



In the Works

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In The Works is a monthly newsletter providing Environment, Health and Safety (EH&S) news and regulatory updates. The newsletter is provided by Loureiro Engineering Associates, Inc. of Plainville, Connecticut. In this Issue you will find links to the following articles:

NATIONAL

U.S. Environmental Protection Agency, New England Region- Memorandum by Alexandra Dunn

Spring is the season to celebrate new beginnings as nature sprouts. What better way to connect with nature than to celebrate water? This May, EPA is happy to observe Drinking Water week and to join the New England Water Communication Collaborative's Water is Worth It Month.

Water in all forms is critical to our health, economy, and way of life - and yet it is often taken for granted. Every day, even in times of extreme weather, we rely on safe water for drinking, cooking, bathing, and firefighting. Without much thought, we take showers, flush toilets, and reach for a glass of tap water. This month, let's think about what it takes to maintain our safe and clean drinking water, and ask ourselves what water is worth.

Keeping water clean and operational for citizens takes many hands. In New England, we are fortunate to have thousands of drinking water managers and operators working to sustain the services of safe drinking water. Under a support network sustained by the New England states and by regional and state drinking water associations, these public health servants study and work hard to become certified in their noble profession. They keep up with aging infrastructure and emerging technologies, while continuing to run the plants, fix the leaks, clear the pipes, and communicate with citizens.

There are 2,700 community public water supply systems across New England. Each one has unique challenges. Living on the coast in Rockport Massachusetts, I appreciate the beauty and vulnerabilities of our coastal waters and water infrastructure. As seen during extreme weather events, the battle of nature versus physical infrastructure has erupted in every state in New England, appreciating those vulnerabilities and preparing for the future is important to sustaining our systems.

We face other challenges, including lead, which can be present in our public and household pipes and plumbing, and which needs constant attention. Science has discovered emerging contaminants, like per- and polyfluoroalkyl substances (PFAS) that, in some cases, are present in our ground water. We have also heard about algal blooms as a threat to our water supplies when excess nutrients enter our water systems through direct and stormwater discharges. While these challenges can seem daunting, I am convinced that it is everyone's business to get involved and with all of us pulling together we can make a difference.

We are making progress. We all know that aging infrastructure presents a growing need. New England is one of the first developed regions in the country, and our water infrastructure often reflects its age, as some of our systems are more the 100 years old. Communities face substantial gaps between infrastructure improvement needs and available funds. This is a problem we recognize and a problem we beginning to address. Recently, the U.S. EPA announced a significant increase in funding available for water infrastructure projects. The program, under the Water Infrastructure Finance and Innovation Act (WIFIA), is providing up to \$5.5 billion in low-cost loans, which could leverage over \$11 billion in water infrastructure projects. The time to act and take advantage of this opportunity is now. Prospective borrowers seeking WIFIA credit assistance must submit a letter of interest by July 6, 2018.

We recognize there is more to be done to keep our drinking water clean and safe for us and for future generations. We hope you will join EPA in thinking more about where your water comes from and thanking the people in your community who work so tirelessly to keep your water clean and running.

CONNECTICUT

Connecticut's Department of Energy and Environmental Protection Announces National Air Quality Awareness Week, April 30 - May 4

Connecticut's Department of Energy and Environmental Protection (DEEP) is promoting the United States Environmental Protection Agency's (EPA) "Air Quality Where You Are" campaign to increase air quality awareness and inspire people to take local actions to protect their health and the environment as part of National Air Quality Awareness Week that begins on April 30, 2018.

This year's campaign encourages individuals to take simple, common sense steps to reduce their contribution to air pollution.

