

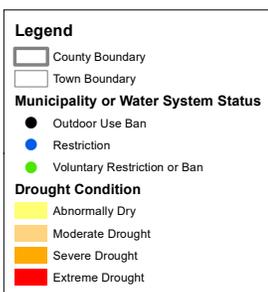
COMMISSIONER'S COLUMN

Extreme drought impacts southern New Hampshire

The southern 40% of New Hampshire is currently in drought, with sections ranging from moderate to extreme drought, and the central and northeast parts of the state are experiencing persistent abnormally dry conditions. The last time portions of New Hampshire experienced severe drought conditions occurred in 2001-2003. To further illustrate the situation, precipitation levels from January-July of this year are the twelfth lowest, based on 121 years of records, and it has not been this dry for this length of time since 1985. To learn more about current drought conditions and resources available to assist with drought monitoring and management, visit <http://des.nh.gov/organization/divisions/water/dam/drought/index.htm>.

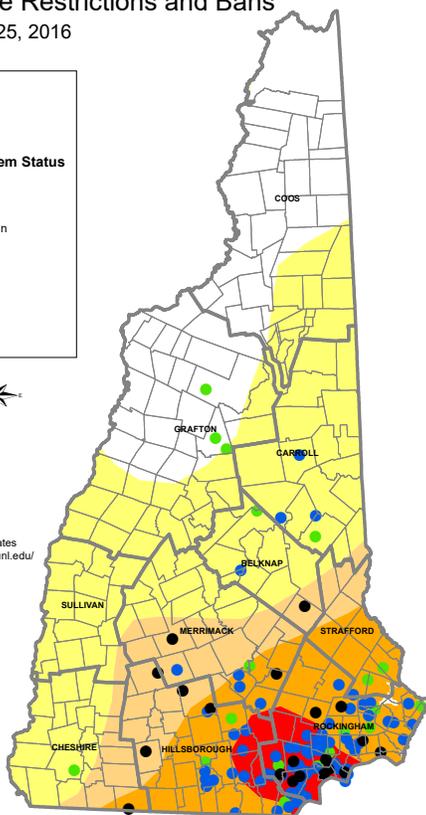
Known Water Use Restrictions and Bans

Last Update: August 25, 2016



Drought Conditions based on United States Drought Monitor (<http://droughtmonitor.unt.edu/Home/StateDroughtMonitor.aspx?NH>)

Disclaimer: The status of water use restrictions and bans is based on information submitted to the New Hampshire Department of Environmental Services and may not be comprehensive.



Hampshire's land surface sits over coarse, unconsolidated deposits. Surface water impoundments in the state generally have been designed to support flood control or recreation rather than water supply needs.

In New Hampshire, drought monitoring, assessment and response are managed by a Drought Management Team (DMT) that includes federal, state, municipal,

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NHDES steps up enforcement of open burning rules

To protect public health and the environment from the illegal burning of household trash and construction and demolition debris, NHDES is stepping up enforcement efforts and will issue fines to those burning illegally, in accordance with the NHDES Compliance Assurance Response Policy. NHDES will also continue to educate the public about the open burning rules and proper disposal methods for waste materials.

Controlling sources of air pollution is not just a responsibility delegated to industrial operations; it is also the responsibility of every citizen of New Hampshire. Current law prohibits the open burning of household trash and construction and demolition debris for homeowners and industrial operations. Violations of the ban are subject to a monetary fine. This ban was established by the New Hampshire Legislature in 2001 for household trash and in 2008 for construction and demolition debris. It reflects our evolving understanding of the adverse effects of uncontrolled burning of these materials on human health and the environment.

Household trash and construction and demolition debris often contain materials such as batteries, plastic, polystyrene, painted, glued and pressure-treated wood, asbestos, mercury containing lamps and switches, pesticides, paints, solvents, bleached/colored papers, etc. When burned, these materials release

Burning, cont. page 3

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environmental, recreational, business and industry officials, and is coordinated by NHDES. The DMT provides water users, municipalities and the public with information about drought conditions and impacts as well as recommended actions that can be taken to prepare for and respond to drought. The DMT met on July 22 and determined that drought conditions were serious enough to warrant initiating public outreach measures to encourage water conservation and recommend that outdoor lawn watering be restricted or stopped altogether. The DMT also initiated efforts to make the public aware of federal financial assistance that is available to low-income homeowners who utilize a private well for their home and are experiencing problems with their well. Parallel to the work of the DMT, the Governor coordinated with federal, state and local officials to assess how drought has impacted the agriculture industry and on August 5, 2016, requested a Secretarial Drought Disaster Designation from U.S. Department of Agriculture (USDA). The declaration was accepted on August 12 and has made federal aid available for all New Hampshire counties through the USDA Farm Service Agency. See <http://www.governor.nh.gov/media/news/2016/pr-2016-08-05-drought.htm> and <https://www.fsa.usda.gov/index>.

