

ENVIRONMENTAL NEWS



Newsletter of the N.H. Department of Environmental Services

September/October 2008

Governor's Message

As our state continues to grow, we must ensure we have a strong and diverse transportation infrastructure in place. This not only includes quality roads and bridges, but also alternative forms of public transportation such as buses and rail.

Re-establishing rail in New Hampshire is critical to our future economic growth as a state. It will help reduce congestion on our roads, which is essential to improving public safety and reducing air pollution. It will help improve the quality of life of our citizens here in New Hampshire and the quality of life, and transportation networks, of our entire region.



Governor Lynch

Since becoming Governor, I have made the re-establishment of commuter rail a priority. I established a passenger rail working group to plan for the development of rail service in New Hampshire, which outlined the steps that need to be taken to implement rail service.

Last year, we took the first important step forward in the effort to bring commuter rail back to this state by creating the New Hampshire Rail Transit Authority, which is charged with overseeing the operations of commuter rail service in New Hampshire.

The creation of a rail authority is

Governor, *continued on page 8*

Making childcare centers safer, healthier

DES partners with DHHS and UNH on new project

What could be more important for a childcare center than knowing that it provides a safe and healthy environment for its children? With more than 1,140 licensed childcare programs serving over 40,000 children across New Hampshire, the DES Environmental Health Program often receives inquiries from parents and childcare providers alike about how to be sure that their childcare environment is safe and healthy.

Last year DES met with the NH Department of Health and Human Services Healthy Child Care Program and Bureau of Child Care Licensing to see what could be done collaboratively to help childcare providers ensure safe and healthy childcare environments.

The group determined that childcare providers would benefit from a comprehensive self-assessment checklist that covers both regulatory requirements and best management



practices for assuring and maintaining healthy childcare environments.

DES then worked with a team of Childcare, *continued on page 2*

Commissioner's Column

Saving energy is everyone's business

With energy prices recently hitting record highs, using energy wisely is of utmost importance to all of us now more than ever. Additionally, the environmental consequences of energy use are significant. Energy use – specifically the burning of fossil fuels for electricity, transportation, and heating and cooling – accounts for the vast majority of global warming carbon emissions. By using energy wisely and reducing the amount of fuel burned, towns and cities throughout New Hampshire can lower their taxes and reduce their carbon footprints.

Many New Hampshire municipalities have taken the first step in addressing energy use by forming energy committees. If your town hasn't formed a committee yet, I strongly encourage you to push your local officials to do so. This will provide a vehicle for accessing resources, measuring your current carbon

Commissioner, *continued on page 2*

Simple and affordable things anyone can do!

Explore ways to save energy and improve the environment by taking simple steps around your home, such as:

- ✓ **Install** a programmable thermostat that can be adjusted to the temperature according to your schedule.
- ✓ **Insulate** heating ducts in unheated areas such as attics and crawl-spaces.
- ✓ **Wash** only full loads of dishes and clothes.
- ✓ **Take** short showers instead of baths.
- ✓ **Insulate** your hot water heater and hot water pipes to prevent heat loss.
- ✓ **Lower** the thermostat on your water heater by 10°F to save between 3 percent and 5 percent in energy costs. Most households only require a water heater thermostat setting of 120°F, or even 115°F.

More info can be found at these websites:

www.nh.gov/oep
www.staywarmnh.org
www.nhsaves.com

Commissioner

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emissions, and evaluating strategies for reducing energy use.

A good place for any municipality or energy committee to start is with EPA New England's Community Energy Challenge. DES has teamed up with EPA to promote this municipal energy efficiency program to help your city or town cut energy waste in municipal buildings, schools, and wastewater treatment facilities. Towns that take the Challenge agree to assess – or benchmark – the energy performance in all buildings, set reduction goals of 10 percent or more, and promote energy efficiency and renewables to individuals, businesses and organizations within their communities. EPA in turn provides free training and technical assistance on Energy Star tools to help analyze building energy use and identify areas for improvements. Over 30 New Hampshire communities have already joined EPA's Community Challenge.

