



NH Water Works Association Newsletter

Issue 116

Summer 2018

NHWWA

20th Annual Construction Field Day Travels to Hooksett, Londonderry and Nashua

For this year’s tour, we started with a visit to the Hooksett Village Water Precinct to see the beginning stages of construction for a modern glass-fused steel 1MG tank which will be connected to the nearest major trunk line of the existing distribution system. The connection consists of 3,450 feet of 12" zinc-coated DI water main, and will replace 1,000 feet of old asbestos cement pipe, and 425 feet of 12" HDPE main below I-93 and Route 3A. The project is the result of a comprehensive effort to address a significant deficiency and reduce the risk and cost associated with operating an undersized, aging and deteriorated 200KG 1950s-vintage welded steel storage tank.

From there we travelled to Londonderry to get a glimpse of Manchester Water Works’ new 3 MG tank. This tank is being

constructed to address the need for additional storage volume for Manchester’s Londonderry system and to meet present and future demands.

The last two stops of the day were spent with Pennichuck Water Corporation. First, we visited the Pennichuck East Utility and Water Works Interconnection project, which when completed, will connect the Pennichuck East Utility (PEU) water system in Litchfield east of the Merrimack River to the Pennichuck Water Works water system in Merrimack west of the Merrimack River. Water demand east of the Merrimack River has continued to grow because of new land development and the recent



Construction Field Day attendees at the site where Manchester Water Works’ new 3 MG Tank will be constructed in Londonderry, NH.

expansion of the PEU Litchfield system in response to PFOA contamination of private wells.

Lastly, the group toured Pennichuck’s distribution facility, a facility that encompasses approximately 55,000 square feet and includes offices, a cross functioning break room and training room; locker rooms; a vehicle maintenance area; meter testing shop; an inventory store room, receiving area, and clerk’s office; a staff resource area; climate controlled vehicle parking and equipment storage bay; and outside heavy equipment and materials covered storage.

Despite the forecast of impending weather, the rain held off just long enough for us to tour each stop and started as we were headed back to Concord.

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Great Innovations for Small Public Water System Design

by Steve Del Deo

A number of general public water system design innovations have made small water system operations more efficient and cost effective in recent years. Many of these “new” products are not so new but change often takes time, and this is especially true for small and very small public water systems, which often lack technical and financial capability.

Some of the material products that can make and, in many cases, have made operations more efficient, cost effective, and safer include: HDPE pipe, lockable sampling stations, transducers (especially for well water levels, tank levels, discharge pressure, and related items), and variable frequency drives (VFD’s). The VFD is one of the more impressive ones and deserves further explanation.

VFD’s, although not anything especially new in general use or in the water industry, have only caught on in small water system design and operations in the past dozen years or so. One of the main advantages of the VFD is that it allows pumps to rotate only as fast as needed to maintain desired operating conditions such as flow

or pressure, helping with energy efficiency. In many cases VFD’s have been incorporated into existing smaller water systems out of necessity. As an example, they are an alternative when large hydropneumatic water tanks have become too costly or impractical to replace, relative to operation of water booster pumps within a small water system. Historically, standard small system pump station design typically included a hydropneumatic tank that was positioned with the front-end protruding through the back wall of the pump station by a couple of feet, and the remainder of the water tank entirely underground and extending out through the back wall of the pump station by as much as 20 or 30 feet. There are still many dozens of these designs in use in NH. When these hydropneumatic tanks age beyond repair, the most efficient, cost effective, and practical design is to bypass the existing tank and replace it with a much smaller

pre-charged pressure tank and VFD’s, all of which are located inside the pump station. In the design of new public water system pumping facilities, large hydropneumatic tanks are now often eliminated altogether, as the designer chooses the significantly less expensive VFD option.

VFD’s, of course, have other uses in the industry, but their application in small water system design and operations will continue to be recommended and utilized with a significant positive impact for years to come.



Newly constructed Wood Meadow 5 VFD pumping system, 0-500 gpm, in Windham, NH. The system was designed by Lewis Engineering, PLLC and is owned and operated by Pennichuck Water.