Improvements made by water users since the moderate to severe drought in 2001-2003 have made New Hampshire more resilient to drought. For example, community water systems that almost ran out of water in 2001-2003 have implemented state-of-the-art metering, leak detection and repair, and other water conservation incentives, and are now better able to manage the impacts of ongoing drought conditions. Additionally, a number of community water systems have diversified their water sources, installed emergency interconnections with other water systems and developed integrated water resource management plans to ensure there is a reliable supply of drinking water during a drought. Two water systems now artificially recharge natural storage basins by withdrawing surface water when river flows are high and storing this water in aquifers for use months later when water demand is higher or precipitation is limited. Efforts of residents are also making New Hampshire more prepared to withstand the effects of drought. As homeowners replace older washing machines, dishwashers, showerheads, toilets and/or water faucets, overall indoor water use can be reduced by as much as one-third.

A number of commercial water users are also effectively dealing with drought conditions through careful planning. For example, some ski facilities have developed water storage and modern snowmaking technology. Some golf courses, a biomass plant and a ski resort have developed the capacity to use highly-treated wastewater, which is a reliable supply of water even during a drought. Many farms in the state have invested in water conservation initiatives, including drip irrigation, back-up water sources and other water conservation measures, all of which aid in effectively withstanding the impacts of drought. NHDES is also working with communities throughout New Hampshire to ensure that our lakes and streams are being monitored and appropriately managed to protect the environment as well as other multiple uses of these resources.

While increased planning, investment and conservation efforts are proving to be effective in responding to drought, continuing these efforts is essential not only for mitigating the potential impacts of the on-going drought, but also to ensure water will continue to be available for drinking, cooking and cleaning. ■

Save the date!

NHDES and Partners are hosting the 3rd Annual NH Salt Symposium

September 13, 2016 at the Grappone Center in Concord, NH

“Where Commercial Salt Applicators Come to Learn About Winter Property Management”

Attendees will be updated on the latest snow industry technologies and Best Management Practices, and will earn continuing education credits for the NH Salt Applicator Certificate, the Snow and Ice Management's (SIMA) Certified Snow Professional Certificate, and T2 Roads Scholar Program Contact Hours.

Learn more about the event at <http://www.sima.org/new-hampshire-salt-symposium>.

Save the date!

Hazardous Materials Management & Emergency Planning Workshop

350 Marlboro Street, Keene, NH
October 20, 2016 – 9 AM-Noon

This FREE workshop includes:

- Tips to Improve Emergency Plans
- Review of Federal Reporting/Planning Requirements
- Hazardous Materials Management in a Changing Climate

For more information or to RSVP call Melissa Zych at (603) 271-6460 or email nhppp@des.nh.gov.

ENVIRONMENTAL NEWS

Environmental News is published six times a year by the New Hampshire Department of Environmental Services.

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Printed on recycled paper.

Burning *continued from page 1*

harmful chemicals and known carcinogens, such as arsenic, asbestos fibers, dioxins and heavy metals into the air we breathe. These pollutants affect your health as well your family and your neighbors. Chemicals in the air are deposited on garden vegetables and fruits, exposing people through ingestion as well. In addition, the ash from burning these materials contains these chemicals, which presents an environmental and health hazard if not managed correctly.

Prohibited

Burning Construction & Demolition Debris and Household Trash

Materials Not Acceptable for Burning

- Construction & demolition debris
- Tires
- Household trash
- Packaging materials
- Plastics
- Coated or laminated paper
- Coated or treated cardboard
- Oily rags
- Animal, vegetable and kitchen waste
- Used Oil, gasoline and hazardous waste
- Brush greater than 5 inches in diameter
- Any wood that has been painted/stained, glued, or treated in any way





Materials Acceptable for Burning

- Campfire wood
- Charcoal
- Clean pallets

If generated on-site

- Brush (less than 5 inches in diameter)
- Clean lumber scraps (private single family residences only)

Burning construction & demolition debris and household trash releases toxic air pollutants, creates potentially hazardous ash, and puts your family, neighbors, and the environment at risk.



Please contact DES at (603) 271-1370 for more information on open burning.



All burning must be conducted in accordance with local ordinances and under a "Permit To Kindle Fire" issued by the local Fire Warden or authorized agent.

