Asst. Commissioner's Column

Interns and NHDES: A Mutually Beneficial Relationship

As is tradition, the New Hampshire Department of Environmental Services has welcomed our seasonal interns onto our team. Summer at NHDES is a particularly busy time of year, and we rely on interns to help manage our increased workload. Skillful participation of recent college graduates and undergraduates significantly increases our productivity and provides the interns with experience in their fields of interest.

All of the divisions at NHDES benefit from seasonal interns, making for nearly 46 unique intern positions ranging from Air Permitting Intern to Solid Waste Compliance Intern. Each intern operates under a supervisor from their corresponding program who assigns them projects, yet grants them a significant amount of autonomy to enable them to learn and grow professionally.

The summer internship program at NHDES allows ambitious young professionals to gain experience in the field of their intended career path, while building on knowledge learned within their college majors. Our interns also have the opportunity to gain hands-on field experience, whether it is conducting surveys, collecting and analyzing data, sampling, or inspecting facilities.

Each summer, NHDES relies on its interns to complete certain routine activities. For instance, Exotic Species

Robert Scott returns to 29 Hazen Drive as commissioner after five years at PUC

A familiar face has taken the helm as commissioner of the New Hampshire Department of Environmental Services: former Air Resources Division director Robert Scott was confirmed to the post by the Executive Council on June 21.

Gov. Chris Sununu nominated the outgoing Public Utilities Commissioner on June 7, citing his wide-ranging experience as something that will serve him well in this new position. At his media availability session following the nomination, the governor called Scott “one of the foremost authorities in terms of a variety of different issues that affect the Public Utilities Commission.”

“He understands a lot of the technical details of what we do, not just in terms of energy at the PUC but with the environmental background as well,” Sununu said. “He knows the department, he knows a lot of the players, and I think he’s going to do a great job as the environmental services commissioner.”

Scott worked for NHDES for a total of 17 years in the Air Resources Division (ARD); the first eight, from 1995 to 2003, as a Mobile Source Program manager, compliance bureau administrator and deputy director, and then as the director of ARD from 2003 to 2012. During his time as director of the ARD, Scott served from 2005 to 2010 on a Governmental Advisory Committee to advise the Administrator of the US Environmental Protection Agency (USEPA) on specific federal policy issues related to the implementation of the North American Agreement on Environmental Cooperation with Mexico and Canada.

“With this experience, I feel I have a strong grasp of the workings of the department and of the issues associated with ensuring the mission of protecting the environment and public health while balancing the needs of a strong economy,” Scott wrote to Gov. Chris Sununu on May 31. “In my tenure as Air Resources Division director I was able to successfully work with both environmental organizations and the Executive Council on issues of mutual interest to the state and to ensure the health and well-being of the citizens of New Hampshire.”

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Interns annually conduct both dock-walking marina surveys and river surveys in kayaks.

Wetland Sampling interns collect aquatic organism samples, assist in the identification of plants, and collect information about wetland landscapes by boat and by foot.

Camp Inspection interns visit New Hampshire state campgrounds throughout the summer and educate campground owners on the state’s open burning laws.

Through the completion of these routine activities, interns gain invaluable field experience while simultaneously accomplishing tasks that are imperative to NHDES operations.

Summer interns also have the opportunity to participate in special projects that go beyond routine intern activities. For example, this year’s Air Permitting intern is assisting with an Atmospheric Science and Analysis project in which he will use the US Environmental Protection Agency’s Valley Identification and Valley Profile tools to pinpoint areas of the state with topographic characteristics that enable the combination of residential wood burning and meteorological conditions, which lead to elevated levels of fine particulate matter.

The Solid Waste Management intern will be assisting in an investigation to profile the universe of closed unlined landfills to help determine how these facilities should be managed. By integrating interns into these projects, NHDES is able to complete its research with a greater efficiency and timeliness. By taking part in these projects, the interns are exposed to real scientific research, and they learn about the environment in a way that cannot be taught in a college lecture.

