# STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

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Commissioner

Dannel P. Malloy
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February 23, 2015

Mr. Tom Groves
NEIWPCC
650 Suffolk Street, Suite 410
Lowell, MA 01854

Re: NEIWPCC Water Program Priorities

Dear Mr. Groves:

Thank you for sharing the January 2015 Draft of NEIWPCC's Water Program Priorities, which includes 18 topics that NEIWPCC has committed to assisting the states in addressing. The list includes pollution prevention and potable water supply topics that the Connecticut Department of Public Health is involved with in both regulatory and advisory capacities. Ensuring safe and sufficient water supplies to Connecticut residents is a priority for this Department, and we value NEIWPCC's assistance in helping Connecticut meet our public health and the environmental protection goals.

One topic that is noticeably absent from the draft priority list and that remains a challenge for Connecticut, is decentralized sewage system (DSS) management. EPA's 1997 *Response to Congress on Use of Decentralized Wastewater Treatment Systems* stated "Adequately managed decentralized wastewater systems are a cost effective and long-term option for meeting public health and water quality goals." The report also acknowledged that inequitable funding and institutional biases have historically hampered DSS management. EPA promotes use of CWSRF as a means for states to implement comprehensive wastewater system management programs, and EPA has been encouraging states to re-evaluate their CWSRF programs to ensure decentralized needs are adequately determined and sufficiently funded.

Decentralized sewage systems serve an estimated 40% of Connecticut's population, and improved management of these systems helps ensure that they are protective of public health and the environment. Comprehensive DSS management in accordance with EPA's guidance benefits many public health and environmental protection programs (drinking/source water protection, nonpoint source management, TMDLs, UIC, LIS, etc.). The priority lists includes other topics (e.g., Climate Change/Storm Resiliency, Nutrients, Water Monitoring, Pharmaceuticals, etc.) that impact decentralized sewage systems.

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Further in a number of the bullets the Clean Water Act is discussed without any mention of similar issues under the Safe Drinking Water Act. It is recommended that the SDWA be mentioned and discussed under the Funding and Integrated Planning sections. Also it is critical under the Water Quality Standards for Viruses section to note that when EPA works to develop recommended water quality criteria for viruses that the programs work closely with the state's public health agency to address public health and drinking water quality concerns. Please note the additional comments on the attached document.

In closing, this Department recommends NEIWPCC consider adding Decentralized Sewage System Management to the Water Program Priority list, as well as the items noted above for the SDWA and the DWSRF program. We appreciate NEIWPCC's assistance in addressing matters affecting public health and environmental protection.

Sincerely,

Ellen Blaschinski
Public Health Branch Chief
Regulatory Services Branch

c: Suzanne Blancaflor, Section Chief, Environmental Health Section
Lori Mathieu, Section Chief, Drinking Water Section

**New England Interstate Water Pollution Control Commission**
**Water Program Priorities**
January 2015

*This list of water quality priority topics was developed based on input from NEIWPCC's staff, Executive Committee, and Commission members. It represents issues that are of common concern to all of NEIWPCC's member states and that we expect to be engaged in for the coming years. Inclusion of topics in this document indicates that NEIWPCC is committed to assisting the states with addressing these issues. Priorities are not ranked, but rather have been listed in alphabetical order.*

Affordability of Water and Wastewater Services

Clean, safe, reliable, and low-cost water and wastewater services are considered a personal right in the United States. Almost a quarter of the 800,000 miles of water mains in the U.S. are more than 50 years old and 8 percent are beyond their useful life; more than $4 trillion will be required over the next 20 years to repair the water and sewer infrastructure and to continue to meet regulatory requirements. Some experts forecast water and sewer rates in the U.S. could double or quadruple over the next 15 – 20 years; and the pressure on customer rates will continue to escalate. Thus, the issue of affordability while still protecting public health remains critical to the water and wastewater industry. Innovative methods geared towards assuring water and wastewater services remain affordable for our municipalities are needed as well as assuring protection of public drinking water supplies. These methods include integrated planning, volumetric water and sewerage rates, direct financial assistance, and expanding low income relief programs.

Clean Water Act Reauthorization

The 1972 Clean Water Act (CWA) does not provide the tools to solve our nation's 21st century water challenges. More and more frequently, issues have arisen regarding complex topics (i.e., nutrients, mercury, stormwater, nonpoint source pollution, CWA jurisdiction, aging water and wastewater infrastructure, the energy-water nexus, climate change, cross-media concerns) that cannot be adequately addressed by the current Act. Our member states recognize this is a long-term effort but modifications to the Act or serious reform of EPA guidance documents must be initiated. Regional action on this issue is urgent and essential to restoring our nation's waters to ensure that clean water is available to sustainably meet economic, social, and environmental purposes today and in the future.

Climate Change

Whether we call it climate change or extreme weather, the impacts to the water sector in the Northeast are clearly evident. Increasing frequency of intense precipitation events, like Irene and Sandy, is just one of the many potential future climate change projections for our region that will require our attention. Our states should coordinate efforts and funding to ensure that we are capable of adapting to the complex challenges that are arising. Many of the current CWA's and SDWA's problems—such as aging infrastructure, funding needs, nonpoint source pollution, and energy use—will be exacerbated by climate change, and all uses of water, including agricultural, municipal, industrial, and ecological, will be affected. Thus, effective, sustainable water management cannot ignore climate change impacts. We must build resiliency to climate change and other future stressors into these management efforts.

