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The Magazine of the CT Section American Water Works and the Connecticut Water Works Associations Winter 2015/16

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Cover photo: Millstone waterfall in Wilton, CT on the watershed of South Norwalk Electric & Water. Photo by Kathy Fortin.

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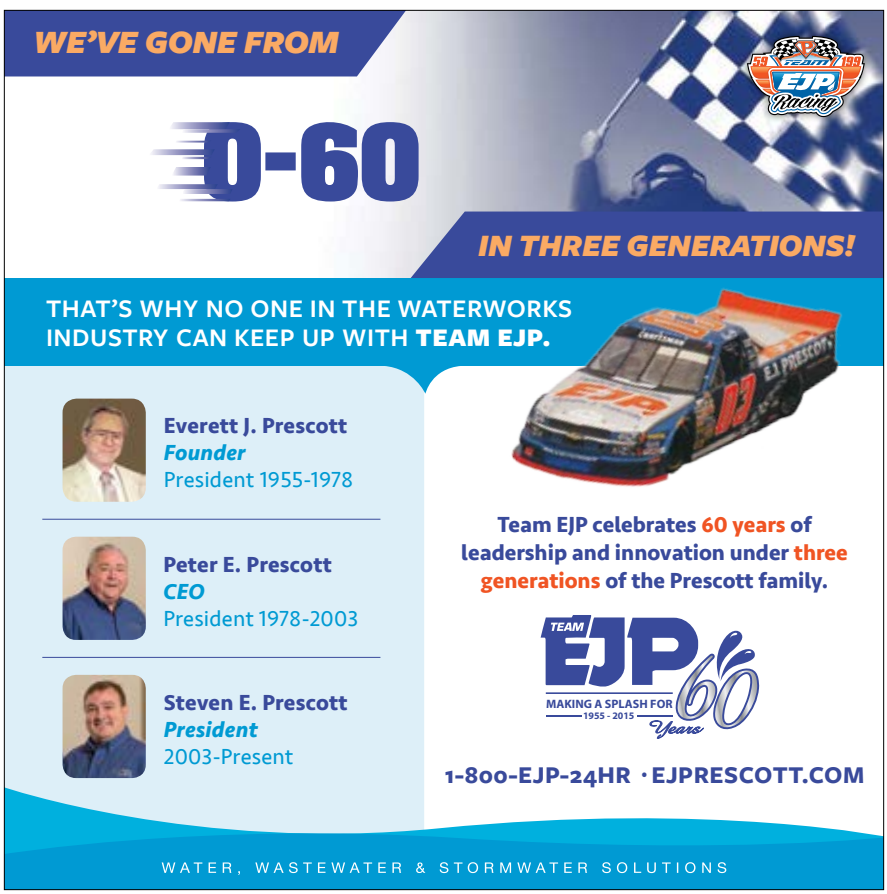
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Stephen E. Pratt



Reflecting On the Status of the Water Industry

As we pick up the leaves, prepare our snow blowers, top off the oil tank, and get ready for another winter here in Connecticut, we also need to reflect on where we are concerning the status of the water industry regarding the realignment of the Water Utility Coordinating Committees (WUCCS), the State Water Plan, Stream Flow Classifications, and a myriad of other water-related issues at the local, state, and national level.

The WUCCs are now realigned to three along the boundaries of the Councils of Government. Consultants were to submit proposals to Connecticut Department of Public Health (DPH) on the establishment of the WUCCs, with review and a decision on the selection of the consultant expected no later than February 2016. The WUCCs will be convened from West to East working with the consultant to re-establish exclusive service areas (ESAs) based on the ability to provide potable water to customers in a quantity and quality sufficient for the health and safety of the public in those ESAs.

Last year at this time, the University of Connecticut and the Water Planning Council (WPC) had entered into a Memorandum of Understanding for project management services to develop a State Water Plan as required under Public Act 14-163. To that end, we now have the report from the other States' Plans workgroup and the expanded Table of Contents, the establishment of the Steering Committee, and the creation of the Policy Committee and the Science and Technology subcommittees. Whether the progress to date on the State Water Plan is going to be sufficient to keep the development of the Plan on the timeline to have the plan in place by the legislated deadline of January 2018 without tweaks in the Act is not known at this time.

The stream flow classification process continues as DEEP moves forward to protect the androgynous fish population and other flora and fauna downstream of water utilities drinking water reservoirs. The issue of significant investment on identified future sources continues to vex the process with few streams being classified as '4' and the industry accepting a '3' classification or ending up with a negotiated settlement with DEEP. The DEEP issue of diversion permit conditions related to streamflow for utilities is another can of worms in itself.

On the national front, issues such as legionella, cyanotoxins, and the lead and copper rule changes with the implementation of the Revised Total Coliform Rule (RTCR) in April 2016 are all on the radar for continued monitoring. Speaking of the revised total coliform rule, it appears that the NOVs from DPH for color, pH, turbidity, and odors will be things of the past when the rule is implemented in Connecticut. We still have to see the final version of the regulation changes implementing the RTCR. No mention at this time on the issues of a sodium, fluoride, or the raw water herbicide and pesticide yearly monitoring.

The Annual Fall Conference held at the Aqua Turf on October 20th was another success. Kudos should be extended to Betsy Gara for coordinating and again pulling together a program that continues to attract and educate the participants at the conference. If there are any thoughts or issues that you, as attendees, would like to be addressed, please contact Betsy at *gara@gmlobbying.com.* Betsy will be providing further details in a Fall Meeting wrap-up.

The CWWA Legislative Committee has held one planning meeting to date to recommend actions on state legislation and regulations with additional meetings of the committee coming in the near future to firm up the Government Affairs Agenda for the coming year's short session. If there are legislative issues that CWWA can assist our members with, please forward those issues or thoughts directly to Betsy at *gara@gmlobbying.com* or have your utility representative bring up those issues during the next committee meeting. The final agenda will be formally approved by the Board so the legislative Tri-Chairs and Betsy can formulate recommended language to address those legislative and regulatory issues. The CWWA's Tri-Chairs of Maureen Westbrook (CWC), Lori Vitagliano (RWA), and Guy Russo (Middletown Water and Sewer) along with Betsy, will further massage the issues in the best interest of the water purveyors in Connecticut and present them to legislators. We could not do our primary focus of shaping laws and policies affecting the water industry in Connecticut without our members' support and input, so keep those thoughts and ideas flowing.

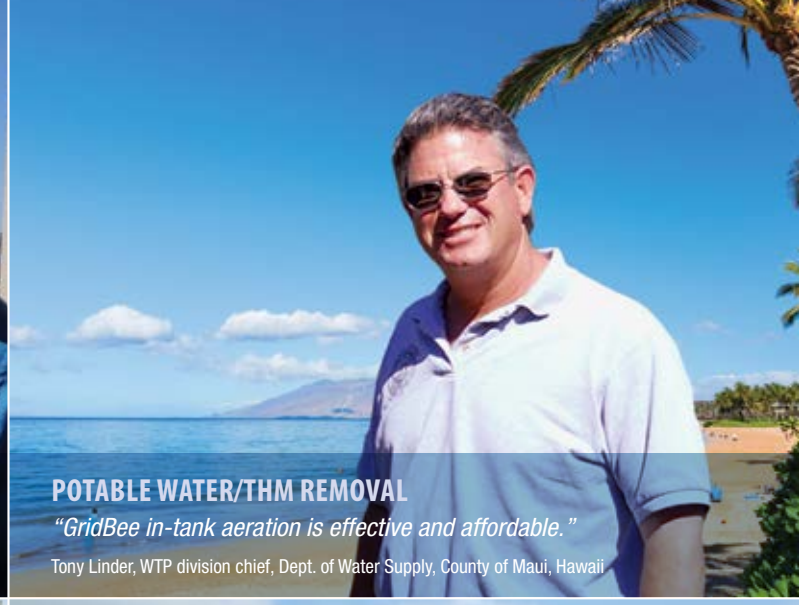
"If there are legislative issues that CWWA can assist our members with, please forward those issues or thoughts directly to Betsy at gara@gmlobbying.com."



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Ready For the **Challenges**

Hi everyone; I hope this update finds you all well and ready for the challenges that winter brings. The fall has remained unusually dry, and, as of this writing, much of the state is seeing a deficit in cumulative annual rainfall of about eight inches. Some utilities have called upon customers for increased voluntary conservation measures. If the deficit is to be made up before next summer, unfortunately it may come in the form of snow. If you have not done so, now may be a good time to brush off your emergency contingency plans and make sure that you are prepared for next year.



We had a successful joint fall conference on October 20, 2015 at the Aqua Turf in Plantsville. I would like to extend thanks to CWWA and particularly Betsy Gara for putting together another interesting program. Attendees heard a wide variety of presentations on important industry topics. I would also like to thank all of those who took up the challenge to serve the industry by presenting at the conference.

One topic that was new to me at the conference, and of particular interest to the water industry, was an update given by Beth Barton of Day Pitney LLP on a recent CT Supreme Court decision related to diversion permit applications filed by Tilcon Industries in 2003. The Court ruled unanimously that CTDEEP had overreached in the extent of information requested from Tilcon, tying the approval to other permit applications, and seeking to revisit wetland mitigation measures approved at the local level. This decision could have important implications on diversion permit applications filed by water utilities. The Supreme Court remanded the permit application back to CTDEEP to render its decision on whether the 12-year-old application is complete. We will continue to monitor CTDEEP's activities on this application and report as news occurs.

Darlene Gurnon, our CTAWWA Administrative Manager, and I attended a water utility roundtable discussion organized by CTDPH on October 27th. CTDPH worked with both CTAWWA and CWWA to develop the agenda for the roundtable. Topics covered in depth included the State Water Plan, WUCC process, upcoming legislation

and regulations, legionella, and the Freedom of Information Act. At the conclusion of the meeting, on behalf of CTAWWA, I asked for attendees to provide feedback on improving the value of CTAWWA. I extend that invitation to all of our readers. Please feel free to contact me or Darlene with your suggestions. We have had several interesting discussions, and I plan to provide an update soon on improvements we will make to our events and programs based on your suggestions.

Speaking of improving the value of CTAWWA, at our October Board meeting, Donise Caverly and Kirk Ducharme, co-chairs of our Water Treatment Plant Operations & Maintenance Committee, presented an overview of a new 'Water Talk' forum that will be offered soon through our CTAWWA website *(www.ctawwa.org)*. The forum will be a place where water system operators can speak with other professionals about issues that they are having in their systems, to ask questions, and to get opinions. We are grateful for the hard work put into this effort by Kirk, Donise, and the entire committee, and we know you will be impressed by this new resource.

ATCAVE, our annual technical conference and vendor exposition, will be held at the Radisson in Cromwell on February 23, 2016 (see page 25 for full details). I am pleased to report that the CTAWWA Program committee has received a record response to our call for papers and presentations for ATCAVE 2016. We are working to make the 20th year of ATCAVE our best ever! If you would like to get involved as an ATCAVE volunteer, please contact Darlene Gurnon at *info@ctawwa.org* or at 860-808-8464. I look forward to seeing you all there.

On behalf of the entire CTAWWA Board, I offer you best wishes for a wonderful holiday season with family and friends. Stay warm!

CTAWWA **Election of Section Officers**

Proposed Slate of Officers for 2016-2017

Chair	One-Year Term	Tom Loto
Vice Chair	One-Year Term	Robert Longo
Past Chair[(a)]	One-Year Term	Steve Rupar
Secretary	One-Year Term	Kathy Fortin
Treasurer	One-Year Term	Rochelle Kowalski
2nd Year Trustee[(b)]	2nd of a Two-Year Term	Jennifer Muir
1st Year Trustee	Two-Year Term	Gerry McDermott
National Director[(c)]	Three-Year Term	Ray Baral
[(a)]Automatic appointment; no vote required		
[(b)]Serving the second year of a two-year term; no vote required		
[(c)]Serving the first year of a three-year term		

Article VII and VIII of the Section's By-laws govern the election and nominations process and may be viewed at our website, *www.ctawwa.org* (select 'About Us' and 'Standard Practice Manual'). Any questions may be directed to Kathy Fortin at South Norwalk Electric and Water, 164 Old Boston Road, Wilton, CT 06897, or by email to *kfortin@snew.org.*

If no further nominations are received from CTAWWA members by April 20, 2016, Kathy will cast a ballot for the above slate and issue a notice to the membership via the next available issue of the Section magazine.

Other Board Positions for 2016-2017

Trustee at Large 2nd yr	Kate Powell
Trustee at Large 1st yr	Joseph Fazzino
Administrative & Policy Council Chair	Peter Bocciarelli
Associates Council Chair	Mark Anderson
Education & Public Affairs Council Chair	Rob Page
Technical & Standards Council Chair	Ken Skov
Water Utility Council Chair	Tom Barger

Officers of the Board have voted to approve the Other Board Positions whose terms shall begin at the annual meeting in May.