NHDES is proud to have built a strong seasonal internship program that increases our productivity while providing valuable opportunities for passionate, eager-to-learn, young professionals who bring a fresh perspective and excitement to our agency, and we look forward to continuing this mutually beneficial program into the future.

Intern Heather Baron travels across New Hampshire, educating campground owners on open burning laws.

Stay alert with our summer alerts!

Receive notice when NHDES issues Air Quality Action Days or Cyanobacteria Lake Warnings right into your inbox:

Sign up online at www.des.nh.gov/media/enews/index.htm
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the business community. In fact, I think that the work we were able to accomplish demonstrated that environmental protection and economic vitality are mutually supportive.”

He returns to NHDES after a five-year stint as a commissioner of the Public Utilities Commission, a term that was set to end July 1. He received the 2016 New Hampshire Business and Industry Association (BIA) “Above and Beyond” award in recognition of service and leadership in advancing BIA’s mission.

Scott started his career as an engineer in the private industry, a position he held from 1990 to 1995, and as a munitions and aircraft maintenance officer in the US Air Force from 1986 to 1990. He recently retired as a cyberspace operations officer with the Air National Guard after 30 years of military service, having commanded three Air Force squadrons in his career. Scott has a Bachelor of Science degree in mechanical engineering from Lehigh University.

While at the PUC, he served on the Board of Directors of the National Association of Regulatory Utility Commissioners (NARUC) and was a member of the Committee on Critical Infrastructure as well as the Committee on Energy Resources and the Environment. He co-chaired the New England Conference of Public Utilities Commissioners’ (NECPUC) subcommittee on cyber security. He also represented New Hampshire on regional electricity matters as New England States Committee on Electricity (NESCOE) manager. He also formerly served as co-chairman of the Northeast Energy Efficiency Partnerships (NEEP) Evaluation, Measurement and Verification Forum Steering Committee. Commissioner Scott will continue to serve on the Regional Greenhouse Gas Initiative Inc. (RGGI) Board of Directors.

NHDES’ commissioner position has been open since Tom Burack stepped down in January 2017, after serving for 10 years.

NHDES responds to, investigates air quality complaints & tips

If you smell a strange or foul odor, or see excessive smoke or dust, what should you do?

If you have a complaint or a question regarding air quality issues, NHDES encourages you to call it in.

The voice on the other end of the line will likely belong to Linda Magoon, the senior compliance assessment specialist (also known as the complaint manager) in the NHDES Air Resources Division. Linda recently joined the Air Resources Division after managing compliance and enforcement for the Land Resources Management Bureau in the Water Division at NHDES. She is now responsible for managing ARD’s response to approximately 100 to 200 air complaints a year.

Most complaints are received by telephone, but they can also be received via fax and email. When a complaint is received, it is assigned a number and the details are entered and tracked in a database. Then either Linda or one of her co-workers will follow up on the complaint or, if appropriate, refer it to other sections in ARD or to another NHDES division. ARD believes that every complaint, whether anonymous or not, requires investigation and resolution. Further, given the state’s limited resources, these complaints are often helpful in assisting ARD to locate sources of air pollution that may be unlawful, or that may require air permits and, in some cases, pollution control equipment.

The process for responding to each complaint is the same: the complainant is interviewed; the source of the problem is identified as best as possible; the responsible party is contacted; and an onsite investigation is conducted, if necessary. Often complaints are resolved by making the source aware of the problem, offering technical assistance, and providing outreach materials.

Sometimes a complaint investigation will uncover serious violations that result in the case being referred for potential enforcement.

Over the last 10 years, the raw number of complaints has decreased. An analysis of the numbers shows that the decrease is an indication of fewer complaints about the state’s remaining solid waste landfills. Complaints resulting from other sources, such as open burning, outdoor wood boilers, industrial sources, sand and gravel pits, have remained relatively constant. As the public health risks of air pollution become more well-known, and as personal air monitoring devices become more accurate and widespread, NHDES expects the volume of complaints and inquiries to increase. Please let us know what you are seeing and smelling out there. ARD relies on the public to help identify issues that, when remedied, help protect our public health and the air we all breathe.