Portsmouth Naval Shipyard at risk to rising seas

The Union of Concerned Scientists hosted a press event on July 27 in Portsmouth's Prescott Park to announce a new analysis indicating that US East and Gulf Coast military installations are at risk of losing land as sea level rise moves the high tide line inland in decades to come.

The US Military on the Front Lines of Rising Seas – Growing Exposure to Coastal Flooding at East and Gulf Coast Military Bases concludes that, given the growing exposure to rising seas and storm surge, the military is at risk of losing land where vital infrastructure, training and testing grounds, and housing for thousands of its personnel currently exist. Our Portsmouth Naval Shipyard will need more detailed analysis and resources to implement solutions. To learn more, see the full report at <http://www.ucsusa.org/global-warming/global-warming-impacts/sea-level-rise-flooding-us-military-bases#.V7HdLpgrK71>. ■



Standing behind Governor Maggie Hassan as she signs five coastal-related bills into law are (L to R):

Cory Riley, Great Bay National Estuarine Research Reserve; Joanne Ward, Stratham, NH; Tom Burack, NHDES Commissioner; Cliff Sinnott, Rockingham Planning Commission; NH Senators David Watters and Nancy Stiles; NH Representatives Fred Rice and Martha Fuller-Clark (bill sponsors).

To learn more about the open burning rules visit: <http://des.nh.gov/organization/divisions/air/cb/ceps/npsap/index.htm>. ■



twitter.com/NHDES

Great Dam removal restores Exeter River

Great Dam in Exeter, NH was removed during the summer of 2016 after almost ten years of study and stakeholder engagement on what to do about the safety risk, low fish numbers and water quality challenges surrounding it. The project will restore the Exeter River to its natural state and open up habitat for migrating fish as well as reduce flooding hazards.

Funding to complete the \$1.8 million dam removal came from the Town of Exeter and grants from the NHDES Aquatic Resource Mitigation Fund, the NHDES Coastal Program, the New Hampshire State Conservation Committee Conservation Grant Program, and a National Oceanic and Atmospheric Administration Coastal Ecosystem Resiliency Grant. Project partners, including NHDES, assisted the Town with funding feasibility studies, holding public meetings and coordinating the project.

Exeter voted to remove the dam in 2014.

In 2000, NHDES issued a letter of deficiency to the dam's owner, the Town of Exeter, which indicated that the dam could not safely pass a 50-year storm event. Throughout the years, property owners upstream of the dam have continued to express concerns about costs and damages from flooding. A recent feasibility study



concluded that the removal of Great Dam would reduce flood risk by lowering water levels.

Great Dam was the first barrier to fish migration on the Exeter River. New Hampshire Fish and Game had more than 35 years of data showing that river herring passage through the fish ladder was low, especially when compared to similar sized coastal rivers in New Hampshire. Additional bad news for the fish and other aquatic life was that the impoundment and sluggish river upstream of the dam contributed to low dissolved oxygen, resulting in poor water quality.

The site's future benefit to fish was acknowledged by a visit from Happy Fish. This fish statue was on loan from the World Fish Migration organization and travels internationally to sites where projects are being done to restore fish migration routes. Visit <http://www.worldfishmigrationday.com/where-is-the-happy-fish> to see where else Happy Fish is visiting. ■

Happy Fish image credit: Kristen Murphy, Town of Exeter



Regional initiative seeks to reduce air emissions

In the Northeast, the transportation sector accounts for approximately 40% of all greenhouse gas (GHG) emissions. The Transportation and Climate Initiative (TCI) is a regional collaboration of 11 Northeast and Mid-Atlantic states and the District of Columbia that seeks to develop the clean energy economy and reduce oil dependence and GHG emissions from the transportation sector. The participating states are: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island and Vermont.

The TCI was formed in 2010 when leaders from the 12 jurisdictions' transportation, energy and environmental agencies signed a Declaration of Intent (<http://www.transportationandclimate.org/sites/default/files/TCI-declaration.pdf>) to work collaboratively to "reduce greenhouse gas emissions, minimize the transportation system's reliance on high-carbon fuels, promote sustainable growth, address the challenges of vehicle-miles traveled and help build the clean energy economy."

The initiative builds on the region's strong leadership and commitment to energy efficiency and clean energy issues, and its Regional Greenhouse Gas Initiative (RGGI) to reduce GHG emissions in the power sector, which have resulted in the region becoming one of the most energy and transportation efficient areas in the nation. This effort underscores the sense of urgency shared by all 12 jurisdictions and their collective aspirations to combat climate change and become the leading region for sustainability and clean energy deploy-

ment in the country.