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is more than just talk

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- Our computer-to-plate technology reduces the amount of chemistry required to create plates for the printing process. The resulting chemistry is neutralized to the extent that it can be safely discharged to the drain.
- We use vegetable oil-based inks to print the magazine. This means that we are not using resource-depleting petroleum-based ink products and that the subsequent recycling of the paper in this magazine is much more environment friendly.
- During the printing process, we use a solvent recycling system that separates the water from the recovered solvents and leaves only about 5% residue. This results in reduced solvent usage, handling and hazardous hauling.
- We ensure that an efficient recycling program is used for all printing plates and all waste paper.
- Within the pages of each issue, we actively encourage our readers to REUSE and RECYCLE.
- In order to reduce our carbon footprint on the planet, we utilize a carbon offset program in conjunction with any air travel we undertake related to our publishing responsibilities for the magazine.

So enjoy this magazine...and KEEP THINKING GREEN.

AWWA – Cybersecurity Guidance and Tool

Water professionals have long been aware of the risks associated with securing reservoirs and wells to protect the water supply – to guarding materials at their facilities from theft and sabotage, to planning for response and recovery from events ranging from routine pipe breaks to natural disasters. Today, the threats we face also include the risks of intentional harm through malevolent acts, including cyberterrorism. In an effort to provide utilities with the information and tools needed to protect against cybersecurity, AWWA has released the Process Control System Security Guidance for the Water Sector and a Use-Case Tool, which can be accessed at *http://www.awwa.org/resources-tools/water-and-wastewater-utility-management/cybersecurity-guidance.aspx.*



Mandatory Municipal Set Aside Requirements

Effective October 1, 2015, a new law requires municipalities to comply with small business/minority business set-aside requirements. The law applies to any public works projects funded in whole or in part by the state in excess of $50,000. Although the law places the responsibility for meeting the set aside goals with the contractor, municipalities must include contract compliance and set-aside language in all bid documents for such contracts and inform contractors of their obligation to meet contract compliance requirements and demonstrate good faith effort to achieve set-aside goals. Please visit the Commission on Human Rights and Opportunities (CHRO) website for FAQs, sample contract language, and information on the topic: *http://www.ct.gov/chro/site/default.asp.*

State Minimum Wage

Connecticut minimum wage increases:

January 1, 2016	$ 9.60 per hour
January 1, 2017	$10.10 per hour

Cleanup project to install new water supply for properties contaminated by Durham Meadows Superfund Site

Contact Information: Jim Murphy, (617) 918-1028

BOSTON – EPA has allocated $9 million to jump-start cleanup activities at the Durham Meadows Superfund site in Durham, Conn. The funding will support the installation of an alternative water supply to the Superfund site area, serving more than 100 residential and commercial structures, including Regional School District 13. Many of the homes and businesses to be connected have treatment systems or are being provided bottled water as a result of widespread groundwater contamination.

"This EPA funding will initiate the work to install the alternative water supply for the residents and businesses of Durham. We are excited that this means the important work to address groundwater contamination and ensure clean drinking water will begin next year," said Curt Spalding, regional administrator of EPA's New England office. "EPA appreciates the hard work and partnership of the Town of Durham, the City of Middletown, the Conn. Dept. of Energy & Environmental Protection (DEEP), and the Conn. Dept. of Public Health to help EPA make this happen."

"Moving this project forward brings us closer to a positive ending to a long and troubling saga for residents and businesses in this area," said DEEP Commissioner Robert Klee. "With federal and state funding now in place we are moving forward to provide safe drinking water to families and to clean chemical contamination that has remained in the ground for far too long."

In the past, the Durham Manufacturing Company (operating) and the former Merriam Manufacturing Company polluted soil and groundwater with TCE and other chlorinated solvents in the area of Main Street in Durham. As a result, water in many private potable wells in Durham is unsafe to drink.

> "Superfund is the federal program that investigates and cleans up the most complex, uncontrolled or abandoned hazardous waste sites in the country."

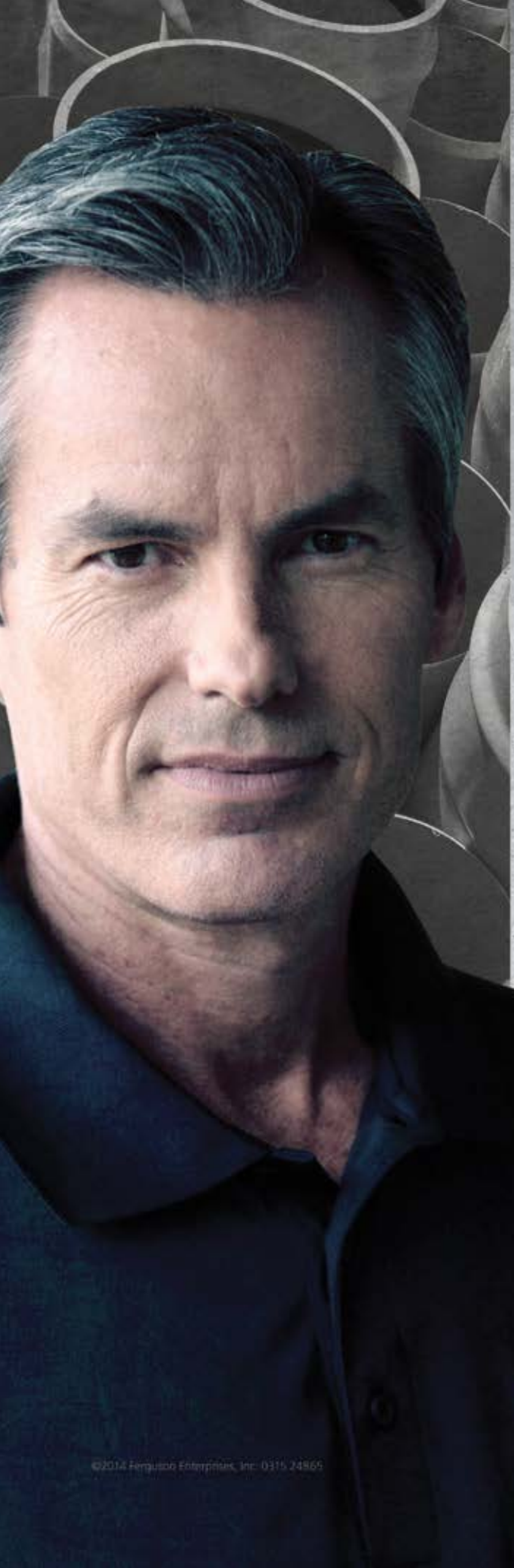
EPA, DEEP, DPH, the Town of Durham, and the City of Middletown have been working together for many years to provide temporary and permanent remedies for the homes with polluted wells. A public water main from Middletown to Durham will be the permanent remedy. EPA received $9 million for the federal fiscal year of 2015 to start construction of the water main. DEEP has received $3 million from the Bond Commission for the state's cost share, as required by Superfund, to support construction of the water main and other remedial actions at the site. EPA and DEEP are happy to see this project moving forward.

"I made a commitment to the residents of the Town of Durham that bringing clean water to the contaminated areas within the Superfund would be a priority. Thanks to the dedication of our partners at EPA, DEEP, DPH and the City of Middletown, our residents will be assured of a clean and safe water supply," said Town of Durham's First Selectman, Laura L. Francis.

The Durham Meadows Superfund Site includes an area of groundwater contamination associated with past disposal practices at the Durham Manufacturing Co. and the former location of Merriam Manufacturing Co. In 1982, the Conn. Dept. of Environmental Protection (now the Conn. Dept. of Energy & Environmental Protection (CT DEEP)), detected volatile organic compounds (VOCs – commonly found in solvents, paints, and degreasers) in private drinking water wells in the Durham Center area, including trichloroethylene (TCE).

Under a state order, the companies installed granular activated carbon filtration units on impacted residential wells. To date, 50 private wells serving 54 locations have found to be contaminated. These homes have water treatment systems to remove contamination. In 2005, EPA issued a Record of Decision outlining the cleanup action for the Site, including the extension of an alternate water supply from the City of Middletown Water Distribution System to address the overall area of site-wide groundwater contamination. Since 2005, EPA has been developing the design for the water line with support from the Town of Durham, City of Middletown, CTDEEP, and CTDPH. EPA also completed the cleanup of the former Merriam Manufacturing Company property in 2012 and is working on the design to perform a cleanup at the Durham Manufacturing Company.

Superfund is the federal program that investigates and cleans up the most complex, uncontrolled or abandoned hazardous waste sites in the country. This year marks the 35th anniversary of the enactment of the Comprehensive Environmental, Response, Compensation and Liability Act, the law establishing the Superfund program. Superfund's passage was a giant step forward in cleaning up hazardous waste sites to help ensure human health and environmental protection through long-term and short-term cleanup activities. Cleanups not only address environmental and human health threats, but often lead to positive economic benefits in the communities where cleanups occur including job creation and enhanced local tax bases.



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Regulation and Research Committee: A Critical Role

The Connecticut Section's Regulation and Research Committee has less than a half dozen active participants of the committee, but they do important work for our membership. Dan Ott of the Aquarion Water Company, Michael Hage of the CT DPH, Terry Spalletta of the Regional Water Authority, John Herlihy of the Aquarion Water Company, and Steve Pratt of the MDC are active members with others such as Ray Esponda of the New Britain Water Company, Tom Barger of the Regional Water Authority, Mark Pantages from the Manchester Water Company, and Brendan Avery from the Hazardville Water Company, Eric McPhee of CT DPH, Darleen Buttrick of Tighe & Bond, and Tom Gaidish of Aquarion joining in to support the effort. Anyone wishing to join the Regulation and Research Committee please contact the Chair, Steve Pratt, at *spratt@themdc.com* or 860-278-7850 x.3901.

The committee's primary focus recently has been the review of proposed Environmental Protection Agency (EPA) regulations and the State of Connecticut's Department of Public Health's (DPH) implementation of the Federal EPA regulations into the State Public Health statutes and or regulations. Some of the regulations proposed and enacted at the federal level are never incorporated into state regulation as the rules are implemented and administrated through the EPA directly while some regulations proposed at the state level are not based directly on a Safe Drinking Water Regulation enacted at the EPA.

Prime examples of federal rules that DPH has incorporated into DPH regulations are the:

- Interim Enhanced Surface Water Treatment Rule;
- Long Term 1 Enhanced Surface Water Treatment Rule;
- Long Term 2 Enhanced Surface Water Treatment Rule;
- Groundwater Rule;
- Stage 2 Disinfection/Disinfection ByProducts Rule;
- Revised Total Coliform Rule.

Each regulation had to be incorporated into the state regulations for Connecticut to retain primacy, and required DPH to write proposed changes to the State Public Health regulations pertaining to drinking water in Connecticut, also known as 19-13-B102. It was the Regulation and Research Committee's endeavor to review each and every iteration of those proposed regulation changes to ensure that the proposed changes met the federal requirements.

Examples of CT regulations that do not directly mirror a promulgated federal rule include the:

- Emergency Generator Regulations requiring emergency power at all public water system sources to maintain adequacy of supply and purity;
- Emergency Notification Regulations;
- Operator Certification Regulations, which deal with the certification and educational requirements of operators in the state of Connecticut for:
  – plant and distribution operators;
  – public and private water systems.
  The standardization of the examination requirements has enabled the certified operators in Connecticut to reap the benefits of the certification recognition with reciprocity of certification across the states.

Regulations for which the State of Connecticut did not need to incorporate into state regulations but still required Committee review included the multitude of Unregulated Contaminant Monitoring Rules, which over the course of many years have included the:

- Information Collection Rule (ICR);
- Unregulated Contaminant Monitoring Rule (UCMR);
- Unregulated Contaminant Monitoring Rule 2 (UCMR2);
- most recently, the Unregulated Contaminant Monitoring Rule 3 (UCMR3).

These rules were reviewed by the Committee, and by working together, the Committee members were able to fully understand the requirements imposed on the larger utilities (and a handful of smaller utilities) in Connecticut.

The Committee members over the years have read and commented on hundreds of pages of proposed regulations that could impact the water industry in Connecticut put forth by either the EPA at the federal level or at the state level as the CT DPH Drinking Water Section, and even the Department of Consumer Protections (Geothermal Well Regulations). As is often the case, the devil is in the details; so the work of the committee is critical to adoption of practical, workable regulations.



CWWA & CT Section AWWA
2015 Fall Conference Highlights



This year's CWWA/CTAWWA Fall Conference included several informative presentations, wonderful food, great vendor displays and lively conversation. 170 water industry professionals and public officials attended the event, including a record number of sponsors and exhibitors. Presentations are available on CWWA's website at *www.cwwa.org*.

Managing Cyanobacteria

Djanette Khiari, a Research Manager for the Water Research Foundation presented on the topic of 'Managing Cyanobacteria.' She provided a detailed overview of how to understand the occurrence and toxicology of cyanobacteria and available tools to manage cyanotoxin events, including in-plant treatment options and watershed management.

Drinking Water Section Update

Mike Hage of the Department of Public Health's Drinking Water Section updated attendees on a number of issues the department is focusing on this year, including efforts to convene the Water Utility Coordinating Committees and how important this is to the state's efforts to develop a state water plan. Hage also touched on efforts to improve the Water Supply Plan process, concerns regarding a recent incident involving a pressure tank explosion, harmful algal blooms (HABs), and several other regulatory initiatives.

2016 Legislative Outlook

Two of CWWA's Legislative Tri-Chairs, Maureen Westbrook, Connecticut Water Company, and Lori Vitagliano, RWA, updated members on new laws adopted in the 2015 legislative session and emerging issues facing the water industry. Their presentation included information on the state's efforts to develop a state water plan and CWWA's priorities for the upcoming legislative session.