- Drive Clean –considered purchasing or leasing a plug-in electric vehicle. Learn more by visiting: www.driveelectricus.com;
- Drive Less - consider carpooling, vanpooling, using public transit or even telecommuting;
- Save Energy- setting air conditioners to 78 degrees and "Wait 'til 8" to use energy intensive appliances like washing machines, dryers and dishwashers;

- Be Aware of Your Air -understand the Air Quality Index and sign up to receive alerts so you will know when air quality is predicted to be unhealthy; and
- When you know there will be an unhealthy air day, make small changes to your routine:
 1. Refuel your vehicle after dusk and stop refueling when the nozzle clicks off
 2. Avoid idling your vehicle unnecessarily
 3. Delay mowing your lawn or using other lawn and garden equipment until evening
 4. Limit your outdoor activity in the heat of the day
 5. Refraining from recreational wood burning;

DEEP also wants to remind the public that with warmer weather on the way, high levels of ground level ozone and fine particulate matter (PM2.5) pose health risks to the public. Unhealthy concentrations of ground level ozone can cause or exacerbate a variety of respiratory and health problems, including asthma attacks, difficulty breathing, chest pain, coughing, and throat irritation.

The impacts of unhealthy concentrations of air pollution can be more severe for sensitive groups such as, children, the elderly, adults who are active outdoors, and people with existing respiratory disease and asthma. People in sensitive groups may experience adverse effects at even at lower ozone concentrations. When ozone levels are elevated, the public should avoid strenuous outdoor activities and consider remaining indoors in an air-conditioned environment.

MASSACHUSETTS

Baker-Polito Administration Awards \$4 Million for Energy Efficiency and Renewable Energy Upgrades at Water Treatment Facilities

The Baker-Polito Administration recently awarded \$4 million in grants to 36 drinking water and wastewater facilities across the Commonwealth of Massachusetts to help these facilities reduce energy use, increase energy efficiency and generate renewable energy. Awarded through the Gap Funding Grant Program, these grants will expedite implementation of previously assessed energy efficiency and clean energy generation projects at municipal treatment facilities. The program is designed to fill the last “gap” in project financing, enabling facilities to use utility incentives and funds from other sources to build or install selected energy efficiency and clean energy projects. The announcement was made by state environmental officials during an event in Ware as part of the Commonwealth’s celebration of Earth Week.

“As we celebrate Earth Week, our administration is proud to award funding that will help communities across the Commonwealth provide safe, clean drinking water to their residents, protect our natural resources, and reduce the significant energy usage of local wastewater and drinking water treatment,” said Governor Charlie Baker. “The innovative Gap Funding Grant Program provides the last funding communities need to complete vital energy efficiency and renewable energy projects that will increase reliability, lower operating costs and cut greenhouse gas emissions.”

“The Gap Funding Grant Program allows municipalities to use other sources of funding, including from electrical utilities, saving money for communities and local ratepayers,” said Lieutenant Governor Karyn Polito. “Our administration is committed to working with cities and towns across the Commonwealth to improve water quality programs that protect our waters and public health.”

Today’s awards are expected to leverage \$1.3 million in additional energy utility incentives, leading to the installation of \$17 million in clean energy improvement projects. These 36 projects, taken together, are projected to generate approximately 9.6 megawatt hours in annual electricity savings or onsite energy generation, sufficient to power 234 households, reduce carbon emissions by 3,015 tons, and result in savings of up to \$1.3 million annually. All projects are expected to be completed and operational by the end of 2019.

“Massachusetts is a national leader when it comes to energy efficiency and development of renewable energy, and the Gap Funding Grant Program will help the Commonwealth maintain its status,” said EEA Secretary Matthew Beaton. “These innovative grants provide a positive return on investment, not only for the facility involved, but also for the state and the energy utilities that have provided incentives.”

“The Gap Funding Grant Program allows facilities to make improvements to their treatment systems through the use of energy efficiency measures, enabling these facilities to provide cleaner water – and cleaner air – while reducing energy use,” said Massachusetts Department of Environmental Protection Commissioner Martin Suuberg. “Over time, these efficiency upgrades improve the facility’s operational reliability and cut the use of fossil fuels in plant operations, significantly reducing their greenhouse gas emissions.”

Energy use at wastewater and drinking water treatment facilities is a major contributor to overall energy consumption for many cities and towns, with communities statewide spending approximately \$150 million per year on electricity to treat 662 billion gallons of wastewater and drinking water. About 30 percent of municipal energy use derives from water treatment.

