

Governor's Message

The Renewable Energy Act

If we want to secure a more stable, cleaner electricity supply for future generations, the time to act is now – and that is exactly what we are doing.

The Renewable Energy Act is an example of the real progress we are making in New Hampshire by putting partisan politics aside and focusing on working together to build a better future for our people. This legislation has been tried and failed in the past. But this year, it passed by a wide margin in the House, and unanimously in the Senate. We came together – Democrats and Republicans, industry leaders and environmental advocates – to begin securing New Hampshire's energy independence.



Governor Lynch

I have set a goal of ensuring 25 percent of our state's energy comes from renewable sources by 2025. This legislation, by creating a renewable portfolio standard and incentives to energy companies to use more renewable fuel sources, is a key component in reaching our goal.

Increasing renewable energy use will increase New Hampshire's and our nation's energy independence, lessening our need for foreign oil and

Governor, *continued on page 8*

You weed the garden ... we'll weed the lakes

by Amy P. Smagula, Limnologist/Exotic Species Program Coordinator

With four certified divers on staff, the DES biologists have been hard pressed to keep up with the demand for hand-removing milfoil and other exotic plants. Now more than ever, hand removal is playing a larger role in most exotic species control activities. Hand-removal is the process by which a diver descends to the bottom and removes both the rooting systems and above sediment portion of the plant, generally to control growths of exotic aquatic plants. This technique is used often on new infestations when there are few plants to remove, or as follow-up control to herbicide applications which can be used to reduce the overall biomass of larger infestations, to a point where hand removal is feasible.



DES biologist Walter Henderson mugs for the camera after a long day of hand-removing milfoil from Kimball Marine on Little Squam Lake. To keep up with demand for milfoil control, DES is training and certifying divers. Photo by Amy Smagula.

Divers, *continued on page 7*

ExxonMobil settles with state

DES recently settled a case with ExxonMobil for more than \$2.04 million for reimbursement to the Oil Discharge and Disposal Cleanup Fund (ODD Fund). The ODD Fund, authorized in 1990, provides financial insurance for the cleanup of releases from underground and above-ground motor fuel storage tanks. ExxonMobil, which currently has dozens of gasoline stations in New Hampshire, requested and received reimbursements over the last several years when it had existing insurance coverage. At the time ExxonMobil filed for ODD Fund reimbursement, there was uncertainty whether it would be able to collect on its insurance claims. After the company received a large insurance payout as settlement for nationwide environmental insurance claims, the state stepped in to ensure that ExxonMobil complied with the excess insurance requirements of

Settlement, *continued on page 8*

State enacts burning ban on C&D debris

At time will come when we will all view every piece of waste that we produce in the same manner in which most of us today view an aluminum can or plastic soda bottle – that is, we look to recycle it. I recently joined in celebrating with Governor Lynch the signing of two bills, HB 427 and HB 428, which will enact a permanent ban on the combustion of the wood component of construction and demolition debris (C&D). These bills mark a very important first step in an overall effort to bring a more comprehensive approach to New Hampshire's management of solid waste, including C&D debris. In the long-term, the most desirable outcome for these wastes is their reduction, reuse and recycling – the "3Rs." Approximately 22 percent of the total waste stream managed in New Hampshire is comprised of C&D debris, so achieving this outcome will also help to substantially reduce the need to use the state's limited landfill capacity for its disposal.

Construction and demolition debris should be a prime example of how we can better manage all of our solid wastes through the 3Rs. The good news is that an estimated 80 percent to 90 percent of C&D is recyclable. C&D is comprised of wood, glass, metal, insulation, shingles, gypsum wallboard, plaster, concrete and bricks. Items such as doors and windows can

be refurbished and directly reused. Concrete and bricks may be crushed and used as structural fill. Shingles may be reprocessed and used in road construction. The unpainted and untreated wood component of C&D, which comprises approximately 40 percent of the total volume of C&D, may be used to make new products such as compressed wallboard. Clean dimensional lumber such as salvaged 2x4s and timbers may be reused for their original purpose.