Energy Efficiency Options for Water Utilities

Jenn Muir, President of JKMuir, Paul Michaud, Esq. of Murtha Cullina LLP, and Andrew Brydges of Connecticut Green Bank teamed up for a presentation on various energy efficiency programs available to water and wastewater utilities, and why it makes sense to incorporate these program into their systems. Solar, Virtual Net Metering, Energy Performance Contracts, and microgrids were discussed.

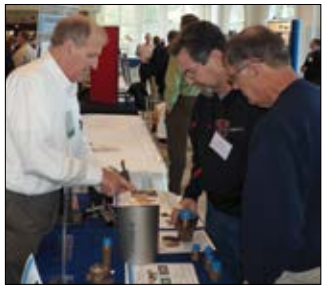
DEEP's Regulatory Authority in the Wake of the Tilcon Decision

The Connecticut Supreme Court recently issued a decision in a case involving the scope of DEEP's regulatory authority in issuing water diversion permits. Attorney Beth Barton, Day Pitney LLP, discussed the decision, concluding that there are certain limits to DEEP's authority, such as requiring studies and other information from a permit applicant or using one permit program to revisit permits previously issued in another, such as a local wetland permit authorizing wetlands impacts.

Cybersecurity & Connecticut's Water Utilities

Art House, Chair of the Public Utilities Regulatory Authority (PURA), this year's keynote speaker, addressed the group on the importance of guarding against cybersecurity attacks and PURA's docket to provide guidance to public service companies, including water utilities, in addressing cybersecurity concerns. Before joining PURA, House served as head of the Communications Group at the National Geospatial-Intelligence Agency, a combat support agency of the U.S. Department of Defense, and prior to that, as Director of Communications for the Office of the Director of National Intelligence.







Photos by Kathy Fortin

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MANAGING Harmful Algal Blooms

In response to a toxic algal bloom that prompted the City of Toledo to issue a 'Do Not Drink/Do Not Boil' water advisory in 2014 to more than 400,000 customers, Congress adopted the Drinking Water Protection Act, which President Obama signed into law last August. The Act requires EPA to develop recommendations for treatment options to help mitigate any public health risks resulting from cyanotoxin-producing cyanobacteria or blue-green algal blooms, sometimes referred to also as harmful algal blooms (HABs).

EPA recently released its 'Algal Toxin Risk Assessment and Management Strategic Plan for Drinking Water,' which outlines approaches and projects to help control and manage algal toxins in source water, and treat algal toxins in drinking water. The plan can be accessed at *www2.epa.gov/nutrient-policy-data/algal-toxin-risk-assessment-and-management-strategic-plan-drinking-water.*

What causes HABs?

"Cyanobacteria (a.k.a. Blue Green Algae) are prokaryotes that evolved a variety of adaptations to out-compete other groups of algae or bacteria. Some cyanobacteria produce toxins, including but not limited to microcystins, nodularin, anatoxins and cylindrospermopsins, which also include neurotoxin and hepatotoxin. Cyanobacteria can also cause water quality difficulties inclusive of taste and odor episodes, chemical dosing fluctuation, shortened filter runs and increased oxidant/disinfectant," noted Robert Kortmann, Ph.D., of Ecosystem Consulting Service, Inc. in Coventry, Connecticut.

According to the American Water Works Association (AWWA), nutrient pollution, predominately from nitrogen and phosphorus, is a significant factor in promoting cyanotoxin-producing blooms. High concentrations of nutrients may stem from wastewater discharges, animal waste, non-point fertilizers, and/or stormwater runoff.

Clearly, managing HABs is a big topic of concern for utilities and was a featured presentation at CWWA/CTAWWA's Fall Conference in October. Djanette Khiari, Ph.D. of the Water Research Foundation, updated attendees on the occurrence of cyanobacteria in the United States and available tools to manage cyanobacteria and HABs.

EPA issued a Health Advisory that serves as informal technical guidance to assist, federal, state, and local officials and utility operators in protecting public health as needed, according to Khiari. However, such health advisories are not legally enforceable standards, and some states are choosing not to enact the recommendations included in the guidance or are postponing action. Cyanotoxins are on the EPA's Candidate Contaminant 3 List for potential regulatory action following a notice and public comment period, and some of the most commonly found toxins of cyanobacteria may be monitored as part of next cycle of the Unregulated Contaminate Monitoring Rule.



Fortunately, there are "a variety of successful reservoir management approaches for the reduction, avoidance, or elimination of cyanobacteria blooms which have been developed over the past 30 years which key on the ecological conditions which stimulate cyanobacteria," said Kortmann in a recent article. Khiari touched on these approaches in her presentation.

Clearly, source water management is critical in addressing cyanotoxins. "Early warning systems must be functioning continuously to be effective in 1) identifying early indicators, such as pH, water temperature, Secchi disk depth, location/extent of thermocline; 2) defining trigger levels for increased monitoring; and 3) identifying action thresholds that tie source water monitoring to operational decisions," noted Khiari.

Khiari also outlined a summary of options for the management of cyanobacteria:

Intervention Type	Technique
Physical Control	Selective intake
	Mixing – destratification
	Dilution to decrease retention time
Nutrient Control	
External	Watershed management
Internal	Aeration & mixing
	Oxygenation (hypolimnetic)
	Sediment 'capping' with P-binding agents (e.g., modified clays, Alum)
Chemical Control	Algaecides
Non-Chemical Control	Novel technology (e.g., ultrasound)
Biological Control	Biomanipulation
	Viruses, bacteria, exotic algae

In-plant treatment options, including intracellular cyanotoxins removal and extracellular cyanotoxins removal, were

"Clearly, managing HABs is a big topic of concern for utilities and was a featured presentation at CWWA/CTAWWA's Fall Conference in October."

also discussed in detail. In addition, Khiari outlined information in the *Utility Manager's Guide to Cyanotoxins,* published by AWWA and the Water Research Foundation, which includes a quick self-assessment tool to help utility operators understand whether they are prepared for a cyanotoxin event.

What are the 'take home' messages from Khiari's presentation?

- Know your system.
- Be technically prepared – 1) Early warning systems and; 2) Know how to manage source and adjust treatment.
- Be ready to communicate with the public and the press.

To view the presentation, visit *cwwa.org* or *ctawwa.org.* For more information, visit the Water Research Foundation's website at *www.waterrf.org.*

No-cost cyanotoxin testing

Cyanotoxin testing for public water systems that utilize active surface water reservoirs was recently offered for free through the Department of Public Health's Drinking Water Section (DPH DWS) in cooperation with the DPH State Laboratory. The testing will be conducted for both microcystin and cylindrospermopsins, toxins that are the subject of EPA's recent Health Advisory. This no-cost testing offer is limited and the department has indicated that testing results will be held anonymous if the public water system so chooses. The DPH DWS staff will use this information to establish a basis for future testing and additional protective measures. For additional information, please visit the DPH DWS Harmful Algal Bloom cyanotoxin webpage.





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CWWA's 2016 Legislative Outlook

Despite increasing taxes by $1.3 billion, reducing scheduled tax cuts, and making $102 million in midyear budget cuts, the state is expected to face another budget shortfall this fiscal year – more than $600 million – according to recently released new revenue estimates.

As a result, budget issues will once again dominate discussions when the legislature convenes in February for what is supposed to be a 'short session' that adjourns in May. Given the budget climate and short session, CWWA is focusing its legislative efforts on the following key legislative priorities:

Developing a State Water Plan

One of CWWA's top priorities is addressing concerns regarding the process for approving the State Water Plan required to be developed by July 2017 under Public Act 14-163. The current law allows the plan that is submitted by the Water Plan Council, after their extensive process, to be modified before being approved by the General Assembly. Given the potential implications of a State Water Plan on public water supplies, the approval process should require the affirmative action of the legislature. However, under current law, the plan may be deemed approved if the legislature fails to adopt it within the statutory timeframes. This leaves too much to chance, given the legislature's numerous other priorities.

Restoring the Sales Tax Exemption for Private Water Companies

In a last-minute effort to address the state's budget deficit last session, provisions were included in the budget and tax package eliminating the sales tax exemption for private water companies, creating additional disparities in the water rates paid by customers throughout Connecticut. Given that there was no public hearing or opportunity for input on this issue, lawmakers may not have understood why the sales tax exemption was enacted and how its elimination drives rate disparities that have a disproportionate impact on customers of private water companies.

In 1993, the legislature's Program Review & Investigations Committee conducted a study of water company regulation, including issues resulting in rate variability between private utilities and municipal and regional water utilities. The study concluded that, "In general, private water companies have additional costs that public suppliers do not... Private water companies pay local, state, and federal taxes not paid by their municipal counterparts." These taxes include the Corporation Business Tax and applicable surcharges, federal income taxes, and local property taxes that are not paid by municipal or regional water utilities.

In response to the findings outlined in the study and additional discussions about how to minimize rate disparities following the release of the report, the legislature adopted legislation exempting private water companies from the sales tax in 1994. This legislation recognized that imposing sales taxes on private water companies places an unfair burden on customers of private water companies and exacerbates rate disparities. CWWA will be actively lobbying to restore the exemption this session.



Streamlining Regulatory Requirements

In light of the state's ongoing 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; and
- Working with the Department of Public Health to streamline the process for reviewing and approving various regulatory submittals.

Promoting 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 recommendations include 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.

If you are a CWWA member and interested in serving on CWWA's Legislative Committee or if you have ideas for legislative recommendations, please contact Betsy Gara, CWWA, at *gara@gmlobbying.com.*

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Get the most out of ATCAVE 2016 by earning Training Contact Hours (TCH) toward your Connecticut Treatment and Distribution System Operator Certification. See the training registration at the end of this section. Select from tracks in Water Quality and Treatment, Distribution and Storage, or Management. For just $110 CT Section AWWA (CTAWWA) members can attend either a morning or afternoon session and the Expo lunch **or** for $160 CTAWWA members can attend the whole day with Expo lunch.

ATCAVE Technical Conference

WATER QUALITY AND TREATMENT

Session A-1: Water Quality and Treatment
2.0 TCH* (.2 CEU)
8:30 AM to 10:30 AM
A-1 only session cost: $110.00, CTAWWA member single session attendance includes Expo lunch
A-1 plus any afternoon session cost: $160.00, full day member attendance includes Expo lunch

Bedrock Well Rehabilitation
Stacy Stieber, CPG, Leggette, Brashears & Graham, Inc.
Thomas P. Cusack, CPG, Leggette, Brashears & Graham, Inc.
This presentation will discuss how to identify when a bedrock supply well is in need of rehabilitation based upon changes in well yield, water level and/or water quality. Several methods for bedrock well redevelopment and rehabilitation will be discussed.

Algae and Algal Toxins: Impacts on Treatment and Control Strategies
Christine Thornton, Hazen and Sawyer
Algal blooms cause both physical and chemical treatability issues. This presentation will report on results from a study of six water treatment plants. All selected utilities are located in the eastern US, all have experienced algae related issues, and the utilities use a range of raw water sources.

Connecticut Department of Public Health: Upcoming Requirements of the Revised Total Coliform Rule (RTCR)
Vicky Carrier, Sanitary Engineer 3, DPH Drinking Water Section
This presentation will discuss the Revised Total Coliform Rule (RTCR) requirements.

Session A-2: Water Quality and Treatment
2 TCH* (.2 CEU)
1:00 PM to 3:00 PM
A-2 only session cost: $110.00, CTAWWA member single session attendance includes Expo lunch
A-2 plus any morning session cost: $160.00, full day member attendance includes Expo lunch

Optimizing a Green Sand Filtration System for Iron/Manganese Removal and Water Main Ice Pigging at the North Willington Village Condominium Association Water System
Irving Fallon, PE, Contract Operator, North Willington Village Condo Association
The North Willington Village Condominium Association's water system has a history of difficult water. This presentation discusses how several challenges at this small system have been addressed.

Mind the Gap: Upgrading Existing Overflow Piping to Meet Standards
Brian P. Robillard, PE, Tata & Howard
Jim Hill, South Central Connecticut Regional Water Authority
Many utilities are being cited for lack of air gaps on tank overflow and filter to waste piping. This presentation will present two projects and the challenges associated with this type of upgrade.

Seeing It All the Way Through: Adding DAF and a Lot More to Meriden's Broad Brook Water Filtration Plant
Dennis Waz, Director of Public Utilities, City of Meriden
Chuck Pike, PE, Engineering Manager, Black & Veatch
Ari Copeland, Plant Operations/Startup Specialist, Black & Veatch
The City of Meriden is upgrading their Broad Brook WFP to include dissolved air flotation. This presentation provides an overview of the project from planning and design, through to construction; including 'lessons learned' at each phase.

DISTRIBUTION AND STORAGE

Section B-1: Distribution and Storage
2 T.C.H.* (.2 CEU)
9:00 AM to 11:00 AM
B-1 only session cost: $110.00, CTAWWA member single session attendance includes Expo lunch
B-1 plus any afternoon session cost: $160.00, full day member attendance includes Expo lunch

Lake Konomoc Pump Station: Adding Redundancy and Resiliency to the City of New London's Existing Water Treatment Plant
James Collins, P.E., Project Manager, ARCADIS U.S., Inc.
Joe Lanzafame, City of New London
Future population growth and potential drought conditions had motivated the City of New London to proactively take steps to build redundancy and resiliency in its system by increasing its withdrawal capacity from its Lake Konomoc reservoir. This presentation will include an overview of the project, pump station design, challenges, and lessons learned.

