

GOVERNOR'S COLUMN

New Environmental Legislation

Continuing her efforts to protect New Hampshire's natural resources, Governor Maggie Hassan signed into law three critical pieces of environmental legislation at a ceremony at the Seacoast Science Center in Rye on August 21.

"From the noble mountains that tower over the North Country to our beautiful lakes and rivers and the sandy beaches along our Seacoast, our natural resources are integral to the quality of our daily lives as well as the strength of our economy," Gov. Hassan said. "It is critical that we protect them for generations to come."

The three bills – Senate Bill 163, Senate Bill 164 and House Bill 393, improve the management of New Hampshire's waterways, address sea-level rise and protect Great Bay and other fragile estuaries.

Sen. Nancy Stiles (R, Hampton) co-sponsored all three.

SB 163 establishes a coastal risk and hazards commission that will help the State prepare for projected sea-level rise and recommend smarter, more innovative ways to make New Hampshire's communities resilient to the increasing number of severe weather events. SB 164 authorizes local planning boards to include coastal management provisions in their master plans. The bills' co-sponsors included Sen. David Watters (D, Dover).

"We must look for smarter, more innovative ways to make our communities resilient so that we can weather storms, protect property and natural resources and reduce the economic harm that could result from sea-level rise," Hassan said.

HB 393 helps reduce the amount of nitrogen and phosphorous allowed in turf fertilizers sold in retail outlets. Co-Sponsored by Rep. Adam Schroadter (R, Newcastle), HB 393 will help mitigate the degradation of the New Hampshire's precious waterways. When she signed the bill, Gov. Hassan spoke specifically about Great Bay.

"Because it's such a special place, we all know we have to protect it from the kind of pollutants we're seeing," she said. ■



COMMISSIONER'S COLUMN

Restoring the State Aid Grants Program

In June, with the enactment of the State Budget for Fiscal Years 2014 and 2015, Governor Maggie Hassan and the General Court restored funding for state aid grants for wastewater projects, drinking water projects and land-fill closures to support project funding that had been delayed for a number of years. This resulted in the restoration of funding for 127 projects from about 50 municipalities, thus making projects that have already been constructed more affordable for these communities. Some of these grants had been delayed for almost five years, since November 2008, due to state funding shortfalls caused by the recession. Restoration of this funding was the result of very hard work by many municipal officials, the New Hampshire Municipal Association, and a bipartisan group of legislators to inform elected state officials of the importance of the funding.

The State Aid Grant (SAG) program provides grants of 20 to 30 percent of eligible project costs to help communities offset the cost of expensive infrastructure projects. The grant payments are tied to the debt service payments for the projects, and most projects opt for a 20-year finance period. These projects not only benefit the local community by providing infrastructure essential for public health and the environment, they benefit the overall state environment and economy by contributing to the clean waters that

Commissioner's Column *continued from page 1*

attract thousands of recreational tourists to New Hampshire to visit, play, dine and shop.

New Hampshire has a tremendous need for water infrastructure replacement, repair and expansion over the next 10 to 20 years. In fact, it is estimated that the total need is on the order of at least \$2.9 billion for upgrades to water supply, wastewater, stormwater and dams primarily owned and operated by local governments. This need is generally caused by aging infrastructure, capacity attainment due to growth, and federal regulatory requirements. The affordability of these necessary upgrades is a major concern for New Hampshire's municipalities. This challenge is one of several key issues identified by the Water Sustainability Commission in its final report, issued in December 2012 (<http://www.nh.gov/water-sustainability/publications/documents/wsc-final-report.pdf>).

To help address the funding issue going forward, Governor Hassan and the General Court also continued authorization of the Commission to Study Water Infrastructure Sustainability. This commission has scheduled nine meetings this fall to complete its work in time to deliver a final report by November 1, 2013. I am optimistic that this report will present a framework for a long-term sustainable state funding strategy for New Hampshire's water infrastructure.

In 1959, Governor Wesley Powell and the New Hampshire General Court enacted the first state budget that included authorization of state aid grants to municipalities for water pollution control projects. In those early years, these grants not only made municipal wastewater treatment projects more affordable, but also spurred the initial phase of the clean up of our rivers, lakes and estuaries that continues today. Who then would have imagined that, 54 years later, this program would still exist and would still be playing such a vital role in the restoration of New Hampshire's environment and improvement of our drinking water supplies? This continues to be one of the most successful environmental restoration and public health protection programs in New Hampshire's history. I look forward to a bright future for this program that provides financial support for the water infrastructure that is essential to the future of New Hampshire's economy, environment and the public health of our citizens. ■



Manchester Wastewater Treatment Facility

In Memory of Ira Leighton

Ira Leighton, Deputy Regional Administrator of U.S. EPA Region 1, passed away unexpectedly on July 26, 2013.

