Accomplishments from Collaboration – What the Southern New Hampshire Regional Water Interconnection Project is Teaching Us

When the State of New Hampshire sued 22 gasoline manufacturers and refiners in 2003 seeking damages in connection with statewide contamination of groundwater with the gasoline additive methyl-t-butyl ether (MtBE), the vision of a drinking water infrastructure project linking together six New Hampshire communities with a regional water line did not exist. Between 2013 and 2016, the State succeeded in settling the lawsuit with all but one of the defendants, obtaining approximately $82 million in MtBE Settlement Funds, and it also received verdict monies from the remaining defendant, ExxonMobil Corporation, for approximately $307 million, of which 90% formed the Drinking Water and Groundwater Trust Fund (DWGTF). With a combination of these funds, a project delivering safe and reliable drinking water to southern New Hampshire to address MtBE impacted drinking water and other supply issues in the region has become a reality. But funding is only half the battle.

Collaboration of all parties involved is critical to designing and constructing an interconnection project of this size. For the Southern New Hampshire Regional Water Interconnection Project (the Project), the parties include representatives from NHDES, the Attorney General’s office, outside counsel, participating municipalities and water systems and their engineers and legal counsel. Clear and timely communication has led to successfully drafting a Memorandum of Understanding, working through design issues at monthly technical coordination meetings, addressing critical path items with other state agencies such as New Hampshire Department of Transportation, and executing an agreement that outlines each party’s roles and responsibilities.

The Project is now moving from the administrative and design phases into the construction phase. Final designs are being completed, grant agreements are being approved through the Governor and Executive Council process, and requests for construction bids are expected to start going out later this summer. We know the foundation of strong communication and collaboration that led to the success of the first phases of the project will continue to support the next phase when pipe is being laid, connections are being constructed, and the system starts up in 2020.

Celebration of the Southern Interconnect Agreement signing in Plaistow
SB247 Lead Testing Update

Approximately 860 childcare facilities and 630 public and private schools were required to test all drinking water locations for stagnant lead by July 1, 2019, under New Hampshire’s Senate Bill 247 Prevention of Childhood Lead Poisoning from Paint and Water. As of June, 70% of schools and 33% of childcare facilities had completed their first round of testing. Eighty-five percent (85%) of samples were below five parts per billion (ppb), and 95% were below EPA’s action level of 15 ppb for public water systems (see map). NHDES’ goal is to remediate all locations testing at one ppb or above to prevent ANY lead exposure to children. Resources and results reported to the state may be reviewed at the NHDES Lead in Drinking Water webpage under the SB247 heading. See “SB247 Lead in DW Data Received to Date” to see which schools and facilities have tested.

This spring, the New Hampshire Department of Education (NHDOE) and NHDES began administering a 50% lead remediation reimbursement grant program for schools to remediate all faucets testing at five ppb or above. Funding was provided by the Drinking Water and Groundwater Trust Fund. Total available grant funding is $1.6 million for abatement in K-12 schools. As of the end of June, 12 grant applications had been submitted requesting a total of $135,776. Applications are expected to pick up after the end of the school year, when facilities can perform the required plumbing upgrades. Grant application forms and instructions are available at the NHDES Lead in Drinking Water (see link above) and the NHDOE Lead Removal Grant webpage.
New Hampshire Scores a “B” in Water Conservation Efficiency Law and Policy

In 2018, the Alliance for Water Efficiency released “The Water Conservation and Efficiency Scorecard: An Assessment of Laws and Policies,” summarizing the results of a 2017 nationwide survey that was used to determine how states are incorporating water efficiency, water conservation and climate resiliency objectives into management of water resources through laws and policies. New Hampshire received a “B” in water efficiency and conservation, which was higher than any other New England state and above the nationwide average “C.” New Hampshire received points for having comprehensive water conservation regulations applicable to both public water suppliers and large water users seeking approval for certain groundwater and surface water withdrawals. Points were also received for funding a yearly leak detection grant program. Potential opportunities for which New Hampshire did not earn points include water loss limits for all public water suppliers, water loss limits based on volumes specific to each public water system, laws beyond the federal standard to limit consumption of water fixtures such as toilets and clothes washers, and building and plumbing codes requiring water-efficient products.

