N.H. Department of Environmental Services

Drinking Water Source Protection Conference

In-Person Thursday, May 16, 2024 (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

MAY 16, 2024

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 SUBSTITUTION AND RESEARCH OF ALTERNATIVE PRODUCTS, TOXICS USE REDUCTION INSTITUTE, UMASS (invited)

10:30-11:00 am Break

REGISTER ONLINE: www.agwt.org

11:00-11:45 am-Breakout Sessions		
Land and Water Conservation	**Land Use Management: Case Studies and Guidance**	**Emerging Contaminants & Climate**
Conserving the Merrimack River	**Clear Water Ahead: Directing Action for Paugus Bay's Water Health**	**Assessment of Cyanotoxin Risk in Public Water Supplies: New Approaches and Tools**
The Merrimack River, and its protection, was the impetuous for the founding of the Society for the Protection of New Hampshire's Forest. One hundred and twenty-three years later, the Forest Society continues its work to protect this mighty river and to help balance the many needs the State has of the river. Learn about the Forest Society's sustained effort to conserve the river through land conservation, education, advocacy and work with other partners in New Hampshire and Massachusetts. Today, over 500,000 people across two states depend on the river as a primary source of drinking water.	Increasing cyanobacteria blooms in Paugus Bay, the primary source of drinking water Laconia, prompted the Lake Winnipesaukee Association to conduct a comprehensive assessment of five catchments closest to the drinking water intake. The assessment identified which sub-watershed catchments contribute the greatest amount of nutrients and sediment to the bay and prioritized best management practice projects. Implementing BMPs will help limit nutrient loading and charter a course toward clear waters and a healthier future for Paugus Bay.	Cyanobacterial populations in Lake Massabesic were evaluated beginning in the summer and through the fall and winter of 2023-24 to determine the risk associated with exposure to cyanotoxin in drinking water. This session will present new collection methods that can be used by public water systems and citizen scientists to forecast cyanobacteria blooms and potential toxicity using field samples and satellite data. It will present the project findings from Lake Massabesic, and suggestions for future monitoring efforts.
Brian Hotz, Vice President for Land Conservation Society for the Protection of New Hampshire Forests	**Bree Rossiter, Conservation Program Manager, Lake Winnipesaukee Association; Ben Crawford, Superintendent, Water Department, City of Laconia**	**Nancy Leland, President, Lim-Tex, Inc.; Jessica Trout-Haney, Research Assistant Professor Department of Biological Sciences Dartmouth College**

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 & Climate**
Connecticut's GIS-Based Source Water Protection Prioritization Tool	**A Municipal Perspective on Protection, Delivery, and Capacity of Drinking Water Resources**	**Occurrence of PFAS in atmospheric Deposition in New Hampshire's Great Bay Watershed**
The Connecticut Source Water Protection GIS completed a mapping project that systematically and objectively identifies parcels with the most value for source water protection. The analysis considers all parcels (properties) occurring either in a surface water protection area (drinking water watersheds) or ground water protection area (aquifer protection areas). Expert opinion defined a thorough yet reasonable set of metrics for parcels, and the metrics were combined so each parcel was assigned a rank score identifying those that are most valuable for source water protection.	As NH communities continue to grow and develop, the need for clean and safe drinking water resources has never been greater. This session will examine the process of providing drinking water to businesses as well as current and future residents and what municipalities can do to ensure these resources remain viable for the long-term.	Ongoing research focuses on measuring PFAS in atmospheric deposition to the coastal region of New Hampshire to better estimate PFAS precipitation loads to surface waters. Approximately 50 samples were collected between 2022-2024 from four locations across a rural to urban gradient and estuarine to freshwater environment in the Great Bay watershed. This talk summarizes the compounds detected, their frequency of detection, concentration ranges, and associations with storm models.
Eric McPhee, Supervising Environmental Analyst, Connecticut Department of Public Health - Drinking Water Section	**David Sharples, Community Development Director, Exeter**	**Katherine Wieck, Graduate Student, UNH; Adam Wymore, Research Assistant Prof. of Natural Resources, UNH; Paula Mouser, Prof. of Environmental Engineering, UNH**

