution Management Rehabilitation Below Grade Water Storage Basins to Meet DHP Guidelines Avon Water Company Concrete Repairs 	.2	9:00 AM to 11:00 AM	Member	\$100.00	<input type="checkbox"/>
				Non Member	\$125.00	<input type="checkbox"/>
				Small Systems ¹	\$0.00	<input type="checkbox"/>
B-2	<ul style="list-style-type: none"> Connecticut Department of Public Health: Regulatory Update Look Out Below! Replacement of Pumps at Deep River, Norwich, CT Hudson Valley Water Works Conference Seminar Management Program 	.2	1:30 PM to 3:30 PM	Member	\$100.00	<input type="checkbox"/>
				Non Member	\$125.00	<input type="checkbox"/>
				Small Systems ¹	\$0.00	<input type="checkbox"/>
Management Program						
C-1	<ul style="list-style-type: none"> Connecticut Department of Public Health: Regulatory Update Chemical and Biological Water Quality Assessment of Clear Brook and Nepaug River Flood Resilience: A Basic Guide for Water and Wastewater Utilities 	.2	9:00 AM to 11:00 AM	Member	\$100.00	<input type="checkbox"/>
				Non Member	\$125.00	<input type="checkbox"/>
				Small Systems ¹	\$0.00	<input type="checkbox"/>
C-2	<ul style="list-style-type: none"> Facility Master Plans: A Key Building Block of Asset Management Is Your Public Utility Protected From a Cyber Attack? It's Alive – The Care and Removal of Biofilm From a 64-Mile Tunnel 	.2	1:30 PM to 3:30 PM	Member	\$100.00	<input type="checkbox"/>
				Non Member	\$125.00	<input type="checkbox"/>
				Small Systems ¹	\$0.00	<input type="checkbox"/>
Registration Note: If you selected a morning and an afternoon session, the total cost is only \$150 (members) or \$200 (non members).				Subtotal: \$		
Lunch Tickets	Lunch in the Grand Ballroom Only <i>(for Vendor Show only, Small Systems or if you are attending non-educational events)</i>	Quantity: _____ @ \$25.00 each	Total Lunch: \$			
Please make checks payable to: CTAWWA and mail along with this form to: CTAWWA - ATCAVE Registration, 944 Prospect St, Naugatuck, CT 06770			Total Fee Enclosed \$			

Further information can be obtained by calling (203) 714-6096 or emailing: ctawwa@snet.net

Registrations can also be faxed to: 203-725-0445

CREDIT CARD INFORMATION – ALL FIELDS MUST BE COMPLETED			
NAME ON CREDIT CARD:		BILLING PHONE NUMBER:	
BILLING ADDRESS:			
TYPE OF CREDIT CARD:		SIGNATURE:	
CREDIT CARD #:	EXPIRY:	CCV:	AMOUNT TO CHARGE TO CREDIT CARD:

☐ Check here if you have a disability and require accommodations to fully participate. You will be contacted by CTAWWA. For additional registrations, reproduce this form or call CTAWWA at (203) 714-6096.

MEMBER: Any CTAWWA member (individual, utility or corporate) or DPH Small System. Memberships will be verified for purposes of registrations.

NON MEMBER: Any attendee that does not meet the qualifications of a Member.

SMALL SYSTEMS: Any system identified by CT DPH as a small system.



ATCAVE VENDOR EXPO REGISTRATION

February 24, 2015, Crowne Plaza, Cromwell CT

VENDOR NAME (as you would like it to appear on conference materials):			
CONTACT PERSON:		PHONE WITH AREA CODE:	
ADDRESS:		CT SECTION AWWA MEMBERSHIP NO:	
CITY:		ST:	ZIP:
FAX WITH AREA CODE:		EMAIL:	

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DRAPED BOOTH - 6 FT. DEEP X 10 FT. WIDE WITH TABLE AND TWO CHAIRS (5 available—first come, first serve)

☐ CT Section Enhancer: \$500.00 ☐ CT Section Member: \$575.00 ☐ Non-Member: \$750.00

Electricity: ☐ \$30.00
Break Station Sponsorship (Five available): ☐ \$300.00
General Luncheon Station Sponsorship: ☐ \$350.00
Audio-Visual Sponsorship: ☐ \$300.00

Please provide names
for exhibitor badges:

Additional Luncheon Tickets
(Vendors receive two free tickets):

Quantity: _____
@ \$25.00 each

Total Lunch: \$

Total Fee Enclosed \$

To register online please visit our website: www.ctawwa.org

CREDIT CARD INFORMATION – ALL FIELDS MUST BE COMPLETED			
NAME ON CREDIT CARD:		BILLING PHONE NUMBER:	
BILLING ADDRESS:			
TYPE OF CREDIT CARD:		SIGNATURE:	
CREDIT CARD #:	EXPIRY:	CCV:	AMOUNT TO CHARGE TO CREDIT CARD:

Discount hotel room rate is \$114.00 per night. To book, call the Crowne Plaza at 860-635-2000

Please make checks payable to "CT Section—AWWA" and mail with this completed registration form no later than Friday, February 6, 2015 to:

Pam Monahan, Executive Manager, Connecticut Section AWWA, 944 Prospect Street, Naugatuck CT 06770

Registrations can also be faxed to 203-725-0445 or emailed to ctawwa@snet.net.

If you have questions, please call Kathy Fortin at (203) 762-7884, Ext 4302 or email kfortin@snew.org.



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DON'T BE EXPOSED

The Importance of Chemical Resistant Coatings for Chemical Containment Areas

Darleen P. Buttrick, P.E. and Peter J. Grabowski, P.E.

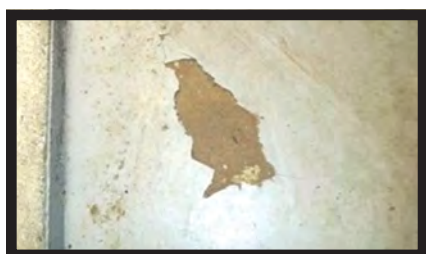


Figure 1 - Failure of Chemical Resistant Paint



Figure 2 - Failure of Chemical Resistant Paint



Figure 3 - Installation of Fiberglass Matting

The term “chemical resistant coating” seems to be an oftentimes misused term and is thought by many to mean anything from a chemical resistant paint to a full chemical resistant lining system. The difference between the various types of systems is important, however, because the level of protection offered by a chemical resistant paint versus a chemical resistant coating or lining system is very different. These systems are commonly used throughout water treatment facilities in Connecticut.

Chemical Resistant Paints and Coatings

Chemical resistant paints provide additional protection in wet and corrosive environments beyond the typical level of protection provided by a standard paint system. The systems are generally epoxy based, and are applied in 4 to 6 mil layers, with a typical total thickness of 8 to 12 mils dry film thickness (DFT). Good applications for chemical resistant paints are on ductile iron piping in areas where chemicals are stored or where chemical injectors are located, and on walls in chemical storage areas above the containment area where chemical splatters are possible. Although they are often found on the floors of chemical containment areas, this is not

the best application for this type of paint system, as the systems are generally not intended for heavy foot traffic or full chemical immersion.

As shown in Figure 1, these types of systems will quickly crack and peel when subject to foot traffic or impacts. Over time this type of system will crack and deteriorate, leaving the concrete exposed and susceptible to degradation, and compromising the integrity of the containment area.

Some manufacturers offer high-build chemical resistant coating systems, which often contain flake fillers to provide an added level of chemical resistance. High-build chemical resistant coatings are often applied in 15-20 mil layers, for a total thickness of 30 to 40 mils. These systems provide a higher degree of resistance to chemical spills by virtue of the flake fillers and additional DFT, and typically have a longer lifetime compared to a standard epoxy based chemical resistant paint.

Chemical Resistant Lining Systems

There are many types of chemical resistant lining systems on the market today, offered by manufacturers such as Dudick, Tnemec, and Sherwin-Williams. Chemical resistant lining systems offer an advanced form of protection for concrete and CMU in chemical containment areas through the multiple layer approach of protection. The systems provide protection against heavy foot traffic and impacts, and can be rated for continuous immersion. The total thickness of the system with fiberglass matting is often as much as 100 to 110 mils DFT.

A typical system with fiberglass matting is shown in Figure 2. Proper surface preparation is essential to ensure that the system will adequately adhere to the substrate. This could include complete removal of an existing coating system or installation of a moisture barrier for new or existing substrates. A moisture barrier is essential in



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Parameter	Chemical Resistant System		
	Chemical Resistant Paint	Chemical Resistant Coating (No Mesh)	Chemical Resistant Lining (Mesh)
Typical System Thickness (mils DFT)	8-12	30-40	100-110
Service Life (Years)	5-10	10+	15-20+
Installation Cost (\$/SF)	4-8	15-20	20-40
System Durability	Low to Moderate	Moderate to High	Very High

Table 1 – Chemical Resistant Paint/Coating/Lining System Comparison

applications where the moisture level of the substrate is high, to ensure that the system will adequately adhere to the substrate.

After surface preparation is complete, the primer is applied to the concrete or CMU and then the basecoat is applied, which typically consists of a flexible epoxy resin with silica fillers, which bridge small surface cracks, followed by a fiberglass type mesh or matting as shown in Figure 3. The matting provides additional bridging of surface cracks as well as impact resistance, which could otherwise result in cracking or chipping of the coating system leaving it susceptible to accelerated deterioration. This layer is especially important, because it provides the final level of protection if the chemical resistant topcoat has weakened from successive chemical spills, or has cracked or failed.

Finally, the topcoat layer is applied as shown in Figure 4. The topcoat is similar to a high build vinyl ester or epoxy chemical resistant coating (up to 15 to 20 mils per coat), and is much thicker than a standard chemical resistant paint (4 to 6 mils per coat). The topcoat is the first layer of protection from chemical spills, and it is critical that this layer be compatible with the chemical being stored in the containment area. Chemical resistant coating and lining system manufacturers will provide recommendations for the system most suitable for specific applications. Chemical compatibility tables are also a resource when selecting the system for a service condition.

Why is Proper Protection So Important?

Without a chemical resistant coating, the porous concrete is left vulnerable to attack by the chemical being stored in the containment area. Aggressive chemicals such as fluoride, sodium hydroxide, and sodium hypochlorite quickly attack the concrete substrate as shown in Figure 5, resulting in deteriorated concrete areas that begin to spall and break away. This ultimately leaves the reinforcing bar in the concrete at risk

of deterioration and section loss, and over time, expensive repairs to the concrete may be necessary.


More importantly, the primary and most critical function of a chemical containment area is to contain the full volume of chemical being stored in the event of a tank failure. In the event of a tank failure, the chemical containment area provides the sole means of containment of chemical spills. The typical response time for a utility to be notified of a spill via alarm or visual identification can be hours depending on the level of sophistication of the notification system in place. Then additional time is required to either pump the spilled chemical to on-site catastrophic failure tanks or hire an emergency spill team to arrive at the site to clean up the chemical.

During that time, it is critical that the containment area perform its intended function of containing the contents of the chemical spill with no concerns regarding leakage of the chemical into surrounding areas or the environment. If a chemical resistant coating system is not present or has areas where it has failed, the chemical will penetrate the concrete substrate or concrete masonry units (CMU) and migrate into surrounding building areas or the exterior environment. This is even more concerning in areas where CMU walls form part of the containment area, because CMU is much more porous than cast-in-place concrete, and the chemical would likely seep through the wall in a matter of hours, before personnel are able to respond.

Ultimately, a cleanup that would have been limited to solely the containment area, now has the potential to include surrounding areas such as adjacent rooms or chemical containment areas risking the mixing of incompatible chemicals, or worse, an environmental clean-up if the chemical migrates to surrounding soils or water ways via an exterior wall or floor drain.

Which System is Right for Us?

Selecting the desired system for your chemical feed system application will depend on a combination of factors, including the service life of the system, the budget available for the installation, the desired durability and robustness of the system in place, and the level of acceptable risk for the facility. Table 1 below provides a comparison of the different systems.

In general, the installation cost of the chemical resistant coating system includes ventilation, surface preparation, and installation of the new system. The range of costs depends on a variety of factors including the square footage of the application area, the type of surface preparation necessary, and the chemical being stored in the area. The estimated service life assumes that proper maintenance is performed, and can vary based on factors such as the frequency of chemical spills. Once a chemical resistant coating is installed, proper maintenance is necessary to ensure the longest service life possible for the coating system. Spills should be cleaned up immediately, and the coating system should be monitored for signs of deterioration, and the top coat repaired as necessary. 