Comprehensive Leak Inventory – An Innovative and Efficient Approach in San Marcos, Texas
Wayne Pratt, Vice President, Wachs Water Services
With an eye toward reducing non-revenue water, improving system mapping, and identifying system deficiencies, the City of San Marcos, Texas has commissioned a comprehensive leak inventory. Learn how San Marcos is delivering on its leak inventory goals and optimizing its approach to leak detection and data with the help of mobile GIS.

Mixed Oxidants – An Efficient Approach to Improving Water Quality & Chlorine Residual Issues
John Deogracias, Parkson Corporation
At Westover Air Reserve Base (WARB) in Chicopee, MA it was realized that typical methods for maintaining required chlorine residual levels such as flushing was not operationally cost



efficient. Mixed oxidant chemistry has provided more than just enhanced chlorine residuals at the base. It has also significantly improved water quality overall. Learn about the onsite generation process, mixed oxidant chemistry, and how it has saved the WARB more than $100,000 per year.

Section B-2: Distribution and Storage
2 TCH* (.2 CEU)
1:30 PM to 3:30 PM
B-2 only session cost: $110.00, CTAWWA member single session attendance includes Expo lunch
B-2 plus any morning session cost: $160.00, full day member attendance includes Expo lunch

Connecticut Department of Public Health: Regulatory Update, Focus on Lead and Copper Rule and the Long Term 2 Enhanced Surface Water Treatment Rule (LT2)
Christopher Roy, Supervising Sanitary Engineer, DPH Drinking Water Section

Responding to Reoccurring Coliform Detections
Kristen Berger, P.E., Principal
Reoccurring total coliform detections can be a troublesome issue for public water suppliers. To respond to this issue, questions need to be considered. These include: what is the source of the bacteria, and where are susceptible areas of the distribution system? This presentation will summarize an evaluation completed for South Kingstown, Rhode Island's South Shore Water in response to repeat coliform hits in their distribution system.

Not Your Average Pump Station Upgrades Project: Meeting Challenges to Achieve Reliability
Darleen P. Buttrick, Tighe & Bond
Rose Gavrilovic, South Central Connecticut Regional Water Authority (SCCRWA)
Recent upgrades were completed at SCCRWA's Lake Saltonstall raw water pump station. Upgrades included the installation of self-cleaning drum screens with airburst, new motors and VFDs for raw water pumps, as well as electrical and structural upgrades at both the pump station and the water treatment plant. This presentation will review the balance between the project scope and budget, design alternatives, and overall project challenges.

MANAGEMENT

Session C-1: Management
2 TCH* (.2 CEU)
9:00 AM to 11:00 AM
C-1 only session cost: $110.00, CTAWWA member single session attendance includes Expo lunch
C-1 plus any afternoon session cost: $160.00, full day member attendance includes Expo lunch

Connecticut Department of Public Health: Hot Topics in Public Drinking Water
Lori Mathieu, Section Chief, DPH Drinking Water Section

Unaccounted for Water from Beginning to End
Tiffany Lufkin, PE, Asset Management Engineer, South Central Connecticut Regional Water Authority
Brian Messner, EIT, Lead Project Engineer, Wright-Pierce
The South Central Connecticut Regional Water Authority (SCCRWA) recently reinvigorated its unaccounted for water efforts beginning at the SCCRWA's two largest water treatment facilities. This presentation will detail their approach to controlling unaccounted for water, including effluent flow meter testing method and results. Lessons learned will also be presented.

Improving Efficiency with Electronic O&M Manual and Operator Logs
Tom Tyler, The Metropolitan District
Len Sekuler, Arcadis
Hartford's Metropolitan District Commission Water Pollution Control Facility recently created electronic operation and maintenance (O&M) manuals for a number of treatment processes. Background information including drawings, O&M manuals, vendor information, standard operating procedures, as well as operator logs and training are all included in an easily accessible electronic system. Advantages include better use of existing information, confidence in latest revision dates, and access from computers and mobile devices.

Section C-2: Management
2 TCH* (.2 CEU)
1:30 PM to 3:30 PM
C-2 only session cost: $110.00, CTAWWA member single session attendance includes Expo lunch
C-2 plus any morning session cost: $160.00, full day member attendance includes Expo lunch

Protecting Against ARC Flash Hazards
Joe Hurley, Woodard & Curran
Andrew Fitzpatrick, PE, Woodard & Curran
This presentation details the requirements for arc flash risk assessments and how these assessments can identify potential risks. Information shared includes safety-related work practices, arc flash boundary, and appropriate personnel protective equipment to be used within the arc flash boundary. These assessments identify practical improvements that improve personnel protection and considerations for liability associated with incidents.

Risk and Resilience Management of Water and Wastewater Systems
Kate Novick, Gradient Planning
Find out more about the Risk Analysis and Management for Critical Asset Protection Standard for the water sector. This Standard can be used to provide support for internal decisions about critical assets and their management, and improve reliability of service.

A Well-Seasoned Case Study: Investigation and Modeling of Road Salt in Groundwater
Kevin Schwabe, Avon Water Company, Andy Adinolfi, GEI Consultants, Inc.
This presentation describes the investigation of potential sources of increased sodium in a water supply aquifer. Investigation of nearby road salting practices, monitoring well sampling, geochemical analysis, and groundwater modeling were completed to determine the likely source and timeframe of the increased sodium.

*At the time of *InFlow-Line* publication, DPH approval for session TCHs was pending.

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ATCAVE TECHNICAL TRAINING REGISTRATION FORM

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INSTRUCTIONS FOR MAIL-IN OR EMAIL REGISTRATION:

1) Complete the registration information above, including name and contact information (phone and/ or email address).
2) Select your sessions below. Please be sure to check the appropriate box for each session selected and your registration type (member, non-member, or small system).
3) Complete the payment section on the second page of this registration form.
4) Return to the address provided on the second page with appropriate payment.
5) Mail-in and email **REGISTRATION DEADLINE IS Friday, FEBRUARY 12, 2016.** Registrations will not be accepted after this date.
6) Cancellation Policy: All cancellations must be received by February 16 in order to be eligible for a refund. Any cancellations received after February 16 will not receive a refund.

REGISTRATION NOTE: Lunch is included with Member and Non-Member registrations.
SMALL SYSTEMS: CTAWWA offers limited FREE conference registration to small water systems. This offer does not include lunch. 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. Refer to page 30. Please do not use this form.

Section	Topics	CEUs	Time	Type	Price	Select
Water Quality and Treatment						
A-1	· Bedrock Well Rehabilitation · Algae and Algal Toxins: Impacts on Treatment & Strategies for Control · Connecticut Department of Public Heath: The Revised Total Coliform Rule and Regulatory Updates	.2	8:30 am to 10:30 am	Member	$110.00[2]	☐
				Non Member	$135.00[2]	☐
				Small Systems[1]	$0.00[3]	☐
A-2	· Optimizing Green Sand Filtration for Iron/ Manganese Removal and Water Main Pigging at N. Willington Condos · Mind the Gap: Upgrading Existing Overflow Piping to Meet Standards · Seeing It All The Way Through: Adding DAF and a Lot More to Meridens Broad Brook Water Filtration Plant	.2	1:00 pm to 3:00 pm	Member	$110.00[2]	☐
				Non Member	$135.00[2]	☐
				Small Systems[1]	$0.00[3]	☐

Please continue the ATCAVE Registration on the next page.

ATCAVE TECHNICAL TRAINING REGISTRATION FORM – CONTINUED

Section	Topics	CEUs	Time	Type	Price	Select
Distribution						
B-1	· Lake Konomoc Pump Station: Adding Redundancy and Resilience to the City of New London Water Treatment Plant · Comprehensive Leak Detection: An Innovative and Efficient Approach in San Marcos, Texas	.2	9:00 am to 11:00 am	Member	$110.00[2]	☐
				Non Member	$135.00[2]	☐
				Small Systems[1]	$0.00[3]	☐
B-2	· Connecticut Department of Public Health: Compliance Issues with the Lead and Copper Rule Regulations Update, and LT2 ESWTR · Responding to Reoccurring Coliform Detections · Not Your Average Pump Station Upgrades Project: Meeting Challenges to Achieve Reliability	.2	1:30 pm to 3:30 pm	Member	$110.00[2]	☐
				Non Member	$135.00[2]	☐
				Small Systems[1]	$0.00[3]	☐
Management						
C-1	· Connecticut Department of Public Health: Regulatory Update Hot Topics · Unaccounted for Water from Beginning to End · Improving Efficiency with an Electronic Operations and Maintenance Manual and Operator Logs	.2	9:00 am to 11:00 am	Member	$110.00[2]	☐
				Non Member	$135.00[2]	☐
				Small Systems[1]	$0.00[3]	☐
C-2	· Protecting Against ARC Flash Hazards · Risk and Resiliency Management of Water and Wastewater Systems · A Well-Seasoned Case Study: An Investigation and Modeling of Road Salt In Groundwater, Avon Water Co.	.2	1:30 pm to 3:30 pm	Member	$110.00[2]	☐
				Non Member	$135.00[2]	☐
				Small Systems[1]	$0.00[3]	☐
[2] **Full-Day Registration: If you register to attend both a morning and an afternoon session – Members enter and pay $160 and Non-Members enter and pay $210 for the Subtotal**				**Subtotal:** $		

[3] **Lunch is not included with the Small System FREE Conference Registration. A Lunch Ticket must be purchased separately.**

SMALL SYSTEM[1,3] and EXPO ONLY LUNCH TICKETS	Lunch in the Grand Ballroom (11:30 am to 1:30 pm)	Quantity: _____ @ $35.00 each	**Total Lunch Ticket Cost**

Please make checks payable to: CTAWWA and mail along with this form to:

CT Section AWWA, P.O. Box 542, Tolland, CT 06084

Total Fee Enclosed $

Questions?
Email *info@ctawwa.org* or call (860) 808-8464

For additional registrations, reproduce this form or register online @ w*ww.ctawwa.org*

Registrations can also be emailed to: *info@ctawwa.org*

CREDIT CARD INFORMATION – ALL FIELDS MUST BE COMPLETED			
NAME ON CREDIT CARD:		BILLING PHONE NUMBER FOR CREDIT CARD:	
BILLING ADDRESS FOR CREDIT CARD:		BILLING ZIP CODE:	
TYPE OF CREDIT CARD: ☐ MasterCard/Visa ☐ AMEX ☐ Discover	SIGNATURE:		
CREDIT CARD #:	EXP. DATE:	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.

MEMBER: Any CTAWWA member (individual, utility, or corporate).
NON MEMBER: An attendee that is not a Member or Small Water System.
[1]SMALL SYSTEM: An independently owned & operated water system that serves a population of <1,000 people.

ATCAVE EPA Class for Small Water Systems 8:00 am to 4:00 pm (Including Expo lunch)

As an operator, manager, or governing body of a small water system, you face daily challenges to providing reliable, safe drinking water to your consumers. CTAWWA is offering a FREE one-day workshop at ATCAVE on February 23, 2016 at the Crowne Plaza, Cromwell. TCHs will be awarded for this workshop, which is made possible by funding through the USEPA and AWWA's partner, RCAP Solutions.

This small water system training opportunity is open to public water systems that serve less than 10,000 people. The session is intended to provide individuals responsible for small water system operation (e.g., small system board members, owners, local town officials, and others) with a better understanding of the public health significance and regulatory requirements associated with the operation of a small water system. This course is not intended for professional contract operators. Class size is limited to 25.

The course will present and discuss several of the most common water supply, treatment, and regulatory issues facing small water systems in Connecticut. The workshop will focus on issues and compliance for water systems serving less than 1,000 people. Course modules will be selected from among the following topics*:

- Water Treatment – Microbial Contaminants
- Distribution System Operation and Maintenance
- Regulatory Review – Revised Total Coliform Rule, Lead/Copper, Groundwater Rule
- Nitrates/Nitrites
- Arsenic
- Radionuclides
- Source Water Protection Planning

To register, please complete the registration form below.

*Final topic list was not available at the time of *Inflow-Line* publication.

Questions? Contact Darlene Gurnon, CTAWWA Administrative Manager at *info@ctawwa.org* or 860-808-8464.

YES, I will attend the EPA Grant Training on February 23, 2016.

NAME:		
SMALL SYSTEM NAME:	POPULATION SERVED:	
STREET ADDRESS:		
CITY:	ST:	ZIP:
EMAIL ADDRESS:	PHONE:	

PLEASE MAIL TO:
Darlene Gurnon, CT Section AWWA
P.O. Box 542, Tolland, CT 06084, or email to *info@ctawwa.org.*



ATCAVE Vendor Expo

8:00 AM – 3:00 PM
Location: Grand Ballroom
FREE ADMISSION

The 2016 Vendor Expo is your chance to see the latest in water supply related technologies and equipment from among dozens of vendors and specialists in the water supply industry. For many attendees, the knowledge gained and the contacts made at the Vendor Expo add significant value to their attendance at ATCAVE.

Product Demonstrations
Product demonstrations are held throughout the day. Please consult the information board near registration to find demonstration listings, locations, and times.