The TCI explores ways to reduce GHG emissions through mass-market deployment of clean vehicles and fuels; development of state-level tools and policies that support more sustainable communities; advancement of regional initiatives to improve the efficiency of goods movement (freight); and by using information and communication technologies to improve efficiencies on existing roadways.

In October 2015, five Northeast States and DC announced they would work together to develop potential market-based solutions to reduce GHG emissions from the transportation sector. Governor Hassan released a statement in support of this effort, stating that "Through market-based programs like the Regional Greenhouse Gas Initiative (RGGI), we are seeing reduced emissions from the power sector and greater investments in efficiency, but we know that there is more work needed to address climate change, particularly in the transportation sector, the largest source of greenhouse gas emissions in the state." Georgetown Climate Center released a report that "finds that clean transportation policies could cut greenhouse gas emissions between 29 to 40% in the TCI region by 2030. A comprehensive implementation of state policies could result in net cost savings of up to \$72.5 billion over 15 years for businesses and consumers, along with tens of thousands of new jobs and improvements in public health." The full report can be found at <http://www.georgetownclimate.org/reports/reducing-greenhouse-gas-emissions-from-transportation-opportunities-in-the-northeast-and-mid-atlantic.html>.

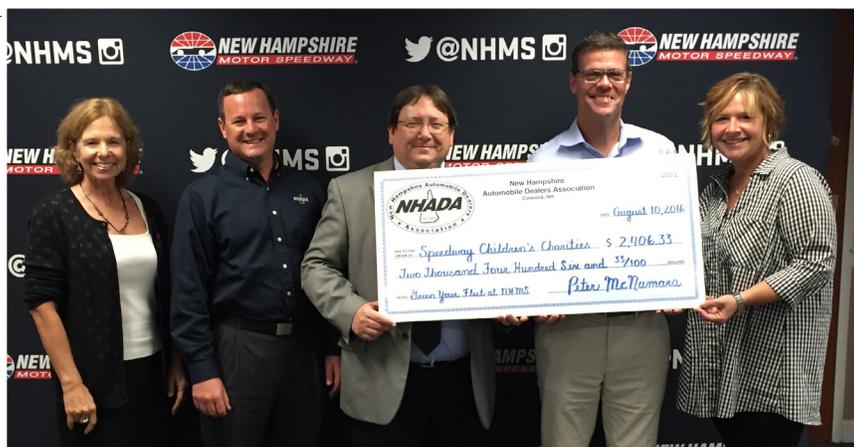
The TCI is supported and facilitated by the Georgetown Climate Center and its funders, and through grants from the US Department of Energy. ■

Green Your Fleet!

The Granite State Clean Cities Coalition (a program hosted by NHDES and the NH Automobile Dealers Association) recently presented a check to the New Hampshire Motor Speedway Children's Charities (SCC) following a successful Green Your Fleet! event held at the Speedway.

Green Your Fleet! is a biennial event of the Granite State Clean Cities Coalition (GSCCC) for fleets and municipalities that focuses on alternative fuel and advanced vehicle technologies.

The GSCCC is a collaborative of over 140 public and private interests from all regions in New Hampshire. Coalition members support the goals of reducing depen-



(L to R): Dolores Rebolledo (GSCCC Coordinator), Dan Bennett (NHADA), Craig Wright (NHDES), David McGrath (executive vice president and GM at NHMS), Cheryl LaPrade (executive director of the NH chapter of SCC)

dence on foreign oil, and improving air quality, through the use of domestically produced, cleaner burning alternative fuels and other fuel reduction strategies. Many coalition partners attended, participated or sponsored the event. ■

Drought guidance for homeowners on private wells

With persistent drought conditions that will likely continue into the fall, NHDES requests that outdoor water use be limited or ceased except for hand watering of vegetable gardens. Going beyond, getting a sense of your well can help you to identify drought symptoms and protect you from running dry.

Typically, dug wells, shallow bedrock wells, wells located near topographic high points, and wells constructed in areas where bedrock is close to the ground surface are more susceptible to failing when drought conditions are present. Look for signs like no water, sudden drops in water pressure or pressure surges, air bubbles coming out of non-aerated faucets or cloudy or heavily silted water. The cause of well failure may be a shortage of water or other problems associated with the well casing, valves, waterlines, pumps, or pressure tanks.

To prevent your well from failing or if you cannot keep up with the water demand, try spreading out the timing of water use and cut out non-essential uses such as watering your lawn. Cutting back on showers or running appliances such as laundry machines at maximum capacity helps conserve water as well. You can also consider replacing old top-loading washing machines and toilets older than 1994, as they are known to be the largest water-wasting culprits.