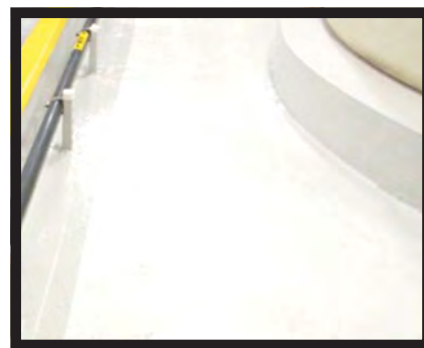


Figure 4 – Finished Installation with Topcoat



Figure 5 – Deteriorated Concrete in Sodium Hypochlorite Area

CWWA & CT Section AWWA FALL CONFERENCE A SUCCESS



This year's CWWA/CT AWWA Fall Conference was a huge success! Record attendance, informative speakers, wonderful food, great vendor displays and lively conversation! To top it off, Governor Dannel Malloy popped in and Commissioner Jack Betkoski quickly ushered him to the podium to discuss the state's efforts to develop a State Water Plan.

Two-hundred water industry professionals and public officials attended the event, making this the largest fall conference ever. Here's a recap of some of the presentations provided at the event:

Oxygenation and Circulation in Reservoirs

Ken Wagner, Ph.D., CLM of Water Resources Services, Inc. presented on issues relating to oxygenation and circulation for the management of oxygen, algae,

iron, and manganese in reservoirs. These processes are useful in avoiding low oxygen levels that foster undesirable water quality and increase treatment needs resulting from elevated metals, especially iron and manganese, accumulations of ammonium, hydrogen sulfide, and phosphorus release from sediment that supports algae growth. Ken also touched on the technical and cost factors associated with these techniques.

Drinking Water Division Update

Lori Mathieu of the State Department of Public Health's Drinking Water Division updated attendees on a number of issues, including the department's focus on improving the sanitary survey process by focusing on issuing violations quickly to pursue corrective action for significant

deficiencies. In addition, Lori presented on the department's efforts to use technology and Lean Practices to improve regulatory oversight. Issues relating to changes in Public Water Supply Management Area boundaries and pending regulations, including emergency generator regulations, were also discussed.


DEEP's Environmental Priorities

Commissioner Robert Klee, State Department of Energy & Environmental Protection, discussed his department's environmental goals for 2015. These include efforts to address issues relating to climate change, encourage the use of renewable energy, and update solid waste management plans.

State Water Plan

A panel discussion featuring Jack Betkoski, PURA Commissioner and Chair of the state's Water Planning Council, David LeVasseur, Undersecretary for the Office of Policy and Management, Betsey Wingfield, DEEP, and Maureen Westbrook, Connecticut Water Company, discussed efforts to develop a State Water Plan. All agreed that is was an ambitious process and that public input and involvement is vital to the process. In addition, ensuring that the plan is based on sound data and is forward looking to address issues such as climate resiliency will be critical.

Water Security & Guidelines for Developing a State Water Plan

Gene Likens, Ph.D., a renowned ecologist and pioneer in the study of acid rain, shared his experiences in developing water plans in other countries. He reiterated the need to use 1) a broad, stakeholder-based, long-view perspective for water management and conservation; and 2) science, best data, and local knowledge in a transparent and documented process. Gene also touched on the importance of incorporating future variability, uncertainties, and risk in the decision-making process as well as promoting environmental justice—the fair treatment of people of all races, cultures, and incomes. 

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Maureen Westbrook, on behalf of CWWA, recognized two individuals who are retiring this year who have been active in the water industry and our associations at the Fall Meeting.

Left – Maureen with Greg Leonard.

Right – Maureen with Vinny Susco.

On behalf of both CT Section and CWWA, we want to thank the following individuals for their contributions to the industry and wish you all the best in your retirement.

Greg Leonard

Greg Leonard is retiring from his position as General Manager of the Southeastern Connecticut Water Authority (SCWA). Greg has served as the General Manager for SCWA since 1993. Prior to that Greg was with the South Central Connecticut Regional Water Authority. As General Manager of SCWA, Greg is responsible for the overall operation and administration of the SCWA as well as serving as the liaison with local and state government.

Beyond his work at SCWA, Greg has been involved in the water industry, having served on the CWWA legislative committee, the CWWA Board, and was president of CWWA from 2001-2002. He is a member of the Water Planning Council Advisory Group and was active in the Southeast WUCC.

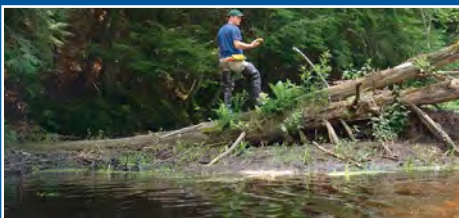
Vinny Susco

Vinny Susco is retiring from his position at the East Hampton Water & Sewer Authority. He had a long career in the water industry, starting doing source protection and cross connections at CT Water Company. He had various roles at CT Water and then went on to work at Cromwell Fire District before he took his position in East Hampton, overseeing both water and sewer operations.

Throughout his career, Vinny has been involved in both CT Section and CWWA. He was active on various Section Committees through the years, and was instrumental in developing the early cross connection program in CT. He was President of CWWA from 1985 – 1986 and Chair of the CT Section AWWA from 1987-88. In addition, he served on the CWWA legislative committee, most recently as one of the tri-chairs, providing the municipal perspective on legislative issues. Vinny was recognized by his colleagues with the water industry's prestigious Fuller Award in 1989. 💧



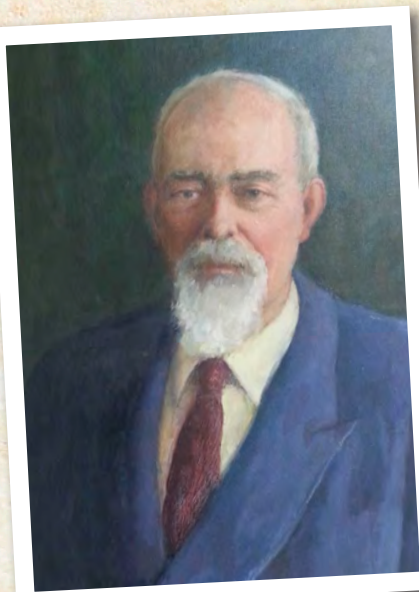
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HISTORY *of the* Avery/Dewing Families' Involvement *in the* WATER INDUSTRY

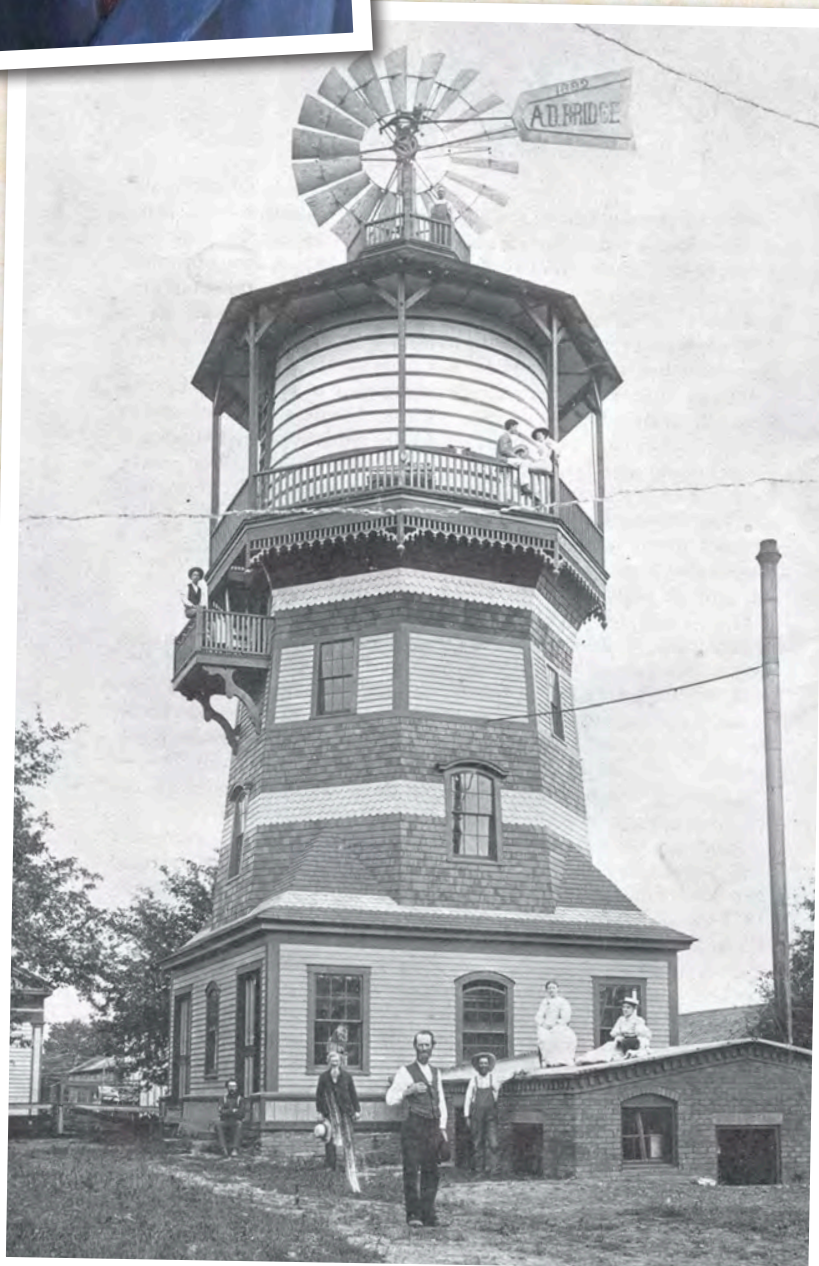
BY BRENDAN AVERY

The Hazardville Water Company was founded on December 29, 1892 by a man named Amos D. Bridge. He was elected the President of the company

with various members of his family acting in various other officer positions. The initial water supply had several small pumps coupled with an iconic water tower built and designed by Amos D. Bridge in 1892. The company was given a special charter from the state of Connecticut in 1899 to supply Hazardville, Scitico, and part of Somers, CT with clean drinking water. The company continued successfully until 1935 when it fell under financial strain due to the depression.

Arthur Dewing, my great-grandfather, purchased the company in 1935, but kept the local manager and staff while overseeing the company from his home in Boston, MA. At the time of purchase, the company had around 300 customers with a capacity of 10,000 gallons an hour and a 150,000 gallon storage capacity. Arthur Dewing financially backed the company through the depression and it steadily recovered to stability in the 1940s. Arthur Dewing also purchased the Jewett City Water Company around 1935, which was also having financial problems due to the depression. The Jewett City Water Company was also founded around 1892, but it is supplied primarily from a reservoir as opposed to underground wells.

Stuart Avery, the son-in-law of Arthur Dewing and my grandfather, took over as general manager of both Hazardville and Jewett City in 1952 following the departure of longtime GM Luther E. Cotton. Part of the agreement with Stuart taking control was a move of the headquarters from Boston, MA to Cambridge, MA. There was rapid population growth in the borough of Hazardville, CT during the 1950s and 1960s. This growth put a financial strain on the small water company, which did not have the staff to handle such rapid change at the time. The death of longtime President Arthur Dewing in 1971 triggered the hiring of Kenton Ide to assist Stuart. The additional help sustained the company until Kenton departed in 1976.



Jewett City did not go through the growth of Hazardville during this same time and as a result, the system is currently considerably smaller than Hazardville.

Stuart's son Jonathan Avery, my father, got involved with the company in 1978 when the future of the Avery family's involvement in the company was uncertain. The addition of Jon allowed Hazardville to file for much needed rate increases through the late 70s and early 80s. The additional revenue led to a more stable company making necessary upgrades to its system. Stuart passed away in 1984 after a battle with cancer and Jon Avery took over as President of both Hazardville and Jewett City. The companies remained stable, until the late 90s brought the necessity of a treatment plant to deal with a persistent manganese problem in Hazardville. This project was by far the most expensive undertaking in the history of the company. The capital was raised in large part thanks to the president Jonathan Avery, which allowed for the Stuart Avery Treatment Plant to be constructed in 1998. The office in Hazardville moved to its current location on Hazard Avenue in 2000 to allow more space for office staff and to be more visible to the community. All administrative business was moved from Boston, MA to the current office in 2004. A recent project in Hazardville was the completion of a one million gallon storage tank in 2007 effectively doubling the storage capacity of the system.

Jewett City experienced a large change in the early 1980s where the company transitioned from fixture billing to metered billing. This transition took roughly seven years and promoted considerable conservation within the community. Prior to the addition of meters, there was no financial incentive for an individual to use less water. The new meter numbers also allowed the sewer department in the town to bill based on usage, further encouraging conservation. The company has adapted to the loss of the majority of the industry in town and currently remains primarily a residential system. The most recent challenge was the addition of a treatment plant in the late 90s as a response to the increased standards in the safe water drinking act. This plant removes some of the turbidity in the water to a point that it conforms to current acceptable standards.