Fresh Ideas Poster Contest
The CTAWWA Young Professionals Committee hosts the 'Fresh Ideas' Poster Contest. The goal of this competition is to encourage new member involvement in the CTAWWA and to expose our new members to the opportunities that their membership in AWWA offers them.

The CTAWWA Fresh Ideas Poster Contest winner is eligible to compete at AWWA's 2016 Annual Technical Conference (ACE16). ACE16 will be held June 19–22 in Chicago, IL. CTAWWA awards our Fresh Ideas winner a stipend toward travel and accommodations at ACE16.

Individuals new to the water supply profession are encouraged to enter. Young Professional participation from all areas of the water industry stimulate progressive thinking, and 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 display student poster contest entries throughout the day. Please visit the contest and vote!

General Expo Luncheon
11:30 AM – 1:30 PM
Individual tickets available for $35.00

Note: Please note that due to weather and circumstances beyond our control we must caution that programs are subject to change. CTAWWA will, however, work to provide substitute instruction that provides the best possible educational alternative.



ATCAVE 2016

American Water Works Association ConnecticutSection **Annual Technical Conference & Vendor Expo**

February 23 2016, 8 AM to 3 PM at the Radisson, Cromwell, Exit 21 on I-91

ATCAVE Vendor Expo Registration

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

DRAPED BOOTH - 8 FT. DEEP X 10 FT. WIDE WITH TABLE AND TWO CHAIRS *(Please check applicable boxes)*

☐ CT Section Enhancer: $600.00 ☐ CT Section Member: $675.00 ☐ Non-Member: $850.00

~~**DRAPED BOOTH - 6 FT. DEEP X 10 FT. WIDE WITH TABLE AND TWO CHAIRS**~~ **SOLD OUT!**

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

Electricity: ..... ☐ $35.00
Break Station Sponsorship (Five available): ..... ☐ $300.00
General Luncheon Station Sponsorship: ..... ☐ $350.00
Audio-Visual Sponsorship: ..... ☐ $300.00
Small System Program Sponsorship (Five available): ..... ☐ $250.00

Please provide names for exhibitor badges: _____ _____ _____ _____

Additional Luncheon Tickets *(Vendors receive two free tickets):*	Quantity: _____ @ $35.00 each	**Total Lunch:** $
		Total Fee Enclosed $

Please check out our new registration at ***www.ctawwa.org.*** Your online registration is greatly appreciated.

CREDIT CARD INFORMATION – ALL FIELDS MUST BE COMPLETED			
NAME ON CREDIT CARD:	BILLING PHONE NUMBER:		
BILLING ADDRESS FOR CREDIT CARD:	BILLING ZIP CODE:		
TYPE OF CREDIT CARD: ☐ MasterCard/Visa ☐ AMEX ☐ Discover	SIGNATURE:		
CREDIT CARD #:	EXP. DATE:	CCV:	AMOUNT TO CHARGE TO CREDIT CARD:

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

Please make checks payable to "CT Section – AWWA" and mail with this completed registration form no later than Friday, February 5, 2016 to:

CTAWWA, P.O. Box 542, Tolland, CT 06084

Registrations can also be emailed to *info@ctawwa.org*

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

American Water Works Association
ConnecticutSection

Spring 2016 Training Schedule

The classes listed below are for the Spring 2016 semester. The CTAWWA Education Committee is committed to providing comprehensive up-to-date training for our members. We appreciate your continued support and encourage you to participate in courses offered by CTAWWA individually as well as in partnership with the New England Water Works Association (NEWWA).

Please note that the following courses, which are offered in partnership with NEWWA, must be registered through and payment made directly to NEWWA.

If you have questions or comments, please contact Peter Grabowski, Education Committee Co-Chair at 413-572-3234, *pjgrabowski@tighebond.com*; or Darlene Gurnon, CTAWWA Administrative Manager at 860-808-8464, *adminmanager@ctawwa.org*.

American Water Works Association
New EnglandSection

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.

To register for these courses, call NEWWA at (508) 893-7979, or visit the website at *www.newwa.org*. **CTAWWA 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.

Intermediate Concepts of Reading Prints and Drawings

Course Code: DBI316AC
Date: Wednesday, January 20, 2016
Location: MDC Training Center, 125 Maxim Road, Hartford
Time: 9:00 am – 4:00 pm
CEU: 0.6 CEU
Applicable for Distribution (D)

Course Description: This course is a continuation of the *'Fundamentals of Reading Blueprints,'* which is a prerequisite class. In order to fully benefit from this class participants are strongly urged to complete the fundamentals class prior to registering for the intermediate class. This course is designed for drinking water operators who wish to increase their knowledge of reading technical blueprints used on the job and in related construction projects. After a brief review of the basics of print reading, topics covered will include sessions on angles, bearings, site utility and grading plans, stationing, process and instrument drawings, and wiring diagrams.

Registration Fee: CTAWWA Members: $185.00; Non-Members: $235.00

Preparing For and Responding to Customer Water Quality Complaints

Course Code: WWQ316AC
Date: Wednesday, February 3, 2016
Location: MDC Training Center, 125 Maxim Road, Hartford
Time: 9:00 am – 12:30 pm
CEU: 0.3 CEU
Applicable for Distribution and Treatment (D and T)

Course Description: This course will allow participants to carefully plan how to create an effective program for receiving water quality complaints, and how to deal with the various types of expected and unexpected water quality complaints. Because of serious liability issues, as well as the need to learn more about your system's water quality, an overview of how to properly receive and record complaints will be presented along with proven remedies to ease any fears in the minds of the customer. Sound practices for setting up and completing a site visit, if required, will be discussed along with a list of the most common types of water quality complaints, and how to satisfy the customer.

Registration Fee: CTAWWA Members: $135.00; Non-Members: $185.00

Iron and Manganese Removal

Course Code: TIM316AC
Date: Wednesday, March 2, 2016
Location: Regional Water Authority, New Haven
Time: 9:00 am – 4:00 pm
CEU: 0.6 CEU
Applicable for Treatment (T)

Course Description: This course will help participants describe characteristics of Iron (Fe) and Manganese (Mn); describe the value of removing Fe and Mn; describe basic treatment methods and processes for removing Fe and Mn; perform basic calculations relating to Fe and Mn treatment methods; discuss chemical application and feed methods; and identify potential problems and corrective actions.

Registration Fee: CTAWWA Members: $185.00; Non-Members: $235.00

Understanding the Importance of Contact Time (CT) in Disinfection

Course Code: WM416AC
Date: Tuesday March 15, 2016
Location: Regional Water Authority, New Haven
Time: 9:00 am – 12:30 pm
CEU: 0.3 CEU
Applicable for Treatment (T)

Course Description: This half-day class is designed to provide participants with an understanding of the concept of Contact

Spring 2016 Training Schedule

Time (CT) used in providing effective disinfection of water. Beginning with a full explanation of CT, the reasons for the use of tables supported by sound science and research will be examined as it relates to water microbiology. A brief explanation of Irradiation Time (IT) will be covered to assist in understanding similar concepts in the use of ultraviolet energy as an effective disinfectant. The various types of chemical disinfectants will be examined, with an explanation of the most successful methods that are used to provide the best methods of pathogen elimination. Lastly, a brief exercise will follow related to the use of CT tables and how to use the tables for compliance with the Safe Drinking Water Act. This class will be useful to anyone who wishes to learn more about the disinfection process as it relates to drinking water and public health.

Registration Fee: CTAWWA Members: $135.00; Non-Members: $185.00

Hands-On Introduction to Drinking Water Microbiology

Course Code: BWM416AC
Date: Tuesday, April 12, 2016
Location: Groton Utilities Operation Complex, 1240 Poquonnock Rd., Groton, CT
Time: 9:00 am – 4:00 pm
CEU: 0.6 CEU
Applicable for Treatment (T)
Course Description: This course will present an overview of drinking water microbiology and microbiological methods. Classroom instruction will cover bacteria, viruses and protozoa, testing techniques, and microorganism detection. Students will then participate in four facilitated laboratory workstations on basic microscopy; popular methods of sterilization; aseptic technique practice; and simple testing methods for microorganisms.
Registration Fee: CTAWWA Members: $185.00; Non-Members: $235.00

Rescuing and Rehabilitating Your Aging Water Mains

Course Code: DWM416AC
Date: Wednesday, April 27, 2016
Location: 231 Brainard Road, The MDC, Hartford. Please note the change of MDC location!
Time: 9:00 am – 4:00 pm
CEU: 0.6 CEU
Applicable for Distribution (D)

Course Description: This course will provide fundamental information to anyone responsible for evaluating and correcting serious problems with water mains in their drinking water distribution system. Proper evaluation of your system's conditions, as well as being aware of options available to correct these problems, are critical in providing water quality that meets or exceeds SDWA requirements. The course will feature focused examples of newer and currently used methods of pipe rehabilitation; pros and cons of each of these methods (including cost considerations); and a checklist of how to select the best consultant and contractor for your system.

Registration Fee: CTAWWA Members: $185.00; Non-Members: $235.00

Sanitary Survey Preparation and Follow-Up Compliance

Course Code: WSS416AC
Date: Wednesday, May 4, 2016
Location: Regional Water Authority, New Haven
Time: 9:00 am – 12:30 pm
CEU: 0.3 CEU
Applicable for Distribution and Treatment (D and T)
Course Description: This course will assist water system operators to recognize sanitary risks in their own systems, understand what actions should be taken to correct them, and prepare for sanitary surveys by the drinking water regulatory agency. Specific topics covered include facilities, operation, and maintenance of the entire small water system from source to tap. Operators will become familiar with the concept of multiple barrier protection and learn how its interruption can adversely affect the system's ability to provide safe drinking water. Students will gain the insight and practical skills needed to assess and correct sanitary deficiencies in the water system they operate.

Registration Fee: CTAWWA Members: $135.00; Non-Members: $185.00

Water Main Disinfection

Course Code: DMD416AC
Date: Wednesday, May 18, 2016
Location: 231 Brainard Road, The MDC, Hartford. Please note the change of MDC location!
Time: 9:00 am – 12:30 pm
CEU: 0.3 CEU
Applicable for Distribution (D)
Course Description: This introductory course will present an overview of the various processes used to disinfect drinking water distribution system water mains and present topics relating to the sanitary protection of these mains according to the latest AWWA Standard C651. The introductory segment will help participants develop an understanding of the various types of chlorine and ozone used in the disinfection process, as well as the importance of water main disinfection. The next segment will include a presentation that will illustrate the correct methods used to disinfect new, repaired, or rehabilitated mains. Also covered will be the disposal of highly chlorinated water and how to properly dispose of this water according to the latest acceptable practices. The course will end with an overview of how to provide proper quality control and effectively deal with contractors when disinfecting mains.

Registration Fee: CTAWWA Members: $135.00; Non-Members: $185.00

Biofilm in YOUR Distribution System: Controls and Concerns

Course Code: WBF416AC
Date: Wednesday, June 1, 2016
Location: Regional Water Authority, New Haven
Time: 9:00 am – 12:30 pm
CEU: 0.3 CEU
Applicable for Distribution and Treatment (D and T)

Course Description: If you distribute water, you have biofilm in your system! This course will provide a brief overview of biofilm, why its presence in a distribution system is a concern, and how to control and prevent problems. In addition, participants will have an opportunity to examine common locations of biofilm in a system, review the appropriate steps to physically and chemically control biofilm, and explore the various methods used to identify the presence or absence of troublesome biofilm.

Registration Fee: CTAWWA Members: $135.00; Non-Members: $185.00

Well Rehabilitation and Maintenance

Course Code: RWR416AC
Date: Wednesday, June 15, 2016
Location: 231 Brainard Road, The MDC, Hartford. Please note the change of MDC location!
Time: 9:00 am – 4:00 pm
CEU: 0.6 CEU
Applicable for Distribution and Treatment (D and T)

Course Description: This course will assist water utility superintendents and managers in assessing their groundwater supplies with an eye towards preventive maintenance and well rehabilitation as cost-effective alternatives to new source development. Topics include the types of wells, terminology, well construction, maintenance, finance, as well as plugging (how and why). Case studies will tie together all workshop information with real-world groundwater supply problem solving.

