N.H. Department of Environmental Services

Drinking Water Source Protection Conference

Wednesday, May 6, 2015 (8:30 am – 4:00 pm)
Grappone Conference Center
70 Constitution Avenue,
Concord, NH 03301

Sponsored by
American Ground Water Trust
Concord, New Hampshire
A 501(c)(3) non-profit organization

5.0 Technical Credit Hours for NH Water Works Operators

AGENDA

8:30 – 8:45 AM **WELCOME, CONFERENCE OVERVIEW**
- **Pierce Rigrod, Planning, Protection and Assistance Section; Drinking Water and Groundwater Bureau, NHDES**

8:45 – 8:55 AM **ANNUAL DRINKING WATER SOURCE PROTECTION AND SUSTAINABILITY AWARDS**
- **Thomas Burack, Commissioner, NHDES**

8:55 – 9:15 AM **A RECOMMITMENT TO ASSESSING AND PROTECTING SOURCES OF DRINKING WATER**
- **Kira Jacobs, Source Protection Specialist, USEPA Region 1**

This presentation will summarize the National Source Water Collaborative's *call to action* to rededicate efforts and reassess the threats to drinking water resources. The Collaborative represents over 20 organizations working together at a national level to improve source protection.

9:15 – 10:00 AM **BARRIERS TO PRIVATE WELL WATER TESTING IN NEW HAMPSHIRE AS REVEALED BY A STATEWIDE SURVEY OF WELL OWNERS**
- **Mark Borsuk, Associate Professor of Engineering, Thayer School of Engineering, Dartmouth College**

This presentation will review the results of a statewide survey conducted by Dartmouth College to estimate rates of private well water testing and treatment for arsenic, identify factors influencing the rate of water testing and treatment, and interpret how these results can inform efforts to intervene in order to increase water testing and treatment.

10:00 – 10:45 AM **MTBE AND BEYOND – THE DRINKING WATER QUALITY PROGRAM OF THE MTBE REMEDIATION BUREAU**
- **Derek Bennett, MtBE Remediation Bureau, NHDES**

NHDES' MtBE Remediation Bureau is implementing a plan to address MtBE contamination in NH. A component of this plan includes an extensive well sampling program to test drinking water for the presence of volatile organic compounds (VOCs). This presentation will describe how sampling areas are selected, the work completed so far, and how the program is helping to promote safe drinking water beyond MtBE.

10:45 – 11:15 AM **BREAK / REFRESHMENTS**

11:15 – 12:00 PM **BREAKOUT SESSION**

Surface Water	Groundwater	Community-Based Source Water Protection and Private Well Roundtable	Best Management Practices
Lessons from the Woods: A Watershed Manager's Perspective on Balancing Recreational Access and Source Water Protection	**What's Next?: An Overview of Emerging Contaminants in Drinking Water Sources**	**Making Low Impact Development (LID) Systems Work in Your Community: Case Studies and Key Design Factors**	**The NHDES Certified Commercial Salt Applicator Program: A Win for Business and the Environment**
This presentation will feature specific steps York and Kittery water systems took to manage recreational access near both systems' reservoirs involving rules and guidelines, signage, gates, weekly police patrols, and partnerships to help manage the challenges associated with ATVs, mountain bikers, hikers, hunters, dog walkers, and others.	Chemicals are being discovered in drinking water that previously had not been detected. USEPA is working to improve its understanding of a number of these chemicals, often referred to as "contaminants of emerging concern," particularly pharmaceuticals, personal care products and perfluorinated compounds. This session will focus on specific contaminants and how USEPA is working to understand their origins and importance with respect to public health and safe drinking water.	This session will review recently adopted innovative groundwater protection regulations in Rockingham County and focus on key LID stormwater practice design factors necessary to optimize the removal of nutrients and other contaminants often present in stormwater.	New Hampshire's Commercial Salt Applicator Program was established by law in 2013 to facilitate private sector salt reduction. This presentation will provide a history of the program as well as the findings and efforts to date, including the partnership with UNH's T2 Green SnowPro training program, which has resulted in the certification of 354 individuals now trained to limit chloride pollution in their watersheds.
Gary Stevens, York/Kittery Water District; Kira Jacobs, USEPA Region 1	Maureen R. McClelland, Chief, Drinking Water Quality & Protection Unit, USEPA Region 1	Julie LaBranche, Senior Planner, Rockingham Planning Commission; Jamie Houle, Program Manager, UNH Stormwater Center	Patrick Woodbrey, Salt Application Coordinator, NHDES