“The Department of Energy Resources is proud to partner with municipalities on initiatives that reduce energy use, increase energy efficiency and generate renewable energy,” said Department of Energy Resources Commissioner Judith Judson. “This important work at water treatment facilities is critical to creating a clean energy future for the Commonwealth.”

“Massachusetts is home to a vibrant water innovation sector, and this funding will enable municipalities to tap into that resource by adopting technologies that improve energy efficiency,” said MassCEC CEO Stephen Pike. “Gap funding will help these cities and towns overcome persistent funding challenges and provide cost savings to their residents.”

Gap funding grants have been awarded to:

Ayer – \$46,785

Bernardston Fire and Water District – \$200,000

Blackstone – \$42,521

Brockton – \$200,000

Charlemont Sewer District – \$45,000

Chicopee – \$200,000

Dartmouth – \$107,057

Fairhaven – \$23,924

Fitchburg – \$200,000

Franklin – \$79,380

Groton – \$83,295

Hatfield – \$200,000

Hull – \$61,685

Kingston – \$76,020

Lenox – \$98,542

Lynnfield Water District – \$79,443

Massachusetts Water Resources Authority – \$81,027

Middleborough – \$43,437

Milford – \$13,380

Millbury – \$155,385

Montague – \$150,000

Nantucket – \$200,000

North Carver Water District – \$58,230

Orange – \$200,000

Paxton – \$22,814

Rockport – \$81,081

Shrewsbury – \$200,000

South Essex Sewage District (Beverly, Danvers, Marblehead, Peabody and Salem) – \$200,000

Southwick – \$40,546

Taunton – \$35,500

Uxbridge – \$168,613

Wareham – \$200,000

Westfield – \$39,424

Worcester – \$200,000

NEW HAMPSHIRE

Coastal Program Announces Request for Proposals for New Hampshire Coastal Resilience Grants Funding Opportunity

The New Hampshire Department of Environmental Services (NHDES) Coastal Program announces the availability of targeted funds for projects that enhance coastal resilience to current and future hazards. Each year, coastal communities in New Hampshire experience flooding and coastal storm damages to property, infrastructure, natural resources, and cultural resources, along with associated economic disruptions. The past year brought damaging nor'easters and more frequent reports of nuisance high tide flooding. These hazards are projected to continue intensifying and expanding with the effects of climate change. At about \$86 million per year, the need is well beyond the level of funding available under the Drinking Water State Revolving Loan Fund (DWSRF), the main source of federal-state assistance for drinking water infrastructure, which is currently funded at around \$9 million per year for New Hampshire. Other government programs, such as USDA Rural Development and New Hampshire Community Development Finance Authority, also help finance such projects, but the amount of money available in any given year is limited and not all water systems are eligible.

The purpose of the 2018 New Hampshire Coastal Resilience Grants funding opportunity is to support projects that improve the capacity of a community or system to proactively prepare for and "bounce back better" from hazardous events such as hurricanes, coastal storms, and long-term sea-level rise and associated impacts. There are two types of eligible projects: Creative Capacity Building and Design & Construction.

Proposed work must take place in one or more of the 17 New Hampshire coastal zone communities. Eligible applicants include municipalities, state agencies, regional planning commissions, academic institutions, and non-governmental organizations.

A total funding amount of approximately \$200,000 is available. Applicants must request a minimum of \$20,000 and no more than \$100,000 in grant funds per project. A two-to-one federal to non-federal match through cash or in-kind services is required (i.e., if \$20,000 in grant funds are requested the applicant must provide at least \$10,000 in non-federal cash or in-kind match). Exceptions to the match requirement may be made for Creative Capacity Building project applicants who can demonstrate hardship securing match. The funds are made available to the NHDES Coastal Program through the National Oceanic and Atmospheric Administration Office for Coastal Management, under the Coastal Zone Management Act.

Proposals must be submitted electronically by emailing kirsten.howard@des.nh.gov by 4:00 pm EDT on Friday, July 6, 2018.