Individual actions are just as important as governmental actions and I urge everyone in New Hampshire to find ways to reduce energy use, save money, and ultimately reduce your family's carbon footprint. With roughly half of the greenhouse gas emissions coming from households, your family really can make a difference. Simple energy saving actions such as cleaning or replacing filters on furnaces, insulating hot water heaters and hot water pipes, and lowering the thermostat setting, especially when everyone is asleep or away from home, can add up to big savings in money and carbon emissions.

The New Hampshire Carbon Challenge, a UNH initiative, is a fun way to engage your family in calculating your carbon emissions and devising a strategy for reducing emissions by just 10,000 pounds. Please check out the website at carbonchallenge.sr.unh.edu and join me and my family in taking the challenge today!

Tom Burack, *Commissioner*

Childcare

continued from page 1

three graduate students from the Master of Public Health Program at UNH-Manchester to assist in developing the checklist as part of their Integrating Seminar capstone project. They created an easy-to-use self-assessment checklist of 130 specific requirements and evidence-based best practices that can be used by all childcare providers to help assure safe and healthy conditions. The NH Bureau of Child Care Licensing now plans to incorporate the checklist as part of their *Child Care Program Rules Guidebook*.



DES is pleased to be part of this successful collaborative effort, and plans to continue our cooperative relationships. For information on the self-assessment checklist, please contact Jessica Morton, DES Environmental Health Program, at (603) 271-3911, or Denise Corvino, DHHS Bureau of Child Care Licensing, at (603) 271-4590. ■

ENVIRONMENTAL NEWS



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FEMA issues final report: independent evaluation of flooding events in New Hampshire

The Federal Emergency Management Agency issued its final report on the Independent Evaluation of Recent Flooding in New Hampshire. The evaluation was performed to determine the specific causes of floods of May 2006 and April 2007 in New Hampshire and provide recommendations for improving water management procedures and dam operations to reduce the impacts from future flooding. The evaluation was requested by Gov. Lynch following the floods that devastated Southern New Hampshire in 2007.

DES Commissioner Tom Burack noted, "This report will provide DES with invaluable information as we continue to improve our emergency preparedness and management processes. DES has already begun to act upon many of the recommendations put forward in the report."

The evaluation found that the causes of the flooding in May 2006 and April 2007 were different for the two events. The May event was unusual because of the sheer volume of rainfall, which ranged from 6 inches inland to over 14 inches along the seacoast over a two-day period. The region normally receives only about 3.5 inches of rainfall in



Machinery buried in sand in the aftermath of the Suncook River flood.

an average spring month. The April 2007 event was extraordinary because of the combination of heavy rainfall, which ranged from 4 to 8 inches across south central and southeastern New Hampshire, and rapidly melting snow. The runoff produced during these events overwhelmed the region's rivers and streams, and inundated the region's floodplains. The evaluation found that the high runoff also lessened the effect of operations performed at dams in the region. All but the largest lakes in the upper reaches of the rivers filled rapidly and passed all inflows downstream.

The evaluation recommended several actions to mitigate future flood damages, including: improved floodplain management; improved flood forecasting; and a watershed approach to flood operations. These recommendations are based on the findings that:

- Flood events as large as and larger than the May 2006



During the May 2006 rain event, the Suncook River breached a glacial ridge at the southwestern corner of this gravel pit, initiating rapid formation of the new channel through easily eroded glacial lake and wetland sediments.

and April 2007 floods are likely to happen in the future. Communities and the State should plan accordingly.

- Many of the floodplains adjacent to the rivers and streams in the region are still relatively undeveloped. Building in these floodplains will subject the structures to flood risk and will increase the flood elevations and flow rates elsewhere, and should be discouraged. Sound floodplain management, based on accurate information about the floodplains, is critical to reducing the effects of future floods.
- Flood forecasting, while not always sufficiently accurate, should be used as a tool to help decisionmakers take appropriate actions during flood events.
- Storing waters in the region's lakes, ponds, and reservoirs, and coordinated dam operations help reduce flooding. However, storage opportunities in south central and southeastern New Hampshire are highly limited, and the effect of improved dam operations will be relatively minor. Implementing flood management recommendations can reduce local flooding, but cannot prevent widespread flooding from events like the May 2006 and the April 2007 events.

