N.H. Department of Environmental Services

Drinking Water Source Protection Conference

In-Person Thursday, June 12, 2025 (9:00 am-3:15 pm)

Conference registration is available at the American Ground Water Trust's registration page: www.agwt.org

4.75 Technical Credit Hours for NH Water Works Operators

AGENDA

Edward Cross Training Complex
722 Riverwood Drive
Pembroke, NH 03275

June 12, 2025

9:00-9:15 am **WELCOME, CONFERENCE OVERVIEW**
Pierce Rigrod, Supervisor, Drinking Water and Groundwater Bureau, NHDES

9:15-9:30 am **OPENING REMARKS AND AWARDS**
Robert R. Scott, Commissioner, NHDES

9:30-9:45 am **DWGB PRIORITIES, LEGISLATIVE AND POLICY UPDATES**
Brandon Kernen, Administrator, Drinking Water and Groundwater Bureau, NHDES

9:45-10:30 am **PFAS EXPOSURES AND HEALTH EFFECTS: TEMPORAL TRENDS IN EXPOSURE PROFILES AND THE IMPORTANCE OF PROTECTING WATER QUALITY FOR PUBLIC HEALTH**
Laurel Schaider, PhD, Senior Scientist, Environmental Chemistry and Engineering, Silent Spring Institute

PFAS exposures are ubiquitous, and the relative contributions of drinking water, food, and consumer products vary among different types of PFAS, across communities and over time. This presentation will describe ongoing research on PFAS relative exposures through impacted communities and modeling of historical drinking water concentrations to inform epidemiological research on health effects.

10:30-11:00 am Break

REGISTER ONLINE: https://agwt.org/event/2025-nhdes-drinking-water-source-protection-conference/

11:00-11:45 am-Breakout Sessions		
Land and Water Conservation	**Land Use Management: Case Studies and Guidance**	**Emerging Contaminants & Public Health**
Prioritizing land protection and freshwater projects in a changing environment	**Green Stormwater Infrastructure – Principles & Practice**	**PFAS in residential wastewater: Occurrence, transformations, and impacts to groundwater quality**
Learn about two GIS models prioritizing where to target conservation projects: *TNC's Resilient and Connected Network* (RCN) and the *Freshwater Resilient and Connected Network* (FRCN). The session will include an overview of the scientific criteria and data that drive these models, how to use the tools for screening land protection and river restoration projects, and potential future applications of the tools. We hope this will be an opportunity for new users and seasoned practitioners to bring questions and suggestions for how they can contribute to source water protection efforts.	This presentation will provide a summary of common Green Stormwater Infrastructure (GSI) and Low Impact Development (LID) practices and ways in which they can be used at various scales, from single lots to larger developments and local watersheds. Real-world examples will be discussed from various projects that the Horsley Witten Group has been involved with over the years. Discussion will review considerations around project selection, design, cost, construction, performance and maintenance – including creative ways to encourage the implementation of these practices to help promote surface water quality and protection of our water resources.	Per- and polyfluoroalkyl substances (PFAS) are known contaminants in many industrial and commercial waste streams and are also increasingly being detected in domestic wastewater. Effluent sampling of four community septic systems indicates total PFAS concentrations ranging from 8 to 137 ng/L, primarily attributed to perfluorooctanoic acid (PFOA), perfluoropentanoic acid (PFPeA) and perfluorohexanoic acid (PFHxA). This session will cover the PFAS composition in wastewater at the two residential sites and relationships between PFAS in products, consumer behavior and product use.
Charles DeCurtis, Lead Conservation Scientist, Freshwater Program Manager, TNC in New Hampshire; Ben Wallace, Land Protection lead, TNC in New Hampshire	**Michael Laham, P.E., Senior Engineer; Geoff Glover, PE, Senior Engineer, Horsley Witten Group, Inc.**	**Jennifer Harfmann, PFAS Discharge Specialist, NHDES; Alexis Eaton, UNH graduate student**
11:45-12:45 pm-Lunch		
12:45-1:30 pm-Breakout Sessions		
Land and Water Conservation	**Land Use Management: Case Studies and Guidance**	**Emerging Contaminants & Public Health**
From Crisis to Conservation: Turning Environmental Disaster into a Legacy of Safe Water	**Keeping PFAS Out of Local Drinking Water Sources: Using the New NHDES Groundwater Model Zoning Ordinance**	**Developing a Cyanobacteria Monitoring and Response Plan for Lake Waukewan, Meredith, NH**
Nearly 40 years ago, the Village of Northwood Ridge faced a nightmare—an entire community's water supply contaminated from a leaking gasoline storage tank. Decades later, Northwood is now expanding protection around its wellfield to ensure safe drinking water for generations to come. This session dives into how a crisis sparked a bold, long-term vision—turning emergency action into lasting conservation success. Learn about the challenges and successes of securing funding, building strong partnerships, and mobilizing community support to permanently ensure safe drinking water.	The town of Newton updated its zoning ordinance in 2025 to expand groundwater protection of aquifers and community water supply wells. The most notable inclusion involved language to mitigate risk of PFAS contamination – a first at the local level in New Hampshire. Learn about one small town's experience in upgrading its regulations using NHDES's updated model Groundwater Protection Zoning Ordinance.	This session will present key components of new (2025) cyanobacteria monitoring and response plan for Lake Waukewan, the primary source of drinking water for Meredith, NH. The plan provides the water system a long-term monitoring and response strategy for tracking and responding to cyanobacteria blooms in the lake and within the treatment plant. We will also highlight the strong partnerships formed to support the development and ultimate implementation of this plan.
Krystal Balanoff, Executive Director, Bear-Paw Regional Greenways; Bob Young, Commissioner, Village of Northwood Ridge Water District	**Jenn Rowden, Land Use Program Manager, Rockingham Planning Commission; Pierce Rigrod, Source Protection Program Supervisor, NHDES**	**Laura Diemer, CLM, Senior Project Manager, Lake Services Lead Director of Operations, FB Environmental Associates**