Registration Fee: CTAWWA Members: $185.00; Non-Members: $235.00



SPRING 2016 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)

PART II – COURSE LISTING

✓	Course Code	Course Title	Date/Time	Fee
	DBI316AC	**Intermediate Methods of Reading Prints & Drawings** Location: MDC Training Center, 125 Maxim Road, Hartford	January 20, 2016 (9:00 am–4:00 pm)	$185.00/ $235.00
	WQ316AC	**Preparing & Responding to Customer Water Quality Complaints** Location: MDC Training Center, 125 Maxim Road, Hartford	February 3, 2016 (9:00 am–12:30 pm)	$135.00/ $185.00
	TIM316AC	**Iron and Manganese Removal** Location: Regional Water Authority, New Haven	March 2, 2016 (9:00 am–4:00 pm)	$185.00/ $235.00
	TUT316AC	**Understanding the Importance of Contact Time in Disinfection** Location: Regional Water Authority, New Haven	March 15, 2016 (9:00 am–12:30 pm)	$135.00/ $185.00
	BWM416AC	**'Hands-On' Introduction to Drinking Water Microbiology** Location: Groton Utilities Operation Complex, 1240 Poquonnock Rd., Groton, CT	April 12, 2016 (9:00 am–4:00 pm)	$185.00/ $235.00
	DWM416AC	**Rescuing and Rehabilitating Your Aging Water Mains** Location: 231 Brainard Road, The MDC, Hartford Please note the change of MDC location!	April 27, 2016 (9:00 am–4:00 pm)	$185.00/ $235.00
	WSS416AC	**Sanitary Survey Preparation and Follow-Up Compliance** Location: Regional Water Authority, New Haven	May 4, 2016 (9:00 am–12:30 pm)	$135.00/ $185.00
	DMD416AC	**Water Main Disinfection** Location: 231 Brainard Road, The MDC, Hartford Please note the change of MDC location!	May 18, 2016 (9:00 am–12:30pm)	$135.00/ $185.00
	WBF416AC	**Biofilm in YOUR Distribution System: Concerns and Controls** Location: Regional Water Authority, New Haven	June 1, 2016 (9:00 am–2:30 pm)	$135.00/ $185.00
	RWR416AC	**Well Rehabilitation and Maintenance** Location: 231 Brainard Road, The MDC, Hartford Please note the change of MDC location!	June 15, 2016 (9:00 am–4:00 pm)	$185.00/ $235.00
		Add $20.00 late fee if registering within 2 days of the class date	~ ~ ~ ~ ~	
			TOTAL FEE	

☐ Check here if you have a disability and require accommodations to fully participate.

PART III – METHOD OF PAYMENT

Type of Payment			Amount (from TOTAL FEE above)
☐ Check (Payable to NEWWA) ☐ P.O.#		☐ Master Card/Visa ☐ 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.*

Scholarship Opportunities

General Scholarship

The Connecticut Water Works Association (CWWA) and the Connecticut Section of the American Water Works Association (CTAWWA) have scholarships available for eligible high school students. The first place scholarship award is $1,000 with additional awards issued at the discretion of the Associations based upon the applications received and what the funds allow. We have had some great candidates in the past and hope this piques their awareness of the water industry.

To be eligible for consideration, a complete application package must be submitted to the Scholarship Committee by **March 15, 2016**. Applicants are asked to include a written essay (approximately 500 words) summarizing 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*.

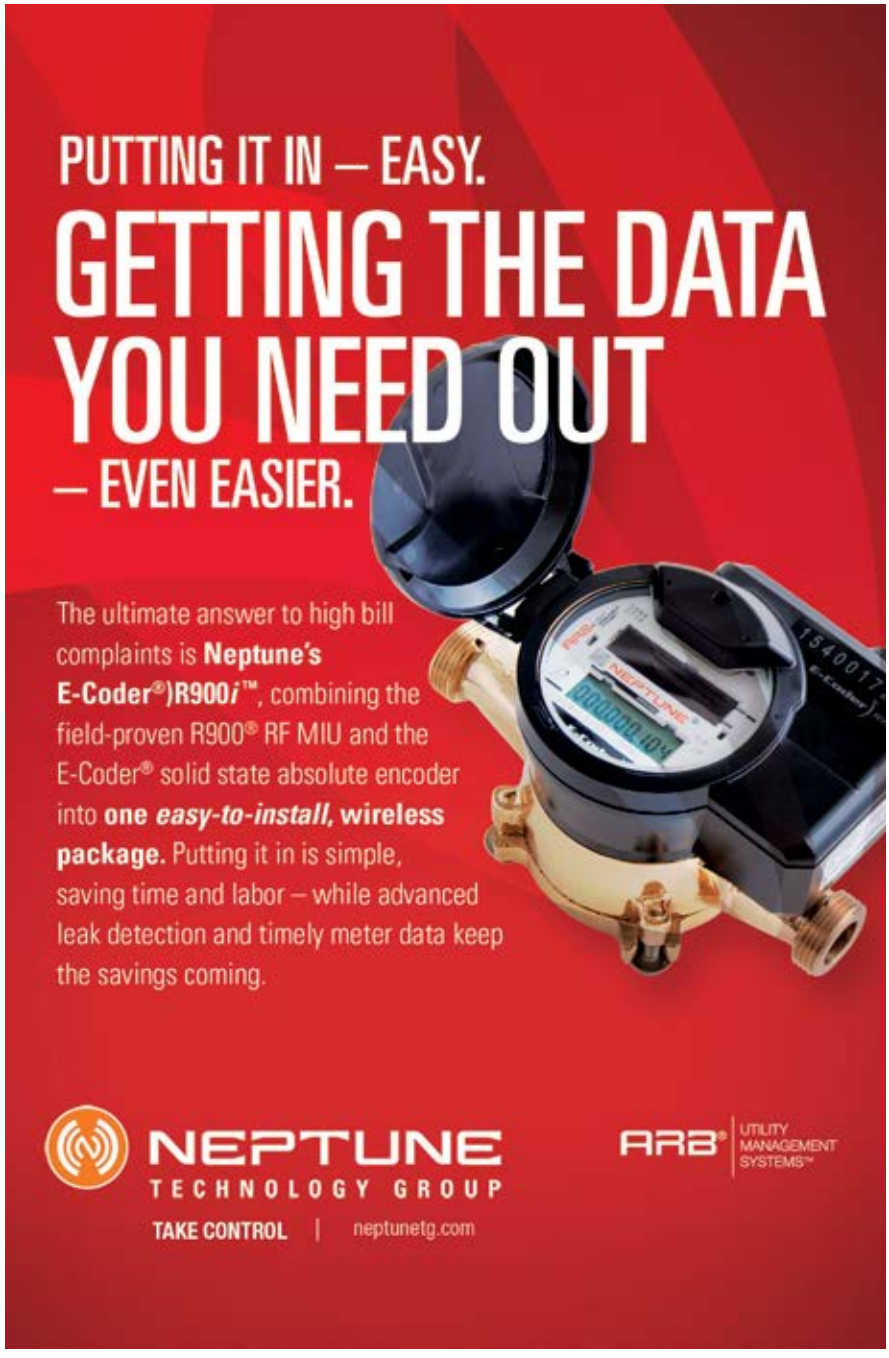


Associates Committee Scholarships for CTAWWA Individual Members

Thanks to the generosity of the Associates Committee and especially the Section Enhancers, applications are now being accepted for the CTAWWA Associates Committee Scholarship Program. These scholarships are offered for CT Section AWWA (CTAWWA) **individual** members or their immediate family members (children/dependents) who have not previously been awarded a CTAWWA scholarship.

High school seniors and students currently enrolled in an educational program beyond the secondary level in a two-year, four-year, or graduate program are eligible. Student members of CTAWWA are also eligible. 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**. The application deadline is **Friday, March 11, 2016**.

For further information including applications, please visit the CTAWWA website at *www.ctawwa.org*. Encourage your immediate family member to apply!



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Gateway Community College

CT DPH, CT DEEP
Water & Wastewater Treatment Certification
Environmental Science/Technology Courses
Spring 2016

Course	Name	Location	Day	Time	Credits
ENV 100	Alt Energy Systems	New Haven Campus	Tuesday, Thursday	5:25–6:45 PM	3
ENV 110	Environmental Regulations	MDC Training Center 125 Maxim Road, Hartford	Monday	5:15–6:35 PM HYBRID	3
ENV 182	Solar Voltaic Systems	North Haven Campus	Friday	9:00–1:50 PM	3
WMT 102	Special Topics in Water Treatment	MDC Training Center 125 Maxim Road, Hartford	Thursday	5:15–8:05 PM	3
WMT 103	Special Topics in Water Distribution	MDC Training Center 125 Maxim Road, Hartford	Tuesday	5:15–8:05 PM	3
CWM 112	Clean Water II	New Haven Campus	TBA	TBA	3
EVS 100	Intro to Environmental Science	New Haven Campus New Haven Campus New Haven Campus ONLINE	Monday Thursday Tuesday, Thursday N/A	7:00–9:50 PM 7:00–9:50 PM 9:05–10:40 AM N/A	3
EVS 114	Environmental Science	New Haven Campus	Monday, Wednesday, Friday	9:05–10:40 AM	4
EVS 200	Toxicology	New Haven Campus	Monday, Wednesday	5:25–6:45 PM	3
EVS 296	Envr. Internship	TBA	N/A	N/A	4
CHE 231	Quant Chem Analysis with Envr Apps	New Haven Campus	Tuesday Thursday	5:30–6:50 PM 5:30–9:50 PM	4

The Spring 2016 Semester starts on January 21, 2016 and ends on May 16, 2016.

New students can receive admissions and registration materials by contacting the Admissions Office at 203-285-2010. Continuing students, already admitted to the college, can receive registration materials by contacting the Registrar's Office at 203-285-2020. Continuing students may also register online at the following address: *www.GatewayCT.edu*.

Please call 203-285-2428 with any questions about these courses or programs.

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Asset Management at the South Central Connecticut Regional Water Authority *Where to Begin?*

By Rose M. Gavrilovic, P.E. South Central Connecticut Regional Water Authority, Capital Planning Team Lead

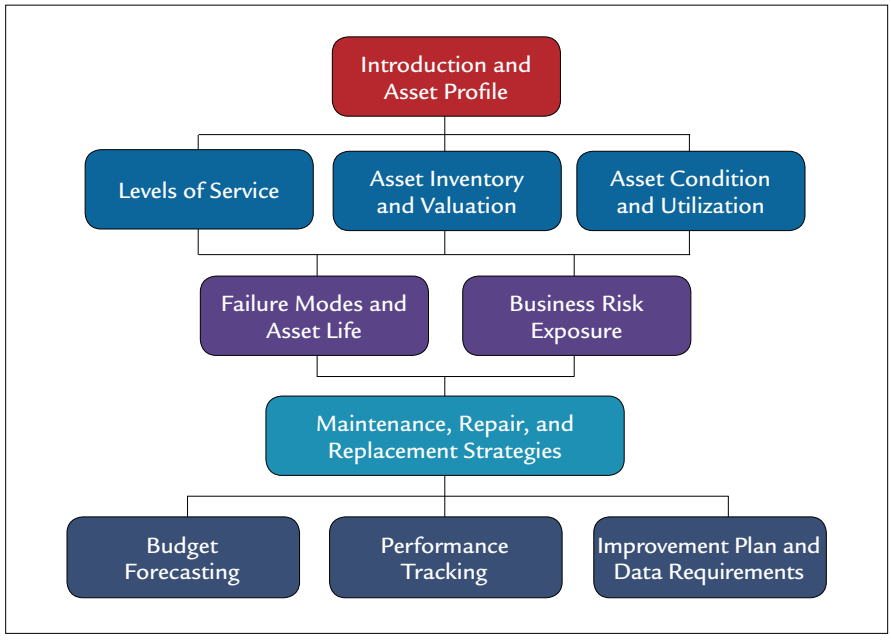
Without infrastructure, we have nothing. And in a time with increasing fixed costs, aging infrastructure and equipment, and fewer dollars available, the South Central Connecticut Regional Water Authority (RWA), like most utilities nationwide, is finding that the cost of operating effectively and efficiently is becoming more difficult. The RWA is seeking better ways to extend the life of our assets and has incorporated asset management (AM) into the way we do business. Asset management is focused on making our assets last as long as possible with the lowest possible life-cycle costs.

What follows is how the RWA developed and implemented an AM program.

The Asset Management Division was formed in 2013 to develop an AM culture and formal program to manage the RWA's capital assets. With that charge, the newly created AM Division researched existing AM practices, attended technical conferences, and made contacts at other utilities with established AM programs. From the information gathered, we developed a robust implementation plan in 2014. This plan outlines the phases, goals, and tasks required to incorporate an AM program into the short- and long-term management of the RWA's assets. It is reviewed semi-annually and updated based on lessons learned as we proceed further into program development.

- The first thing the AM Division needed to know was the status of our current assets and their management. They knew AM was part of the RWA's daily operations, but different processes were used in each department without an overall plan or program. To help develop a more consistent way of managing the RWA's assets, interviews with the key staff involved in the management of those assets were conducted. An initial list of assets was collected, totaling over 4,400. This list was the basis of the development of

Figure 1: Overview of components of an Individual Asset Management Plan (IAMP)







asset structure charts which document the classes of the assets.

- The next step in the development of the RWA's program was to develop the process for utilizing the data. What good is data if there is not a clear vision on how that data will be used? The Asset Management Division created the Enterprise Asset Management Plan (EAMP). This document outlines the standard information that should be evaluated and documented for each type of asset. The EAMP helps clarify the levels of care for each type of asset and lays out a schedule for developing more detailed, asset-specific plans, called Individual Asset Management Plans (IAMPs).

These individual asset plans allow the AM Division to dive in and manage the assets. The categories of the IAMPs are shown in Figure 1. Within each category, the AM Division can get a lot of information including age, condition and value of an asset, the dollars spent on maintenance (planned and unplanned), and budgeting. The AM Division can also review and rank assets at RWA facilities, basing the ranking on criticality, risk, consequence of failure, and likelihood of failure. Preventive maintenance schedules are reviewed and updated as part of the IAMP. Developing the IAMPs does not happen overnight. The AM Division is developing the first two in the RWA's current fiscal year – Tanks and Pump Stations. These plans will be piloted and the lessons learned will improve the process moving forward.