A complete copy of the report, including appendices, is available at www.des.nh.gov/dam/floods.htm. For more information, please contact Jim Gallagher, DES Dam Bureau, at (603) 271-1961. ■

Where there's water, there's a mosquito (or two, or ...)

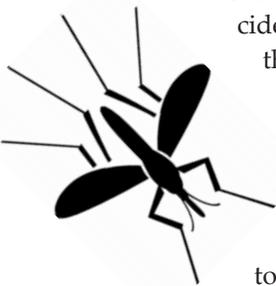
by Laura Harty, Public Information and Permitting Intern

Washed out vacations aren't the only downside to all the rain this summer. Experts have warned that the increase in moisture may also bring a dramatic increase in mosquitoes. In New Hampshire there are 47 different species of mosquitoes, some of which can carry and spread Eastern equine encephalitis and West Nile virus, two serious and sometimes deadly diseases.

The NH Department of Health and Human Services administers a mosquito surveillance program from June 1 to October 31. If an increased threat of disease is discovered during this time, targeted control of mosquitoes may be selected to reduce human health risk. This often means pesticide spraying.

While protecting the health of residents is a top priority, many people are concerned that this type of pest control can pose a threat to local water quality.

New Hampshire has strict regulatory safeguards for pesticide spraying. All pesticides used must be included on a list that has been approved by the EPA. A special permit must then be issued by the NH Division of Pesticide Control in the NH Department of Agriculture, Markets and Food.



The DHHS mosquito control fact sheet states that there are two primary methods used to control mosquitoes: larvicides, which are applied to mosquito breeding areas, and "adulticides," which are pesticides used to eliminate large numbers of adult mosquitoes.

The predatory bacteria and chemicals in larvicides prevent the mosquito larvae from developing to adulthood. Larvicides are not applied in areas accessible by the general public, nor are they applied to areas that drain into waters consumed by the public. The bacteria in these products are short-lived and do not pose a threat to aquatic life. They are also biodegradable and do not remain in the environment.

Adulticides have a low persistence in the environment and break down quickly. They bind to soils and are not expected to contaminate groundwater. There are limits to where these pesticides can be sprayed. The chemicals in these pesticides can be harmful to fish and other aquatic life, therefore spraying bodies of water is prohibited. It is also unlawful to spray near any organic farms or private properties of those who have contacted community officials with a request not to have their property sprayed.

There are also policy provisions that must be followed. State land management agencies are required to promote primary mosquito prevention methods through on-site education and outreach. It is important the public be aware of ways to reduce their risk of exposure to EEE and West Nile virus. Dressing appropriately in areas where mosquitoes breed, using an insect repellent as directed by its manufacturer, and reducing amounts of standing waters in backyards could not only decrease the risk for disease, it could potentially decrease the amount of pesticides sprayed. ■

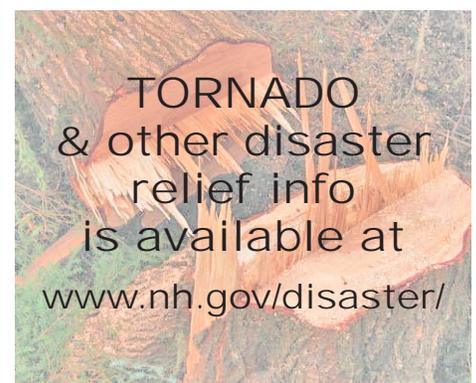
Youngsters! Win a trip to D.C. Enter the 2009 National Radon Poster Contest

The NH Radon Program is coordinating this year's State Radon Poster Contest in partnership with the National Safety Council and the EPA.