The Chatham Water Company was created in 1929 by Arthur Dewing for the primary purpose of serving local businesses.

This system is the first utility Arthur owned primarily on his own, and the only system he started. The project was originally intended to be a partnership with local businesses, however the depression forced Arthur to create the company entirely on his own. The resulting system served roughly 45% of the town. The company was sold to the town 1985 in a mutually beneficial transaction, which allowed the company to expand and serve the remaining areas of Chatham, MA.

The Avery family has chosen to continue the water company legacy created by Arthur Dewing. I, along with two of my cousins, recently decided to get involved with the water companies. We represent the fourth generation of Averys/Dewings and hope to continue the history of success in the industry. We all realize it's important to remember those who built the foundation, which we stand on. 💧

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CWWA's 2015 *Legislative Outlook*

When the legislature convenes on January 7, Governor Dannel Malloy and lawmakers will be grappling with closing a projected budget deficit. This comes on the heels of \$100 million in budget cuts the administration was forced to make in November to close a budget shortfall as well as a hiring freeze.

How will this affect the water industry?

Water utilities and other businesses often face long delays in receiving approvals from state agencies for permits, applications and other submissions, such as water supply plans. Businesses and municipalities point out that this undermines efforts to move forward with projects that may benefit the economy.

For years, state agency officials have argued that these delays are due in large part to reductions in agency staff. Staffing levels have declined over the last several years. For example, staff in the state Department of Public Health's Drinking Water Division has reduced between

2008 – 2014. Unfortunately, there is no relief in sight given the state's continued fiscal crisis.

To address this, agencies have been adopting lean practices, developing General Permits and looking for other ways to streamline review and approval processes to do more with less. And this has helped – to some degree.

Given the focus on the state budget, which Ben Barnes, Secretary of the state's Office and Policy and Management, recently characterized as a "permanent fiscal crisis", CWWA will be focusing its efforts on the following legislative priorities:

Support Efforts to Develop a State Water Plan

Although we do not expect additional legislation regarding the state's efforts to develop a State Water Plan, CWWA and its members are devoting a lot of time serving on working groups and attending meetings to help develop a "plan for the

plan". Our focus is to ensure that the process for developing a State Water Plan: 1) Is a collaborative stakeholder process; 2) Relies on objective data and science; and 3) Protects the availability of public water supplies needed for present and future public health, safety, and economic development needs.

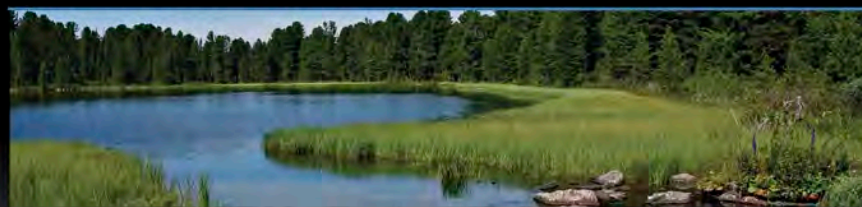
In addition, CWWA supports efforts to facilitate the completion and approval of the Water Utility Coordinating Committee (WUCC) plans to provide for coordinated water supply planning, which will provide critical information and data to support the development of a State Water Plan.

Protect the Safety & Availability of Public Water Supplies

Preliminary discussions about the State Water Plan have also touched on the issue of registered diversions. CWWA wants to make sure that the rights of water companies to use registered diversions are not jeopardized. These registered diversions are critical to providing sufficient water supplies to meet the public health, safety and economic development needs of the communities we serve.

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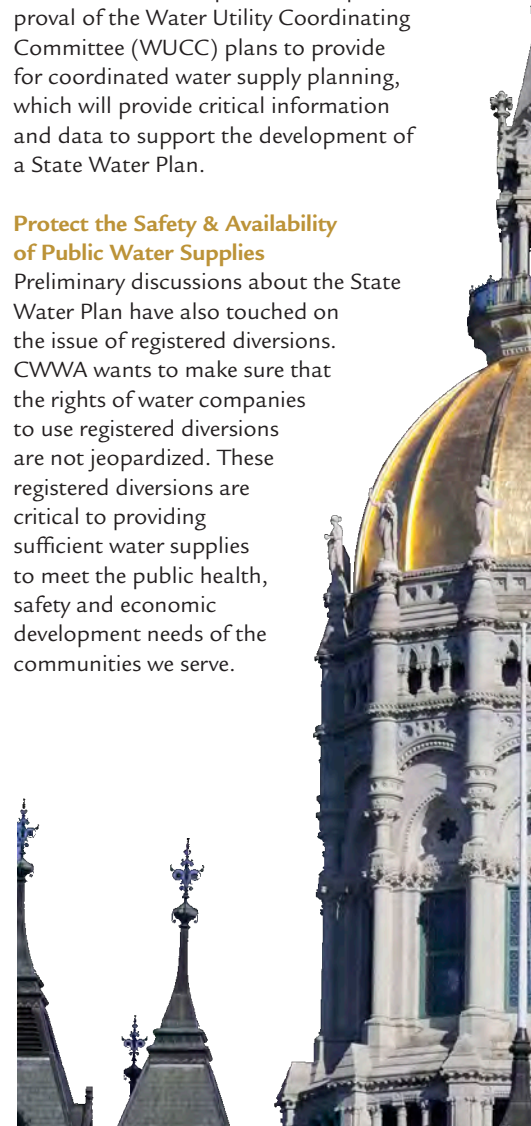
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In addition, as the state moves forward with implementation of the new stream flow regulations, CWWA is focusing on ways of ensuring that the state Department of Energy & Environmental Protection's (DEEP) basin classifications reflect the factors negotiated in the stream flow regulations. The big issue here is making sure the classifications recognize the need to protect a water company's safe yield and margin of safety to meet current and future public water supply and economic development needs.

Streamline Regulatory Requirements and Expedite Approvals

Given the state's fiscal challenges, it is more important than ever to look for ways to assist state agencies in streamlining regulatory requirements to end the gridlock. Some of CWWA's recommendations in this area include:

- Streamlining the format and approval process for Water Supply Plans required to be filed by water companies;
- Limiting the scope of the state Department of Public Health's (DPH) change of use permits to issues that could impact water quality and/or operations rather than routine or minor activities;
- Expediting the process associated with system acquisitions to reduce time and transaction costs;

- Developing a Water Resources Professional program to assist state agencies in processing permits and other requirements in a timely manner; and
- Eliminating the requirement for obtaining a permit for the use of excess water during emergencies.

Promote Energy Efficiency & Water Conservation


The state also needs to identify ways of assisting water utilities in reducing costs to keep rates reasonable. Many water utilities are incorporating energy efficiency and water conservation measures in an effort to do just that. CWWA recommends:

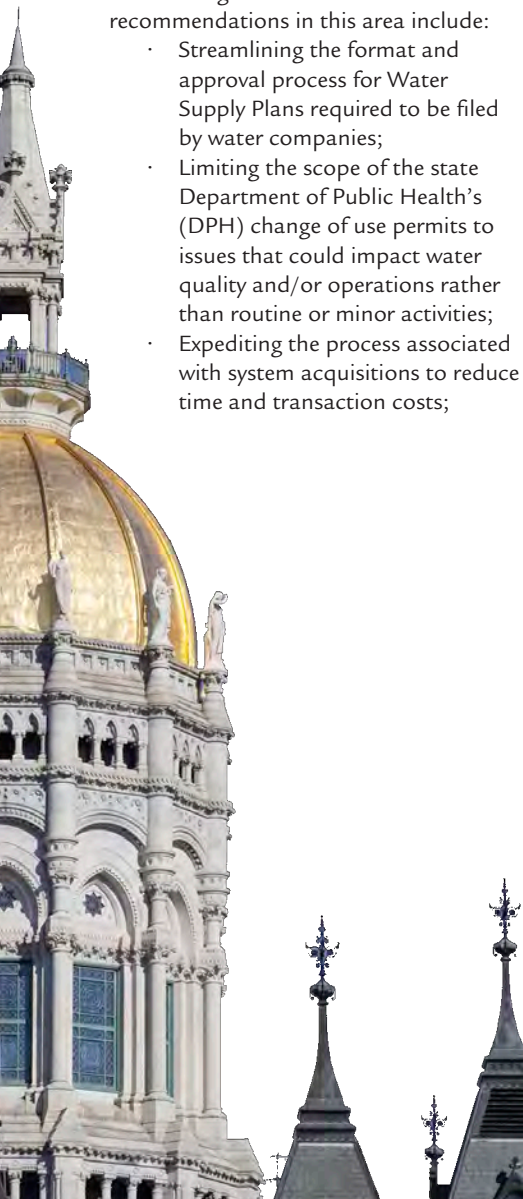
- Providing greater certainty to private water companies by clarifying costs that may be recovered relative to energy efficiency and water conservation; and
- Exploring opportunities to expand virtual net metering opportunities for water companies, which allows customers to reduce energy costs by assigning the net production from their electric generation to other metered accounts.

Address Capacity & Viability Issues of Small Community Water Systems

Another issue that lawmakers and regulators – and the water industry – believe must be addressed is concerns with small community water systems. In addition to expediting the process associated with acquiring such systems to correct deficiencies, CWWA recommends:

- Providing greater regulatory oversight to ensure that new and existing small Community Water Systems (CWS) have adequate financial and managerial capacity to meet public water supply needs; and
- Setting aside funds under the state's newly created Water Quality Improvement Program to assist CWS in addressing necessary system improvements.

Clearly, it promises to be a busy legislative session. If you are a CWWA member and interested in serving on CWWA's Legislative Committee, please contact Betsy Gara, CWWA, at gara@gmlobbying.com. 



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Serving Our Communities

Connecticut's water companies are committed to providing a safe, adequate supply of quality water to meet the public health, safety and economic development needs of the communities they serve. But water companies also recognize the importance of serving their communities in other ways, including food, clothes and toy drives, educational programs and encouraging a spirit of volunteerism among their staff.

Organizing Charity Drives

Helping people who are facing difficult times is a goal of many of Connecticut's water companies, particularly during the holiday season when the need is so great. "We've found that we can benefit customers in more ways than just reliably supplying safe, pure water," explained Bruce Silverstone, Aquarion Water Company.

Aquarion undertakes a very ambitious food drive as part of its 'House of Hope' program, which places food collection centers throughout the Bridgeport area. "Our House of Hope food drive in 2014, held in partnership with St. Vincent's Medical Center, collected a record seven tons of food for area food banks and the hungry families and individuals they serve," said Silverstone.

Connecticut Water Company also hosts a food drive each year, beginning October 1 through Christmas. "Unfortunately, the organizations we have talked to said they have far less on their shelves than in previous years. Non-perishable food items and grocery store gift cards are being accepted and will benefit local service agencies," said Dan Meaney.

Donating toys to benefit needy families is also a focus of Connecticut Water Company's efforts to serve its communities. "Each year, literally truckloads of toys are delivered to local social service agencies to be distributed to children," said Meaney. Connecticut Water Company also collects coats to donate to individuals in need.

Promoting a Spirit of Volunteerism

By supporting efforts to encourage employees to volunteer their time and resources, water companies can make a big difference

to individuals and families in the communities they serve.

"As a citizen-owned utility, Norwich Public Utilities (NPU) supports its community by encouraging employees to donate time, energy and financial support to various causes," said Mark Decker, Norwich Public Utilities. For example, NPU participates in United Way's Day of Caring. Employees and equipment are sent out to a local non-profit agency to help out with needed chores, such as painting or landscaping other.

Employees of the South Central Connecticut Regional Water Authority (RWA) are also active volunteers in their community and participate in United Way's Days of Caring. "This year, RWA employees built a playground and painted walls at a shelter in New Haven for homeless families," said Kay Powell, RWA.

Connecticut Water Company organized a staff-driven Community Involvement Committee to promote volunteerism and help coordinate support for various charitable activities throughout the communities it serves. "Clearly, an important part of our mission is to be a good corporate citizen in supporting the communities we serve," said Dan Meaney, Connecticut Water Company.

To benefit the Make-A-Wish Connecticut program, Connecticut Water employees participated in the 'Wishes on Wheels' Truck Convoy. The convoy of hundreds of trucks has become an annual tradition that many local Make-A-Wish kids look forward to seeing. And, at the Terryville Lions Club's annual Motorcycle Rally and Picnic, Connecticut Water Company organized a water station where volunteers handed out water and goodies and showed off the new Naugatuck dump truck.