Leighton will be greatly missed at NHDES and throughout New England. His positive impact will not be forgotten, as he served the environment and the people of New England for 41 years as a U.S. Environmental Protection Agency employee and senior leader.

"New England and the American people lost a truly exceptional public servant," said Curt Spalding, EPA Region 1 Administrator.

Leighton started his career with EPA in 1972 as an engineer. Working on contaminated site cleanups in the 1970s and 80s, he was crucial in shaping EPA's program in New England when the Superfund law was passed in 1980.

He supervised EPA's efforts to implement environmental law in New England in the 90s and made sure corporations and communities understood their environmental responsibilities. He spent the latter part of this career overseeing environmental programs in New England.

Leighton valued his role in protecting health and the environment and never forgot its importance.

Spalding reminds us to not let Leighton's accomplishments overshadow his character, noting, "He was smart, hard-working, humble, honest and cared deeply not only for his own family, but also for the people around him. He became personal friends with those he was around. He was simply a terrific person." ■

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29 Hazen Drive • Concord, NH 03301
603-271-3503
www.des.nh.gov
editor@des.nh.gov
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NASCAR – Environmental Impact

By Danielle Walczak

An estimated 28 percent of Americans (67 million people) are fans of NASCAR. Each week during the season, thousands travel to watch their favorite drivers circle the track at white-knuckle speeds. The cars only get four or five miles per gallon and use 450,000 gallons of race fuel a year, so one might think there could be nothing “green” about the sport. Yet with such a massive fan base (second in the nation only to football), NASCAR has become a platform to not only promote green practices but instill them in their fans.

NASCAR Green began in 2008 and has since grown with an onslaught of green initiatives including the world’s largest solar powered facility, the capture of 100 percent of emissions produced by on-track racing, and the introduction of biofuels. In its comprehensive approach to saving the environment, NASCAR is shaping up to silence critics.

When NASCAR and EPA signed a memorandum of understanding in 2012, the two groups pledged to meet a shared goal of promoting protecting the environment within the racing industry while generating greater environmental awareness among fans.

Many still questioned the investment NASCAR fans would have in environmental issues. Michael Lynch, the Director of Green Innovation at NASCAR Green sees progress. According to the New York Times, “The incongruity is part of what makes going green in this sport so impactful,” he said in 2011.

Before NASCAR Green began, fans were polled to be “as likely” as non-fans to describe their homes as “very green.” Now, they are 50 percent more likely than non-fans to describe their homes as such, and avid fans are 70 percent more likely.

One of the greatest areas of education for NASCAR is recycling at racing events. On any given weekend race, 75-100 tons of recyclables are processed in nearby facilities. NASCAR is also recycling car-based materials such as used fuels, lubricants, oil rags and used tires.

Critics still ask how a sport that burns gasoline at its core is green. In 2011, NASCAR adopted Sunoco Green E15 ethanol blend as its official fuel, reducing greenhouse gas emissions by 20 percent compared to unleaded gas.

It is still estimated that NASCAR releases four million pounds of carbon dioxide into the environment annually. So, as part of the Green Clean Air Tree Planting Program, 8,000 one- to three-foot tall trees will be planted in protected areas – enough to capture twice the carbon emissions of all races (including practice, competitions and qualifying) in a given season.

Individual tracks are also taking action. Ponoco Raceway in



PHOTO: DOUGLAS F. MURRAY

Professional driver and environmental activist Leilani Münter filmed a “Pick 5 for the Environment” public service announcement for the Environmental Protection Agency in 2011.

Long Pond, Pennsylvania built a 40,000-panel solar farm near its track that produces twice as much energy as the facility needs, saving \$500,000 in energy costs and 324,000 gallons of gas a year.