The Radon Program is encouraging young artists ages 9-14 to participate in the poster contest. The contest highlights the risks posed by indoor exposure to radon. Entrants to the contest will help educate the public about radon, which the US Surgeon General has warned is the second leading cause of lung cancer after cigarette smoking and the number one cause of lung cancer in non-smokers.

The entries for the national contest will come from State Radon Contest winners from across the country. The winner of the National Poster Contest, along with a parent and sponsor, will receive an all-expense paid trip to Washington, DC to attend the national award ceremony.

The deadline for submitting posters is October 15, 2008. Contact Owen David at (603) 271-6845 for information about the contest or to get a poster submission form. For more information, see www.nsc.org/resources/issues/radon/radon_poster.aspx. ■





The Municipal EcoLink

An e-bulletin from the
NH Department of Environmental Services

Do you represent a municipality or local government entity? DES recently launched *Municipal EcoLink*, a monthly e-bulletin designed to inform you of the latest environmental ideas, trends, grants, rules and more from Environmental Services. To subscribe, please go to www.des.nh.gov/enews/ and choose Municipal EcoLink.

Right-to-know law revised

Through the efforts of many people over several years, the statute that governs the records and proceedings of state and local government has been clarified and brought into the electronic age. Laws of 2008, Chapter 303 (HB 1408), makes several important improvements to RSA 91-A, commonly known as the “right-to-know” law. Some of the changes that more directly affect DES and its stakeholders are as follows.

- “Public records” are now “governmental records” to reduce confusion about some of those records being confidential, or non-public.
- A “public body” has been distinguished from a “public agency” and the term “meeting” has been defined as applying only to a public body, to clarify that the provisions regarding access to meetings do not apply to the internal day-to-day workings of an agency.
- A governmental record in electronic form is no longer subject to disclosure pursuant to the law after it has been initially and legally deleted. (An electronic record is “deleted” only if it is no longer readily accessible to the public body or agency itself.)
- The statute now expresses the principle, previously established by the New Hampshire Supreme Court in case law, that a public body or agency is not required to compile, cross-reference, or assemble information into a form in which the body or agency does not already keep or report it.
- Any public body or agency that maintains governmental records in electronic format may, in lieu of providing original records, copy the requested records to electronic media so long as no confidential information is revealed.

For the full text of RSA 91-A, please see www.gencourt.state.nh.us/rsa/html/NHTOC/NHTOC-VI-91-A.htm. ■

Dog poop tidbits

Did you know ...

- 1 gram of dog waste contains 23 million fecal coliform bacteria. (www.stormwatercenter.net)
- 95 percent of fecal coliform found in urban stormwater was of non-human origin. (USEPA, 1993)
- Four in ten households include at least one dog. (American Pet Products Manufacturers Association)
- Americans owned 68 million dogs in 2000. (American Pet Products Manufacturers Association)
- Over 40 percent of American dog owners don't pick up after their dog. (USAToday.com – Center for Watershed Protection)
- Women are more likely to pick up after their dog than men. (USAToday.com)
- Dog waste is not fertilizer. Pet waste causes the same nitrogen related problems as fertilizer and livestock manure. (Snohomish County, Washington Public Works Notice)
- It has been estimated that for watersheds of up to 20 square miles draining to small coastal bays, two to three days of droppings from a population of about 100 dogs would contribute enough bacteria and nutrients to temporarily close a bay to swimming and shellfishing. (USEPA,1993)
- Dogs can also be significant hosts of both giardia and salmonella. (Pitt, 1998)

For information on creating a pet waste cleanup campaign in your neighborhood, please go to www.des.nh.gov/Coastal/scoopthepoop.htm. ■



Flushed with excitement, DES makes water efficiency upgrades

DES recently finished a complete retrofit of four first-floor bathrooms to replace water-wasting fixtures with high efficiency models. The project was funded through the Department of Administrative Services using capital funds to facilitate energy upgrades within state owned buildings.