About 25% of Aquarion Water Company's employees participate in more than 120 organizations throughout the company's service areas. "Customer service is a many faceted mission at Aquarion Water Company. Serving some 630,000 customers across Connecticut, service to customers often equates with service to communities," explained Silverstone. For example,

Aquarion has negotiated special free and discounted ticket offers for its customers at a wide range of museums, sports venues, theaters and even, most recently, a ferry service across Long Island Sound to New York.

Supporting Mentorship, Internship & Leadership Programs

The Metropolitan District (MDC) recently partnered with the University of Hartford's Entrepreneurial Center to host over a dozen local women and/or minority small businesses at its 2014 Executive Leadership Academy. The two-day event provided participants with information and guidance regarding how to access business development tools and effectively market their products and services, obtain project financing, bonding, insurance and administration assistance.

MDC also provides a Diversity Internship Program targeted specifically for college students from diverse backgrounds. The program includes a 10-12 week internship program where students are expected to apply classroom-based knowledge to the work environment. Students participate in semi-monthly workshops, which cover a variety of topics including networking, resume critique, and interview skills and techniques, as well as the benefits of working in the private and public sector.

The Water Boot Camp program is a designed to provide students with hands on knowledge and awareness of careers in the water industry through activities such as stenciling, sampling, and safety training combined with classroom learning. The program, created by our own David Kuzminski of Portland Water with funding from the U.S. Environmental Protection Agency and the CT Section AWWA, has received national recognition. Several water companies, including MDC, Aquarion, RWA and Connecticut Water Company have sponsored the Boot Camp.

The RWA hosts an environmental careers summer camp for high school students. The students learn about the variety of careers available in the water industry through a combination of lectures, hands-on learning and field trips.

Creating Stewards of the Environment

Educating students about the importance of protecting the environment and water resources is also an important goal in serving the greater community and one that Connecticut's water companies embrace.

RWA's Project

"Water is one of our most precious—and endangered—natural resources. That is why we offer environmental education programs to show people, especially kids, how their actions determine ecological quality. Using engaging hands-on activities and experiments, we teach some science and have some fun," explains the RWA on its website.

Over 10,000 students a year take advantage of the RWA's education programs which are provided to schools, libraries and youth groups free of charge. "Students in sixth through eighth grades participate in Project WATER (Watershed, Aquatic, Terrestrial, Ecosystem Research) to help them understand the relationship between land use and water quality. After preparatory classes where they are introduced to the concepts and equipment, students board RWA's bus to sample water at four or five locations along the Mill River in Hamden," said Kay Powell, RWA.

Why Beluga Whales Need Clean Water

In 2014, Aquarion sponsored installation and operation of three webcams at the Mystic Aquarium trained on the facility's highly popular beluga whale exhibit. The images are now available on Aquarion's website along with information about belugas. Material about beluga whales and their environmental needs to have been developed and distributed teachers in our area, and an essay contest was launched for students of all ages around the theme of 'Why Beluga Whales Need Clean Water.'

"We are getting about 150 hits per day on our website. It has been a great way to engage people in the daily lives of the whales and consider their own role in protecting watersheds."

Recognizing Environmental Champions

Once again, Aquarion conducted its annual Environmental Champions Award Program honoring adults, students, corporations and non-profits for voluntary efforts to protect and conserve natural resources. More than 200 entries were received in 2014 – a record – and the Connecticut winners were honored by U.S. Senator Richard Blumenthal state and

Aquarion officials at an event attended by over 1000 people at Connecticut's Beardsley Zoo.

"The Aquarion Environmental Champions Award continues to honor people and organizations with a true passion for the resources that sustain us all. Moreover, it brings recognition to the efforts of many more thousands of environmental volunteers and encourages even more to follow their lead," said Silverstone.

Envirothon Program

Promoting environmental awareness, knowledge, and active personal stewardship among Connecticut high school students through education and team competition is the goal of Connecticut's Envirothon program. The MDC and Connecticut Water are long-time sponsors of the program.

Leave No Child Inside

The state Department of Energy & Environmental Protection launched a 'Leave No Child Inside' program several years ago to promote a love of the great outdoors – and the environment. Getting

kids unplugged and outside is also the goal of many water company programs that understand how important it is to educate people about the importance of protecting the environment and our water resources.

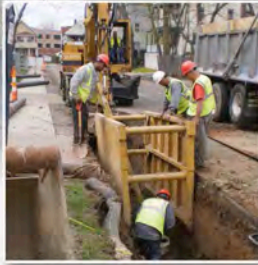



Earlier this year, Connecticut Water Company led two hikes on its watershed properties in Killingworth and Tolland as part of its sponsorship of the Connecticut Forest & Park Association's Connecticut Trails Day 2014. The hikes are a wonderful way of giving people the opportunity to appreciate nature and the state's water resources.

RWA's recreation program also provides area residents with places to hike, fish, and bike. Another program developed by RWA is *Opie's World: Tap Into Nature*, which was created to help children and adults connect with each other and the natural world.

How is Your Company Serving its Community?

If your company has charitable or educational programs that you would like us to spotlight, let us know! These wonderful activities and programs serve as an inspiration to all of us to give back to our communities. 💧

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CTAWWA Spring 2015 Training Schedule

Course selections for Spring 2015 are listed below. The CTAWWA Education Committee provides the most comprehensive up-to-date training for members. We appreciate your continued support and encourage you to participate in courses offered by CTAWWA individually and in partnership with NEWWA.

Please note that the courses offered in partnership with NEWWA must be registered and payment made directly to NEWWA. Courses offered by CTAWWA must be registered and payment made directly to CTAWWA.

There is a listing of the course offerings on the secure website, www.ctawwa.org, where you can also register online.

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E-mail: ctawwa@snet.net

PARTNERSHIP COURSES WITH NEWWA

The following courses are offered in partnership with the New England Water Works Association, a section of the American Water Works Association.

NOTE: CTAWWA does not accept registration for these classes. To register for these courses, call NEWWA at 508-893-7979, or visit the website at www.newwa.org.

Registration fee includes all course materials, breaks, lunch (excluding half-day courses), CEUs and CEU Certificate.

All courses are approved for CT Certified Drinking Water Operator Training Renewal Requirements. Distribution (D), Treatment (T), or combined (T&D) applicability is listed for each course. Enrollment is limited; please register for courses early.

FUNDAMENTALS OF READING PRINTS AND DRAWINGS

Course Code: DBL315AC
Date: Thursday February 12, 2015
Location: MDC Training Center, Hartford
Time: 9:00 AM – 4:00 PM
CEU: 0.6 CEU
Applicable for Distribution and Treatment (D and T)

Course Description: This full day seminar is specifically designed to help participants develop an understanding of how working drawings are organized, and how to utilize the information contained in them. You will receive instruction in reading several types of drawings including: site plans, floor plans, sections and details, including both architectural and mechanical and plumbing drawings. This seminar will present a step-by-step guide to where specific types of information can be found in a set of working drawings, teach you practical easy to remember, procedures for orienting yourself with a new set of working drawings, and provide you with the skills you need to read and understand the information portrayed in engineering drawings.

Water utility operations professionals who must understand how to extract information from engineering and architectural working drawings will find this seminar of interest. Whether serving as an orientation for new staff, or as a review for seasoned professionals who have not had formal training in reading prints, this seminar's straightforward agenda will present important information that can be utilized in "real world" situations.

Registration Fee: CTAWWA Members: \$180.00 ; Non-Members: \$220.00

EVALUATING OPTIONS FOR EFFECTIVE DRINKING WATER TREATMENT

Course Code: TWT315AC
Date: Tuesday March 10, 2015
Location: MDC Training Center, Hartford
Time: 9:00 AM – 4:00 PM
CEU: 0.6 CEU
Applicable Treatment (T)

Course Description: There are many choices to be made regarding choosing the best chemicals to treat drinking water effectively. Periodically, it may be useful for a treatment plant to investigate whether the use of alternative chemicals will allow a more effective result over the chemicals currently being used for treatment. This full day class will review the various types of chemicals used in drinking water treatment, along with how the chemicals are able to perform, the safety hazards in dealing with the chemicals, and when to best use each chemical. Brief demonstrations will be used to allow participants to witness the success of certain chemicals using in drinking water treatment.

Registration Fee: CTAWWA Members: \$180.00 ; Non-Members: \$220.00

DISINFECTION AND DISTRIBUTION SYSTEM WATER QUALITY

Course Code: DDD415AC
Date: Tuesday April 7, 2015
Location: MDC Training Center, Hartford
Time: 9:00 AM – 4:00 PM
CEU: 0.6 CEU
Applicable for Distribution and Treatment (D and T)

Course Description: This course will cover water quality concerns in the distribution system, and how important a role disinfection plays. Topics covered will include a summary of the methods of disinfection, present and future regulatory concerns including the DBP and revised Total Coliform Rules, uses of hydraulic modeling, storage tank contamination concerns and solutions, biofilm and re-growth challenges, and a close examination of several case studies. This class is designed for anyone that is involved with water quality issues in the distribution system including distribution

and treatment plant operators, engineers, and other drinking water personnel.

Registration Fee: CTAWWA Members: \$180.00 ; Non-Members: \$220.00

“HANDS-ON” HYDRANT OPERATION AND MAINTENANCE

Course Code: DHM415AC

Date: Wednesday April 29, 2015

Location: MDC Training Center, Hartford

Time: 9:00 AM – 4:30 PM

CEU: 0.6 CEU

Applicable for Distribution (D)

Course Description: The seminar is designed for all distribution system personnel, especially those responsible for the installation, inspection, maintenance and repair of fire hydrants, their valves and associated water mains. It will enable experienced utility personnel to stay informed on current accepted practice and will provide an orientation for new water operators.

Registration Fee: CTAWWA Members: \$180.00 ; Non-Members: \$220.00

BULK CHEMICAL DELIVERY WORKSHOP

Course Code: TBC415AC

Date: Tuesday May 14, 2015

Location: MDC Training Center, Hartford

Time: 9:00 AM – 4:00 PM

CEU: 0.6 CEU

Applicable for Treatment (T)

Course Description: The Bulk Chemical Delivery Workshop is designed to provide focused information to anyone who is responsible for purchasing handling, or using water treatment chemicals. This seminar will explain key concepts and sound procedures related to the procurement and use of any water treatment chemical. Instruction will focus on the need for accurate chemical specifications, on-site delivery controls, and chemical testing. A segment on properly handling public notification is also included to assist with incidents that may occur related to chemical delivery. During this seminar you will follow the steps of chemical distribution and the associated paper work generated from the time of manufacture to the point of use.

Registration Fee: CTAWWA Members: \$180.00 ; Non-Members: \$220.00

ELECTRICITY, MOTORS AND EMERGENCY GENERATORS

Course Code: BGM415AC

Date: Thursday, June 18, 2015

Location: MDC Training Center, Hartford

Time: 9:00 AM – 4:00 PM

CEU: 0.6 CEU

Applicable for Distribution and Treatment (D and T)

Course Description: This full day class has been created to allow drinking water system personnel and others to understand the basic concepts of electricity and the operation and maintenance of electrical motors, emergency generators and other related equipment. Beginning with an overview of how electricity is generated, delivered and received in a typical commercial building, concepts of electrical safety and Lock Out Tag Out (LOTO) will be presented. Next, a description of the tools used to measure proper delivery of electrical power will be reviewed along with a description of the types of commonly used motors and other equipment used to allow proper motor operations. Required and recommended maintenance will also be described. Lastly, a brief overview of electrical issues related to the use, operation and maintenance of emergency electrical generators will be explored.

Water utility operations professionals who deal directly with their system's motors and pumps as well as other operation and maintenance workers will find this seminar of interest. Those front line management professionals who directly supervise this critical component of water distribution and treatment systems will also find this program useful.

Registration Fee: CTAWWA Members: \$180.00 ; Non-Members: \$220.00

Courses presented by CTAWWA
The courses listed below are sponsored by the Connecticut Section of the American Water Works Association. There is a listing of the course offerings on the website, www.ctawwa.org. You can fax the registration to 203-725-0445, or register online (credit cards accepted). NEWWA does not accept registration for these classes.

Registration fee includes all course materials, breaks, lunch (excluding half-day courses), CEUs and CEU Certificate. All courses are approved for CT Certified Drinking Water Operator Training Renewal Requirements. Distribution (D), Treatment (T), or combined (T&D) applicability is listed for each course. Enrollment is limited; please register for courses early.