1:30-2:15 pm-Breakout Sessions		
Land and Water Conservation	**Land Use Management: Case Studies and Guidance**	**Emerging Contaminants & Public Health**
Case Study and Lessons Learned: Partnering to Conserve Land for a Water District's Wells	**2025 New Hampshire Stormwater Manual – New and Improved!**	**A Community Science-University Research Approach to Characterizing Surface Foams in Coastal New Hampshire Waterways**
Swains Lake Village Water District, a public water system in Barrington partnered with the Southeast Land Trust of New Hampshire to assist the District in the conservation of 70-acres abutting the District's community wells. Funding for this project was provided in part by the Drinking Water and Groundwater Trust Fund. This session will go through how the project came to be, the steps that were taken to get to success, and lessons learned that can help other water suppliers and land trusts looking to take on similar projects.	New Hampshire's Stormwater Manual has been updated in response to evolving science and available technologies for stormwater management as well as new and increasing local, state and federal permit requirements. It was developed through a partnership with the University of New Hampshire Stormwater Center. The Manual provides municipalities, property owners, designers, developers, and regulatory personnel with tools to help minimize the impacts of development and balance the needs of a healthy environment. Learn how you can use this manual to manage stormwater, while meeting environmental objectives of New Hampshire state regulations.	Surface water foams are fascinating phenomena that form in freshwater and marine environments when water movement causes dissolved organic matter to act as surfactants, creating fluffy surface foam. While foam composition is commonly attributed to biotic decomposition, it can also be generated in the presence of anthropogenic contaminants, such as per- and polyfluoroalkyl substances (PFAS). This session will describe a university research partnership involving community members in coastal New Hampshire with scientists at UNH and Temple University to characterize the occurrence and composition of PFAS in foams in the Piscataqua Region Watershed.
Duane Hyde, Land Conservation Director for SELT and Dave Totty and Richard Maier with the Swains Lake Village Water District.	**Deb Loiselle, Stormwater Coordinator NHDES-Watershed Assistance Section; James Houle, Ph.D, CPSWQ, CPESC Director UNH Stormwater Center**	**Dr. Paula J Mouser, Ph.D., P.E. Professor, Civil and Environmental Engineering, UNH; Andrea Amico, Citizen Scientist**
BREAK – 2:15-2:30PM		
Breakout Sessions 2:30pm – 3:15pm		
A Conservation Commission Strategy and USDA's Statewide Land Conservation Project: What To Focus On and When?	**U.S. EPA Clean Water Programs and Partnerships for Land Management and Protection**	**Overview of New Hampshire's Special Permit Process Involving Pesticides and Herbicides**
Strategic planning is vital for conservation commissions to guide decisions on land preservation, natural resource management, and property acquisition. This presentation explores how Litchfield's all-volunteer Conservation Commission developed a proactive Conservation Strategy with clear yearly goals and practical approaches to managing town-owned conservation land. We'll discuss the strategy's creation, its role in maintaining the Commission's focus, and how it drives future conservation planning in town. This session will also give an update on the continuing conservation efforts under the USDA funded *Regional Conservation Partnership Program* (RCPP), focused on source water protection.	This session will highlight opportunities to access resources for land management and protection from Clean Water Act programs, including the 319 Nonpoint Source Program, the Source Water Protection Program and the Clean Water State Revolving Fund. In addition, this session will highlight how U.S EPA tools, like "How's My Waterway," which can help land conservation organizations and partners to evaluate protection needs.	The Department of Agriculture, Markets, and Food, Division of Pesticide Control (Division) will provide information on the rules that protect human health and the environment while applying pesticides in New Hampshire. Pest pressure, including the expansion of invasive species and disease vectors, may result in the need for licensed pesticide applicators to control these pests in proximity to water resources. In these scenarios, a special permit may be required. The special permit application process allows the Division to closely review the proposed activity in order to balance pest control while ensuring pesticides are used in a manner which does not cause harm to human health and the environment.
Jason Brennen, Litchfield Conservation Commission; Lauren Zielinski, MSc, EIT Stream Restoration Specialist Connecticut River Conservancy	**Jesse Boorman-Padgett, Water Data Integration Branch, U.S. EPA Kira Jacobs, Source Water Protection Program, U.S. EPA Region 1 (invited)**	**Mathew Bosiak, Water Quality Protection Division of Pesticide Control, NH Department of Agriculture, Markets & Food**