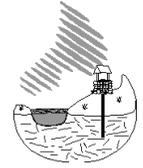




SUPPLY LINES WITH THE SOURCE



Newsletter of the NHDES Drinking Water & Groundwater Bureau
on the web at www.des.nh.gov

Fall 2017

Asset Management: Don't Get Caught Unprepared

Why is Asset Management (AM) an important tool? AM is a systematic process of cost-effectively operating, maintaining, upgrading and disposing of assets. AM allows you to be more proactive and it creates data-driven decisions that improve your ability to explain and defend budgets and investments in your community's water infrastructure to governing bodies.

The Drinking Water and Groundwater Bureau (DWGB) is very pleased with the statewide progress regarding AM. So how do **you** get started? Over the last five years, DWGB at NHDES has been providing financial assistance for the implementation of Asset Management Plans (AMPs). The DWGB Asset Management Planning Grant program will not fully fund an AMP, but it allows you to get a good foundation in place. Applications are now available for 2017-2018 AMP grants. More details about the AMP grants are below along with information about additional tools and trainings.

Asset Management Planning Grant Program

DWGB is pleased to announce another round of the Asset Management Planning Grant program. This grant assists community water systems in developing AMPs. The program will provide a 100% matching grant up to \$20,000

to conduct asset management initiatives. Applications will be accepted until December 12, 2017. Eligible systems include community water systems serving populations of 200 or greater. An information packet and application are available on the DWGB website at <https://www.des.nh.gov/organization/divisions/water/dwgb/asset-management/documents/nhdes-w-03-021.docx>.

Asset Management Database – Coming Soon!

DWGB is creating an Asset Management Database, which will showcase AM work around the state. It will be a way for communities to learn about down-to-earth AM practices and to network to share knowledge and experiences that lead to successful AM implementation. The AM database will be a clearinghouse to assist communities that are considering AM but may not know

how to start. Please visit our webpage <https://www.des.nh.gov/organization/divisions/water/dwgb/asset-management> to view what your peers are doing regarding asset management.

Water Rate Study

Why are water rates so important? As federal financial assistance such as grants and low-interest loans diminish,



(Asset Management, continued from pg 1)

it becomes more critical for communities to establish AMPs and proper rates to support the evolving needs of the water system, including operations and maintenance of infrastructure.

NHDES is kicking off the triennial Water Rate Survey. NHDES has selected the Environmental Finance Center (EFC), and its sub-contractor Tighe & Bond, Inc., to produce the regular New Hampshire Water and Sewer Rate Averages, and also to create a Water and Sewer Rate Dashboard. Data from participating utilities will be incorporated into the free, interactive, online Rate Dashboard, which will allow users to compare rates among utilities according to multiple factors including utility size, water source, customer demographics and geographic features.

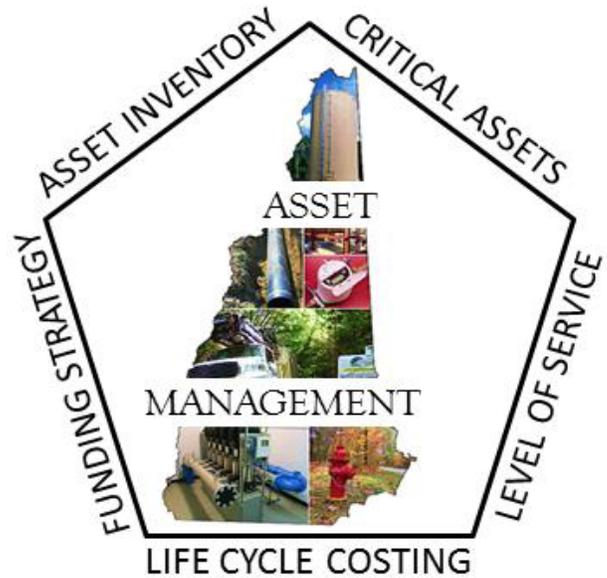
Over the last few months, communities have been inquiring about rates and examples of other communities' rate structures. The Water and Sewer Rate Dashboard will be a great tool for communities to perform comparisons between communities with similar characteristics.