HEALTH AND SAFETY AT WATER TREATMENT FACILITIES*

Course Code: Spring 1501

Date: Thursday, January 29, 2015

Location: MDC Training Center, Hartford

Time: 9:00 AM – 1:15 PM

CEU: 4.0 TCH, (0.4 CEU)

Applicable for Treatment & Distribution (T&D)

Course Description: This half-day educational seminar targets water treatment facility engineers, operators, and managers who want help meeting the complex health and safety requirements encountered at surface water and groundwater treatment facilities. The seminar includes an overview of applicable federal and state safety regulations as they apply to treatment facilities. The seminar will also include a description of the most cited health and safety issues as well as real life examples of remedies. Most utilities have implemented programs to address confined space entry, working at heights, energy control (lockout/tagout), and hazard communication. However, audit results of utility programs indicate that written programs often do not communicate with field activities. Further, the typical health and safety programs that get the attention of utility operators often do not address all of the health and safety concerns at treatment plants. For instance, generator installations often include the storage of combustible liquids that are not obvious. Spill prevention planning as well as tank integrity analysis of these types of storage tanks is critical to safe operation.

Registration Fee: CTAWWA Members: \$130.00; Non-Members: \$170.00

WATER TREATMENT SCHOOL*

Course Code: Spring 1502

Date: Class runs for 12 weeks beginning Tuesday, February 13, 2015

Location: MDC Training Center, Hartford

Time: 6:00 PM – 8:00 PM

CEUs Pending

Applicable for Treatment (And distribution?)

Course description: Revamped, this course will cover all practical aspects of water treatment processes in general use today as well as basic mathematics, chemistry and hydraulics. Although there is no prerequisite for attending this course, each applicant must have basic mathematical ability including the use of fractions and decimals. In-



class time will run approximately two hours, with additional work assigned for completion outside of class. There must be a commitment made by each student to complete these weekly assignments in order for the course to be effective.

Registration Fee: CTAWWA Members \$500.00; Non-Members \$550.00

KNOWLEDGE MANAGEMENT AND SUCCESSION PLANNING

Course Code: Fall 1503

Date: Tuesday, February 17, 2015

Location: Bristol Water Treatment Plant, Bristol

Time: 9:00 AM – 4:00 PM

CEU: 6.0 TCH (0.6 CEU)

Applicable for Treatment & Distribution (T & D)

Course Description: This class offers an overview of the current state of workforce education in the United States and its world economic partners; how this impacts the current operational issues in the water utility industry, and what strategies for knowledge management in the industry are appropriate. The seminar will then present a succession planning model that can bring improvement to the process of placing employees in positions of leadership in the future. Participants will apply the model to their own workforce organization utilizing documentation prepared for the seminar. Included will be a discussion of skill sets that are predictive of successful transition to leadership and management position and a review and application of tools that can be used for employee assessment. Participants will leave with a notebook of relevant materials, handouts and documents that can be expanded on to continue the process back in the work place.

Registration Fee: CTAWWA Members \$160.00; Non-Members \$200.00

BUSINESS 101

Course Code: Spring 1504

Date: Tuesday, April 14, 2015

Location: Bristol Water Treatment Plant, Bristol

Time: 9:00 AM – 4:15 PM

CEU: 6.0 TCH, (0.6 CEU)

Applicable for Treatment & Distribution (T&D)

Course Description: Water operators benefit from understanding just how a

business works so that they may better appreciate the business decision-making process. This full-day course presents to the student the nature of a business and what the risks associated with a large business operation such as a utility are, and how risk is managed. Basic concepts in business organization and operation, form of business, why businesses exist, how businesses are organized, and how the money come in and goes out will be addressed. Upon completion of the course, the student will have a better appreciation for how business decisions are made.

Registration Fee: CTAWWA Members: \$160.00; Non-Members: \$200.00

WATER SYSTEMS OPERATION & OPTIMIZATIONS*

Course Code: Spring 1505

Date: Wednesday, May 6, 2015

Location: Lake Whitney Water Treatment Plant, Hamden

Time: 9:00 AM – 1:15 PM

CEU: 4.0 TCH, (0.4 CEU)

Applicable for Treatment & Distribution (T&D)

Course Description: There are many courses that cover parts of water utility systems but few that look at the entire system in order to gain efficiencies and improve water quality. Water utilities need to look at their systems with a holistic approach towards operations and optimization of their system. This 4-hour seminar will offer an overview of some of the optimization techniques currently used in the water industry. Included will be a panel discussion of the tools and skillsets that are required to successfully diagnose water system inefficiencies.

Registration Fee: CTAWWA Members: \$130.00; Non-Members: \$170.00

DPH OPERATOR CERTIFICATION

Course Code: Spring 1506, Spring 1507

Date: Wednesday, May 28, 2015

Location: Regional Water Authority, New Haven

Time: 9:00 AM – 3:30 PM

Course Description: This course will be a one-day review session to assist treatment plant and distribution system operators for the state certificate examinations. The morning review session will focus on treatment plant

operations, and the afternoon session will focus on distribution system operations. Attendees should bring a calculator to the review session and will be provided with a copy of AWWA's Operator Certification Study Guide (5th edition).

Exam applications are available on the DPH Drinking Water Section website:

www.ctgov/dph. From there, click on

"Drinking Water," then "Certified

Operators," then "Exam Information."

For more information, contact the Connecticut Department of Public Health at 860-509-7333.

No Book: CTAWWA Member \$120.00; Non-Member \$160.00

With Book: CTAWWA Member \$160.00; Non-Member \$200.00

DPH Testing Dates - TBD

Small Water System

Water Treatment Plant Operator

Distribution System Operator

***NOTE: Testing and Application Due Dates to be determined by DPH.**

BUSINESS WRITING FOR EVERYONE

Course Code: Spring 1508

Date: Tuesday, June 2, 2015

Location: Bristol Water Treatment Plant, Bristol

Time: 9:00 AM – 4:15 PM

CEU: 6.0 TCH (0.6 CEU)

Applicable for Treatment & Distribution (T&D)

Course Description: Water operators must be able to write effectively in order to relay information with clarity, conciseness and command. They need to understand and tap into the power of the written word. This full-day course teaches the logic and mechanics to choose the appropriate written communication style and how to avoid common pitfalls of written communication. Target audience: Written communication skills are a must for water operators of all levels. This is an excellent course for managers and operators who want to improve their effectiveness.

Registration Fee: CTAWWA Members: \$160.00; Non-Members: \$200.00

*Subject to DPH approval for TCH hours.
TBD = To be determined. 💧



Spring 2015 – CTAWWA Course Registration Form

HOW TO REGISTER FOR CT SECTION COURSES

Part I – Please complete this entire section including daytime telephone, fax, email, and AWWA or NEWWA member number if applicable. **The address should be your billing address for these courses.**

Part II – Please check which course (s) you will be registering for.

Part III – Please indicate the method of payment by checking the appropriate box and filling in the **TOTAL FEE** box. If you will be paying by credit card, it is very important that you include the card number and expiration date.

Keep a copy of the course dates and directions then return the completed registration form by Mail to: **Pam Monahan, Executive Manager, CTAWWA, 944 Prospect Street, Naugatuck, CT 06770.** Or fax to (203) 725-0445.

PLEASE NOTE: SECURE ONLINE REGISTRATION IS AVAILABLE at www.ctawwa.org. If you require handicap assistance, please contact us.

PART I - PARTICIPANT INFORMATION

PRINT Name (As you want your name to appear on CEU Certificate)		Attendee phone number () -	
Company		Billing phone number () -	
Billing Address			
Billing City		State	Zip -
Email		CTAWWA / NEWWA Member # (if applicable) 	

✓	Course Code	PART II – COURSE LISTING Course Title	Date/Time	Fee
	Spring 1501	Health and Safety at Water Treatment Facilities MDC Training Center, Hartford	January 29, 2015 9:00 AM – 1:15 PM	\$130.00/ \$170.00
	Spring 1502	Water Treatment School MDC Training Center, Hartford	Begins Tuesday, February 13 – 12 weeks at 6:00 PM	\$500.00/ \$550.00
	Spring 1503	Knowledge Management and Succession Planning Bristol Water Treatment Plant, Bristol	February 17, 2015 9:00 AM – 4:15 PM	\$160.00 \$200.00
	Spring 1504	Business 101 Bristol Water Treatment Plant, Bristol	April 14, 2015 9:00 AM – 4:15 PM	\$160.00/ \$200.00
	Spring 1505	Water Systems Operation & Optimizations Lake Whitney Water Treatment Plant, Hamden	May 6, 2015 9:00 AM – 1:15 PM	\$130.00/ \$170.00
	Spring 1506	DPH Operator Certification Review (with book) NO WALK INS RWA, New Haven	May 28, 2015 9:00 AM – 3:30 PM	\$160.00/ \$200.00
	Spring 1507	DPH Operator Certification Review (no book) NO WALK INS RWA, New Haven	May 28, 2015 9:00 AM – 3:30 PM	\$120.00/ \$160.00
	Spring 1508	Business Writing for Everyone Bristol Water Treatment Plant, Bristol	June 2, 2015 9:00 AM – 4:15 PM	\$160.00/ \$200.00

PART III - METHOD OF PAYMENT

Type of Payment			Amount (from TOTAL FEE above)
<input type="checkbox"/> Check (Payable to CTAWWA) <input type="checkbox"/> P.O.# _____ <input type="checkbox"/> MasterCard/Visa <input type="checkbox"/> AMEX			\$
Credit Card # 	Exp. / CCV /	Signature: _____	

Cancellation Policy: If you need to cancel, you must contact CTAWWA in writing at least two business days prior to the start of the course. If you contact CTAWWA within one business day, you will be charged 100% of the original course registration fee. This charge is non-refundable and non-transferable. Written refund/credit request made for special circumstances will be considered if received within two weeks from the start date of the program. Credit issues are valid for six months from the date of the program.

Spring 2015 CTAWWA/NEWWA Course Registration Form

HOW TO REGISTER FOR CT SECTION / NEWWA COURSES

Part I - Please complete this entire section including daytime telephone, fax, email, and AWWA or NEWWA member number if applicable. **The address should be your billing address for these courses.**


Part II - Please check [☐] which course(s) you will be registering for.

Part III - Please indicate the method of payment by checking the appropriate box and filling in the **TOTAL FEE** box. (NOTE: If you are registering within 2 days of the class add a **\$20.00 late fee**.) If you will be paying by credit card, **it is very important that you include the card number and expiration date.** Please do **NOT** send registration forms and payments to CT SECTION for these classes!

Keep a copy of the course dates and directions then return the completed registration form by Mail to: **NEWWA, 125 Hopping Brook Road, Holliston, MA 01746-1471**. Or, fax to NEWWA at **(508) 893-9898**. If you need further information, please call the NEWWA office at **(508) 893-7979**. **PLEASE NOTE: SECURE ONLINE REGISTRATION IS AVAILABLE at www.newwa.org.**

PART I - PARTICIPANT INFORMATION

PRINT Name (As you want your name to appear on CEU Certificate)		Daytime Phone () () () - () () () ()	
Company		Fax () () () - () () () ()	
Billing Address			
City		State	Zip () () () - () () () ()
Email		CT Section / NEWWA Member # (if applicable) () () () () () () () () () ()	

✓	Course Code	PART II - COURSE LISTING Course Title	Date/Time	Fee
	DBL315AC	Fundamentals of Reading Prints and Drawings MDC Training Center, Hartford	February 12, 2015 (9:00 am - 4:00 pm)	\$180.00/ \$220.00
	TWT315AC	Evaluating options for Effective Drinking Water Treatment MDC Training Center, Hartford	March 10, 2015 (9:00 am - 4:15 pm)	\$180.00/ \$220.00
	DDD415AC	Disinfection and Distribution System Water Quality MDC Training Center, Hartford	April 7, 2015 (9:00 am - 4:00 pm)	\$180.00/ \$220.00
	DHM415AC	"Hands-On" Hydrant Operation and Maintenance MDC Training Center, Hartford	April 29, 2015 (9:00 am - 4:00 pm)	\$180.00/ \$220.00
	TBC415AC	Bulk Chemical Delivery Workshop MDC Training Center, Hartford	May 14, 2015 (9:00 am - 4:00 pm)	\$180.00/ \$220.00
	BGM415AC	Electricity, Motors and Emergency Generators MDC Training Center, Hartford	June 18, 2015 (9:00 am - 4:00 pm)	\$180.00/ \$220.00
		Add \$20.00 late fee if registering within 2 days of the class date	~~~~~	
<input type="checkbox"/> Check here if you have a disability and require accommodations to fully participate. 			TOTAL	

PART III - METHOD OF PAYMENT

Type of Payment		Amount (from TOTAL FEE above)
<input type="checkbox"/> Check (Payable to NEWWA) <input type="checkbox"/> P.O.# _____ <input type="checkbox"/> MasterCard/Visa <input type="checkbox"/> AMEX		\$
Credit Card # 	Expiration Date /	Signature: _____

Cancellation Policy: If you need to cancel, you must contact NEWWA in writing at least two business days prior to the start of the course. If you contact NEWWA within one business day, you will be charged 100% of the original course registration fee. This charge is non-refundable and non-transferable. Written refund/credit request made for special circumstances will be considered if received within two weeks from the start date of the program. Credit issues are valid for six months from the date of the program.