For more information on reporting an air quality issue, visit https://www.des.nh.gov/organization/divisions/air/air-quality-complaints.htm. Linda Magoon can be reached at (603) 271-0907 or at linda.magoon@des.nh.gov.
NHDES celebrates 30 years

2017 marks the 30th anniversary of NHDES. Much has changed in the last 30 years to help sustain a high quality of life for all citizens by protecting and restoring public health and our beloved environment. While the work in this effort is not complete, NHDES wanted to take a moment to recognize 30 accomplishments/achievements that have impacted our environment and public health for the better over the past 30 years. Each of the six issues of our Environmental News newsletter will focus on five of these achievements, under a specific theme for each issue. For this issue, the following five achievements for “Our Economy” will be the focus.

Regional Greenhouse Gas Initiative (RGGI)

Why it matters: The climate is changing, both globally and here in New Hampshire. A recent climate assessment from the University of New Hampshire shows that the rate of change has increased significantly over the last four decades. Warmer winters (20-45 fewer days below 32°F) and hotter summers (10-47 days above 90°F compared to 3-7 currently) can be expected over the next 50-75 years. Both the frequency and magnitude of extreme precipitation events, like flooding, have increased and will continue to increase. Climate change not only reduces our quality of life, but it impacts tourism and the economy.

Progress in 30 years: Beginning in 2009, New Hampshire joined fellow Northeast and Mid-Atlantic states in implementing RGGI, the first mandatory market-based regulatory program in the United States to reduce greenhouse gas emissions. RGGI caps regional power plant carbon dioxide (CO₂) emissions, and the cap currently declines by 2.5% per year. A CO₂ allowance represents a limited authorization to emit one short ton of CO₂. A regulated power plant must hold CO₂ allowances equal to its emissions for each three-year control period. For more information, visit www.rggi.org.

The RGGI states have witnessed a significant reduction in power sector CO₂ pollution, even as the regional economy has continued to grow, as shown in the graph below. There are several additional significant benefits to implementing RGGI. An independent report by the Analysis Group found that the investment across the participating states of the first three years of RGGI proceeds generated $1.6 billion in net economic benefit region-wide through the end of the decade; put $1.1 billion in electricity bill savings back into the pockets of consumers in the region over the next decade; created 16,000 job-years in the region; and kept $765 million in the local economy due to reduced fossil fuel demand.

In short, as part of RGGI, little ol’ New Hampshire is already doing a great deal to reduce the emissions that are contributing to climate change.

Brownfields

Why it matters: Brownfields are abandoned or underutilized properties where expansion, redevelopment or reuse is complicated by the presence or potential presence of environmental contamination. Historically, New Hampshire was fortunate to have a large manufacturing base with textile, pulp and paper, leather tanning and metal finishing industries throughout the state. Unfortunately, the overall decline of manufacturing during the latter part of the 20th century left a legacy of abandoned and contaminated mill and industrial properties. The consequences have been blight, depressed property values, increasing numbers of tax-delinquent properties, and sites that potentially pose a risk to public health and the environment. NHDES estimates that there are more than 400 such sites within the state where the presence of hazardous substances or petroleum is serving as a barrier to redevelopment. The majority of these sites, which are propor-
tionately distributed among the urban and rural areas of our state, are located in or near town centers. In these locations, they have a maximum adverse impact on the local economy.

Progress in 30 years: New Hampshire's Brownfields Program was established in 1996 to encourage the voluntary investigation, cleanup and redevelopment of environmentally contaminated properties. NHDES' program is comprised of a Brownfields Covenant Program which provides liability protections for the voluntary cleanup of sites by persons who did not cause or contribute to the contamination; a Brownfields Assessment Program for providing site investigation and cleanup planning services for municipalities and non-profits; and a Brownfields Revolving Loan Fund, which provides low-interest loans to for-profit property owners and developers, and grants to municipalities and non-profits. Since its inception, 35 Covenants Not to Sue have been issued, environmental site assessments have been completed at over 50 properties, and funding has been provided for the completion of cleanups at 18 contaminated properties. As a result of these efforts, 34 of the properties have been deemed "ready for reuse."

