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
   ✦ Clark Freise, Assistant Commissioner, NHDES

8:55 – 9:15 AM  NHDES SOURCE WATER PROTECTION YEAR IN REVIEW
   ✦ Pierce Rigrod, Supervisor, Planning; Protection and Assistance Section; Drinking Water and Groundwater Bureau, NHDES
   2015 Year in Review: Source Protection in New Hampshire

9:15 – 10:00 AM  CLIMATE CHANGE IN NEW HAMPSHIRE: FLOODS AND DROUGHTS ON THE HORIZON
   ✦ Cameron Wake, PhD, Research Professor, University of New Hampshire
   New England has been getting warmer and wetter and extreme precipitation events have increased dramatically over the past five decades. Models predict the region will continue to experience more frequent and extreme precipitation events and summertime drought. This session will discuss climate trends, use of LIDAR data to better map flood zones, mapping salt water intrusion that may affect groundwater and options to improve resilience to extreme flooding and drought conditions that are likely on the horizon.

10:00 – 10:45 AM  SO KEN, HOW’S THE WATER?
   ✦ Ken Edwardson, Water Quality Assessment Program Coordinator, Watershed Management Bureau, NHDES
   This presentation will focus on statewide surface water quality trends, data limitations, the implications for places with polluted waters, management options, and the relationship between surface water and groundwater quality. Ken will also discuss opportunities to better collaborate and use data to more effectively protect current and future drinking water resources.

10:45 – 11:15 AM  BREAK / REFRESHMENTS
Rivers are vital to NH. Yet more intense storm events highlight the risks of living close to these waterways. The natural migration of rivers across the landscape may impact water supply infrastructure and supporting utilities. This presentation will introduce basic river concepts, review common river restoration practices and discuss infrastructure protection. Discussion will focus on preliminary alternatives for bank erosion issues on the Mad River near Campton’s municipal wells, and designs to protect drinking water wells in Whately, MA.

Nick Nelson, Fluvial Geomorphologist, Inter-Fluve, Inc.

Brian Goetz, Deputy Director of Public Works, City of Portsmouth

Kathrin Lawlor, Community Engagement Coordinator, Dartmouth Toxic Metals Superfund Research Program

Karl Honkonen, Forest Watershed Specialist, US Forest Service; Donald Keirstead, Natural Resources Conservation District, USDA
### Surface Water

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<td>Pennichuck Water Works (PWW) has completed several phases of water supply protection within the Pennichuck Brook Watershed. Pennichuck Brook is the main source of drinking water for the City of Nashua. This presentation will highlight the multi-phased program that PWW has implemented throughout the watershed including on-going water quality monitoring, public education outreach and installation of structural Best Management Practices (BMPs). A major focus will be on the challenges and results associated with structural BMPs located throughout the watershed.</td>
<td>Emerging contaminants of concern in groundwater continue to be an issue for public water suppliers, the public and regulators. Ongoing work on this topic in NH and other New England states will be presented.</td>
<td>Despite the importance of safe drinking water to human health, modern clinical medicine has largely separated itself from this basic environmental health determinant. The Dartmouth Children’s Environmental Health and Disease Prevention Center partnered with a network of primary care clinics in NH and VT to raise awareness of arsenic in groundwater and emphasize the importance of private well water as a source of exposure. This session will present findings from baseline surveys of medical practices indicating their capacity to address arsenic exposure through drinking water.</td>
<td>EPA has developed a robust, online mapping tool that provides critical information to help safeguard local sources of drinking water. DWMAPS allows users to learn about water quality, local water suppliers and possible sources of pollution that could affect their communities’ water supply. USGS’s StreamStats is a web-based geographic information system (GIS) helpful for water resources management. It provides a variety of streamflow statistics and maps key basin characteristics. This session will go over the functionality and complete a real-time demo.</td>
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Benjamin Lundstedt, P.E.; Principal, Environmental Engineer, Comprehensive Environmental Inc.  
Brandon Kernen, PG, Manager of the Hydrology and Conservation Program, NHDES  
Dr. Carolyn Murray, MD, MPH; Asst. Professor of Medicine, and Community and Family Medicine, Geisel School of Medicine at Dartmouth  
Ted Lavery, Hydrologist, US EPA, Region 1; Robert Flynn, P.E., USGS Pembroke Office