A licensed well driller or licensed pump installer will be able to assist you with determining if your water supply is diminishing, troubleshooting other well issues, and recom-

mending actions to help remedy the problem. To search for a licensed well water contractor, go to: http://www2.des.state.nh.us/OneStop/Water_Well_Contractors_Query.aspx. ■

Did you know?

In New Hampshire, most residents on private wells have a dug well or a bedrock well. Which one do you have?

Dug wells

- Three- or four-foot diameter and not much deeper than 15 feet below land surface.
- Constructed by excavation.
- Older wells are lined with fieldstone, and more recent construction utilizes inter-locking concrete tile.
- Identified by a large stone, concrete objects protruding from the ground or well houses built over them.

Drilled bedrock wells

- Six-inch diameter wells that range in depth from less than 100 feet to more than 1,000 feet.
- Drilled into solid bedrock and cased with steel pipe through the unconsolidated earth deposits into the upper surface of the bedrock.
- Identified as a six-inch steel pipe sticking out of the ground.



EPA coastal tour

NHDES staff hosted EPA Region 1 Administrator, Curt Spalding (fourth from right), on a tour of New Hampshire coastal Aquatic Resource Management (ARM) and Watershed Assistance – EPA 319 funded projects. The tour started in Dover at the Berry Brook stream restoration and stormwater management project (ARM and 319 funded) and finished at a rare coastal salt marsh pond restoration and invasive species removal at Odiorne State Park (ARM funded). ■

NHDES summer food drive

In 2015-2016 school year, New Hampshire averaged 46,703 students eligible for free or reduced-cost lunches. With summer vacation, many of the children who depend on such programs as their source of food must rely on other options.

In mid-July, NHDES hosted an internal food drive to collect donations for chil-

dren in need of meals. With the theme of The Hunger Games™, the NHDES building was divided into different “Districts” that had to compete against each other for the title of “The Hunger Games™ Victor.” After two weeks of competitiveness, enthusiasm and fun, employees donated a total of \$1,167 and roughly two tons of food. The donations were delivered to the Friends



of Forgotten Children where they served children in need of meals during the remainder of summer vacation. ■

NHDES Recognizes Allied Auto Wrecking for Environmental Achievement

On August 9, NHDES recognized Allied Auto Wrecking in Weare for becoming a Certified NH Green Yard, a distinction reserved for auto salvage yards that use exemplary environmental work practices. The requirements for becoming a Certified NH Green Yard were developed by NHDES, working with the Auto & Truck Recyclers Association of New Hampshire (ATRA). The program is one of several initiatives NHDES is implementing to improve environmental performance at motor vehicle recycling facilities and provide incentives for going beyond compliance.

Tara Mae Albert of the NHDES Solid Waste Management Bureau presented David Wilusz, the owner of Allied Auto Wrecking, with a certificate and Certified NH Green Yard flag for display at the auto recycling facility.

Wilusz has been the owner/operator of Allied Auto Wrecking for 20 years. His goals were (and still are) to be progressive and grow this small family-owned business in a steady forward direction while ensuring cleanliness of the yard and shop using “green” practices and helping those around him.

“Allied Auto Wrecking and its employees always strive to go above and beyond the acceptable practices of a New Hampshire motor vehicle recycling facility,” said Dave. “Becoming a Certified NH Green Yard has been one of my goals since the program’s inception in 2002 and we couldn’t have done it without the assistance of NHDES and our committed employees! Our sustainable practices will help keep our environment clean while providing a proper destination for end-of-life vehicles.”

NHDES has been working with over 150 auto salvage yards throughout the state to improve environmental practices and to bring them into compliance with existing state and



federal environmental requirements. The late Jeff Kantor, past ATRA President, summed up the collaboration between the ATRA and NHDES as the best, “New Hampshire’s auto salvage yards recycle over 50,000 end-of-life vehicles yearly. That’s enough cars to fill both lanes of Interstate 93 from Concord to Littleton,” Kantor explained. “Our association is working hard to change the negative view many people have of the auto salvage industry. For example, many people don’t realize that auto recyclers typically recover and recycle, by weight, 85% of the material content of a motor vehicle, making automobiles the number one consumer product being recycled today. Now, when you see a Certified NH Green Yard flag at a salvage yard, you will know the owner is helping to take care of New Hampshire’s environment.”

For more information and to find out about becoming a Certified NH Green Yard, contact Tara Mae Albert, acting Green Yards Coordinator, at (603) 271-3713 or tara.albert@des.nh.gov and visit the NHDES website <http://des.nh.gov/organization/divisions/waste/swmb/tsei/greenyards/index.htm>. ■





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NHDES staff photo contest – 10th anniversary top 10