Nomination Requests for NHWWA Board of Directors – Deadline September 28

The NH Water Works Association (NHWWA) is seeking nominations for a new member of the Board of Directors (the Board). Active members of NHWWA are encouraged to participate in the nomination process by recommending potential

candidates, or by self-nominating, to the Executive Director, who will be compiling candidate names on behalf of the Board.

The position consists of a 1-year term, starting on November 1 and carries with it a request that each director will run for re-election,

working their way up to serving as Vice-President, and then President. This is approximately an 8-year commitment.

For more information please contact Charity Ross, NHWWA Executive Director at cross@nhwwa.org.

American Water Works' Fly-In

April 18-19, 2018



(Left to Right) NHWWA President John Lyons, NHWWA Executive Director Charity Ross and NEWWA President Chris Hodgson in front of the Capital Building, Washington, DC.

In April members of NH Water Works Association (NHWWA), alongside representatives from New England Water Works Association (NEWWA) headed to Washington, DC to attend the American Water Works Association's (AWWA) Fly-In. We were joined by representatives of the NH Water

Pollution Control Association (NHWPCCA) who were there for the New England Water Environmental Associations (NEWEA) Congressional Briefing.

Each event brings together water professionals from around the country to the nation's capital to meet with members of their respective congressional delegation to discuss critical issues facing the industry. This year's event was the first year that both AWWA and NEWEA'S meetings overlapped which allowed for a collaborative effort between drinking water and wastewater professionals to get our messaging across to our elected officials.

The Fly-In's get us in front of our elected officials and to help them understand the importance of continuing to fund water infrastructure and support programs and policies that will ensure clean water for all of our communities. With so many programs seeking funding through the federal budget, it is important that we have this opportunity to speak directly with our elected officials and advocate for our issues at hand.

New Hampshire was well represented with six members meeting collectively with our elected officials. The NHWWA group consisted of John Lyons, President; Chris Hodgson, President of NEWWA; and Charity Ross, Executive Director. Also joining us from NHWPCCA was Shelagh Connelly and Eryka Reid from RMI; and Dan Driscoll, Superintendent for Concord WWTF.

The message we carried to each of our meetings was how important it is to continue to invest in our aging and failing water infrastructure, the challenges we face with increased regulations, and how essential water is to our economy and public health. With such a sizeable group meeting with the delegation, we were able to double our efforts for effective outreach on all water infrastructure topics.

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26th Annual NH Drinking Water Festival and 4th Grade Water Science Fair Held in Plymouth

The New Hampshire 4th Grade Water Science Fair and Drinking Water Festival was held Wednesday, May 9, 2018, in Plymouth. The Drinking Water Festival celebrates National Drinking Water Week. The event was sponsored by the NH Drinking Water Coalition to encourage future leaders and scientists to learn about one of the world's most precious resources, water!

More than 240 students from Bethlehem, Campton, Plymouth, Waterville Valley, Rumney, Thornton, New Hampton, Lyme, Piermont and Harrisville participated in the festival.

Operators, scientists, consultants, artists and environmental educators from public water systems, nonprofit organizations, higher education and local, state and federal agencies joined together to share their expertise with students. Students explored ways to keep water clean, conservation, water testing, groundwater pollution, how climate change is affecting water systems and many other topics.

Students from Bethlehem, Plymouth, Lyme, Westmoreland, Harrisville, Marlborough, Surry Village, Keene and Manchester presented science projects to panels of judges. New this year, was the first annual Water Poetry Contest. Students composed poems relating to the theme 'Water in Our World.' Science Fair and Poetry awards were presented by WMUR Meteorologist Hayley LaPoint. A letter from Senator Maggie Hassan was also presented to all winners. Trophies were donated by Saymore Trophy.

A drinking water tasting contest matched several municipal water supply systems against each other for the coveted Best Tasting Drinking Water Award. Keene Water Department was chosen by the students as having the best tasting water.

Thank you to the donors listed on the page 5 and to the NH Drinking Water Coalition members who work year-round to make

this annual event a success: Concord General Services, Granite State Rural Water Association, Keene Public Works, Manchester Water Works, Merrimack Village District, NH Department of Environmental Services, NH Water Works Association and RCAP Solutions.