### Groundwater

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<th>Improving Knowledge and Awareness among First Responders, and Drinking Water Suppliers Along the Merrimack River</th>
<th>The MBE Remediation Bureau: Coming to a Community Near You</th>
<th>NHDES Local Source Water Protection Grants—the Ins and Outs</th>
<th>Soak Up the Rain New Hampshire: Building Resilient Landscapes at the Grass Roots</th>
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| Following a large chemical spill in 2014 released from two large storage tanks adjacent to the Elk River, (Charlestown, WV’s primary source of drinking water), national attention focused on the potential for large chemical spills to contaminate drinking water and affect public health. This session will discuss a year-long project to improve chemical inventories at over 100 businesses, encourage prompt emergency notification and increase awareness of chemical storage risks along the Merrimack River, Nashua’s primary source of drinking water. | The NHDES MBE (Methyl-tertiary Butyl Ether) Bureau was created in April, 2014 and tasked with the design and implementation of a plan to address MBE contamination in NH. This session will provide an update of Bureau activities over its first two years with an emphasis on the progress of the private well sampling program. The presentation will also describe how the Bureau is contributing to other Department efforts to promote safe drinking water in New Hampshire. | Each year NHDES provides grants to water systems, municipalities and other eligible organizations through the Local Source Water Protection Grant Program. Grant funded projects fall into four categories: 1) delineation of source water protection areas, 2) threat assessment, 3) planning and, 4) implementation projects, such as:  
- Revising wellhead protection areas (delineation)  
- Updating Source Water Assessment Reports (assessment)  
- Identifying appropriate protections (planning)  
- Security enhancements and water conservation measures. (implementation)  
This presentation will give an overview of the eligibility, application process and examples of a number of great projects. | Soak up the Rain (SOAK) is NHDES’ stormwater outreach and assistance program. It is designed to increase awareness of stormwater, the problems it can cause and the simple ways it can be better managed to reduce water pollution and adapt to our changing climate. Working with local partners, the program provides education, outreach, training, and assistance to install small-scale stormwater practices on residential properties. The session will discuss the “barn raising” approach used by the SOAK program to build understanding and capacity within communities and empower individuals to contribute to protecting and restoring water quality. Examples will be given of completed projects and lessons learned in implementing successful local stormwater management programs. |

Andrew Madison, Source Water Specialist, Granite State Rural Water Association  
Gary Lynn, Administrator, MBE Remediation Bureau, NHDES  
Amy Hudnor, Planner, Drinking Water and Groundwater Bureau, NHDES  
Jillian McCarthy, Stormwater Coordinator, Watershed Management Bureau, NHDES

### Community-Based Source Water Protection

| 1:45 - 2:30 PM | 2:30 - 2:45 PM BREAK | 2:45 – 3:30 PM | 3:30 - 4:00 PM EVALUATIONS & NETWORKING |
PROGRAM SPONSORS

USDA – NRCS – Durham, NH
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.

GZA GeoEnvironmental, Inc. – Bedford, NH
GZA GeoEnvironmental, Inc. (GZA) is an employee owned multidisciplinary geotechnical, geo-civil, environmental consulting, engineering, construction management and environmental remediation firm.

Capital Well Co., Inc. – Dunbarton, NH
For nearly 30 years Capital Well Clean Water Center has serviced wells and pump systems for New Hampshire families and businesses. Over the years, we have expanded our services to include water treatment, hydro-fracking and geothermal.

Nobis Engineering, Inc. – Concord, NH
Nobis is a multi-disciplinary consulting firm providing diversified services to commercial, federal, and state and municipal clients throughout the U.S. With proven expertise and established industry relationships, Nobis delivers a full range of environmental, geotechnical and civil engineering services.

Sanborn, Head & Associates – Concord, NH
Sanborn, Head offers a broad range of technical consulting services for clients across a variety of client markets. Our client markets are grouped under the broad headings of industrial, development, solid waste and energy.

USGS – New England (NH, VT Office)
The Nation’s premier earth and biological science agency, providing the hydrologic data, investigative studies, and research needed for the characterization and management of water resources in our two States. We work in cooperation with many Federal, State, and local agencies to evaluate the source, distribution, use, quantity, quality, and biology of water resources.