This tool will be available in late spring 2018, but in the meantime, representatives from EFC will be in touch with communities to collect data necessary to complete this initiative. Thank you all in advance for your cooperation and your time.

Asset Management Workshop

NHDES is hosting its 4th Annual Asset Management Workshop, "The Next Generation" on Thursday, November 2. People with all levels of experience with AM programs are welcome to attend. This training will provide water, stormwater and wastewater operators and managers with means and methods to leverage current and/or future technology implementation to maximize asset management programs. There will be many opportunities to discuss your ideas and network during the breakout sessions throughout the day. Please refer to the web-page for registration information and a detailed agenda at <http://www.des.nh.gov/organization/divisions/water/dwgb/asset-management/categories/training.htm>.

For more information on any of these AM programs or to add your information to the Asset Management Database, please contact Luis Adorno at (603) 271-2472 or luis.adorno@des.nh.gov.



2018 Local Source Water Protection Grants Available

NHDES offers small grants to water systems, municipalities, planning commissions and non-profits to protect the lakes, rivers and aquifers used as clean sources of drinking water. Among other things, grants can be used to identify areas to protect, inventory and assess contamination risks, pay for land conservation transaction costs, and improve security systems (e.g., fencing, alarms) for public water supply sources. The 2018 application for Local Source Water Protection Grants is online at <http://des.nh.gov>. Click on A to Z, then click "Drinking Water Source Protection Program" and scroll down to "Grants/Loans." The deadline for applying is November 1, 2018.

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Commissioner	Robert R. Scott
Asst. Commissioner	Clark Freise
Division Director	Eugene J. Forbes
Bureau Administrator	Sarah Pillsbury
Editors	Paul Susca
	Pierce Rigrod
Design Editor	Lara Hooper

To subscribe, contact Pierce Rigrod at (603) 271-0688 or pierce.rigrod@des.nh.gov www.des.nh.gov
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Save the Date - Monday, November 20, 2017, State Revolving Loan Fund (SRF) Workshop

The New Hampshire Drinking Water State Revolving Loan Fund (DWSRF) will be hosting a joint SRF workshop with the Clean Water State Revolving Fund on November 20, 2017 at NHDES, 29 Hazen Drive, Concord, NH. The event will offer a series of topics in the morning, including SRF program updates, reporting requirements recent survey results, and individual breakout sessions in the afternoon for large and small public drinking water systems and waste water systems. The 2017 SRF Workshop registration form is available online at <http://des.nh.gov>. Click on A to Z, then click "Drinking Water and Groundwater Bureau," scroll down to "Grants/Loans" and click on "Drinking Water State Revolving Fund," then click on "2017 SRF Workshop Registration Form." Registration forms must be received by November 6, 2017. ♠