Pollution Prevention

Why it matters: Pollution Prevention (P2), or source reduction, is the act of reducing or eliminating waste at the source instead of treating the waste after it has been generated. Reducing waste not only protects the environment and public health, but it also saves money. Businesses can realize significant cost savings by incorporating P2 techniques such as eliminating or reducing the use of toxic chemicals, reducing energy and water use, and looking at their processes to eliminate excess waste.

Progress in 30 years: Prior to the Pollution Prevention Act (P2 Act) of 1990, regulated industries were more concerned with treatment and disposal of wastes than trying to eliminate them upfront. The P2 Act was specifically designed to promote source reduction. The U.S. Environmental Protection Agency (USEPA) was tasked with carrying out this national priority and mandated to provide financial assistance to states to promote source reduction by businesses. Thus, the New Hampshire Pollution Prevention Program (NHPPP) was funded and established in 1991. In 1996, the state Legislature passed a bill officially recognizing P2 as the environmental policy of first choice and reaffirmed its commitment to source reduction. NHPPP has provided free, P2 strategies and nonregulatory compliance assistance to over 225 New Hampshire businesses and organizations, saving them nearly $5.5 million. Annually, NHPPP responds to over 200 information requests, conducts several P2 trainings and provides numerous individual site visits upon request. In 1993, the program partnered with the University of New Hampshire to create an internship program, which has placed 135 students in 75 facilities resulting in nearly $2 million savings for participating businesses. NRPPP has received several awards from USEPA for its work, and continues to provide New Hampshire businesses with opportunities to reduce their impact on public health and the environment, while increasing their collective bottom line.

Management of State-Owned Lakes

Why it matters: According to the New Hampshire Lake Association’s 2003 Phase II Report on the Economic Value of New Hampshire’s Surface Waters, New Hampshire’s lakes provide up to $1.5 billion annually of economic benefit to the state, and waterfront property owners pay nearly a quarter billion dollars annually in property taxes. Since the majority of New Hampshire’s surface waters are impounded by dams, the upkeep of these dams is important, not only to protect public safety and the environment, but also to maintain the substantial economic benefits they pro-
vide. The NHDES Dam Bureau also oversees the development of hydroelectric power generation at state-owned dams. This helps to expand New Hampshire’s clean renewable energy initiative.

**Progress in 30 years:** The Dam Bureau Construction Crew has repaired or reconstructed many of the 276 state-owned dams, some of which were built in the 1800s, to bring them up to modern dam safety standards so that they can continue to provide recreational opportunities and economic benefits to the state for many years to come. In addition, the Dam Bureau has modernized the operation of state-owned dams using the latest technologies. It has deployed electronic monitoring stations in river basins across the state in order to receive real-time data on lake levels, inflows into the lakes and flows in the rivers downstream. The data collected are automatically input into rainfall-runoff computer models developed by the Dam Bureau for the basins in which the state-owned dams are located. These models use forecasted rainfall from the National Weather Service, along with current soil moisture and vegetation conditions and snow melt projections, when appropriate, to forecast inflows into the lakes so that the dams can be more efficiently operated to protect public safety and maintain the public benefits provided by the lakes. Also, at some of the lakes that are prone to rapid rises in lake levels during storms, the Dam Bureau has installed automated dam gate control systems that can be remotely operated and allow for more rapid response to large flood events.

**Water Infrastructure**

*Why it matters:* Water infrastructure is critical and beneficial to New Hampshire’s economy and quality of life. Water infrastructure systems – such as drinking water, municipal wastewater and stormwater – benefit families, businesses and the environment by allowing clean water to be where it is needed, when it is needed. While most people take water infrastructure for granted, it is essential for public health and safety, and is one of the reasons that New Hampshire is a great place to live, work and visit.