REMEMBERING *Miles Messenger*



MILES MESSENGER's passing in September was a loss for all. Employed at MDC for 30 years at the Barkhamsted Reservoir, he and his wife Valerie were tireless volunteers for Water For People. They donated their time, talent and treasure without hesitation over the years. After Valerie's death, Miles continued his work for WFP.

He fought cancer in his final days and missed the WFP Golf Tournament this year. However, as he always did, he made sure a sponsorship check got to tournament organizers in time for the tournament.

At The MDC, Miles was the Manager of Water Supply with oversight of hydroelectric generation, natural resources and recreational programs.

Miles had very many interests and activities throughout his life including fishing, camping and hiking, family history and genealogy, and his family's participation in the Civil War, about which he researched and presented public lectures. His passions also included motor racing – especially cars, motorcycles and snowmobiles. Miles traveled all over the country for Formula 1, Flat Track, Moto GP and Superbike races. He was a corner worker/flag man at Lime Rock Park in Lakeville, CT, a pit steward for USAC DMA midjets at Bear

Ridge Speedway in Bradford, VT, and assisted the Ray Miller sprint car racing team. He was a member of the Blizzard Lizards Snowmobile Club and raced snowmobiles for the Miller and Viets Racing team. He also raced motorcycles in enduro and field trials while a member of the Foot Hills Trail Riders Association. Miles and Val were avid golfers and were members of the Shaker Farms Country Club.

His work for WFP didn't stop with the golf tournament. He traveled to a remote village in Honduras with Water For People to assist in the construction of a well to supply safe drinking water and did presentations at schools. He was a recipient of the Kenneth Miller Founders Award for his commitment to WFP.

He was a member of the Union of Concerned Scientists, Physicians for Social Responsibility, the Nature Conservancy, and the Appalachian Mountain Club. Miles and Val sponsored Native American children for over 35 years through the Christian Children's Fund and the Blackfeet Indian Tribe.

With a standing-room only funeral service on October 24, attended by people from all walks of life, Miles was remembered as a wonderful man who accomplished many things but never forgot a neighbor in need.

Pam Monahan, Executive Manager of CTAWWA spoke at the service about Miles' love of science, the MDC, AWWA and WFP. 💧

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Water Well Asset Management – The Importance of Time Based Maintenance Intervals

By Neil Mansuy – Water Well Rehabilitation Specialist – VP Technical Services, Subsurface Technologies Inc.

“The importance of recognizing the “Time based” approach cannot be over emphasized, because waiting until problems occur will result in more costly rehabilitation, with uncertain results.”



Introduction

Most wells will experience some type of operational problems as a normal process of aging. The rate at which a well will experience these problems can be influenced by many factors including: water chemistry, aquifer characteristics, operational schedules, and well construction details, just to name a few.

Some problems commonly experienced include: loss of production, discoloration on start-up, water quality changes, bacteriological failure, increased cost of operation, shorter life expectancy, and increased life cycle cost.

The causes of well deterioration are often categorized into:

- Biological from naturally occurring bacteria that filter both organic and inorganic constituents.
- Mineral encrustation mostly oxidized during operation creating an oxidized zone around an operating well. The most common minerals include various species of iron, manganese, calcium, magnesium, and silicates.
- Formation damage resulting from invasion of the near well environment with fines (sand, silt, clay) from the formation and some collapse of the pore spaces surrounding the well.

Historically most wells have been ‘Run to Failure’ until lost production has occurred, water quality deteriorates, the cost of pumping water is much higher or the system is no longer in regulatory compliance.

Much of the historical run to failure has been due to the reliance on feedback monitoring (specific capacity, water quality, bacterial testing). It was often recommended that well rehabilitation and

maintenance begin when a well lost 15 - 20% of its original specific capacity. During the mid-1990’s, after much experience, it became apparent that specific capacity is not a good indicator of early losses of pore volume in and around a well. Significant plugging of the pore volume in a well can occur prior to losing any specific capacity. Considerable excess pore volume exists in and around a well and plugging some of the pore volume does not immediately impact the specific capacity of the well. Losses in specific capacity occur when the remaining ‘open pore volume’ transitions from laminar to turbulent flow and turbulent flow losses occur.

This historical ‘Run to Failure’ means that by the time any cleaning of a well is initiated, the deposits plugging the well have become more extensive, and more importantly, more hardened or mineralized. From my experience during the past three decades, the approach taken was to try to prevent deposits from building up in an operating well. During these years, much time and money was spent trying to “hunt, count and kill bacteria”. The current state of knowledge demonstrates that the key to successful maintenance and rehabilitation of wells has nothing to do with being more effective at “killing bacteria”. The key to successful Water Well Asset Management is effective removal of biological deposits and the associated minerals before they become hardened.

Over 15 years ago, a transition was made from reactive well rehabilitation to preventing deposits from building up using a time based interval maintenance approach recognizing that deposition occurs from the first day a well is placed into operation. This approach has been

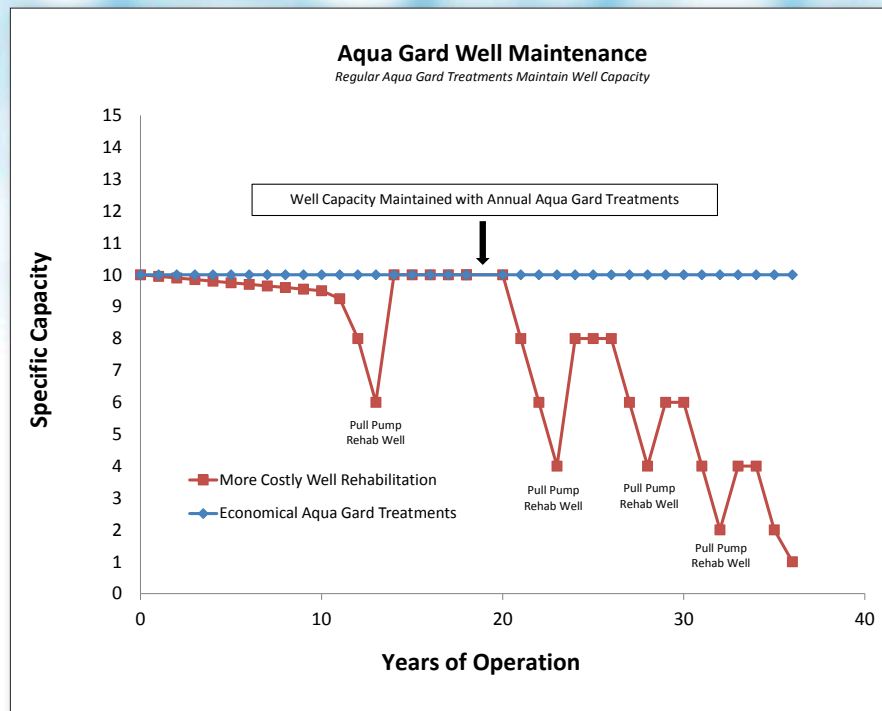
very successful because the deposits are removed when they are “softer in nature” and not very extensive. Time based preventive maintenance, generally annual, will keep wells clean so they never experience significant and hardened deposits. Many systems have been very successful in making the transition from rehabilitation when a well has noticeable deterioration to the proactive preventive maintenance approach of keeping wells in peak operating efficiency

The key to cost effective maintenance of wells is performing maintenance cleaning without removing any pumping equipment. The injection of adequate energy must also reach the lower zones in a well, historically difficult to overcome, with the pump in place. One method of delivering effective energy into a well with the pump in place is to retrofit the well head and equip the well with injection lines directed to the water bearing zones, thereby allowing the well to undergo routine service without removing the pump.

The importance of recognizing the time based approach cannot be over emphasized, because waiting until problems occur will result in more costly rehabilitation, with uncertain results. A more costly rehabilitation will require the pumping or injection equipment to be removed, and more aggressive cleaning treatments will be required to get more complete removal of the deposits. The analogy that is often used is, “You do not wait until your engine starts knocking before you change your oil,” applies here.

The benefits of keeping a well clean include:

- Maintaining peak efficiency and lower pumping energy costs
- Maintaining the lowest cost of pumping water
- Maintaining the maximum production rate from a well
- Minimizing failure of Total Coliform positive samples and elevated HPC's
- Preventing discolorations on start up
- Preventing many Taste and Odor issues
- Maintaining the original water quality by maintaining the original production profile from a well
- Fixed budget pricing
- Wells can be maintained during non-peak demand period
- Less emergency rehabilitation well cleaning 💧



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Election Brings Changes to CONNECTICUT GENERAL ASSEMBLY

In a close and contentious race, Dannel P. Malloy was reelected Governor of Connecticut, defeating Republican challenger Tom Foley by more than 27,000 votes. Democrats also maintained their majority in the state Senate, winning 21 of 36 seats.

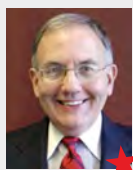
Senate Republicans had hoped to win control of the chamber for the first time since 1996, but they were only able to win one seat out of five open seats. Paul Formica, First Selectman of East Lyme, defeated Betsy Ritter to win the seat previously held by Andrea Stillman, who stepped down.

In the state House of Representatives, Republicans won 10 more seats in this year's election, bringing the total to 64 Republicans, 87 Democrats. This is the largest the Republican caucus has been since 1994 and some are predicting that this may shift the debate on key issues if Republicans align themselves with Moderate Democrats.

New Legislative Leaders Announced

When the legislature convenes on January 7, 2015, there will be a lot of new faces, new committee chairs and ranking members and, for the first time in several years, four new caucus leaders. Caucus leaders play key roles in shaping the issues that will be considered by the legislature and in setting the tone for debate.

CWWA works closely with lawmakers and legislative leaders to address concerns or lend support for bills affecting the water industry. Here is some information on the new leaders and returning House Speaker Brendan Sharkey:



Senate President Pro Tempore - Senator Looney (*New Haven, Hamden and North Haven*) was elected as Senate President Pro Tempore after serving six terms as Senate Majority Leader of the General

Assembly. Since being elected to the State Senate in 1993 and prior to his election as Majority Leader, he served six years as Senate Chair of the Finance, Revenue and Bonding Committee; Chairman of the Banks Committee and Ranking Member of the Judiciary Committee.



Senate Majority Leader - Senator Bob Duff (*Norwalk and Darien*) who was reelected to his sixth term in the state Senate was elected as Senate Majority Leader.

Previously, Senator Duff served as co-chair of the Energy & Technology Committee, vice chair of the Children's Committee, and as a member of the Regulations Review Committee.

Senator Duff was presented with CWWA's Legislator of the Year award in 1993 for his leadership on water related legislation.



Senate Minority Leader - State Senator Len Fasano (*East Haven, North Haven, Durham and Wallingford*) has served in the State Senate since January 8, 2003

and previously served as Senate Minority Leader Pro Tempore and a Senate Deputy Minority Leader. He has also served as Ranking Member on the General Assembly's Planning and Development Committee, Executive Nominations Committee and on the Legislative Management and Veterans' Affairs Committee.



Speaker of the House of Representatives - Representative Brendan Sharkey (*Hamden*) was elected by his legislative colleagues as Speaker of the House of Representatives in 2013. He previously served as House Majority

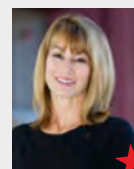
Leader, chair of the Planning & Development and Program Review & Investigations committees, and as a member of the Finance, Revenue & Bonding Committee.

In February 2013, Speaker Sharkey reestablished the MORE (Municipal Opportunities & Regional Efficiencies) Commission, which he originally chaired in 2010 resulting in a set of new laws focused on encouraging regional cooperation among towns. The current incarnation of MORE is a bipartisan panel charged with helping cities and towns reduce their costs and increase efficiencies with the ultimate goal of lowering local property taxes.



House Majority Leader - State Representative Joe Aresimowicz (*Berlin and Southington*) was first elected by his colleagues as their Majority Leader in 2012, after his re-election to a fifth term.

He has served as a member of the Veterans' Affairs Committee, Public Safety and Security Committee, the Finance, Revenue and Bonding Committee, the Commerce Committee, and was Vice Chair of the Government Administration and Elections Committee.



House Minority Leader - State Rep. Themis Klarides (*Derby, Orange and Woodbridge*) was chosen by her House colleagues

as caucus leader, the first woman named to lead the Republicans. Rep. Klarides was reelected to her ninth term and has served as Deputy Leader under outgoing Leader Larry Cafero since 2007. 💧

"One of the best parts of RMSOs is the opportunity to hear what other sections are doing..."