1:30-2:15 pm-Breakout Sessions		
Land and Water Conservation	**Land Use Management: Case Studies and Guidance**	**Emerging Contaminants & Climate**
Identifying Conservation Priorities to Protect Water Quality and Other Benefits: Examples from NH's coastal watershed	**Above the Salt – Tools and Resources to Reduce Winter Chloride Impacts**	**Alternatives to PFAS under "Safer Products" for Washington**
Learn from examples of how municipalities in NH's coastal watershed are prioritizing land for conservation - for water quality protection and other benefits. Identifying priorities can support more strategic use of limited resources and more proactive protection. You'll hear about tools, information, and examples available to support identification of conservation priorities in NH's coastal watershed and beyond.	Although Albert Einstein wasn't likely thinking about chloride contamination in groundwater when he said "*We cannot solve our problems with the same thinking we used when we created them,"* - we can still take a cue from him about the importance of innovating and adapting as we seek to reduce chloride contamination in groundwater. In this session, we'll introduce what the "salt problem" looks like in municipalities, challenges and obstacles, and how to overcome them. This session will cover what resources, tools, and best practices are being used by NH communities to kick the salt habit and protect their water supplies.	The "*Safer Products*" program in the state of Washington aims to reduce exposures to priority chemicals in consumer products. In 2019, Washington's legislature authorized the Washington State Departments of Ecology and Health began to identify priority chemicals and priority products and to enact bans when safer alternatives are feasible and available. Instead of conducting single chemical and product risk assessments, *Safer Products* focuses on reducing the use of classes of hazardous chemicals by identifying safer alternatives. The criteria used for safer alternatives leverages existing hazard assessment methodologies and product certifications, that are used to determine if safer alternatives are available for multiple PFAS-containing products.
Lisa Wise, Climate Adaptation Program Manager, NH Sea Grant | UNH Extension	**Scott Kinmond, Technical Specialist, and Instructor at UNH Technology Transfer Center**	**Holly Davies, Senior Toxicologist, Washington State Department of Health**
BREAK – 2:15-2:30PM		
Breakout Sessions 2:30pm – 3:15pm		
One-on-One with the Source Water Protection Program	**Managing Stormwater & Environmental Impacts through Low Impact Solutions**	**PFAS: Impacts and How You Can Reduce Exposure**
This time is reserved for anyone who would like meet "one-on-one" with staff or would like more information about program work involving: • Local Source Water Protection Grants • DWGWT – Land Conservation Grants • Chemical Monitoring Waivers • Env-wq 401 BMP rules and inspections • Cyanobacteria monitoring • Model Zoning Guidance • Public Outreach Opportunities • NHDES Water Conservation Guidance	This presentation will focus on ways to manage stormwater runoff from developed areas with low-impact, but highly effective landscape elements. The ideas presented will follow accepted practices from green infrastructure and low impact development design. Examples involving challenging site conditions and innovative design decisions to reduce runoff from being discharged to the environment will be presented.	From food packaging to cosmetics, paints, textiles, cookware, and even cleaning products, PFAS can be found in a variety of product categories. Green Seal's standards have long prohibited long-chain PFAS formally classified as hazardous, however, a growing body of evidence indicates that short-chain PFAS have potential harmful health and environmental effects. This session will provide insight into the health and environmental impacts of PFAS; how to transition away from all 12,000 of the chemicals in this class; and ways to ensure products are PFAS-free.
NHDES Source Water Protection Program Staff	**Mike Everhart, Eastern Erosion Control & Stormwater Specialist** **E. J. Prescott, Inc.**	**Brittany Maule, Director of Products and Standards, Green Seal**