N.H. Department of Environmental Services

Drinking Water Source Protection Conference

In-Person Tuesday, May 16, 2023 (9:00 am-2:15 pm)

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

3.75 Technical Credit Hours for NH Water Works Operators

AGENDA

Edward Cross Training Complex
722 Riverwood Drive
Pembroke, NH 03275

MAY 16, 2023

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 **LEGISLATIVE AND POLICY UPDATES**
Brandon Kernen, Administrator, Drinking Water and Groundwater Bureau, NHDES

9:45-10:30 am **PFAS STRATEGIC ROADMAP: EPA'S COMMITMENTS TO ACTION 2021-2024**
An overview of US EPA's national approach to addressing PFAS.
US EPA National (invited, virtual)

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**
Protecting Portsmouth's Surface Water Supply: A case where planning, funding, and good partnerships have created opportunities for the protection of the Bellamy Reservoir.	**A Tale of Two Cities: How to Adopt Groundwater Protection Rules in Your Town**	**Characterization of PFAS in tributaries discharging to New Hampshire's Great Bay Estuary**
Protecting high priority land around the Bellamy Reservoir and throughout its watershed is critical to maintaining water supply quality for the long-term. The City's approach to source water protection and outcomes involving land protection efforts will be presented. The importance of planning, outreach, land protection grants, and the City's partnership with Southeast Land Trust, the Town of Madbury and landowners will be discussed with highlights on the key components of success.	The Town of Sanbornton and the City of Franklin worked to protect groundwater resources that provide drinking water in both communities. Using a range of communications methods, this local project helped build community awareness and support for key changes to land-use ordinances providing long-term groundwater protection. This presentation will provide ideas and inspiration to improving local groundwater in rural New Hampshire.	Per- and polyfluoroalkyl substances (PFAS) are a class of persistent compounds, some of which accumulate in the environment and biota. NHDES is considering establishing health-based standards for select PFAS in surface waters, with implications for drinking water protection and industrial/ municipal point source dischargers. UNH research is focused on characterizing PFAS occurrence, diversity, and concentration in tributaries of the Great Bay Estuary as an example for other watersheds in New Hampshire.
Albert Pratt, PE, Water Resource Manager, City of Portsmouth NH; Duane Hyde, Land Conservation Director, Southeast Land Trust	**Boyd Smith, CEO, NH Water Works Association, Inc.; Crystal Kidd, Planner Resilience Planning & Design, Inc; Seth Creighton, AICP Planning and Zoning Director, City of Franklin, NH**	**Dr. Paula Mouser, Professor of Environmental Engineering, UNH; Gage Moran, Graduate Student, UNH**

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**
Municipal and Village District Lawn Watering Restrictions During State or Federally Declared Droughts	**Enhancing Protecting of Groundwater Through Local Ordinances: Opportunities and Pitfalls**	**CyanoScope Community Monitoring on Lake Sunapee, NH**
New Hampshire has experienced drought five of the last six years with significant impacts upon a number of public and private well users. Outdoor water use can comprise over 30% of overall domestic water use. This presentation will cover key guidance available from NHDES concerning how municipalities may institute lawn watering restrictions authorized under RSA 41:11-d during state declared droughts and details from municipal leaders who will discuss how they administer and ensure compliance with their local code.	Many municipalities have local regulations aimed at protecting their groundwater and surface water resources. Local regulations often fall short because they are unclear, making them difficult to administer and hard to enforce. The Rockingham and Strafford Regional Planning Commissions have worked with multiple communities to update local ordinances that strengthen the protection of drinking water resources and make them more enforceable. This presentation will focus on how to improve municipal codes and avoid legal or administrative pitfalls.	Recently the Lake Sunapee Protective Association began training volunteers to collect, identify, and enumerate cyanobacteria on Lake Sunapee. The community scientists are trained to collect plankton samples, identify major cyanobacterial taxa, and count taxa in a systematic way throughout the summer. They also coordinate the timing of sample collections with satellite overpasses, to correlate imagery with cyanobacterial cell counts. The program has provided important information about the cyanobacterial community composition, revealing several potentially problematic cyanobacterial taxa not previously known to be abundant in the lake.
NHDES Staff; City of Claremont (invited)	**Jennifer Rowden, Land Use Program Manager, Rockingham Planning Commission; Autumn Scott, Regional Planner Strafford Region Planning Commission**	**Jessica Trout-Haney, postdoctoral researcher at Dartmouth College**

1:30-2:15 pm-Breakout Sessions		
Land and Water Conservation	**Land Use Management: Case Studies and Guidance**	**Emerging Contaminants & Climate**
We want YOU for source water protection! Finding Conservation Partners and Taking Action	**NEIWPCC's Updated Source Water Protection Toolkit for Municipal Officials**	**Real-Time Monitoring for Cyanobacteria at Lake Rockwell Reservoir (Akron, OH, virtual)**
No organization needs to go it alone. In fact, source water protection outcomes are often better when key players are involved. Land conservation is a fundamental tool that protects drinking water by maintaining source water quality. A number of water systems are actively pursuing a strategy to conserve areas around their sources, while Land Trusts and Conservation Commissions are excellent conservation partners with the "know-how" to complete conservation projects. Given the availability of federal and state conservation funding, it's a good time to consider conserving important water supply lands. If you wonder how towns, public water systems and land trusts can connect and collaborate on conservation actions to protect drinking water, this is your session.	An updated Source Water Protection Toolkit is available online and is a fantastic resource for municipal water professionals, local officials, and community volunteers interested in protecting local drinking water supplies. As water quality standards, land uses and the climate all change over time, municipalities need to consider updates to local water supply protection. This toolkit was recently updated to reflect the contemporary challenges municipalities face in protecting source water with practical advice/tools to face these challenges.	With a warming climate, conditions in our lakes and reservoirs are more favorable for cyanobacteria growth and blooms. Toxins produced by certain species of cyanobacteria, particularly during severe cyanobacterial blooms, can pose a public health threat and affect public water system operations and surface water treatment costs. Developing a strong monitoring and response plan that allows your water system and community leaders to respond quickly and effectively to avoid impacts to drinking water, public health and water system operations is critical. This presentation by Akron, OH public water system staff will provide a detailed overview of how the water system monitors its raw water using data sondes that are tied to its SCADA system for real time updates allowing them to identify bloom forming conditions.
Molly Thunberg, Conservation Planner, NHDES; Ben Engel, Natural Resource Specialist, Land and Community Heritage Investment Program (LCHIP); Duane Hyde, Land Conservation Director, Southeast Land Trust	**Ian Dulin, Environmental Analyst, New England Interstate Water Pollution Control Commission (NEIWPCC)**	**Charles Lacy, Lab Analyst III, Akron Water Supply; Robert K. Holmes, Lab Analyst II, Akron Water Supply**