RMSO Wrap Up

While the 6-hour ride from Connecticut was lengthy, the opportunity to network with sections in the Region 1 area of AWWA that took place in Canandaigua, New York was worth it. Hosted by the New York Section, the Regional Meeting for Section Officers (RMSO) took place in the fall beginning with a networking event on Thursday, a full-day Friday and a half-day on Saturday.

The packed agenda focused on a variety of topics. Warner Palermo, director of the section from Puerto Rico was the Visiting Officer. Christopher McGinness, AWWA's Section Services Manager was the Moderator for the meeting. Tommy Holmes from AWWA's Washington, D.C.'s office, and Jeanne Bennett-Bailey of the Public Affairs Council, were also in attendance and spoke to the group present.

One of the recurring themes that came up through the conference was that many of the sections have a 'Conference Committee' who handles all the conferences. "One of the best parts of RMSOs is the opportunity to hear what other sections are doing," said Pam Monahan, Executive Manager of CTAWWA said. "This is one idea I'm bringing back to the section and will explore the feasibility of implementing something like this in the future."

In a report given by the three attendees from Connecticut to the section board, including Monahan, Steve Rugar and Tom Barger, each summarized a topic of interest.

Steve Rugar, CTAWWA Vice Chair, from Tata and Howard, spoke to the board about the Community Engineering Corps. AWWA has partnered with the American Society of Civil Engineers and Engineers

Without Borders USA to create the Community Engineering Corps. The purpose of the CEC is to provide engineering assistance to underserved communities in the United States. The CEC's mission has some similarities to Water For People, although service will be focused on communities in the United States instead of overseas. Communities in need of assistance post their project descriptions on the CEC website. The founding organizations of the CEC encourage their members to form teams to work on the projects. Each team must have at least one member from one of the three founding organizations, and teams must include at least one professional engineer, although anyone can volunteer. Funding of construction will be provided by the community requesting the project. The CEC is a great way to contribute your talent to communities in need in the United States in a hands-on way. For more information, visit the CEC website at www.communityengineeringcorps.org.

Tom Barger, the WUC Council Chair, from Regional Water Authority, spoke

about the topic of philanthropy and the importance within each Section. As part of the 'Giving 'Til It Feels Good' agenda item, Sections discussed their efforts in raising monies and how they in turn disbursed this money to various water-related efforts or programs. While there were many similarities among Sections such as golf events, there were also new ideas circulated for all Sections to consider. Equally important, various unsuccessful efforts were also mentioned as were efforts that were deemed somewhat 'off the table' such as games of chance that require permitting.

Also discussed to a limited extent was the AWWA's Philanthropic Program; comments were raised regarding the obstacles to integrating this effort with pre-existing Section programs, the possibility of a negative impact to individual Section fundraising efforts and the potential impact to the popular Water For People program.

The next RMSO is scheduled for October, 2015 in Wilmington, Delaware. Attendees were each given a bottle of Old Bay seasoning as a reminder. 💧

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WUCC Boundaries Finalized

Changes to the boundaries of the public water supply management areas were recently finalized by the state Department of Health. As adopted there will be three public water supply management areas: the Western, Central Corridor and Eastern (see map). The decision, which was adopted after notice and three public hearings, also outlines the department's priorities for initiating the Water Utility Coordinating Council (WUCC) planning process.

The final boundaries reflect changes made by the department based on comments received at the public hearings. For example, the final boundaries reflect concerns raised by the Upper CT WUCC regarding the importance of maintaining WUCC

boundaries consistent with the Farmington River watershed. As adopted, the towns of Colebrook, Hartland, Barkhamsted, New Hartford, Harwinton and Burlington will be in the Western area.

In delineating the boundaries, the department also considered other factors, including the location of existing sources of public water supply, service areas and exclusive service areas. The department noted in its report that it was important to ensure that as many watersheds as possible remained intact and not split between two different areas.

In addition, municipal and regional council of government boundaries are kept whole and not split between two or more areas, although more than one

Council of Government is located in each of the areas. This is intended to increase the level of municipal and regional participation in the WUCC process.

Administration of the WUCCs

How will these changes affect the administration of the WUCCs? The report acknowledges that in the Western area, there are 985 potential members, including 195 community public water systems. In the Central Corridor area, there are 871 potential members, including 185 community public water systems and in the Eastern area, 636 potential members, including 159 community public water systems. The report concludes that with "appropriate rules and procedures in place" and "the assistance of a contractor hired by the department," the WUCC can make decisions and complete the planning process while ensuring the maximum participation of WUCC members.

Priorities

Based on consideration of certain factors, the department recommends that the Western public water supply management area be convened first. These factors include the existence and severity of the following in each management area:

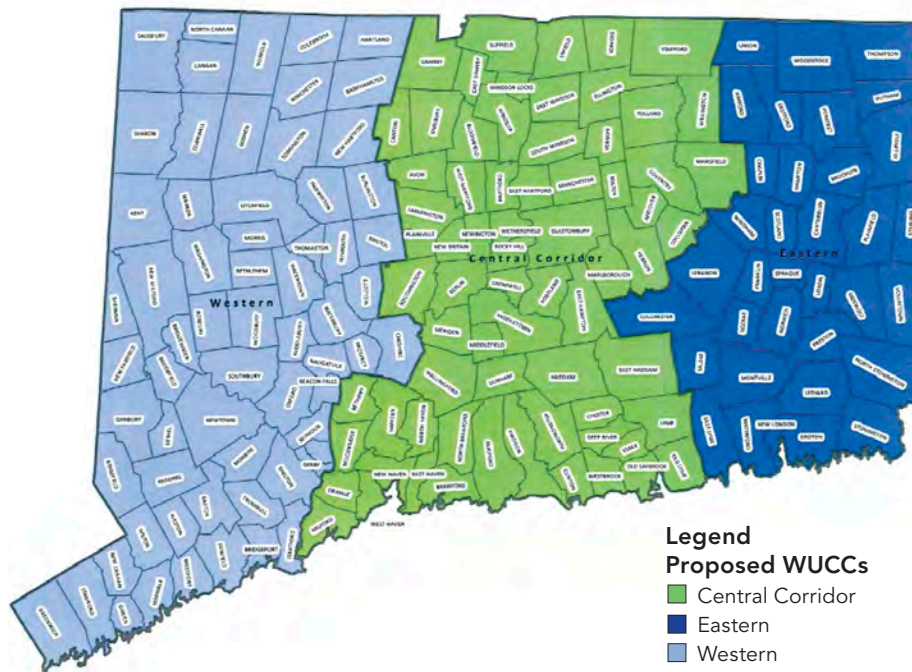
- 1) Uncoordinated planning;
- 2) Inadequate water supply; and
- 3) Unreliable water service.

The report notes that "the majority of the public water systems located in the Western public water supply management area have not been involved previously in the WUCC process and therefore have not been involved in much coordinated planning." The Central Corridor public water supply area will be convened next, followed by the Eastern public water supply management area.

Recognizing that the WUCC planning process is critical to the state's efforts to develop a statewide water plan, the legislature authorized \$250,000 to the department to retain a consultant to assist in completing the WUCC planning process.

CWWA fully supports efforts to complete the WUCC planning process which is a vital tool in developing cost-effective solutions to addressing issues relating to water quality and water supply management on a regional basis. In addition, completing the WUCC process for coordinated water supply planning will provide important data and information necessary to the development of a state water plan, which the legislature directed the Water Planning Council to develop by July 1, 2017. 💧

Final Altered Boundaries of the Public Water Supply Management Area







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WQT Symposium 2014 Recap

Eighty plus water professionals attended the Third Annual Water Quality & Treatment (WQT) Symposium which took place in November at the Crowne Plaza Hotel in Cromwell.

In 2013, Ray Baral, Jr., past chair of CTAWWA and chair of the WQT Symposium said: "We are searching to find the most qualified speakers and the best and most topical information we can provide. We were very successful in doing that last year and will achieve it this year."

No doubt, the WQT program committee including Baral, Scott Bonett of Hazen & Sawyer, Gerry McDermott of Connecticut Water Company, Elaine Sistare from CDM and Amy Busko of

Regional Water Authority did exactly that, and put together a program that surpassed the last two conferences.

'New England Floats to the Top: Innovation in the Northeast Led to Widespread Implementation of Dissolved Air Flotation in the US' given by Hazen & Sawyer's Michael Greeley, started the event. Stephen Olson of Environmental Partners Group spoke after Greeley on 'DAF Selected to Upgrade Two 100-year old Surface Water Supplies in Massachusetts'. Tim Clayton of Holland and Company spoke on 'Coagulation and Charge Chemistry.' One of the highlights of the Symposium was the talk of Dr. James K. Edzwald, Professor Emeritus at the

University of Massachusetts who spoke on 'Coagulation and Mixing: History and Present versus Sustainable Practice.'

Following a social networking break and lunch, the group returned to hear Kevin M. Flood and Fereshteh M. Doost of Fuss & O'Neill discuss 'Ultraviolet Light as a Secondary Form of Disinfection.' Zachary Eichenwald of CDM Smith spoke on 'Lake Auburn: The Effect of Climate Drivers on Lake Water Quality.' Mike Polster of Utility Service Co., Inc. was the final speaker with 'A New Approach to Maintaining Potable Water Quality within Storage Facilities.'

Look for future announcements about the 2015 WQT Symposium – don't miss it. 💧

Scholarship Opportunities



General Scholarship

CWWA and the CT AWWA have a scholarship available for eligible high schools students. The first place scholarship award is \$1000, and a second place scholarship is \$500. Additional awards of \$500 or more may be issued at the discretion of the Association as funds allow. We have had some great candidates in the past and hope this peaks their awareness of the water industry.

To be eligible for consideration, a complete application package must be submitted to the Committee by March 30, 2015. Applicants are asked to include a written essay (approx. 500 words) summarizing any environmental water related experience and explaining why they have chosen their field of study and if it will improve the environment or public health, in particular the water industry. A copy of the application and the eligibility criteria is available on the CWWA website at www.cwwa.org.

Please share the information with high school students that you know and encourage them to apply!

Associates Committee Scholarships for Family Members

Thanks to the generosity of the Associates Committee and especially the Section Enhancers, applications are now being accepted for the CTAWWA Associates Committee Scholarship Programs for CTAWWA members or their children/dependents who have not previously been awarded a CTAWWA scholarship. High School seniors and students currently enrolled in an education program beyond the secondary level in a two year, four year or graduate program are eligible. Student members of CTAWWA are also eligible. Application deadline is Friday, March 13, 2015. There are two types of scholarships – general education and for those entering a waterworks career. Last year, ten scholarships were awarded for a total of \$7,000.


For further information including applications, please visit the CTAWWA website at www.ctawwa.org. 💧



EPA Makes Preliminary Determination to Regulate Strontium in Drinking Water

The U.S. Environmental Protection Agency has made a preliminary determination to regulate strontium in the nation's drinking water. Strontium is a naturally occurring element that, at elevated levels, can impact bone strength in people who do not consume enough calcium.

A regulatory determination is a formal decision on whether EPA should initiate a rulemaking process to regulate a specific contaminant. The *Safe Drinking Water Act* requires that every five years, EPA develop a contaminant candidate list and then make a regulatory determination for at least five contaminants on the list.

Based on available information, the agency has initially determined that strontium has adverse health effects. Strontium replaces calcium in bone, affecting skeletal development. Although strontium affects all life stages, infants, children, and adolescents are of particular concern because their bones are developing. Strontium has been detected in 99% of public water systems and at levels of concern in 7 percent of public water systems in the country. For more information, please visit <http://water.epa.gov/scitech/drinkingwater/dws/ccl/ccl3.cfm>. 




State Rep. John Hampton Recognized for Leadership on Water Resources Issues

Rep. John Hampton (D-Simsbury) was named the Legislator of the Year for his leadership in winning passage of legislation to create a State Water Plan, announced the Connecticut Water Works Association (CWWA).

In announcing the award, CWWA Legislative Tri-Chair Maureen Westbrook, Connecticut Water Company, said, "Recognizing how difficult it is to make decisions affecting the state's water resources without a comprehensive, statewide water plan, Rep. Hampton took decisive action this session to move forward with a bill to develop a plan. His efforts are critical to ensuring that Connecticut has sufficient public water supplies to meet the state's current and future public health, safety and economic development and environmental needs."

"Many individuals, state agencies, and organizations are actively involved in issues affecting the state's water resources. Rep. Hampton made sure that everyone had a seat at the table and an opportunity to be heard. This collaborative process paved the way for passage of a bill that will benefit Connecticut residents and future generations," said Lori Vitagliano, South Central Connecticut Regional Water Authority and CWWA Tri-Chair.

Rep. Hampton also worked with the Governor's office, key agency personnel, and several lawmakers in pushing for passage of the bill. The state's Water Planning Council is now moving forward to implement the legislation and develop the State Water Plan. 