To spearhead this effort, DES has formed a C&D 3R Task Force that is charged with developing recommendations for concrete action steps that can be promptly put into practice. The C&D 3R Task Force includes trade associations, companies, citizen and environmental groups, municipalities, other governmental organizations, as well as members of the Legislature, all of whom have come together in true New Hampshire fashion to build consensus around practical, common sense New Hampshire solutions. Smaller subcommittee groups will be formed to address the more troublesome C&D components as well as the economics, market barriers, and health issues related to C&D components. The task force expects to report its initial conclusions and recommendations by late 2007.

As a department, DES is very proud and pleased to have been able to work

closely and cooperatively with the Governor, the House and Senate committees, as well as a great many concerned citizens, organizations, municipalities and business interests to craft an approach in these bills that is in the best long-term interests of New Hampshire. The DES Waste Management and Air Resources divisions have also worked tirelessly in support of these efforts. DES looks forward to achieving continuing progress through the C&D Task Force to ensure that construction and demolition debris is reduced, reused and recycled to the maximum extent possible here in the Granite State. This effort will certainly provide a sound foundation on which the future of our solid waste disposal actions will be built.

Those interested in participating on the task force in a constructive, good faith manner should contact Paul Heitzler at (603) 271-2945 for further information.

Thomas Burack
Commissioner

DES employee receives SESA award

Pierce Laskey-Rigrod of the Drinking Water and Groundwater Bureau was recently presented with a Suggestion and Extraordinary Service Award (SESA) by Gov. Lynch. The award was established in 2005 to recognize state employees who make suggestions that raise revenue or save costs, or who perform a service in their jobs that goes above and beyond the call of duty. Pierce's suggestion centered on managing the agency's fleet more fuel-efficiently by matching higher fuel-efficient cars with longer trips, and creating a flag in the fleet management databases that signals a potential carpooling opportunity when two vehicle requests are made for the same destination on the same day. ■

**ENVIRONMENTAL
NEWS** 

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Mike Wimsatt: new WMD director

Michael Wimsatt, a veteran with over 19 years experience with the Waste Management Division, was unanimously confirmed by the Governor and Executive Council in June to be the new division director. Commissioner



Tom Burack nominated Wimsatt in recognition of his knowledge of hazardous waste management issues, and his extensive experience working with municipalities, the business community, and the public to resolve local problems involving solid and hazardous wastes. "I nominated Mike following interviews of an exceptionally strong, talented and dedicated pool of candidates from within the department, and after consulting with the Waste Management Council."

Mike spent over four years working on hazardous waste compliance and enforcement issues, and 15 years in hazardous waste site investigation and remediation with DES. Over the last eight years, he has coordinated the DES Brownfields Program. "I am honored to have been selected to lead the Waste Management Division," Mike recently said. "The strength of our organization lies in the dedication and professionalism of our outstanding staff. I look forward to working with all of them to serve the people of our state and to address the significant challenges that we face in promoting responsible waste management and protecting public health and the environment."

Mike, a licensed Professional Geologist, holds a B.S. in chemistry from the State University of New York at Syracuse, and a master's degree in water resources engineering from the University of New Hampshire. ■

State bans disposal of TVs and computer monitors in landfills/incinerators starting July 1

To remove a significant source of lead from the environment, a ban on the disposal of televisions and computer monitors in the state's landfills and incinerators went into effect July 1. Most towns and cities in the state have electronics recycling programs in place and recently Staples has announced that it will recycle some types of electronic waste at its stores. There are also a number of commercial recycling centers available to state residents, which are listed on the DES website at www.des.nh.gov/SWTAS/comp_recyclers.htm.

Recently, Texas, Oregon and Connecticut passed legislation requiring recycling of electronics, joining Maine, New Hampshire, Massachusetts, California, Maryland and other states with recycling or disposal ban laws. The Electronic Industries Alliance, with nearly 1,300 member companies, has proposed a national legislation model that includes an industry-sponsored organization for the recycling of televisions and a take-back program for computers and related equipment.