DWGB Calendar of Events & Deadlines: October 2017 - April 2018

- | | |
|---------|--|
| Nov 1 | Local Source Water Protection grant deadline, contact Pierce Rigrod at (603) 271-0688 or pierce.rigrod@des.nh.gov or see https://www.des.nh.gov/organization/divisions/water/dwgb/dwspp/lswp_grants.htm |
| Nov 2 | Asset Management Workshop, contact Luis Adorno at (603) 271-2472 or luis.adorno@des.nh.gov or see https://www.des.nh.gov/organization/divisions/water/dwgb/asset-management/index.htm |
| Nov 20 | State Revolving Loan Fund Workshop, contact Johnna McKenna at (603) 271-7017 or johnna.mckenna@des.nh.gov or Emily Nichols at (603) 271-8320 or emily.nichols@des.nh.gov |
| Dec 12 | Asset Management Grant applications due, contact Luis Adorno at (603) 271-2472 or luis.adorno@des.nh.gov or see https://www.des.nh.gov/organization/divisions/water/dwgb/asset-management/index.htm |
| Dec 31 | Water works operator certification renewal deadline, renewal application available under 'Forms/Applications' at https://www.des.nh.gov/organization/divisions/water/dwgb/op_cert/index.htm , contact Wade Pelham at (603) 271-2410 or wade.pelham@des.nh.gov |
| Anytime | Cyanobacteria Monitoring and Training grants, contact Paul Susca at (603) 271-7061 or paul.susca@des.nh.gov |
| Anytime | Record Drawing Grant applications accepted, contact Johnna McKenna at (603) 271-7017 or johnna.mckenna@des.nh.gov or see http://des.nh.gov/organization/divisions/water/dwgb/capacity/documents/record-drawing-grant-app.doc |
| Anytime | Tank Inspection Grant applications, contact Luis Adorno at (603) 271-2472 or luis.adorno@des.nh.gov or see https://www.des.nh.gov/organization/divisions/water/dwgb/asset-management/index.htm |

To see event calendars for additional opportunities please visit:

Granite State Rural Water Association at <http://www.granitestatewater.org>

New England Water Works Association at <http://www.newwa.org>

New Hampshire Water Works Association at <http://www.nhwwa.org>

Operator Profiles: Mark Houghton

Please tell us about your water system, or water systems.

We operate 16 PWSs, ranging in size from the Town of Walpole to some small non-community, transient systems and everything in between.

What was your first ever job?

Ha, I actually started my quest for a career as a farmer at a large dairy in Walpole. This was instrumental in my career journey. My responsibilities at the farm included the vast network of infrastructure that provided water and power to the farm and all its associated buildings. And, as we all know, in the world of agriculture, you learn you often have to do a lot with very little.

How long have you been in the profession? Which water system did you start out at?

My father was both a Master Electrician and Plumber and ran the Walpole Water Department as a “duty to his town,” as did his father. In 1994, as my father talked of retirement, I made the decision to join the family business and leave my love of “the farm” behind. Within a few years, I started taking over the duties associated with the town water system and as I continued to grow the family electrical and mechanical business, I slowly began helping other systems in need of an operator, which seemed a good fit. This has continued to today and is rewarding, and sometimes a quite challenging part of what we do.

What is your favorite part about being a water works operator?

I especially enjoy helping system owners with the challenges they face in maintaining a healthy water supply.

The requirements that come with a PWS, and the ever-increasing standards can be overwhelming for some. No two systems ever have the same water chemistry or system requirements, which in and of itself, continues to keep system management fascinating.