Fourteen 3.5-gallon per flush (gpf) toilets were replaced with high efficiency 1.28 gpf models, as well as two 1.5 gpf urinals with waterless models, and 16 2.2-gallon per minute (gpm) faucets with 0.5 gpm solar powered sensor faucets. The first floor bathrooms were chosen as they are used by the public during meetings and would generate the most immediate payback. Increased visibility of water



The first floor bathrooms at DES were retrofitted with high efficiency, water saving faucets, toilets and urinals. The pilot project will serve as a model for the remaining bathrooms at DES and other state agencies. The Syvertsen Corporation replaced the fixtures.

efficiency will also serve as a tool to promote water conservation awareness to visitors and staff alike.

The project will serve as a pilot for considering other water efficiency measures in the remainder of the building, as well as for other state agencies. DES anticipates saving close to 500,000 gallons of water annually with a projected payback period of approximately five years. Office buildings, especially those constructed prior to the 1992 federal Energy Policy Act, can realize immediate savings at relatively low cost through retrofitting older fixtures with high efficiency models.

For more information about this project, contact Derek Bennett, DES, at (603) 271-6685 or derek.bennett@des.nh.gov. To learn more about water conservation in general, contact Derek or go to www.des.nh.gov/h2o_conservation.htm. ■

Hampton Beach ranks near top for cleanest beach in national survey

According to the 18th annual beach water quality report released recently by the Natural Resources Defense Council, Hampton Beach was ranked one of the cleanest vacation beaches in the nation.

The report attributes New Hampshire's beach cleanliness to the various DES inspection and monitoring programs that aggressively monitor bacteria levels at the state's coastal beaches, and encourage public awareness and participation in keeping the beaches clean.

Nationwide, however, America's beaches did not receive as positive ratings as New Hampshire's. Using data from the US Environmental Protection Agency, the report, "Testing the Waters: A Guide to Water Quality at Vacation Beaches," shows the number of closing and advisory days at ocean, bay and Great Lakes beaches was more than 20,000 for the third consecutive year, confirming that our nation's beaches continue to suffer from serious water pollution that puts swimmers at risk.

DES works diligently to provide the public with clean beaches, and has received assistance annually from EPA in the form of a federal BEACH Act grant. New Hampshire



received \$201,450 this summer to continue its water quality testing and monitoring. Approximately \$20,000 per year is allocated from state funds for accounting, supervisory, and additional beach work performed by state employees not directly paid by the federal BEACH Act funds.

For the full NRDC report, go to www.nrdc.org/beaches. ■

Water well contractor pleads guilty to unlicensed well construction

Jeffrey Bemis, owner of BG Drilling and Geothermal LLC, based in Fitzwilliam, pled guilty on July 24, 2008, in Keene District Court to one count of unlicensed well construction. He admitted that on March 12, 2007 he constructed a water well on property located in Harrisville, and did not have a water well contractor license as required by law. Bemis' water well contractor license was revoked on June 1, 2006 by the NH Water Well Board for making a material misstatement on his license application and for misconduct in the industry.

In New Hampshire, a conviction of constructing wells without a license is a criminal misdemeanor carrying a maximum penalty of up to one year in prison and a \$5,000 fine. Judge Edward J. Burke sentenced Bemis to four months in the House of Corrections suspended for a period of one year, and a fine of \$5,000 with \$1,500 to be paid within six months and the balance of the fine, \$3,500, suspended for one year. The sentence was conditioned upon good behavior, and moreover, Bemis is not permitted to construct water wells while he remains unlicensed.

Investigators from the Environmental Protection Bureau of the NH Attorney General's Office and the EPA Criminal Investigation Division, with assistance from DES, investigated these charges. Attorney General Kelly A. Ayotte said, "This state's drinking water is a precious resource that must be protected. The law provides that individuals hired to construct drinking water wells are licensed to do so, and this office will continue to enforce that law to ensure public health."