New Hampshire residents should contact their local disposal facility or the manufacturer of the equipment to determine the best option for recycling their monitors and televisions. For additional information about the disposal ban, please call Don Maurer, supervisor, DES Solid Waste Technical Assistance Section, at (603) 271-3713. ■

Mercury bill signed into law

In early June, Gov. Lynch signed into law HB 907, relative to the sale and distribution of certain mercury-added products; it will go into effect August 10. The law will prohibit the sale of certain types of mercury-added products, including manometers, barometers, thermometers and various other measuring devices, switches, relays and thermostats. Certain products, such as those specified by a federal requirement, are exempt.

There is also a built-in exemption process for products that have no feasible non-mercury alternative available. The sales prohibition on the first "wave" of products, mainly measuring devices, will take effect on January 1, 2008. Switches, relays and thermostats sales will be restricted as of July 1, 2008. This DES-requested bill was first introduced in the 2000 session, so its passage marks several years of work in this area and brings New Hampshire law more in line with the other states in our region.

DES also supported the passage of HB 416, relative to mercury reduction and establishing a committee to study methods of improving the recycling rate in New Hampshire for mercury-added thermostats. This bill bans the disposal of all mercury-added products, including button cell batteries and compact fluorescent light bulbs, in landfills, incinerators and transfer stations. At press time, this bill was still in its final stages before being sent to the Governor for his signature. ■

State awarded \$2 million in EPA Brownfields grants

The EPA recently awarded ten Brownfields Assessment and Cleanup Grants, totaling \$2 million to seven communities across New Hampshire. This is quite significant considering that all of New England received about \$18 million. The grants were formally announced by EPA Regional Administrator Robert Varney at a State House ceremony attended by DES Assistant Commissioner Michael Walls, the grant recipients and the DES Brownfields team. The grants will help New Hampshire communities to revitalize former industrial sites, now derelict, and transform them into vibrant community resources.

The seven recipients awarded grants include the Nashua Regional Planning Commission, \$200,000 for a Hazardous Substance Assessment Grant; the City of Nashua, \$600,000 for a Hazardous Substance Assessment Grant, a Petroleum Assessment Grant, and a Cleanup Grant; Hillsborough, \$200,000 for a Cleanup Grant; North Country Council Inc., \$400,000 for a Hazardous Substance Assessment Grant and a Petroleum Assessment Grant; Rockingham Planning Commission, \$200,000 for a Hazardous Substance Assessment Grant; Southern New Hampshire Regional Planning Commission, \$200,000 for a Petroleum Assessment Grant;



This former woolen mill built in the 1800s will be razed and a riverfront park will be developed in its place, thanks to Brownfields funds granted to Hillsborough.

and Southwest Regional Planning Commission, \$400,000 for a Hazardous Substance Assessment Grant and a Petroleum Assessment Grant.

These grant awards are testimony to the great efforts of the New England region EPA staff who have worked hard with all prospective applicants to understand the application process and give them the tools to write winning applications. It is important to note that several of these first time grantees had previously applied to EPA two to three times for these nationally awarded grants.

These grant awards can be significant to a community. For example, Hillsborough was awarded a Cleanup Grant for the 2.5-acre former Woolen Mill site. The late 1800s textile woolen mill will be demolished once the asbestos and other contaminants are removed. This work effort will enable the town to move ahead with its vision to develop a river front park on the property, which will incorporate the existing 12-mile rail trail to Bennington. Other improvements to the site and the rail trail will include the reconstruction of a railroad covered bridge for foot and bike traffic.

DES congratulates all the grantees and looks forward to working with them to ensure their projects' success. ■

Air permits go online!