Students take a break from the festival to get a drink of clean water!

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NHWWA Calendar of Events

September 26	Surface Water Peer Review	Rochester Treatment Plant
September 18, 20, 25 & 27	Grade 1A Certification Exam Course	NHDES, Concord
September 25 and October 2, 9, & 16	Water Works Operator Certification Exam Preparatory Course	Concord Treatment Plant
September 27 and October 4 & 11	Basic Water Works Math	Concord Treatment Plant
October 10	Technical Meeting	Exeter Inn
October 17	One-Day Asbestos Cement Pipe Worker Safety Training	Concord Treatment Plant
October 18	Operator Training (tentative)	North Conway
October 25	NH Drinking Water Expo & Trade Show	Grappone Conference Center, Concord
November 1	Annual Technical Meeting	Centennial Inn, Concord
November 15	Backflow Course (tentative)	Franklin
November 8, 27	Roundtables for Small System Operators	Conway, Derry

View upcoming meetings and events on our website - www.nhwwa.org.

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NH Drinking Water Expo & Trade Show

Twenty quality seminars are on the agenda for this year's NH Drinking Water Expo & Trade Show. A wide range of topics will explore issues from pipe replacement via pipe bursting to cyber security. A presentation on the Drinking Water and Groundwater Bureau Trust Fund will also be offered.

Expo attendees will still be able to fill their "Trade Show Passport" by visiting exhibitor booths, collecting logos, then turning it in to enter the raffle. As always, the exhibit hall and lobby will be full with exhibitors who provide drinking water products and services.

Exhibit Booths

If you are interested in exhibiting at the show you can find more information on our website at www.nhwwa.org or by contacting

Patricia Beavers, Trade Show/Expo Coordinator at 802-763-3937 or patricia@pdwater.com.

Sponsorship Opportunities

Sponsorship opportunities at the show include *Seminar Room Sponsors, Food and Beverage Sponsors and General Sponsors*. For more information please contact Charity Ross at cross@nhwwa.org.

Attendees

For the registration fee of \$75, attendees have the opportunity to earn up to 5 TCHs. The fee also includes morning coffee and lunch. Registrations can be completed through our website at www.nhwwa.org/events/nhdwets.

People

Jack Cooper, former supervisor of the Concord Water Department, passed away on May 26, 2018 at the age of 64. He retired from the City of Concord in 2015 after 40 years of service. He leaves behind a wife, a son, two daughters and five grandchildren.

Brian Goetz, Deputy Director of Public Works for the City of Portsmouth, was granted the 2017 Award of Merit by New England Water Works Association (NEWWA) at the NHWWA and NEWWA Joint meeting in January. The award recognizes his outstanding service to the industry through his involvement in NEWWA and his efforts in conservation and PFAS contamination management in the City of Portsmouth. Brian is also a past president of NH Water Works Association.

David Miller, Deputy Director of Water Supply at Manchester Water Works, was recognized by NEWWA at the Joint NHWWA and NEWWA meeting in January for his years of service to NEWWA. Dave has served fifteen years as Chair of the Flexible Reservoir Covers & Linings for Potable Water Storage Committee. He also served nine years as Chair of the Water Treatment Plant Residuals Committee.

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2nd Annual Fisher Cats Outing— A Good Time Despite the Rainout

On the evening of June 28, baseball fans enjoyed a buffet of ballpark food and good company while hoping for skies to clear and the game to begin. Unfortunately, signs of parting clouds weren't enough to keep the game from being postponed. Attendees declared that they enjoyed the evening in the Northeast Delta Stadium Party Suite and looked forward to returning on a future evening to watch a game. Dates are being reviewed for next year's 3rd annual outing and we will keep our fingers crossed for better weather.

Thank you to our sponsors who helped make this event possible.

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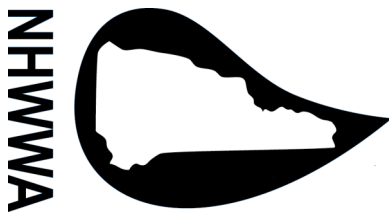


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