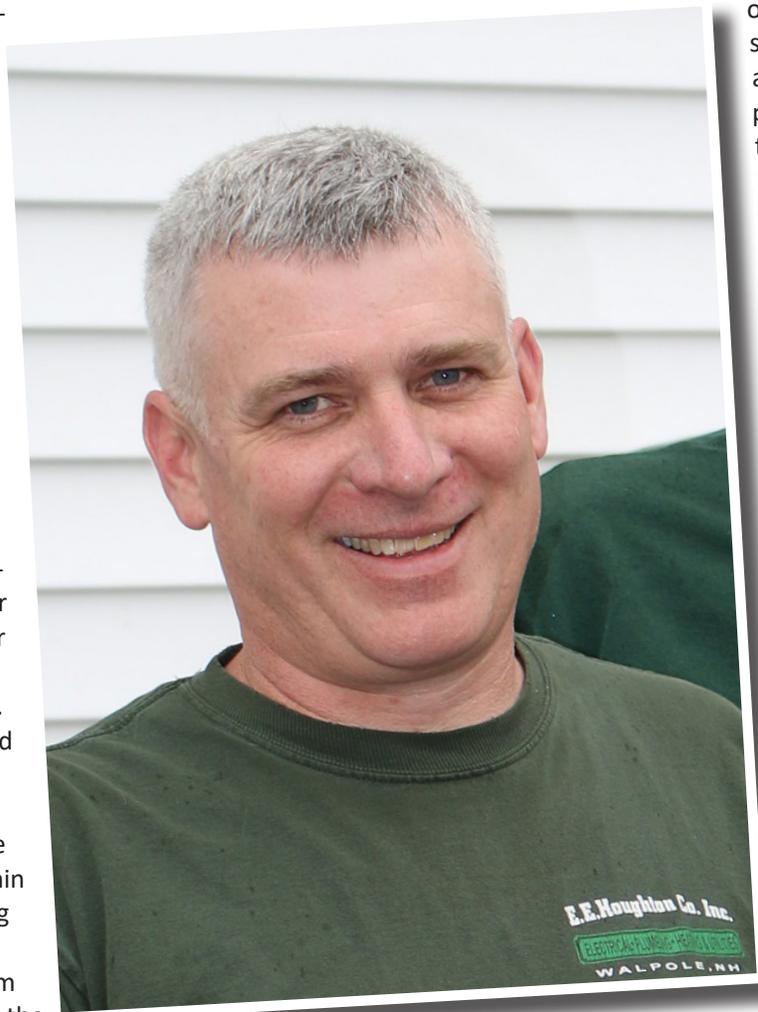
I take pride in the upgrades we install to make systems more durable and much more efficient. The introduction of VFDs, SCADA systems and new pump technologies has allowed us to take a lot of the “guess work” out of operating many systems, and has also allowed us to respond to problems – often before the water users even know they exist. This is a great benefit to all involved.

What have you learned that you wish you’d known when you first started in the industry?

Maintaining water quality and systems is an ongoing, ever changing process – you will never stop learning... It’s also a simple fact that all “issues,” from broken water mains to lightning damage, always seem to happen on a holiday or weekend!

What advice do you have for new operators?

This is a very rewarding path. I can’t speak for systems we don’t operate – but those we currently work with are extremely appreciative. The responsibility of providing safe drinking water for your friends and neighbors is a great one. Always be honest and take the responsibility with great pride. Few things are so taken for granted as clean and safe water, and it’s the operator’s responsibility to ensure the highest level of professionalism while working on a public water system. 💧



Mark Houghton

New Faces and New Duties: Staff Changes at DWGB

The DWGB recently underwent a small reorganization and hired new staff. Jackie Howarth is the new manager of the Bacteria Monitoring and Youth Camp programs. Jackie has a Master's of Science degree in Marine Science and Environmental Policy from UNC Wilmington and was the State Environmental Manager at the New Hampshire Air National Guard.



Emily Nichols is working in the Drinking Water State Revolving Loan Fund (DWSRF) program, managing small system projects and providing assistance with Davis Bacon requirements for DWSRF projects. Emily has a Bachelor's Degree in Natural Science from Castleton State College and has worked in various NHDES programs for 10 years.



Emily Jones was promoted to supervisor of Enforcement and Rulemaking. Emily has worked in the Enforcement program for well over a decade and has made a smooth transition to her new role.



The Information Management program and the Monitoring program were merged into the Information Management & Reporting Section (IM&R). It made sense to combine the program responsible for managing all of the data for DWGB with the program that receives the most data.

Leah McKenna now oversees the IM&R section. She has spent 11 years in the bureau, supervising the Monitoring

program and then the Enforcement and Rule-making program. Leah has broad knowledge of programs within the bureau and will work with all staff to identify their future information needs.



Laurie Cullerot, former Information Manager, retired at the end of 2016. Chris Dunbar was hired as her replacement in May and comes to the DWGB with a Bachelor's Degree in Fisheries Biology from UMass Amherst and a Master's Degree in GIS from Salem State University, along with a wealth of experience in data management with other programs within NHDES. Chris is working with his staff on the rollout of an updated internal public water system database. This database conversion will increase the amount of information available online to the regulated community and to the public.