What is the NHDES Water Conservation Program’s reaction to a “B” score? Stacey Herbold, NHDES Water Conservation and Water Use Registration and Reporting Program Manager, states “The water conservation regulations in New Hampshire related to community water systems and large water users are extensive and this is where the state received the majority of its points. The scorecard highlights other areas where New Hampshire could implement laws and policies to achieve a more widespread approach to water conservation. These changes are worth considering, especially in the face of a changing climate. Climate scientists agree that periods of heavy rains followed by long dry periods is the new norm, which means more water than we want at times and not enough at others.”

Source: Alliance for Water Efficiency

2017 Water Efficiency and Conservation State Scorecard

Source: Alliance for Water Efficiency
NHDES Drinking Water and Groundwater Bureau recently recognized the Town of Gorham and the Strafford Regional Planning Commission for their work to protect and conserve sources of public drinking water at its annual Drinking Water Source Protection Conference on May 16.

The Town of Gorham received this year’s Source Water Protection Award for its effort to permanently conserve nearly all of the watershed area associated with Ice Gulch and Perkins Brook, the primary sources of drinking water for the Town of Gorham. By the fall of 2019, 3,500 acres of town-owned watershed land in Gorham and Randolph will be protected by deed restrictions that will provide protections, but will still allow forestry, agriculture and water supply activities. The deed restrictions will permanently protect 98% of the Ice Gulch Watershed and 85% of the Perkins Brook Watershed. The town has a long commitment to protecting Perkins Brook and Ice Gulch, dating back to 1936.

Strafford Regional Planning Commission received this year’s Source Water Sustainability Award for completing several significant water conservation efforts with stakeholder groups in the cities of Rochester and Dover. In Rochester’s case, the city updated regulations to limit water use during declared droughts. Dover updated its site plan regulations to retain more existing natural vegetation and require more water efficient landscaping for new development. Changing these regulations will help reduce new water demand, which could be critically important during future droughts.

The annual NHDES Drinking Water Source Protection Conference attracted over 240 water suppliers, municipal officials and volunteers, and industry consultants and covered a wide variety of drinking water protection topics. For more

(Town, continued on pg 5)
Over 400 fourth graders from 11 different schools participated in the New Hampshire Drinking Water Festival and Water Science Fair on May 8. Students spent the day with water professionals from across the state, learning about the complexity of water in the environment and our man-made systems.

The Water Science Fair and Water Poetry awards were presented by WMUR meteorologist Hayley LaPoint. This year’s winners of the Water Science Fair are:
1. Caitlyn Bishop, Manchester
2. Rylee Swift, Keene
3. Andrew Downing, Keene
4. Ethan Anhert, Westmoreland

Honorable Mentions go out to:
- Avery Kelly, Westmoreland
- Nildalany Gardner, Manchester
- Jaelyn Hartford, Manchester
- Declan Manning, Manchester

North Hampton swept the field in the Water Poetry Contest, taking first through fourth places:
1. Emily Hyett
2. Devin Stanton
3. Tommy Janvrin
4. Maddy Kontos

The event will take place in Keene in 2020, Plymouth in 2021 and at a TBD seacoast area location in 2022. We are actively searching for a seacoast location and partners. If you would like to know more or if your organization is interested in hosting, please contact Lara Hooper at lara.hooper@des.nh.gov or (603) 271-4071.
The phone rings. It’s a call from a New Hampshire drinking water operator, looking for help with their public drinking water system. Granite State Rural Water Association (GSRWA) field staff are here to help.

Since 2005, GSRWA has been assisting water and wastewater systems with a myriad of tasks, such as troubleshooting operations and maintenance issues, rate setting and GIS mapping to ensure record drawing compliance. GSRWA field staff have access to specialized equipment to locate leaks and distributions systems and experience to guide solutions. Thanks to funding from federal grants and contracts, there is no charge to systems to receive this assistance.

Granite State Rural Water Association:
We’re Here to Help!

*By Gretchen Tillson, Member Services Coordinator*

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GSRWA offers training classes for credit hours towards licensing requirements and holds a variety of classes all over the state. Some of the topics include Proper Sample Collection Technique, Understanding your Motor Control Panel, and Certified Stormwater Inspector. Operators describe our instructors and classes as “engaging,” “informative” and “providing the most useful ...course I have ever taken.”

In addition to providing onsite technical assistance, GSRWA advocates for systems at the state and federal levels. For example, the Association has advocated for the renewal of state aid grant funding for water and wastewater systems, participated in the federal regulatory process to develop the Revised Total Coliform Rule, and more recently has been following the science and monitoring requirements of PFAS with a coalition of organizations.