Even if your utility hasn't gone through the same process to put a formal AM plan in place, chances are you are doing asset management on a daily basis. Whether you are constructing a new storage tank, replacing water mains, or simply exercising valves in your distribution system, AM doesn't have to be fancy. Take credit for work that you are doing. If there is more work to do with certain assets within your utility, focus additional efforts in those areas in a systematic way and document your efforts. Ask questions and learn from others who are experienced in AM. And finally, and arguably the most important, understand the effects of change that a large-scale program like asset management will have in your organization. There will be challenges along the way. Stay focused on the positive long-term results you can achieve and how they will benefit your customers for years to come.



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South Central Conn. Regional Water Authority Earns Major Awards for Utility Excellence

Accolade Follows Recent Utility of the Year Award from the NEWWA

The fall was full of accolades for the South Central Connecticut Regional Water Authority (RWA). The RWA was honored in September as the New England Water Works Association's (NEWWA) Utility of the Year. In October, the RWA was given the Association of Metropolitan Water Agencies' (AMWA) Platinum Award for Utility Excellence. And also in October, New Haven Mayor Toni Harp proclaimed that October 19 was RWA Day. These honors amplify the RWA's emphasis on sustainable decision making, reinforcing its higher purpose: to ensure the New Haven region is well-positioned to maintain its excellent water supply, and use it as a source of growth, opportunity, and vitality for the region's stakeholders.

"We are honored that the NEWWA and AMWA recognize the RWA's commitment to its stakeholders and conscious business practices," RWA President and CEO Larry L. Bingaman said. "These awards are certainly testaments to the dedication and determination of our staff as they are integral in moving the organization forward. We have an incredible team that continually allows the RWA to 'Tap the Possibilities,' realizing our higher purpose while upholding our mission to provide customers with high-quality water and services at a reasonable cost and maintaining a strong commitment to the communities it serves."

The NEWWA Utility of the Year Award acknowledged the RWA's recent accomplishments including:



Peter Bocciarelli (center) and Jim Flynn (right) of RWA accept the AMWA's Platinum Award

- **Mitigating customer rate increases by 12%** via an internal savings of more than $12 million through improved operating efficiency as well as reduced operating expenses and debt service.
- **Replenishing discretionary capital reserves** by 2.6 times since January 2009, which translates into lower cost interest rates on new debt, and ultimately lower rates for customers.
- **Expanding RWA Laboratory Services**, which performs more than 100,000 tests annually to ensure that the RWA's water quality meets or exceeds state and federal standards.
- **Securing one of the lowest main break records in the industry** at four breaks per 100 miles, which was achieved by investing millions of dollars annually to improve and maintain RWA's water system, protecting water quality and maintaining reliable service.

The RWA was one of only eight utilities nationwide to earn the Association of Metropolitan Water Agency's Platinum Award. This award recognizes outstanding achievement in implementing the nationally recognized *Attributes of Effective Utility Management*. The *Attributes* were developed by a panel of respected water and wastewater utility executives, commissioned by the U.S. Environmental Protection Agency, AMWA, and other water industry associations.

Chuck M. Murray, AMWA president and general manager of Fairfax Water in Va. said, "AMWA awards recognize the extraordinary performance of water agencies where management vision and employee commitment create a sustainable utility producing ample supplies of clean, safe drinking water. The communities served by these award winners should be proud of the accomplishments of their forward-thinking, exceptionally well-managed public utilities."

Lastly, New Haven Mayor Toni Harp proclaimed that Monday, October 19 was RWA Day in New Haven. Mayor Harp praised the RWA for being an integral part of and serving the communities it serves and striving to improve the quality of life and the economic vitality of the region.

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CT Section AWWA Water For People 21st Annual Fall Golf Classic Wrap Up

water for people

The 21st Annual Connecticut Section AWWA – Water For People Fall Golf Classic was a resounding success. This year's event was held at Tunxis Plantation in Farmington on Tuesday, September 15. The weather on the day of the tournament was spectacular once again and the 210+ golfers who attended had nothing but praise for the event!

The Annual Fall Golf Classic represents the largest fundraiser for the Connecticut Section AWWA Water For People Committee, and this year's tournament netted a profit of approximately $13,500.

Kicking things off, Tata & Howard and Badger Meter sponsored a free continental breakfast for all of the golfers. After sipping on coffee and downing some pastries, our golfers were able to get loose on the driving range thanks to sponsor Aquarion Water Company.

All the golfers who attended received a stylish windbreaker with the Water For People logo thanks to McWane Ductile, Tyler Union, and Kennedy Valve. Other golf giveaways included a sleek messenger bag thanks to Neptune Technology Group that was stuffed with golf towels from HD Supply and Call Before You Dig, a bottle of water from Ferguson Waterworks, a Bigelow Tea sampler, and an apple from longtime apple sponsor Johnny Appleseed. The golfers also received a handy five-gallon bucket from HD Supply. What are you doing with your five-gallon bucket?

After a long day on the course, the golfers were treated to a scrumptious post-tournament cookout sponsored by GL Lyons Associates and EBAA Iron. After announcing the many tournament prize winners – including the always popular on-course 'Poker hand' game – we raffled off more than $2,500 in prizes.

Finally, there were more than 45 individual hole sponsors without whom the Classic would not be the success that it is. The Connecticut Section AWWA Water For People Committee would like to thank all of our sponsors for your incredible generosity, and we will see you next year when we return to our normal second Tuesday of September date – **September 13, 2016.** Please mark your calendars now!













Photos by Kathy Fortin

Mark your calendar for Tuesday, September 13, 2016!





"There were more than 45 individual hole sponsors without whom the Classic would not be the success that it is."

water for people

Connecticut Section AWWA Water For People A Top 20 Committee!

The Connecticut Section AWWA Water For People Committee has been recognized as a Top 20 Committee contributor to Water For People for Fiscal Year 2015! In the 2015 fiscal year, the Connecticut Section Water For People Committee was able to raise and contribute $21,086 to Water For People.

Fundraising efforts were once again led by the Connecticut Section AWWA Water For People Annual Fall Golf Classic held at Tunxis Plantation in Farmington. The 21st Annual Classic drew more than 210 golfers, all of whom were treated to a beautiful day of golf and activities, including the always-popular poker game and a raffle filled with tons of great prizes. In all, the event raised over $13,000 for WFP.

A new fundraiser was held earlier this year in conjunction with the Young Professionals Committee – indoor mini-golf. The two committees partnered with a mini-golf course review group, the Putting Penguins, to host this indoor mini-golf fundraising event at Chicago Sam's Restaurant and Sports Bar in Cromwell. Putting Penguin staff assembled an improvised course in the restaurant space with obstacle items provided by committee members and event hole sponsors. It was a one-of-a-kind, family-friendly evening of socializing, networking, and prize winning, all while raising more than $2,000 for Water For People. Look for the indoor mini-golf fundraiser to return again this spring!

Water For People was initially created in 1981 as the philanthropic branch of the AWWA. In 1991, Water For People was officially established as an independent, international nonprofit development organization. Along with several other professional organizations associated with maintaining and improving the quality of the water and environment throughout the world, it is a designated charity of choice of the AWWA.

2016 marks the 25th Anniversary of Water For People and the Connecticut Section AWWA Water For People Committee is striving to make 2016 our most successful year yet!

Connecticut Section Water For People Committee was able to raise and contribute $21,086 to Water For People.

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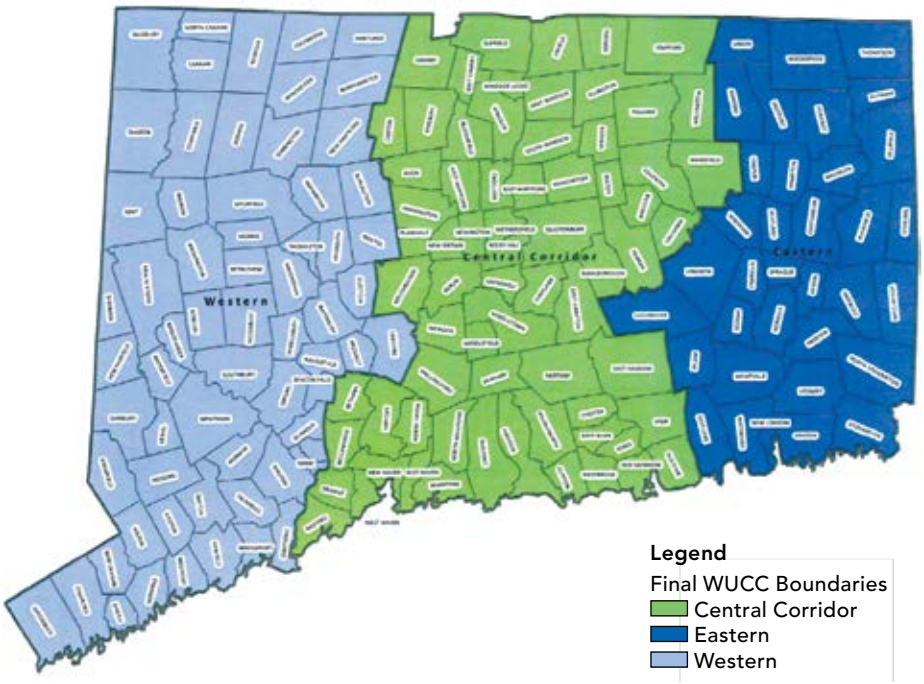
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Regional Water Supply Planning Process – DPH Water Utility Coordinating Committee Update

By Lori Mathieu

The Department of Public Health (DPH) continues to work toward convening the regional water supply planning process known as the Water Utility Coordinating Committee (WUCC) in the three WUCC planning areas (see map). The three new WUCC areas and the priority order for convening each area were announced in October 2014 by the DPH following an extensive public hearing and comment process. The three new areas reorganize the previous seven areas that were originally set in 1986, and would provide an update to the existing WUCC plans as well as provide plans for areas never convened. The DPH intends to convene the WUCC planning process in early 2016 in the priority order: Western, Central, and then Eastern areas. Once a WUCC area is convened by the DPH Commissioner, the law requires that the regional water supply plan be completed in two years.

Final Boundaries of the Public Water Supply Management Area



In September 2015, the DPH arranged and held organizational meetings facilitated by WUCC membership in Middletown, Brookfield, and Willimantic. With attendance of over 170 people for the three meetings, the DPH presented the history of the process, the current status, and the future plans to move forward to complete the regional planning process for the three new areas as well as development of a statewide water supply plan which will summarize critical information from the three WUCC areas. A number of guest speakers presented their thoughts on the past WUCCs and the meaning of the water supply planning process. For additional information about the WUCC process, and to view the DPH presentation, click the *CTPH WUCC* link.

In December, additional WUCC organizational meetings have been planned in anticipation of the 2016 convening for each area. Presently the DPH is working on two contracts, one to gather background information for the WUCC plans and the other to hire a consultant to directly assist the WUCC membership in regional plan development for each WUCC area.

DPH sends notices of WUCC meetings to all WUCC members (public water systems and Councils of Government) as well as many other parties and stakeholders. These meetings are public meetings, and it is hoped that membership and stakeholders take an active interest in the planning process and plan development. Any questions on the WUCC water supply planning process, please call the DPH Drinking Water Section at 860-509-7333.

"DPH sends notices of WUCC meetings to all WUCC members (public water systems and Councils of Government) as well as many other parties and stakeholders."

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CTAWWA Call for Papers! The 45th Annual Joint Conference includes technical presentations for conference attendees, with Training Contact Hours (TCHs) awarded. Individuals interested in presenting are asked to provide their proposals by **Thursday, February 18, 2016.** Presentation proposals should consider the following:

Criteria for selection

Presentations are selected for originality, innovation, significance of work, audience range, technical content, case study examples, quality of abstract, and/or real world applicability.

Suggested topics

Emerging Technologies, Security, Water Quality and Treatment, Operations, Management, Conservation, Strategic and Resiliency Planning, Distribution, Management, Security, or Regulatory Issues.

What to submit

For full consideration, a speaker biography and a detailed presentation proposal must be submitted. The course will be submitted to the CT Department of Public Health for the award of Training Contact Hours (TCHs).

Due date

Submissions are due by **Thursday, February 18, 2016** and should be submitted via email to Scott Bonett at *sbonett@hazenandsawyer.com* or to Gerry McDermott at *gmcdermott@ctwater.com*.

Questions?

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



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Coalition Successful in Winning Passage of Rail Extension Bill

CWWA, as part of a coalition of farmers, manufacturers, construction industry organizations and water utilities, was successful in urging support for federal legislation to extend the deadline for the rail industry to fully implement the Positive Train Control (PTC) requirements. Failure to adopt the extension would have forced a shutdown of the freight rail network, disrupting the delivery of critical supplies, including water system components and treatment chemicals. Fortunately, Congress adopted the legislation which extends the PTC requirements by three to five years, avoiding a threatened rail shutdown.

Climate Change – State Water Agency Practices

State water agencies across the country are starting to integrate climate change considerations into the Clean Water Act and Safe Drinking Water Act programs they administer.

To provide useful models to assist state regulators and public water suppliers in addressing climate change, EPA has developed summaries of state practices that state water agencies are implementing to reduce their vulnerability to climate-related impacts and to build resilience to climate change. The practices are from diverse water program areas and geographic locations.

