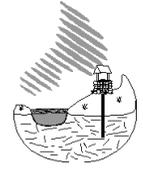




SUPPLY LINES WITH THE SOURCE



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

Winter 2018

NHDOT and NHDES Protecting Over 2,900 Acres of Water Supply Lands

Over 1,000 acres of water supply lands have already been permanently protected in the New Hampshire communities most affected by the widening of Interstate 93 between Manchester and the Massachusetts border.

The Federal Highway Administration provided \$3 million through NHDOT as part of a mitigation package designed to address the highway project's impacts on growth and water quality. The mitigation package has funded eight projects in the I-93 corridor, administered by the NHDES Water Supply Land Protection (WSLP) program. These projects conserve land in Derry, Londonderry, Windham and Auburn.

One additional project will permanently protect 1,871 acres around Tower Hill Pond in the Lake Massabesic watershed. The Lake Massabesic watershed is currently Manchester Water Works' sole drinking water source, and supplies 159,000 residents of the City of Manchester and surrounding towns. This project, spearheaded by the Society for the Protection of New Hampshire's Forests (SPNHF), is also being funded by a NHDES Aquatic Resource Mitigation grant. "These conservation lands provide critical buffers to Tower Hill and its tributaries. The natural buffers help clean and prevent pollutants from reaching the drinking water. The grants from NHDES were the catalyst for advancing this important conservation project and it could not be done without these critical funds," says Brian Hotz, Vice Presi-

dent for Land Conservation at SPNHF. While the majority of the WSLP grant funds have been awarded, NHDES expects to hold one more grant round with the remaining money.

Municipalities and land trusts are eligible for these grants to support land protection projects, which involve outright purchases of land or permanent conservation easements.

For more information on the upcoming WSLP grant round, contact Holly Green at (603) 271-3114 or holly.green@des.nh.gov. To obtain a project eligibility application form, visit the NHDES webpage at <http://des.nh.gov>, click on "A to Z List," then "Drinking Water Source Protection Program," scroll down to "Grants/Loans" and click on "Water Supply Land Protection Grants," then under "Forms/Applications" click on "Water Supply Land Protection Grant Project Eligibility Application Form." ♦



Tower Hill Pond

Winter Salt Use and Why it Matters

Each winter across New Hampshire, over 225,000 tons of salt will be applied to keep our highways free of ice and snow. This does not include the tons of salt used by municipal, commercial and private sectors to treat town roads, parking lots and sidewalks. Salt does not just dissolve and disappear. It finds its way into ground and surface water, affecting groundwater quality and aquatic life in rivers, lakes and wetlands. Striking a balance between public safety and environmental impact is difficult but necessary, particularly where sodium and chloride levels approach or exceed environmental standards.

(Salt, continued on pg 2)

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>
<ul style="list-style-type: none"> Youth Camps (Env-Wq 900) 	September 1, 2017	For both rules: Harrison "Chip" Mackey, (603) 271-0655 or harrison.mackey@des.nh.gov
<ul style="list-style-type: none"> Revised Total Coliform Rule Amendments; Consumer Confidence Report Amendments re: Notices for Lead (Env-Dw 701, 709, 717, 720 & 811) 	November 18, 2017	

(Salt, continued from pg 1)

Salt is expensive to remove once dissolved in water. While not a public health concern for most people, elevated sodium or chloride levels that reach or exceed 250 mg/L (a secondary maximum contaminant level (SMCL)), can result in a salty taste and be corrosive to home appliances. Treating water or replacing wells can be expensive. To reduce private well impacts, RSA 228:34 requires a 50-foot setback from the right-of-way of a state highway for newly constructed private wells. Setbacks, however, are not likely to be a panacea, particularly as sodium and chloride levels continue to increase over time.

Statewide surface water monitoring data suggest that sodium, chloride and conductivity levels are increasing. Most lakes continue to remain below the chronic chloride criterion of 230 mg/L but increases of over 100% in all three parameters noted above have been documented in many lakes over the past 25 to 30 years, with the greatest increases occurring in recent years. The same is true in groundwater. In 2011, US Geological Survey and NHDES reviewed sodium and chloride levels in public and private well water over a forty-year period. The upshot was that median sodium and chloride levels in groundwater (statewide) were three times higher by the end of the first decade of this century (2000-2011) than they were in the previous three decades. The largest increases have been in the southeast portion of the state.

Reductions in salt use of 20-25% are being realized in our state through the use of newer "on-truck" technologies, regular truck maintenance including seasonal spreader calibration to ensure more efficient salt applications, as well as pre-wetting with brine solutions to keep up to 30% of dry salt from blowing off asphalt surfaces. NHDOT, which currently uses brine solution on portions of I-93, and a number of local public works departments and commercial entities, continue to train staff to adopt practices that limit impacts of salt use on the environment. For example, NHDES' Green SnowPro program trains salt applicators how to use the least amount of salt to ensure safe conditions on surfaces traveled by pedestrians and vehicles in winter conditions. Municipalities can also adopt low-salt policies for winter maintenance of state and local roadways and work with private property owners to limit excessive salt applications on private parking lots and driveways. To find out more about these options visit NHDES' Road Salt Reduction program by clicking on the "A to Z List" on <http://des.nh.gov>, and then scroll down to "Road Salt Reduction." 💧