The Air Resources Division just added a valuable new feature to the DES OneStop web database: air permits. OneStop, which provides environmental data on over 30,000 sites in New Hampshire, recently made air permits and other related documents available to the public. The air division has added information on the database for over 450 permitted sources of air pollution. Currently, all Title V Air Permits are accessible, as well as all other state-only air permits issued June 1, 2007 or later. It is the division's goal to get all valid permits and associated documents online by the end of the summer. Check www.des.nh.gov/OneStop.htm often for the latest air permitting information. ■

Bad air? EnviroFlash notifies you instantly

DES recently launched a new air quality notification system in New Hampshire called EnviroFlash. The nationwide program is sponsored by the EPA, in partnership with DES and other state and local air quality agencies. EnviroFlash provides important air quality information such as forecasts and "action day" announcements via email, cell phone, or pager notification. This service is especially helpful for people who are at greater risk from air pollution, including children, older adults and people with heart or lung diseases.

"We are pleased to be part of this important service that will allow people to protect their health and adjust their lifestyles when necessary on unhealthy air quality days," said DES Commissioner Tom Burack.

EnviroFlash gives instant information that is customized for particular geographical areas in New Hampshire. People can sign up to receive notification of air quality information for one or more locations of their choice.

To sign up for EnviroFlash, go to www.airnow.gov, and click on the EnviroFlash logo at the top right side of the page. No private information will be requested, nor will e-mail addresses be shared with any other parties.

Additional information on air quality in New Hampshire is available at www.airquality.nh.gov. To learn more about EnviroFlash, please contact DES Air Resources Division at (603) 271-1370. ■

Green scums can kill your pets and ruin a day at the beach

Toxins associated with cyanobacteria have generated increased attention in the public health field during the last 10 to 15 years. This increased attention is a result of spectacular cyanobacteria blooms throughout the world that have resulted in the death of livestock, pets and increased cases of human illnesses, including the death of one human in the Midwest in which microcystins were the likely cause.

Attention has also been directed towards cyanobacteria in New Hampshire's lakes and ponds. In 2004, two public beaches experienced long-term cyanobacteria advisories, two others experienced short-term advisories and at least three lakes experienced lake-wide cyanobacteria blooms. Similar numbers of lakes with cyanobacteria were documented in 2005. Thirteen waterbodies were issued cyanobacteria advisories during the 2006 summer season. The increase of cyanobacteria advisories was likely the result of the extreme weather patterns of heavy rain and increased watershed runoff to lakes.

In 1998, the World Health Organization published a drinking water guideline value for the frequently-occurring cyanotoxin Microcystin-LR of 1 ug/L. Other countries used the WHO guidelines to set their own standards for microcystin in drinking water. The EPA is currently developing a microcystin standard for drinking water and recreational waters for the United States.

So what exactly are cyanobacteria? Cyanobacteria (for-



A cyanobacteria bloom on Bow Lake.

merly classified as blue-green algae) are prokaryotes (a unicellular organism having cells lacking a membrane) capable of performing photosynthesis; many are capable of fixing (converting into a biologically useable form of) nitrogen. They are present in virtually all natural environments including many extreme environments like hot springs, and are found in most, if not all, of New Hampshire's lakes.

DES has taken a proactive approach to protect public health by becoming the first state in the nation to issue public beach advisories to counter public health concerns from cyanobacteria scums. Any suspected scum should be reported to DES. Biologists will collect samples at any beach with reported scums. If a microscopic identification reveals that greater than 50 percent of the cell count originates from possible toxin producing cyanobacteria, an advisory is issued at the public beach and a press release is sent to the local papers. Samples are also collected for microcystin analyses.

If you suspect a cyanobacteria bloom is occurring at a lake or pond, please collect a sample (if possible) and call DES Limnology Center immediately at (603) 271-3414 or contact the cyanobacteria hotline at (603) 419-9229. If cyanobacteria are confirmed to be the cause of the scum in a lake you live on or visit, make sure you keep your dog out of the water. Never let your children or family members swim in waters with cyanobacteria scums, as a mouthful of concentrated cyanotoxins will likely cause health problems.