**Progress in 30 years:** New Hampshire has over 700 community public water systems that are regulated under the state and federal Safe Drinking Water Acts, and there are nearly 100 regulated municipal wastewater systems that discharge treated wastewater to our state’s surface water and groundwater. Community growth, prosperity and a high quality of life over the past century were made possible by major investments in water infrastructure systems. Since 1997, NHDES has provided $272 million in loans to help NH communities build new or updated drinking water infrastructure through the Drinking Water State Revolving Fund. Likewise, NHDES has provided $845 million since 1989 for municipal wastewater infrastructure improvements through the Clean Water State Revolving Fund (CWSRF). Although over $1 billion has been invested via the SRF loan programs over the last 30 years, much of the state’s infrastructure is old, at capacity, or needs to modernize to meet new regulatory standards. According to a Joint Legislative Study Commission report issued in 2013, $2.9 billion is needed for upgrades and improvements to drinking water, wastewater, stormwater and dam infrastructure over the next decade. Since the commission’s report was issued, little has changed in terms of investment in water infrastructure needs in New Hampshire. Inadequate funding for water infrastructure poses the risk of reversing decades of progress in public health, environmental protection and economic growth. Sufficient investment is a win-win, supporting tourism and manufacturing while creating jobs for NH.
**Conant High School Takes Top Honors at 2017 NH Envirothon Competition**

The 2017 New Hampshire Envirothon competition saw 22 high school teams and one middle school team vie for this year’s top prize. The competition was held on May 23 and hosted by the New Hampshire Technical Institute in Concord.

The team from Conant High School, located in Jaffrey, emerged as the overall winner, while a team from Keene High School took second place, and a team from ConVal High School, located in Peterborough, earned third place honors.

As the 2017 winner, Conant High School will now represent New Hampshire at the North American Envirothon (with a theme of “Agricultural Soil and Water Conservation Stewardship”) to be held from July 23-29 at Mt. Saint Mary’s College in Emmittsburg, Maryland.

Teachers who are interested in coaching a team, professionals interested in volunteering their time, and anyone interested in providing financial support can contact the New Hampshire Envirothon Coordinator by email at nhenvirothon@gmail.com or by mail at New Hampshire Envirothon Coordinator, 1197 Route 12A, Surry, NH, 03431.

More information can be found online: http://nhenvirothon.org.

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**Collis Adams receives National Wetlands Award**

Collis Adams received the National Wetlands Award for State, Tribal, and Local Program Development from the Environmental Law Institute in May. Benita Best-Wong, the EPA Assistant Administrator for Water, made the presentation during ceremonies held at the US Botanic Gardens and on the plaza in front of the nation’s capital.
Fourth-graders impress with their Water Science Fair projects

Students from Keene, Manchester, Westmoreland, Marlborough, Surrey and Harrisville schools participated in the New Hampshire Fourth Grade Water Science Fair in May. Finalists brought their impressive water science projects to Keene to compete for top honors and presented their research in front of a panel of judges. Congratulations to Anna Dumond from Keene, who won first prize; Greyson Ansevin-Allen from Keene, who took second prize; Kyleigh Reiss from Manchester, who took third prize and Maia Chretien from Keene, who came in fourth place. Honorable Mentions go out to Oliver Villa from Manchester and Oriah Holmes and Claire Holmes from Keene. Trophies were donated by Hudson Trophy.

Over 330 students from those communities also participated in the 25th annual New Hampshire Fourth Grade Drinking Water Festival. Scientists, engineers, consultants, environmental educators, water operators and artists from a wide variety of organizations and agencies from across the state led hands-on activities to share their expertise with students. Students learned about ways to keep water clean, how to test water quality, how to conserve it, about aquatic insects and animals, and how climate change is affecting water systems. Students also voted on the best tasting drinking water from a variety of communities. Concord General Services won the coveted Best Tasting Drinking Water Award.

These events are sponsored by the New Hampshire Drinking Water Coalition to celebrate National Drinking Water Week and are supported by volunteers and donations from across the state.