NASCAR recognizes that the core of its sport is not green – but it hopes to save money and promote green initiatives by improving its environmental impact. ■



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Hiking and Learning Go Hand-in-Hand

In 2010, NHDES concluded a major renovation to the Air Monitoring Station in Miller State Park on the summit of Pack Monadnock Mountain. Because Pack Monadnock is such a popular place to hike, it presents an excellent opportunity for NHDES to educate hikers about air pollution and show real-time data from the summit. At the top of the mountain, hikers can now view educational message boards and real-time pollution and meteorological information. Because of its 2,290-foot elevation, this air monitoring station is especially important for measuring the “transport” of air pollution into New Hampshire from sources to the south or southwest. On clear days, views reach to Mount Washington, the skyscrapers of Boston, and the Green Mountains of Vermont.



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NHDES updated the monitoring station as part of a multi-pollutant network called NCore. This network is made up of 80 sites across the country including both urban and rural locations. The NCore network supports long-term health assessments of air pollution. To meet the new monitoring needs, NHDES modified the state police building at the base of the fire tower on Pack Monadnock Mountain.

NHDES has had an Air Pollution Monitoring station on the summit since 2002 to monitor criteria air pollutants including ozone, small particle pollution, sulfur dioxide, nitrogen oxides and carbon monoxide. NHDES also records meteorological conditions including outside temperature, wind speed, wind direction, barometric pressure, relative humidity and rainfall.

Miller State Park in Peterborough, home to Pack Monadnock Mountain, is the oldest state park in New Hampshire. There are two trails up Pack Monadnock that start from the Route 101 parking area. The Wapack Trail and the Marion Davis Trail are each only 1.4 miles to the summit. A winding 1.3-mile paved road also leads to the scenic summit and is open for visitors to drive in summer and on spring and fall weekends.

Also located on the summit are a fire tower and a hawk migration viewing area. Pack Monadnock is a great place to take a

family hike, learn about air pollution, view hawk migration, and take in some great scenery. For more information on Miller State Park, go to <http://www.nhstateparks.org/explore/state-parks/miller-state-park.aspx>. ■

Exemption for Municipal Transfer Stations to Burn C&D Continues

In 2007, the New Hampshire legislature enacted a ban on burning the wood component of construction and demolition debris (C&D) or any mixture or derivation of C&D.* The ban included even the clean, untreated wood component of C&D. The legislation included an exemption from the ban to allow the “incidental combustion” of untreated wood at municipal transfer stations under certain conditions. The legislation also included a prospective repeal of the exemption, such that untreated wood could no longer be burned at municipal transfer stations as of January 1, 2011.

In 2010, the repeal of the exemption was postponed to January 1, 2014.*

In 2013, the repeal of the exemption was itself repealed.*

The bottom line is that municipal transfer stations can continue to burn untreated wood in accordance with the statutory conditions.

*Sources: 2007,128:1, codified as RSA 125-C:10-c; 2010, 156:1; 2013, 52:1; 2013, 158:1 ■

2013 Coastal Cleanup

Join volunteers on Saturday, September 21, 2013 for the 27th annual International Coastal Cleanup (ICC) Day and make a difference cleaning up New Hampshire's beaches. ICC Day is the largest volunteer event of its kind, where people from all over the world clean up their local waterways on the same day. Here in New Hampshire, volunteers are needed to help pick up trash on approximately 30 sites along our seacoast and Great Bay. Cleanup hours are 10 AM-2 PM, but this may vary by site. The Blue Ocean Society for Marine Conservation was awarded a grant from the NHDES Coastal Program to coordinate the event in New Hampshire. To participate, contact the Blue Ocean Society at (603) 431-0260 or e-mail coastalcleanup@blueoceansociety.org. For more information, visit http://www.blueoceansociety.org/Research/coastal_cleanup.html.



Last year's cleanup in New Hampshire was a great success, with more than 907 volunteers collecting 41,401 pieces of debris, which amounted to 2,690 pounds of trash. The number one item collected was cigarette butts, of which more than 24,000 were collected.

Cleanups help marine wildlife by removing items such as fishing line, nets, plastic bags, balloons, ribbon and six-pack holders, which are dangerous and potentially fatal to birds, fish and marine mammals who mistake it for food or get caught in it. ■

Gina McCarthy New EPA Administrator

The U.S. Senate confirmed Gina McCarthy as the Environmental Protection Agency's new administrator on July 15 by a 59 to 40 vote.

"Climate Change will not be resolved overnight," the Boston native said in a speech given at Harvard Law School a few weeks after her confirmation. "But it will be engaged over the next three years. That I can promise you."