Created in 1984, the Water Well Board is a seven member executive branch board charged with licensing

water well contractors and pump installers. DES provides administrative support for the board through its Water Well Program staff in the Drinking Water and Groundwater Bureau. The program licenses approximately 200 well drilling and construction contractors and 300 pump service and installation contractors, and performs all of the normal functions of a State licensing agency, with one additional mandate: to protect the groundwater resources of the state. Important program functions include:

- Develop and enforce well construction standards, to protect the health and safety of drinking water well owners, and to protect the groundwater resources of the state by ensuring that wells do not become a source of contamination to groundwater.
- Provide and maintain well construction records for all new wells constructed in the state. Currently over 100,000 well records have been provided by licensed well

contractors since 1984. This valuable hydrologic and geologic information is managed by the NH Geological Survey and utilized by DES and others for the evaluation, management, and protection of New Hampshire's groundwater resources.

- Investigate consumer complaints filed against licensees and enforcement of the licensing law and rules adopted for the construction, maintenance and abandonment of wells, the installation of pumps, and reporting.

The program is unique because the board and DES have independent legislative authority. However, they also have concurrent powers to enforce the licensing law, RSA 482-B, and the administrative rules adopted by the board. This is a unique example of how two state programs work together as partners to play an important role in protecting groundwater and the health and safety of New Hampshire citizens.

Questions about the program should be directed to Rick Schofield, P.G., program manager, at (603) 271-1974. ■

Merrimack Village Dam Restoration Project Ceremony



Photos by Laura Harty, PIP intern. More on the Merrimack Village Dam on page 8.



DES River Restoration Coordinator Deb Loiselle displays her Excellence in Restoration Award, flanked by Jim Gallagher, administrator of the DES Dam Bureau; Tom Burack, DES commissioner; and John Catena, chief of the NOAA Restoration Center Northeast Region. Photo by L. Harty. (See more photos on page 7.)

Deb Loiselle recognized for excellence

Deborah Loiselle, the DES River Restoration Coordinator, has received the Excellence in Restoration Award from the National Oceanic and Atmospheric Administration (NOAA) for her work on the removal of the Merrimack Village Dam from the Souhegan River in Merrimack. John Catena, chief of the Northeast Region of NOAA's Restoration Center, presented the award to Deb on August 21, 2008 at a ceremony hosted by Pennichuck Water Inc., the dam's owner, celebrating its removal.

The Merrimack Village Dam was the first dam upstream of the confluence of the Souhegan and Merrimack rivers, and its removal has opened up 14 miles of river to catadromous and anadromous fish, including Atlantic salmon, American eel, American shad, blueback herring and sea lamprey. The project not only provides fish passage, but restores a significant stretch of high quality river habitat for native fishes. This project represents the largest and most complex dam removal project undertaken to date in New Hampshire.

NOAA's Restoration Center presents the Excellence in Restoration Awards to partners for their work in the field of habitat restoration. The Restoration Center created the award in 2004 to publicly recognize partners that have achieved a level of excellence in their restoration efforts. In recognizing Deb, NOAA cited her outstanding project organization skills as well as her extraordinary effectiveness in communicating and collaborating with the diverse project partners during the five years it took to plan and execute this complex restoration project. ■

Governor

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moving New Hampshire forward in the planning and development of rail service. Through the work of the authority and lawmakers, we have taken another very important step forward with the passage of legislation requiring the New Hampshire Rail Transit Authority to maintain liability insurance for passenger rail service.

The authority supported the new law saying the limit on liability, which caps the state's liability at \$75 million, is essential in moving forward with commuter rail service in the southern tier. The law is similar to one passed in Massachusetts in 1994. Passage of a liability cap was seen as essential in moving forward with an operating agreement on the rail lines from Nashua to Lowell, Mass.

We still have a long way to go before daily commuter rail is again running in our state, but we have made some significant progress in a short amount of time. I look forward to the rail authority's continuing work to negotiate contracts, secure federal funding, set fares and establishing rail schedules and rail service for our state.

Expanding our highways is not the only solution to reducing congestion on New Hampshire's highways. And rail is also not the only solution. But bringing rail back to New Hampshire is part of an overall strategy to create a well-rounded transportation system in New Hampshire.

It is critical for the safety of our citizens, and our environment.

John Lynch, *Governor*



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