For more on cyanobacteria, go to www.des.nh.gov/beaches/cyanobacteria.html. ■

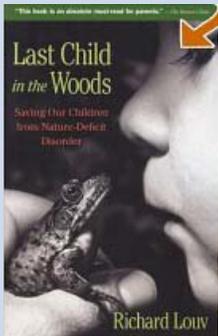


Peterborough Recycling Center receives beautification award. Peterborough residents have reason to be proud: their transfer station and its manager, Scott Bradford, have been recognized by the NH Arborists Association. This is the first transfer station to ever receive the association's award. Bradford not only keeps the facility clean, but he has planted hundreds of flowers, shrubs and trees at the recycling center. Most of the materials have come either from donations or from the unwanted items left at the recycling center. Photo by Marc Morgan.

BOOK REVIEW

Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder

Author Richard Louv, in his 2006 book *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*, brings attention to an increasing trend in



today's society toward a disconnect between children and their environment. Today's children, in general, spend more time playing indoor video games on computers or listening to iPods than they do playing outside, learning from nature. The result is a decline in children's health, as evidenced, for example, by increasing incidence of attention deficit disorder and childhood obesity,

and by growing fears on the part of parents and teachers about sending children outside to play.

In a related article called "Leave No Child Inside" in the March/April 2007 edition of *Wildlife Journal*, Marilyn Wyzga, includes the following description of the concepts in Louv's book:

Children are not getting outside—not fishing, or building forts, or looking under logs for salamanders. A national conversation about this phenomenon has been ignited by outdoorsman Richard Louv's groundbreaking book, *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*. In it Louv traces the causes and impacts of this separation through interviews with educators, parents and health professionals, as well as with children themselves. He outlines the environmental, social, physiological and spiritual implications of what he calls "nature-deficit disorder." And he describes a growing body of research that reveals the necessity of contact with nature for healthy child development—and for adults, neighborhoods, whole communities and the very future of our society.

This book sounds a wake-up call for the importance of keeping people of all ages connected with nature! Caring about the future of our environment and its inhabitants, we should not forget the importance of "connecting children with nature." The take home message from this book for parents and teachers is clear—take your kids outside to play and to experience and enjoy things in nature! ■



Competitors working on the wildlife component of this year's Envirothon. Photo by John Liptak.

Envirothon 2007

Once again, New Hampshire high school students were called upon to demonstrate their knowledge of environmental science and natural resource management at the annual Envirothon competition. All of the students showed a remarkable grasp of environmental and ecological issues, with Keene High School walking away with overall first place.

The five-person teams exercise their training and problem-solving skills in a competition centered on four universal testing categories, such as soils/land use, aquatic ecology, forestry and wildlife, and a current environmental topic. This year's theme was "Energy and the Environment for 2007." New England College in Henniker hosted this year's competition. Keene will represent the state in the national competition to take place this month at Hobart and William Smith Colleges in New York. DES supports this event by the many staff that assist with the competition and training. ■

Recent retirements

In the past few months, DES has had many long-term employees retire or move on. We wish them well in their new life-adventures and enterprises, and thank them for their many years of dedicated service to DES and the people of New Hampshire!

George Berlandi

Kevin Hopkins

Brad Foster

Becky Presby

Tony Giunta

Helen Vezina

Jack Glenn

Lynn Woodard

Garry Haworth

Bridget Whalen

www.des.nh.gov

DES Clean Travel Challenge

As part of Air Quality Awareness Week, DES employees were challenged to reduce the number of miles they traveled by car during the month of May. The voluntary "Clean Travel Challenge – Give Your Car a Break" initiative asked employees to be more car-free by biking, walking, combining trips, carpooling, taking transit or thinking of new ways to get around. Participants found that they did save at the pumps, and were freer of traffic and driving hassles!

Challengers were asked to fill out a trip-log to record the miles they "saved." The results were then tallied, including gallons of gasoline saved and pollution reduced, and the results were not bad for this first time effort! They are:

Number of participants – 15

Number of miles saved – 4,111

Gallons of gas saved – 191

Estimated emission reductions –

CO₂ – 3,766 lbs.

Carbon monoxide – 189 lbs.

VOCs – 25 lbs.

NO_x – 13 lbs.