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New Webpage! Cyanobacteria and Drinking Water – Information for Public Water Systems

NHDES Drinking Water and Groundwater Bureau recently launched a new webpage to promote awareness of cyanobacteria and the need for water systems to be prepared for suspected cyanobacteria blooms. The webpage includes links to the Bureau's recently developed *CyanoHAB Response Protocol for Public Water Supplies*, as well as links to equipment funding sources and other useful guidance documents developed by EPA, American Water Works Association and Water Research Foundation. If you are a water supplier that utilizes a surface water source or a citizen interested in how NHDES is supporting drinking water source surveillance, check it out! Visit the new Cyanobacteria and Drinking Water webpage by visiting <http://des.nh.gov> click on "A to Z List" then "Drinking Water and Groundwater Bureau," and then click on "NEW! Cyanobacteria and Drinking Water – Information for Public Water Systems," available under the Hot Topics section.

For more cyanobacteria information, including the ecology and appearance of these interesting organisms, visit the NHDES Beach Inspection Program's Recreational Exposure to Cyanobacteria webpage. The Recreational Exposure to Cyanobacteria webpage can be accessed from the Cyanobacteria in Drinking Water webpage by scrolling down to "Other Resources" and clicking on the "Beach Inspection Programs webpage" link. 💧



DWGB Calendar of Events & Deadlines: January 2018 - July 2018

January 24	Business plan workshop for small water systems (population <1000) at the Durham Public Library, contact Shelley Frost at shelley.frost@des.nh.gov or (603) 271-2949
May	Drinking Water State Revolving Loan Fund (DWSRF) pre-applications available, contact Johnna McKenna at johnna.mckenna@des.nh.gov or (603) 271-7017
May 9	Fourth Grade Water Science Fair and Drinking Water Festival, contact Lara Hooper at lara.hooper@des.nh.gov or (603) 271-4071
May 17	NHDES Drinking Water Source Protection Conference, Grappone Conference Center, Concord, contact Pierce Rigrod at pierce.rigrod@des.nh.gov or (603) 271-0688
June TBD	2019 Leak Detection Survey Grant application period opens, contact Stacey Herbold at stacey.herbold@des.nh.gov or (603) 271-6685 or visit https://www.des.nh.gov/organization/divisions/water/dwgb/water_conservation/leak-detection.htm
June 30	Permit to Operate application and fee due, contact Jane Murray at jane.murray@des.nh.gov or (603) 271-3544 or visit https://www.des.nh.gov/organization/divisions/water/dwgb/permit_pws_pto.htm
July TBD	2019 Leak Detection Survey Grant applications due, contact Stacey Herbold at stacey.herbold@des.nh.gov or (603) 271-6685 or visit http://des.nh.gov/organization/divisions/water/dwgb/water_conservation/leak-detection.htm
Anytime	Cyanobacteria Monitoring and Training grants, contact Paul Susca at paul.susca@des.nh.gov or (603) 271-7061
Anytime	Record Drawing Grant applications accepted, contact Johnna McKenna at johnna.mckenna@des.nh.gov or (603) 271-7017 or visit http://des.nh.gov/organization/divisions/water/dwgb/capacity/documents/record-drawing-grant-app.doc
Anytime	Tank Inspection Grant applications, contact Luis Adorno at luis.adorno@des.nh.gov or (603) 271-2472 or visit https://www.des.nh.gov/organization/divisions/water/dwgb/asset-management/index.htm

NHDES Expands Support for Private Well Testing Events

A study by the US Geological Survey and the Centers for Disease Control and Prevention recently found that New Hampshire is second only to Maine in the percentage of the state's population using private wells with arsenic levels above the maximum contaminant level of 10 ppb. Testing your well is the first step in determining whether private well water is safe and what can be done about it.

Local private well testing events are one of the most effective ways to increase the number of wells tested in a community, with the ultimate goal of improving public health by enabling private well users to make informed decisions about treating their water. NHDES works with Dartmouth College and the Public Health Laboratory in New Hampshire Department of Health and Human Services to provide local well testing workshops and to support community well testing events. The events, in which residents typically pick up sample bottles, sample their own water, and bring the bottles (along with a check) to a central drop-off point on a given day, require a local organizer and until recently, someone to bring the

bottles and checks to the laboratory in Concord. Bringing the bottles to Concord is often a stumbling block for local organizers, as is the need to limit the bottle drop-off to a scheduled day.

NHDES recently made it easier for organizers of well testing events by providing transportation for the samples to the laboratory, and in some cases by taking the samples right in people's homes. That change was made possible by NHDES' MtBE Remediation Bureau (MtBERB), which was formed in 2014 due to a settlement fund collected as a result of a lawsuit pursued against refineries and gasoline manufacturers. The MtBERB's mission is to investigate and remediate groundwater contamination by the gasoline additive Methyl tertiary Butyl Ether (MtBE). The Bureau has a staff of six field technicians who collect water samples, primarily in people's homes, and transport the samples to a laboratory. MtBERB can take samples for a variety of test packages. Testing for volatile organic compounds (including MtBE) is free for private well users, but well users still need to pay for other tests. NHDES recommends a "standard" package that costs \$85 at the Public Health Laboratory and a radon/radiological test which costs \$80; many private laboratories offer similar packages. For more information about holding a private well testing event in your community, please contact Paul Susca at paul.susca@des.nh.gov. ♦