Every fall GSRWA hosts a conference called the Operator Field Day where operators can network with NHDES, vendors and one another. The 2019 theme is...
Operator Profiles: Donny Labrecque

Donny Labrecque is the primary operator for Berlin Water Works. He holds New Hampshire water works operator Treatment grade 3 and Distribution grade 3 certifications and is a NEWWA certified backflow prevention device tester.

Please tell us about your water system. The City of Berlin has a population of 10,051 and includes residential, industrial, commercial and institutional properties, a Federal Correctional Facility and a State Correctional Facility. The Berlin Water Works (BWW) is a municipal subdivision of the City of Berlin. The City uses about 1.5 to 2.3 million gallons per day (MGD) of water throughout the year. Our current plant, the Ammonoosuc Water Plant, was built in 1996. It is a four MGD plant in which there are two micro-floc trident filter systems, which are designed to put out two MGD each. Each system has an upflow clarifier to a downflow anthracite/sand/garnet filter. In 2010, BWW did a major rehabilitation project to the Godfrey Dam (which impounds our source water in the Kilkenny mountain range) in which new piping at the dam and concrete were installed. In 1982 a high service well, with the capability of pumping 600 gallons per minute (GPM), was installed as a backup in case of emergencies or maintenance to one of the treatment facilities. In 1982 a high service well, with the capability of pumping 600 gallons per minute (GPM), was installed as a backup in case of emergencies or maintenance to one of the treatment facilities. In 2012 the Water Department upgraded that well and, in 2016, the department installed a second, high service well. The current wells have the ability to pump over 1,000 GPM each and we are able to pump 1.5 MGD while sustaining a safe yield to aid the Ammonoosuc plant in drought conditions, emergencies or scheduled maintenance.

What was your first ever job? My first ever job was when I was 14 years old. I was a parking lot attendant at Story Land. I have been employed by the City of Berlin in some capacity since October, 1989. I spent the first 14 years of employment in the Public Works Department starting with garbage collection and moving into heavy equipment operation.

How long have you been in the profession? Which water system did you start out at? I have been in the water profession for 16 years, always with the Berlin Water Works. I spent the first six to eight years in the distribution system and part-time (mainly during winter months) in the treatment system. I was promoted to chief operator in the treatment system eight to ten years ago and this is where I currently work.

What is your favorite part about being a water works operator? My favorite part of being an operator would be the connections I have made and the people I have met. It seems we all have a story to tell. I appreciate the ability to discuss the different events we have encountered in the field with other operators. Another part of the job I enjoy is the different tasks you go through in a day. Very rarely are there any two days the same.

What have you learned that you wish you’d known when you first started in the industry? The effort and knowledge that it takes to get water from your source (whether it be surface water or well water), into and through the treatment process, and then out to the far ends of your distribution system while maintaining a minimum pressure and a safe and potable water quality. Also, the amount of resources and information that is available to us is quite impressive as long as you put a little time and energy into reaching out and asking for it.

What advice do you have for new operators? Pay attention to your peers in the workplace. They have an abundance of knowledge about the system in which you are employed. Most will have an understanding of how the dynamics work in that particular system (either with chemicals, pressures, and/or other hazards in the environment). Don’t be afraid to ask questions, and listen to what others may have to say in the industry. Don’t be afraid of change, as this industry is forever evolving. ✨
In addition to her role as the manager of the bacteria monitoring program, Jackie Howarth is now overseeing the Lead and Copper Rule (LCR) and Disinfection By-Products (DBP) monitoring programs. Jackie supervises Kimberly (Kimmi) Durgin, who was recently hired to oversee monitoring schedules, sampling sites, monitoring/reporting violations and public notices for both programs. Kimmi joined NHDES in 2007, starting in the Wetlands Bureau and was later promoted to the Waste Management Division. Her exemplary customer service, organizational skills and attention to detail make her a great fit for the DWGB monitoring program.

Retirement: Allyson Gourley retired at the end of June. Allyson was with NHDES for 25 years starting in the Air Division and Wetlands Bureau before moving to the Drinking Water and Groundwater Bureau. Allyson spent the last 13 years helping thousands of public water systems understand and meet their regulatory requirements. Join us in wishing Allyson all the best in her retirement!