With 30 years of experience, McCarthy will manage the development of regulations designed to cut carbon dioxide emissions from existing power plants as outlined by President Obama in his recent speech on climate change.

"Environmental cleanup efforts have already produced economic benefits in the U.S.," McCarthy said in the same speech.

McCarthy's experience with environmental protection is robust – landing her the position she calls the "honor of a lifetime," according to the Washington Post.

In 2009, President Obama appointed McCarthy as the Assistant Administrator for EPA's Office of Air and Radiation.

McCarthy served as the Commissioner of the Connecticut Department of Environmental Protection and has worked at state and local levels on important environmental issues. She has also organized policies on economic growth, energy, transportation and the environment. ■



What's This Sludge?

An observant landowner's suspicions were raised when he noticed what appeared to be a layer of oil in a nearby swamp. The information was passed along to NHDES emergency responders. What this landowner didn't know is that it could be iron oxidizing bacteria (IOB), a naturally-occurring bacteria found throughout New Hampshire. Further investigation confirmed this to be the case. IOB is an overgrowth of bacteria in standing water that is low in oxygen. As they feed on dissolved ferrous iron in the water, insoluble ferrous

personnel report that you can easily distinguish between petroleum products and bacteria by poking a stick into the sheen. If the sheen joins back together, it's petroleum. If the sheen is bacteria, it stays apart in clumps.

Should the public be alarmed? Although the most common appearances are in standing waters, it has also been found in drinking water wells. No health risks exist, but buildup can clog equipment and affect the yield of a well. Management in those cases can vary from physical removal to chemical



Photo 1: Oil Slick



Photo 2: Iron Oxidizing Bacteria

iron is produced. The result is a rust-colored material which is very similar in appearance to spilled oil. Photos 1 and 2 show the remarkable similarities between the bacteria and an oil spill.

Iron oxidizing bacteria creates a rust-colored slime beneath the water with a rainbow sheen upon the surface. Often, it will smell similar to sewage, rotten vegetation or petroleum. There is, however, a simple test to tell them apart. Field

treatments and pasteurization techniques. Preventative measures are encouraged when the well is repaired to ensure the system remains water tight and disinfected.

NHDES hopes this information will enable individuals to check for IOB before calling emergency response personnel. But it never hurts to ask a question, especially when you are uncertain. ■

Regional Planning Commission Workshops

Water quality, salvage yards, septic systems, solid waste, air quality, sludge, drinking water and our changing climate – these are just some of the topics that experts from NHDES discussed with Regional Planning Commission (RPC) staff in a series of workshops held in July and August. NHDES staff shared data, identified continuing and emerging challenges, and highlighted actions to consider for supporting A Granite State Future, a statewide project by the RPCs to prepare new regional plans (see www.granitestatefuture.org). Some highlights from these sessions include:

Adapting to N.H.'s Changing Climate: N.H. is seeing bigger storms, extreme weather events and increased temperatures – the effects of a changing climate. We can adapt, with new policies, technologies and behaviors, as we have before, to address large-scale environmental concerns such as acid rain, smog and depletion of the ozone layer. Encourage communities to use existing planning tools (such as master plans, emergency preparedness plans, zoning & regulations) and take deliberate steps to build climate-resilient communities. Consider changing environmental conditions within each topic area covered in local and regional plans.

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“I Will Act” on Climate Change Bus Tour

On August 14, more than 50 people came to South Mill Playground in Portsmouth, N.H., where local elected officials joined with advocates of climate science and environmental protection to show actions being taken by the city to address climate change and protect the city from its worst effects. Particularly important in coastal communities like Portsmouth, the event’s sponsor, the Union of Concerned Scientists, also released a report detailing the growing insurance costs associated with damages due to climate change-fueled extreme weather. To see the report go to: http://www.ucsusa.org/global_warming/science_and_impacts/impacts/flood-insurance-sea-level-rise.html.

Senator Martha Fuller Clark kicked off the press event, applauding the President’s climate action plan and saying she was “proud,” and challenging local governments to work with their federal counterparts to address climate change.

Following the press event, local leaders took attendees on a walking tour, highlighting several LEED certified buildings. These efforts don’t just benefit the buildings’ occupants, they are also job creators, as Regional EPA Director Curt Spalding noted in his remarks. “Transition can be an opportunity for our economy,” he said after receiving a pair of hip boots from event organizers, signifying their necessity as sea levels rise.