This effort has been undertaken by the Association of Clean Water Administrators (ACWA), Association of State Drinking Water Administrators (ASDWA), Association of State Wetland Managers (ASWM), and the EPA Office of Water. If you would like to propose a climate related practice for consideration, email *water_climate_change@epa.gov* with the details.

Ground Water Report to the Nation: A Call to Action

The Ground Water Protection Council (GWPC), an organization comprised of state ground water regulatory agencies, recently issued the 'Ground Water Report to the Nation' to highlight some of the more prevalent threats to groundwater, highlight success stories in addressing these threats, and make recommendations for improved groundwater protection and awareness. "Our ground water resources are in serious need of attention. Abundant, high-quality, low-cost ground water resources are fundamental to the long-term growth and vitality of our nation, yet this most important resource is often overlooked, if not neglected," GWPC announced. To access the report, visit *www.gwpc.org/ground-water-report-nation.*

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CTAWWASource Water Protection Committee: Accepting New Committee Members!

The CTAWWA Source Water Protection Committee is a group of source water protection specialists and professionals that represent a broad spectrum of the organizations responsible for protecting Connecticut's public drinking water supplies. The Committee meets every other month to share topical information, discuss new regulations and upcoming legislation, to brainstorm source protection issues and challenges, and to help direct the course of the future protection of Connecticut's drinking water resources. Recent initiatives by the Committee have addressed important issues such as herbicide use along roadsides near reservoirs, increasing concerns regarding harmful algal bacteria, and complying with new federal mandates regarding cyanotoxins.

The Committee is currently comprised of representatives of water utilities, the Connecticut Department of Public Health, the Connecticut Department of Energy and Environmental Protection, and non-governmental organizations such as the Atlantic States Rural Water and Wastewater Association. We invite you to consider joining our collaborative efforts to safeguard Connecticut's drinking water resources by becoming a member of the Committee, by attending a meeting, or by reaching out to our Committee members for source water protection expertise and information.

By sending an email request to our Committee Chair, you will be placed on an email list to receive meeting notifications, meeting minutes, and timely alerts about important source water protection issues. For more information, please contact our Source Water Protection Committee Chair, Brian Roach of the Aquarion Water Company, at 203-445-7457, or by email at *broach@aquarionwater.com.*

Connecticut Water Staff Announcements

Connecticut Water is pleased to announce two new hires and an internal move that sets up leadership in key areas of the company.



Ryan Fleming has joined Connecticut Water as its Manager of Water Quality and Treatment. Ryan comes to the Company with a wide breadth of experience both at public water utilities and consulting firms, including work at Woodard and Curran and with New York City's water utility as an Administrative Project Manager. Ryan has a B.S. in Civil Engineering from Colorado State University and a M.S. from Cornell in Water Resources System Engineering.



Robert Doffek has joined the company as its Assistant Controller. Bob comes to Connecticut Water with more than 30 years of varied and diverse utility finance and accounting experience at Eversource (formerly CL&P). Bob has a degree in Accounting from Western New England University.



David Connors is moving internally to the role of Director of Service Delivery. Dave joined the Company in August 2014 as the Director of Engineering. He is a licensed Professional Engineer and has more than 20 years of experience in water supply operations. Dave has a B.S. in Civil Engineering from the University of Massachusetts.

Connecticut Water Receives Award

Connecticut Water was recently recognized by the National Association of Water Companies with its Management Innovation Award for the Company's Customer Protection Program, 'Be Sure Before You Open the Door.' The program was featured in the Summer 2015 issue of *In-Flow Line*. Art O'Neill accepted the award on behalf of Connecticut Water.

Report Supports Continued Use of Road Deicing Chemicals

Despite concerns about the use of chloride-based deicing chemicals, a recent study concludes that ConnDOT should continue to rely on such chemicals as a primary means of deicing roads. The 'Winter Highway Maintenance Operations: Connecticut' study conducted by the Connecticut Academy of Science and Engineering, was undertaken in response to concerns raised about the corrosive effects of various deicing road treatments, in particular, chloride-based deicing chemicals, on motor vehicles, bridges, and other infrastructure as well as the environment and water resources. The report downplayed concerns about the chemical's corrosive effects, noting that corrosion to utility infrastructure due to use of winter road treatments, according to utility company representatives contacted for the study, was "not a major concern at this time." The report further noted that sodium chloride is the most economical inorganic chemical and a very effective tool in deicing roads.





Tata & Howard Celebrates ESOP Anniversary

Tata & Howard is celebrating their one-year anniversary since forming an Employee Stock Ownership Plan (ESOP) this month. In addition, the niche water engineering firm celebrated their 23rd company anniversary this October, which is also Employee Ownership Month.

"We have a strong belief that being an ESOP creates a sense of pride in ownership," said Don Tata, P.E., President of Tata & Howard. "The benefits associated with employee-ownership impel all of us to deliver the absolute best client service combined with the highest quality technical expertise to every single project. Every eligible employee has a tangible stake in the company and can now share in the satisfaction and reward of ownership."

Employee-owners have been celebrating the anniversaries as well as Employee Ownership Month with a full month of festivities including both educational and fun activities, and all beneficial owners received their first stock certificates. An ESOP is a program that provides a company's workforce with an ownership interest at no up-front cost to employees. ESOPs are implemented for different purposes, often as a way to provide for the future transfer of ownership of a successful, private company from owners to employees. Because all eligible employees are owners, they have increased rights and responsibilities, such as the opportunity to provide strategic input, the right to be informed about the financial health of the company, and the responsibility to provide the highest quality work.

Although now an ESOP, Tata & Howard upholds the same core values of teamwork, efficient solutions, client satisfaction, integrity, and positive attitude that form its cornerstone, and employee-owners still enjoy the freedom to focus on other values such as philanthropy, wellness, and environmentalism. As an example, the company issued a challenge to collect 350 pounds of food for the Greater Boston Food Bank in the month of October, and employee-owners have already surpassed that number.

"We firmly believe that our positive, team-oriented culture has been strengthened by the implementation of the ESOP," added Karen Gracey, P.E., Vice President. "A company made up entirely of owners who care deeply about their work is a powerful force in the marketplace, and one of which I am proud to be a part."

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Weston & Sampson Welcomes Two Industry Experts

Weston & Sampson Engineers is delighted to welcome Jack Jolls and Bob Tedeschi to their Rocky Hill, Connecticut team. Jack, formerly of RI Analytical, has more than 35 years of experience in the engineering industry, spending 29 of those years in marketing and management roles at Weston & Sampson.


Bob Tedeschi

Bob, formerly of AECOM/URS Corporation, has joined Weston & Sampson as a Team Leader, bringing more than 30 years of experience in the design of water distribution systems, wastewater collection systems, and water/wastewater pumping stations.


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Holland Company manufactures and supplies high-quality inorganic coagulants for use in the municipal and industrial markets. Founded in 1967 by Hugh 'Dutch' Holland and located in the Western Massachusetts Town of Adams, all of the manufacturing, shipping and sales are coordinated from this one location. The company today remains as a medium size business 'family owned and operated' by Dutch's sons Dan (CEO) and Tom (President) with a bright future that includes third generation family members Jim, Matt, and Mike Holland.

When the company began in 1967, it specialized in the manufacture of Liquid Aluminum Sulfate to serve the water, waste, and paper markets. Since then the product line has grown to include Sodium Aluminate, Polyaluminum Hydroxychlorides, Dry Aluminum Sulfates (Technical, Food, and Pharmaceutical grades), Crystal Alums (Ammonium & Potassium), and Sodium Bisulfite for dechlorination/oxidant reduction. Products manufactured by Holland Company meet or exceed the relevant standards of:

· A.W.W.A / N.S.F.
· Food Chemicals Codex
· United States Pharmacopoeia

Holland Company manufactures a complete line of inorganic and specialty coagulants for potable water treatment to help water utilities meet increasing regulatory requirements and a growing demand for cleaner water. Their products are part of the solution when solving treatment problems related to turbidity, color, and total organic carbon (TOC). In addition, the company offers on-site technical services to help with all a company's treatment needs. "We understand that as a provider of key chemicals we need to deliver on our promise of quality and effective solutions, said Patrick Burke, Sales and Marketing Director at Holland Company.



"Holland Company takes pride in owning and operating its own fleet of delivery tank trucks. Available for deliveries on a 24/7/365 basis, they also offer same-day service in the event of an emergency."

"By leveraging decades of water treatment experience, knowledge of application variables, and optimization assistance, we help our clients achieve the results they desire. Jar testing for process optimization, coagulant selection, and product dose are typical benefits provided by our technical support staff."

Holland Company takes pride in owning and operating its own fleet of delivery tank trucks. Available for deliveries on a 24/7/365 basis, they also offer same-day service in the event of an emergency. Holland Company was one of the founding members of CTAWWA's Associates Committee and continues today as an active participant of the Association. Bryan Tanner, Holland Company Senior Account Representative and CTAWWA Associates Chair in 2011, and colleague Bob Kooharian are both long-time AWWA members providing Sales and Technical support throughout the state of Connecticut.

For more information, contact Holland Company at 800-639-9602 or email Patrick Burke, Sales & Marketing Director at *pat.burke@hollandcompany.com.*

E.J. Prescott, Inc.

Team EJP Celebrates Six Decades of Innovation and Three Generations of Commitment to the Waterworks Industry

E.J. Prescott, Inc., better known as 'Team EJP,' is celebrating its 60th anniversary as one of the largest privately owned distributors of waterworks products in the U.S. More than 270 employees serve hundreds of municipalities, utilities, and commercial customers from Maine to Indiana.

In August of 1955, Everett J. Prescott moved to Maine from Massachusetts with his wife, Barbara, and gave his name to the first waterworks distributor north of Boston.

In the 60 years since then, there have been only three company Presidents: Everett J. Prescott, founder; his son, Peter E. Prescott, currently CEO; and Peter's son, Steven E. Prescott, the current President. In 1978, Everett sold the company he had founded to Peter and two sons-in law, Stanley G. McCurdy and James Grotton.

One major reason Team EJP has thrived is that Everett has passed on his character along with his company to the subsequent generations. His son, Peter E. Prescott, CEO, explained, "My father had a rare combination of technical aptitude, business acumen and leadership that inspires all of us at Team EJP today."

Rather than preparing for this milestone by blowing up balloons or baking an oversize cake, the company is busy refining its industry-leading expertise and product lines in order to meet the growing demand for replacement and repair of the aging U.S. waterworks infrastructure.

As company President, Steven E. Prescott, explained, "We're proud of where we've taken the company my grandfather founded, but this is not the time to rest on our laurels. America's cities and towns need our help more than ever upgrading old water mains and hydrants, and installing high-tech meters that can help them manage our increasingly precious water."

The three generations of Prescotts have also started or acquired several sister companies: Team QWP (Quality Water Products) founded in 1978 in South Barre, MA, one of only a few facilities in the entire country that can flange pipe all the way up to 60" diameter; Team P.E.P. Transportation, founded in 1980, which carries goods of every kind coast to coast and in parts of Canada; Team Red Hed Supply & Manufacturing in 2000, which manufactures a complete line of water-works brass products and space-saver flanges in Lincoln, RI; and Team PPF (Plastic Pipe Fabrication) in 2008.

The position of Team EJP today makes it clear that Everett's vision was no pipe dream. As Steven Prescott notes, "The foundation of our success continues to be meeting our customers' needs, as exemplified by our slogan of many years: Whatever you need, whenever you need it, no matter what!"

About E.J. Prescott:
Everett J. Prescott, Inc. was founded in 1955 in Gardiner, Maine, as the first waterworks distributor north of Massachusetts. Team EJP distributes a full range of the highest quality water-works, wastewater, stormwater, and gas products, along with an exceptional level of product expertise and service. For more information, please visit *ejprescott.com.*

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The Associates Committee sponsors the Annual Section Enhancement Program. CTAWWA Enhancers include manufacturers, suppliers, consultants, service providers, contractors, and utilities. The Section Enhancement Program offers outstanding recognition for participants in the program. Those contributing $250 become a Section Enhancer and receive the following:

- A special recognition page insert in the CT Section AWWA *InFlow-Line* (your company/firm will be listed).
- Posting of your company name on the CT Section AWWA website at *ctawwa.org* and a link to your company website.
- Special recognition at the Annual Meeting and all other major events during the calendar year.
- Reduced fee and preferred booth location at the annual ATCAVE vendor show.
- Enhancement Sponsor signs for booths at the annual ATCAVE vendor show.
- Announcements at each event to acknowledge the Enhancement Sponsors.
- Recognition of your support of the Associates Committee Scholarship Program.

The Enhancement Program has sponsored luncheons, speakers, welcome gifts, scholarships, and fund-raising raffles at CT Section events. Last year, the Associates Scholarship Program provided more than $7,000 to ten college students with ties to CT Section AWWA members.

For additional information about becoming a CTAWWA Enhancer, visit the CTAWWA website at *www.ctawwa.org* or contact the Associates Committee Chair, Dick Johnson at *djohnson@utilityservice.com* or call 401-965-5916.



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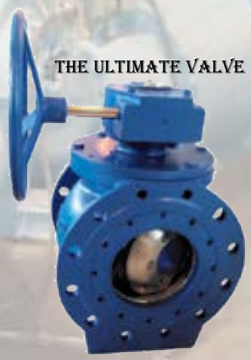
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