This DES challenge was a pilot project to see if it would be a workable program for other agencies and organizations. What did we learn? First, the project needed to be better publicized and promoted. Many employees said they did not hear about it or did not understand what it was all about. Others thought filling out the trip-log was time-consuming and confusing – something that we'll improve upon. Most participants, however, said they were really interested in seeing how much they saved in a month.

For more information on the challenge, contact Kathy Brockett at (603) 271-6284 or kbrockett@des.state.nh.us.



Bike and Walk to Work Day '07

Clockwise, employees from the departments of Transportation, Health and Human Services, and Environmental Services gathered to bike to work on Friday, May 18, as part of the state's annual Bike and Walk to Work Day. Karen Rantamaki, DES Air Resources Division, and DES Assistant Commissioner Mike Walls check in after running and walking respectively to work. David Reichel, DHHS, and Teresa Ferrara, DES, at check-in station.



Divers

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In January 2007, DES began preparing comprehensive long-term management plans for the strategic control of exotic aquatic plants. These management plans focus on using integrated plant management (IPM) techniques, including containment, hand removal, bottom barriers, herbicides, suction harvesting, and others. Nearly every plan for the 68 infested waters contains provisions for hand-pulling.

Four divers. Lots of projects. So, what do we do? Train more divers! In cooperation with certified dive instructors, DES biologists are offering a Weed Control Diver Course to experienced SCUBA divers. This class is recognized by the Professional Association of Dive Instructors (PADI). The class participants will earn a special certification at the completion of the course. Participants go through a lecture training where general lake ecology, exotic species information, diver

safety, proper hand removal techniques, permitting, reporting, and other project factors are covered. Next, divers have a training session in a swimming pool to practice buoyancy, ascents, descents, and other skills. Everything comes together in an open water dive, where the divers are actually put into a waterbody with a milfoil infestation to try their new skills.

Though we will eventually be integrating these new divers into our control projects, DES will continue to be closely involved with all projects. Having more divers on hand that we know are trained in appropriate methods will help us to meet our goal of reducing the overall impacts of exotic species, one plant at a time.

More information on this course can be found on the Exotic Species Website at www.des.nh.gov/wmb/exoticspecies, or by contacting Amy Smagula at asmagula@des.state.nh.us or 603-271-2248. ■

Governor
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for expensive natural gas. In fact, a study by the University of New Hampshire estimated that by reducing natural gas consumption, this law could help reduce total electric costs in New Hampshire by millions, and over time it could bring \$16 million of renewable energy investment incentives to New Hampshire.

This law could lead to the development of new wind, biomass and geothermal plants in New Hampshire. Increasing renewable energy will create jobs right here in New Hampshire by expanding uses for our wood products, in building clean power plants, and in research and development.

Our state is fortunate to have beautiful landscapes and clean waters. Increasing renewable energy use will also help protect our state's special environment and help stem global warming.

This new law will allow us to identify and implement energy alternatives so that we are not as reliant on coal and other polluting fossil fuels.

By 2025, this law will reduce carbon dioxide emissions by 580,000 tons – that is the equivalent of taking 160,000 cars off the road.

Passage of the Renewable Energy Act could not have been successful without the participation of the many organizations, businesses and utilities who came together to incorporate the interests of ratepayers, existing generators, and developing industries. Collaboration, cooperation and compromise made this important law possible – which is the New Hampshire way.

The Renewable Energy Act is a victory for our state's economy, our environment and our future energy independence.

John Lynch
Governor

Settlement
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the ODD Fund.

DES was represented during the mediation by Maureen Smith, senior assistant attorney general; Tim Denison, supervisor, Fund Management Section; and Gary Lynn, supervisor, Petroleum Remediation Section. The settlement refunds the ODD Fund for most of the money reimbursed to ExxonMobil since the inception of the ODD Fund 17 years ago.

Although many state reimbursement funds are likely to have similar potential claims, only three settlements with ExxonMobil have been reached to date. It is noteworthy that New Hampshire recovered a significantly larger percentage of its claim than the two other settlements that were obtained by Massachusetts and South Carolina. These monies will help to shore up the ODD Fund balance, which has a backlog of pending claims. ■

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