The “I Will Act” Bus arrived in Concord that afternoon and was greeted by a number of elected officials and concerned

citizens. Speakers at the Legislative Office Building included Eric Orff from the National Wildlife Federation. Orff spoke about our moose population and how it is declining due to warmer weather and an abundance of winter ticks. An EPA official and a local business specializing in alternative fuel automobiles highlighted the opportunities that exist through technology and policy changes which can decrease our contribution to a changing climate. ■



Peter Britz, Portsmouth’s Environmental Planner, uses sea level rise maps to illustrate which areas will be impacted.

RPC Workshops *Continued from page 6*

Solid Waste Management: The state is below its goal of 40 percent diversion of waste from landfills and incineration by 2000 – some states have diversion rates as high as 60 percent! N.H. can do better and increase its rate of recycling and composting.

Water Quality: Stormwater runoff continues to be the most significant contributor to our water quality concerns in N.H., resulting in erosion, damage to infrastructure, and too much pollution in our waters. All development projects – new, old, big and small – must do their part to better manage stormwater and protect water quality. Better management of other sources, such as septic systems, is also being evaluated. Our existing state regulatory approaches are not enough: community-based action is essential.

Drinking Water & Wastewater Infrastructure: Very significant investment is needed to maintain and protect our drinking water and wastewater infrastructure – to replace aging systems, eliminate excessive infiltration (which increases flooding risks and treatment costs), and reduce the risk of damage from major flooding events. An Asset Management Planning approach can help municipalities and regions to identify and prioritize their needs, budget and plan to maintain these vital systems.

Special thanks to participating NHDES staff: Chris Skoglund, Becky Ohler, Sherry Godlewski, Tara Albert, Paul Gildersleeve, Ted Diers, Ken Edwardson, Eric Williams, Jillian McCarthy, Sally Soule, Barbara McMillan, Sharon Rivard, Brandon Kernen, Paul Susca, Pierce Rigrod, Rick Skarinka, Lori Sommer, Rob Tardif, Mike Rainey, Ray Gordon, and Carolyn Russell ■

Tales From the Field: Crack, Boom, Drip

Ever wonder if your home heating oil tank is supposed to be half-way through the floor? Here's a hint: it was not originally installed that way. Returning home from a two-week vacation, the owner of a home in Tamworth discovered that the home's 275 gallon heating oil tank had fallen through the rotted wood floor of his single-family residence into the crawl space below. Mid-evening on July 18, 2013, he called the State Police Dispatch which requested NHDES Spill Response and Complaint Investigation Section (SRCIS) to call Irving Oil. Investigation showed that at least 150 gallons had been released into the environment. At the time of the response, an Irving technician was on-site and reported that most of the oil remained within the crawl space area. Since it was an old release, Ray Reimold from SRCIS met with the homeowner the following morning, and advised him to contact the Tamworth Fire Department.



Upon further investigation of the site on Friday, July 19, the oil was observed to have traveled a considerable distance. The woods behind the home were impacted due to a drain in the crawl space. Unfortunately, heavy rains had facilitated the flow, carrying the release nearly 100 yards from the residence. Reimold placed sorbent pads on the free product throughout the woods to begin the cleanup process.

If a release such as this is reported, it starts the On Premise Use Facility (OPUF) process, under which an owner may be eligible for State funding if insurance does not pay response and remediation costs. Reimold explained the OPUF process to the homeowner who then contacted Clean Harbors, an environmental spill cleanup contractor. The Clean Harbors crew responded to remove the free product, impacted soil and debris. As of today, most of the oil has been removed and the site is being monitored by NHDES. ■

New Bus Service from Concord to Manchester

The Manchester Transit Authority (MTA) launched the Concord Express Bus and offers passengers direct bus service from Concord to the Manchester-Boston Regional Airport and Downtown Manchester.

Service operates Monday through Friday with the first departure from Concord at 3:55 AM and the last bus leaving the Airport at 12:15 AM. This allows passengers arriving or departing between those hours to use the bus system. Fares are \$4.00 per person and \$2.00 for seniors, 65 and older.

MTA has implemented this service for an initial one-year period while a demand study is performed by the Regional Planning Commissions to address long-term solutions for meeting transportation demands in the corridor.

For more information on the Concord Express, call 603-623-8801 or visit www.mtabus.org.



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