12:00 – 1:00 PM **LUNCH**

1:00 - 3:30 PM AFTERNOON SESSIONS—CONCURRENT TRACKS

Surface Water	Groundwater	Community-Based Source Water Protection and Private Well Roundtable	Best Management Practices
1:00 – 1:45 PM			
From "Cess" to Success!: The Lake Waukewan Watershed Septic System Improvement Initiative Cost-Share Program	**Emerging Wastewater Contaminants in Cape Cod Drinking Water: Where are They Coming from and How Worried Should We Be?**	**Granite State Rural Water Association Source Water Protection Planning Services**	**The ABC's of Protecting Water Resources Through Land Conservation in Your Community: A Step by Step Guide and Real World Examples**
Lake Waukewan in Meredith, NH provides drinking water to over 3,000 residents, but the lake is impaired due to low dissolved oxygen and experiences elevated cyanobacteria concentrations. To reduce these problems associated with nutrients in the lake, Meredith passed regulations requiring septic system evaluations. With funding from NHDES, Lake Winnipesaukee Association has been working with landowners to evaluate and fix failing septic systems along the lake.	On Cape Cod, 85% of residents have septic systems and all residents rely on a large sand and gravel aquifer for their drinking water. This session will review the findings of a study of 20 municipal wells on Cape Cod that were tested for 100 emerging wastewater contaminants, including pharmaceuticals, hormones, and consumer product chemicals and will address the implications for wastewater management planning and protection of similarly vulnerable water supplies.	Granite State Rural Water Association offers source water protection planning services at no associated cost to communities, water systems, or their consumers. This presentation will summarize these services and provide examples of successful projects.	This session will summarize the steps in the land conservation process. Tips about what to expect along the way and how to deal with a variety of stakeholders will also be discussed. Handouts will be available with a summary of various grants and funding sources that may be available with an emphasis on source water protection as well as a summary of the land conservation process.
John Edgar, Community Development Director, Town of Meredith; Pat Tarpey, Director, Lake Winnipesaukee Watershed Association	Laurel A Schaider, Ph.D., Research Scientist, Silent Spring Institute, Newton, MA	Andrew Madison, Source Water Specialist, Granite State Rural Water Association	Danna Truslow, Principal Hydrologist and Anna Boudreau, Land Conservation Consultant, Truslow Resource Consulting LLC
1:45 - 2:30 PM			
Working Together to Reduce Nitrogen in the Oyster River Watershed and Great Bay	**Assessment of the Impact of Storm Water Recharge on Drinking Water**	**Private Well Roundtable: A Discussion About On-Going Efforts in New Hampshire**	**Dusting Off and Updating Your Source Water Assessment Report**
Reducing nitrogen discharged into Great Bay is an important goal for many of NH's coastal watershed communities. The Oyster River, which discharges into Great Bay, is also a primary source of drinking water for Durham and UNH. This session will describe a modeling approach to develop nitrogen loading estimates for non-point sources and present a summary of a comprehensive corridor management plan for the Oyster River.	In recent years, regulations and guidance have encouraged the recharge of storm water to groundwater in lieu of discharging to surface water. Available water quality data from routine compliance samples collected by public water systems will be reviewed to determine how these storm water management policies affect drinking water quality and what data gaps may exist.	New legislation, community well-testing events, on-going work by Dartmouth, new NHDES guidance and other recent NH efforts will be discussed through a moderated audience discussion. Come and quiz a panel of "experts" and learn more about on-going efforts to inform NH residents about the health risks and testing and treatment options that can minimize exposure to common groundwater contaminants.	It's been over a decade since NHDES produced source water assessment reports for all public water systems and planning boards across the state. The reports are often useful when discussing source protection issues with local leaders and businesses and can help focus protection efforts to address the most important threats. This session will review existing online/data resources and discuss the steps to making updates through windshield surveys.

Bill Arcieri, Senior Water Specialist, Vanasse Hangen Brustlin, Inc.; Kyle Pimental, Senior Regional Planner, Strafford Regional Planning Commission	Brandon Kernen, PG, NHDES	Panelist will include representatives from Dartmouth College, community health and conservation officials, and NHDES	Todd Dresser, Senior Project Manager and Michael Redding, P.E., Senior Project Manager Loureiro Engineering Associates, Inc.
2:30 - 2:45 PM BREAK			
2:45 – 3:30 PM			
Lessons Learned from Elk River: What Can Public Water Systems Do to Better Prepare for a Spill/Release?	**Moving Forward to Protect Plaistow's Drinking Water: Planning and Implementation of a Series of Local Groundwater Protections**	**Private Well Roundtable: A Discussion About On-Going Efforts in New Hampshire (continued)**	**Improving Forest Management and Protecting Drinking Water in New Hampshire**
On January 9, 2014, over 10,000 gallons of hazardous chemicals were released into the Elk River (the primary water supply for Charleston, WV and the surrounding area), effectively shutting down the city's water system for 9 days. This session will present some of the key lessons learned from the Elk River event and review a USGS time of travel study conducted using dye tracers on major rivers that are sources of drinking water in NH.	Plaistow recently convened a community forum that has led to the town pursuing a series of key protection measures to preserve local groundwater resources, including updates to its source protection plan, modifications to local zoning, and the implementation of a local BMP inspection program. This session will summarize the steps for putting key protections in place to support community development and protect public health.	The 1 :45 pm Private Well Panel Discussion will be continued in the same room until 3:30 pm.	This session will review a collaborative project to work across federal, state, and private land ownership boundaries to meet the NH Forest Action Plan goals, involving improving water quality, forest stewardship, and land protection. Partners include the US Forest Service, Natural Resources Conservation Service, UNH Cooperative Extension, and NH Division of Forests and Lands.
Thor Smith, Hydrologist, USGS; Pierce Rigrod, NHDES	Sean Fitzgerald, Town Manager, Town of Plaistow; Stephen Lee, Principal Scientist, Normandeau Associates, Inc.	Panelist will include representatives from Dartmouth College, community health and conservation officials, and NHDES	Karl Honkonen, Forest Watershed Specialist, US Forest Service; Donald Keirstead, Natural Resources Conservation District, USDA
3:30 - 4:00 PM EVALUATIONS & NETWORKING			

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NRCS helps America's farmers, ranchers and forest landowners conserve the nation's soil, water, air and other natural resources. All programs are voluntary and offer science-based solutions that benefit both the landowner and the environment. NRCS helps landowners implement conservation practices to improve and maintain drinking water quality in New Hampshire.

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