In addition, the process by which the DWGB both receives sample result data for public water systems and reports to EPA will change drastically in the upcoming year. Carolyn Greenough was hired in July to spearhead the transition and work with accredited laboratories when data transfer errors occur. Carolyn graduated from Plymouth State University with a Master's degree in Environmental Science and Policy after spending five years in consulting, conducting water quality monitoring in lakes across the northeast. 💧



Proposed DWGB Rules

The Joint Legislative Committee on Administrative Rules (JLCAR) recently approved the following rules managed by DWGB. If you have questions on a specific recently approved rule, please contact the staff person listed below. If you are interested in receiving emails when proposed DWGB rules are in the rulemaking process, please email Debra Sonderegger at debra.sonderegger@des.nh.gov.

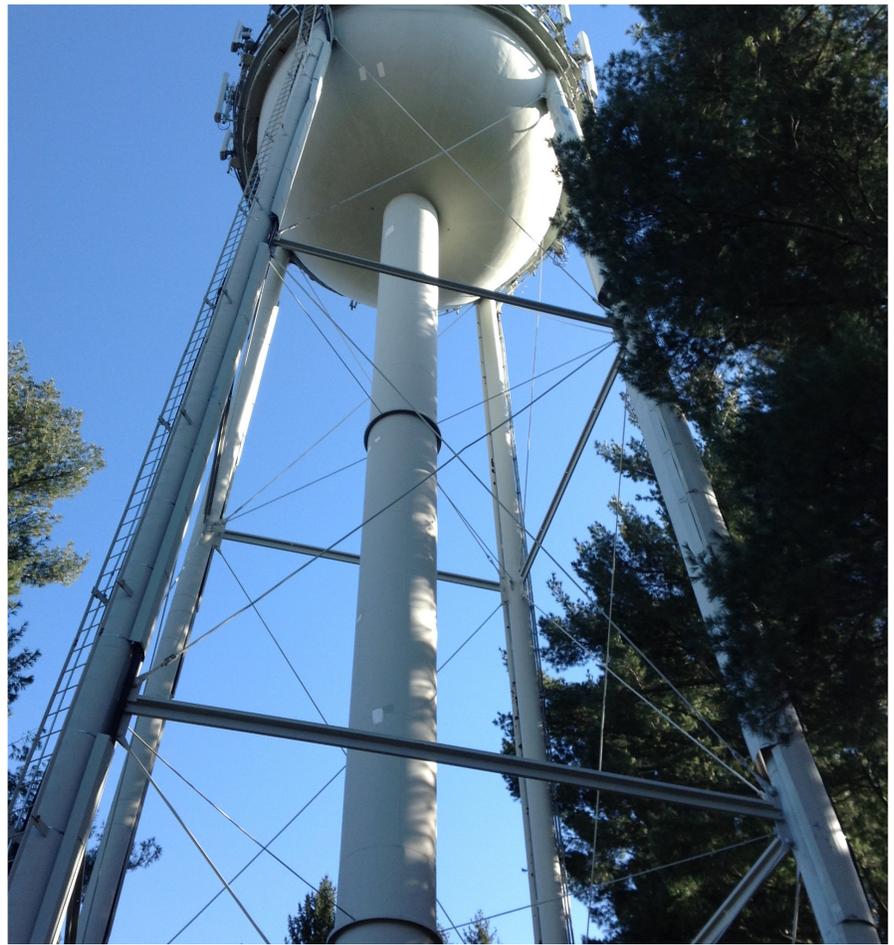


<u>Rule</u>	<u>Date Approved</u>	<u>DWGB Rule Contact</u>
Permit to Operate (Env-Dw 501)	June 16, 2017	Jane Murray, (603) 271-3544 or jane.murray@des.nh.gov
Certification of Water Works Operators (Env-Dw 502)	August, 17, 2017	Wade Pelham, (603) 271-2410 or wade.pelham@des.nh.gov

PORS: What are they?