While vacationing, Betsy Gara spots a municipal water truck in Lerma, Spain.



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DPH Drinking Water Section presented three topics at ACE

During the June 2014 American Water Works Association Annual Conference held in Boston, Connecticut Department of Public Health (DPH) Drinking Water Section (DWS) staff presented on three public water supply topics. Surface water treatment optimization, storm effects on Connecticut's water industry, and water supply planning respectively.

Tom Chyra, Supervising Sanitary Engineer of the DWS Technical Review and Field Assessment Unit, presented a poster titled: *'Treatment Optimization at All Regulated Surface Water Treatment Plants'* and discussed how the DWS recently focused on new efforts to promote optimization in Connecticut in light of plant performance issues in recent years.

The poster provided a brief overview of the diverse number of surface water treatment plants here in Connecticut and some of the unique performance issues that occurred in recent years, which indicated that plant performance issues can arise even when traditional measures of regulatory compliance are met. The poster also presented on why surface water treatment plants should be optimized in light of changing weather events and changes to source water quality. DWS promotes optimization as a voluntary compliance assistance tool to assist plant operators in maintaining compliance and providing maximum public health protection above and beyond minimum regulatory requirements. The poster concluded with optimization goals that DWS is in the process of adopting and some tools that can be useful in helping operators optimize their surface water treatment plants.

Mandy Smith, Sanitary Engineer 3 for the DWS Technical Review and Field Assessment Unit, discussed how the DPH DWS and public water systems responded to the widespread public drinking water effects from Hurricane Irene, Winter Storm Alfred, and Superstorm Sandy during the second half of 2011 and into 2012. Her presentation, titled *'Three Storms, Two Years, One State's Experience,'* discussed improvements DWS instituted to streamline their own processes such as revising and clarifying the boil water advisory. These improvements also included creating a 'Water Board' for the state's emergency management database known as WebEOC, which is for community public water systems to report operational status online promoting collaboration between public water systems, electrical utility providers and state emergency management personnel.

Ms. Smith also noted that DWS is working to create a more resilient public water system community by promoting asset management and emergency planning/emergency power capacity at all community public water systems. She also spoke about the creation of a Drinking Water State Revolving Fund focus point to streamline the small system loan process by facilitating the purchase and installation of emergency generators. She also noted that DWS was able to move forward with a technical service provider to provide asset management training aimed at small community public water system owners.

Lori Mathieu, Public Health Section Chief of the DPH Drinking Water Section, presented on Connecticut's public drinking water supply planning laws, historic efforts in water supply planning and recent events to move forward with regional water supply planning. Her presentation titled *'Connecticut's Public Drinking Water Supply Planning,'* provided a broad public health perspective concerning the need and importance of water supply planning. Aspects of water supply planning were highlighted such as the need for accurate and up to date individual and statewide public water supply safe yield, available water, and water supply demand data, as well as bringing all interested parties together to discuss public drinking water. She also outlined recent events in Connecticut indicating broad support and recognition for the development of a State Water Plan.

The DPH Drinking Water Section's staff's presentations were well attended and well received. Please feel free to contact the DPH Drinking Water Section at 860-509-7333 with any questions you may have concerning the presentations and/or information provided in this article. 💧

2014 Certified Operator Public Health Drinking Water Merit Award



Deb Ouellette, Chief Plant Operator for Norwich Public Utilities, was honored by the Connecticut Department of Public Health Drinking Water Section with the 2014 Certified Operator Public Health Drinking Water Merit Award. The award is given to a certified public water system operator who demonstrates exceptional work practices on the job and contributes to the health and safety of public drinking water. The award was presented during the CWWA/CT AWWA Fall Conference in Southington on October 21, 2014. 💧



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Originality, Innovative, Significance of Work, Audience Range, Technical Content, Case Studies, Quality of Abstract, Real Life.

Suggested topics

Conservation, Emerging Technologies, Information Technology, Plant Operations, Small Systems, Water Treatment, Construction, Engineering, Maintenance, Regulatory Issues, Strategic Planning, Distribution, Management, Safety, Security, Water Quality. Please note that the selection of presentations at annual conference will be made by the CT Section AWWA Education and Program Committees with the presenters being notified within the next few weeks.


What to submit

For full consideration, the speaker biography and detailed outline of the presentation must be submitted by the deadline indicated below. The course will be presented to the Department of Public Health for CEU approval for attendees.

Deadline

Submissions are due by February 1, 2015 and should be sent via email to Scott Bonett at sbonett@hazenandsawyer.com or Gerry McDermott at gmcdermott@ctwater.com.

Questions


Please call Program Co-Chairs Scott Bonett at 860-257-1067, or Gerry McDermott at 860-664-6125. 

CTAWWA Enhancer Program

The Associates Committee sponsors the Annual Section Enhancement Program.

Section members of the manufacturer, supplier, consultant, service provider, and contractor categories have contributed significant time and financial resources to the CT Section AWWA. "These special efforts," according to Tom Bedus of Neptune Technologies and chair of the CTAWWA Associates Committee, "have enhanced the success of the Section, and sponsors should receive recognition for their outstanding support."

The Section Enhancement Program offers outstanding recognition for participants in the program. The Enhancement Program has sponsored luncheons, speakers, welcome gifts, scholarships, and fund-raising raffles at the various Section events. Last year the Associates Committee awarded a total of \$7,000 in scholarships to 10 college students with ties to Section members. Those contributing \$250 become a Section Enhancer and receive special recognition in *InFlow-Line*, link and name on CTAWWA website, recognition at annual meeting and other major events, preferred booth location at ATCAVE, and recognition of support of the Associates Committee Scholarship program.

For further information including registration form, please visit the CTAWWA website at www.ctawwa.org. 



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The Newington, CT location where Mark calls home is one of 15 locations in a waterworks and underground utility-focused business group that covers New England and New York State. It is this focus and dedication to serving the municipal, public, private, and DOT segments of the industry that makes Ferguson so integral before, during, and after a project.

Ferguson, while corporately owned, has always maintained a local 'feel' for its customers. A commitment to bring the top product lines in the water, sewer, and storm industry to their clients with value-added, top-flight, yet personalized customer service is always mission number one. 💧

Ferguson Waterworks

In an industry that is so vital to everyone, consistency, integrity, and knowledge sometimes gets overshadowed by the sheer economics of it. While there are many examples of longevity and productivity in the waterworks industry, Ferguson Waterworks' Mark Anderson stands out. Mark's deep desire to help educate his customers and his fellow Ferguson associates with his thirty-five plus years of experience in the Connecticut construction industry is a benefit.

Mark got his start with the George A. Caldwell Company in 1980 as an outside salesman for water and sewer pipe and related products calling on private contractor and eventually local water companies. That first decade in the industry brought many successes and challenges and prepared him for a deeper level of commitment to be involved in the waterworks business in all facets.

Starting in 1990, Mark went to work at Eastern Pipe Products Company (EPPCO) in Newington, Ct. as the company's sales manager. In that role, Mark help guide EPPCO's growth through that decade, eventually moving on to the role of Municipal Sales Manager. In 2000, EPPCO was purchased by Ferguson and Mark has maintained that role to this day.

Mark's involvement with the CT section of AWWA has found him in various roles: member, Associates Committee Secretary, and Council Chair on the Board of Directors. He is passionate about working with the CT AWWA section board on issues

that affect our industry and his influences are many. Mark also enjoys being a part of various industry-related organizations and always is one to recommend that others get involved in order to meet the professionals in our industry as colleagues and friends.

Mark is proud of his career accomplishments and is always available to anyone who needs to tap into his immense wealth of knowledge. His knowledge base was a key to the transition period once the Ferguson name was installed here in Connecticut.



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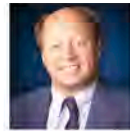
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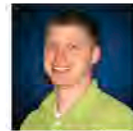
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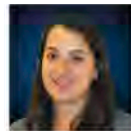
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Frank and Al built a firm that has grown to more than 850 employees at offices throughout the U.S. and at plant facilities nationwide.

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their work. It happened. At the heart of our company are talented people whose commitment and integrity drive results. Our clients experience this power every day in our actions, our solutions, and our promises kept.

The firm's growth over nearly three decades has been the result of responding to the needs of the marketplace. Beginning with challenges driven by *Clean Water Act* requirements, to the onset of CERCLA and RCRA, to the availability of funds to transform brownfield properties,

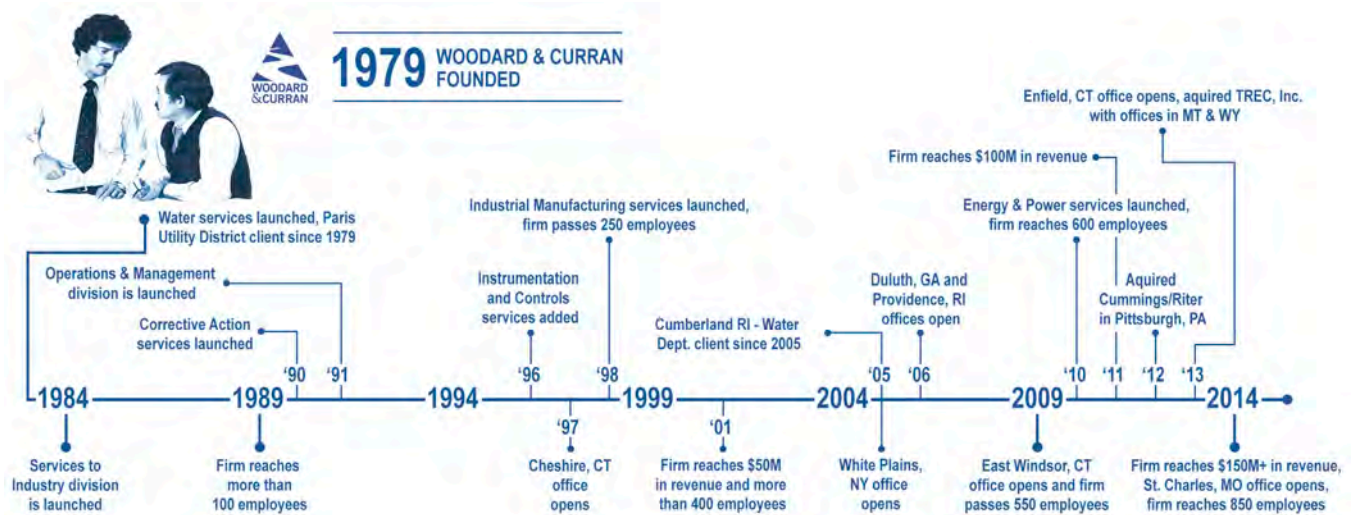
to environmental health and safety regulations, and more recently, the focus on sustainable design and corporate responsibility, Woodard & Curran has anticipated needs and expanded our base of expertise accordingly. Whether helping clients meet demands mandated by regulations, or providing assistance rooted in greater control of their assets and budgets, we have grown by being

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responsive to our clients' needs. In fact, some of our earliest clients are still with the firm today.

We partner with our clients, functioning as a committed team with the big picture in mind to keep costs down and increase efficiency. Our commitment is reflected in the personal attention, collaborative resources, and dedication to results that we devote to each project.

From our environmental roots to the range of consulting, engineering, and operations expertise we provide today, we work for a diverse clientele — including municipalities, the energy industry, food and beverage manufacturers, colleges and universities, and the real estate community. Woodard & Curran combines engineering, science, operations, and control systems expertise to develop efficient, operator-friendly solutions.

We assign the right people with the right expertise to the job, and provide clients with easy accessibility to senior experts. Woodard & Curran has nearly 100 engineers, scientists, operations experts, geologists and hydrogeologists, controls systems experts, and information management experts in-house who team up to solve our clients' water treatment and distribution system challenges. Beginning with a detailed regulatory understanding, our experts have the technical expertise to assess complex ecosystem impacts and design treatment

and disinfection facilities, as well as distribution system improvements.

Increased regulatory requirements and a growing demand for clean water pose new challenges for communities and water utilities. Woodard & Curran provides a full range of water treatment and distribution services to our clients, from new source development, water treatment and distribution services, to operations and operational consulting, electrical instrumentation and control systems implementation, and service and information management.

In the end, our work is characterized by responsiveness, resourcefulness, and willingness to do what it takes to get the job done properly. Our water services team is staffed by people who share Woodard & Curran's values of honesty,

respect, and fairness and who want to do the right thing. They, in turn, treat everyone — our people, our clients, regulators, and stakeholders — respectfully and honestly. 💧

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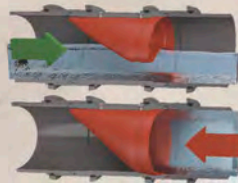
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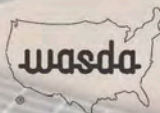


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