Over the past several years, DWGB has become increasingly aware of Privately Owned Redistribution Systems (PORS), which include pumping stations, storage tanks and significant piping networks. Typically, these distribution systems receive all of their water from a municipal water system but the distribution network is privately owned and maintained. Currently DWGB has 22 PORS within the database. These facilities are now regulated under Env-Dw 1200. The main goal of these regulations is to protect public health for all users, whether they get their water from publicly or privately owned distribution networks.

PORS are systems that provide piped water for human consumption that do not meet the definition of public water system under RSA 485:1-a XV, but do meet all of the following criteria: (1) obtains all of its water from, but is not owned or operated by, a public water system; (2) serves a population of at least 25 people, 10 household units, or 15 service connections, whichever is fewest, for



Saint Anselm College

(PORS, continued from pg 6)

at least 60 days per year; and (3) has exterior pumping facilities, not including facilities used to reduce pressure, or exterior storage facilities that are not part of building plumbing.

Examples of a PORS include the following:

- A residential homeowners association, consisting of 100 homes, that receives all of its water supply from a municipality through a meter vault. The residential development owns and operates a booster pump station, which provides higher pressure to a section of the development.
- A New Hampshire institution of higher learning receives all of its water from a municipality through a meter vault and owns and maintains a large elevated storage tank on campus.

One example of a distribution system that is not a PORS would be a large retail development that receives all of its water from a municipality. The privately-owned distribution network includes hydrants, and several buildings have interior fire pumps for the fire suppression systems. This would not be classified as a PORS because there are no exterior pumping facilities. The fire pumps are a component of the building's interior plumbing system.

Under Env-Dw 1200, the owner of a PORS is required to do the following:

- a) Comply with the current regulations related to coliform bacteria based on population served, including periodic monitoring, public notification and remedial action, including boil water notification.
- b) Retain a primary water system operator who maintains an operating certificate at a minimum grade I-A level.
- c) Comply with general operational and maintenance requirements (Env-Dw 1206) including inspection of facilities and distribution flushing.
- d) Ensure that the design of new and replacement facilities conform to design standards (Env-Dw 405) for systems that serve fewer than 1,000 people without street hydrant fire protection, and Env-Dw 404 requirements that apply to all other regulated public water systems.

If you have any questions, please contact Rick Skarinka at (603) 271-2948 or richard.skarinka@des.nh.gov, or Randy Suozzo at (603) 271-1746 or randal.suozzo@des.nh.gov. 💧

US EPA Completes Spill Response Plans for Lower Merrimack River

EPA Region 1 recently completed Geographic Response Plans (GRPs) for a portion of the Merrimack River between Hooksett and Nashua. NHDES has documented over a thousand petroleum spills in the Nashua region. Sometimes, petroleum spills drain into sources of drinking water, like the Merrimack River. GRPs contain detailed strategies and tactics first responders can employ immediately after a large petroleum spill to contain and clean up those spills. With over 500,000 people using the Merrimack River as a primary source of drinking water in New Hampshire and Massachusetts, it's vital to have an informed, efficient and effective clean-up response.



GRP team surveying Merrimack River

(GRP, continued on pg 8)



Merrimack River

GRPs contain information about the location and type of sensitive resource areas, such as water intakes, directions to appropriate river access points, boom deployment instructions, locations for shore-side recovery of petroleum and other critical information to expedite spill response activities. Development of GRPs involves local stakeholders, including public water systems, local emergency responders and NHDES' Spill Response and Complaint Investigation section as well as staff within DWGB. For more information about developing GRPs to protect your source water, contact Pierce Rigrod at (603) 271-0688 or pierce.rigrod@des.nh.gov. 💧



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