Funding for Water Infrastructure

The Clean Water State Revolving Fund has provided Northeast states with over $6 billion in federal grant appropriations since 1989, but tens of millions of dollars could be reallocated away from the region each year through a provision in the Water Resources Reform and Development Act of 2014. Historically distributed according to allotments statutorily set in the CWA, funds may instead soon be distributed according to needs documented by states in the quadrennial Clean Watersheds Needs Survey. The Clean Water State Revolving Fund is frequently on the chopping block in federal budget discussions, despite $344.8 billion in national needs documented for the next 20 years – including $52.4 billion needed in the Northeast. Continued funding for these needs is sorely needed in Northeast states, even more so as infrastructure nears replacement age, and small changes to the formula represent millions of dollars each year. It is imperative that Northeast states are at the table, and well-prepared with alternative allotment options, for the national discussion that will be taking place in 2015.

**Comment [LM1]:** Should include a discussion of the DWSRF as well as there are similar issues and concerns by the states for the DWSRF porgrams

Harmful Algal Blooms

Cyanobacteria-associated harmful algal blooms (HABs) and their toxins are a growing concern in the Northeast. The frequency of HAB occurrence is on the rise and cyanobacteria toxicity has been associated with human health impacts including skin rashes, gastrointestinal and respiratory disease, and liver damage. Effects can be even more pronounced, potentially even fatal, in animals ranging from cattle to dogs. HABs have direct implications for the use of waterbodies for recreation, the susceptibility of public water supplies to toxins, public water supply treatment systems and the overall degradation of aquatic resources. In the absence of federal cyanotoxin guidance (under development in 2015 and 2016), states continue efforts to keep recreational and drinking waters safe through HAB monitoring programs, outreach and education, and official regulations guidance to prohibit use of affected waters.

Implementation of the TMDL Vision

At the national level the framework for implementing the CWA 303(d) Program has been updated. The result is known as the Long-Term Vision for Assessment, Restoration, and Protection under the CWA Section 303(d) Program, more commonly referred to as the 303(d) or TMDL Vision. The vision increases program efficiencies by allowing states to focus on planning activities (i.e., TMDLs or alternatives) within their priority areas. Rollout of the new TMDL Vision also includes a new program measure focused on priority areas. The Northeast states have been involved in efforts to develop the national Vision goals and implementation plans over the last several years. Now that the vision has been finalized and the new program measure will be implemented in October 2015, states are beginning the process of identifying priority areas and developing state-specific Vision plans.

Information Technology Support

More than ever, state water programs are dependent on technology for managing their day to day work. Databases store vital data, statistical programs are used to analyze these data, electronic reporting systems transmit required information to other agencies, and websites communicate information to the public and host online permit application systems. Growing use of and reliance on technology brings with it a greater need for information technology (IT) support. However, state water programs are facing challenges in receiving needed support due to reductions in IT staff, outsourcing IT support, and centralizing IT staff at a statewide level. To continue to meet increasing technological demands, it is crucial that state programs have access to the level of support they need. Success stories and lessons learned should be shared among states to foster regional improvement in this area.

Integrated Planning

While EPA, the states, and municipalities have achieved real progress in implementing the CWA, the challenges today are more complex than those of the past. Population growth, aging infrastructure, increasingly complex water quality issues, and current economic challenges are stressing implementation of CWA programs. The focus is often on CWA requirements individually and this approach may have the unintended consequence of constraining a municipality from addressing its most serious water quality issues first. An integrated planning process has the potential to identify a prioritized critical path to achieving the water quality objectives by identifying efficiencies in implementing competing requirements that arise from separate wastewater and stormwater projects, including capital investments and operation and maintenance requirements. This approach can also lead to more sustainable and comprehensive solutions, such as green infrastructure, that improve water quality as well as support other quality of life attributes that enhance the vitality of communities.

**Comment [LM2]:** There should be a mention of the SDWA as well as the CWA as there are similar implementation issues with the SDWA

Monitoring Our Waters

Water quality monitoring is the back bone of many CWA programs. Monitoring data are used to assess the condition of waters, develop TMDLs and watershed management plans, and determine the success of restoration efforts. As the region faces new water quality challenges such as climate change, there is a need for developing better indicators for monitoring, and work is ongoing in many areas to accomplish this task. In recent years, states have struggled to maintain robust monitoring programs due to limited funding and staff. At the same time, USGS' national stream gauge network has suffered due to funding cuts. Having the data to assess current, present, and future conditions is necessary for addressing the region's water quality issues and therefore support for these programs is critical.

Nutrients

Nutrients are one of the leading causes of waterbody impairments in the Northeast. However, development of numeric nutrient criteria poses a challenge because of the varying effects of nutrients across different waterbodies. EPA has expressed openness to flexibility in state approaches employed to develop and establish criteria, and many Northeast states are moving closer to finalizing proposals. While this work progresses, states continue to address nutrient pollution through a variety of other approaches, including TMDLs, watershed management plans, and establishment of water quality-based effluent limits for wastewater treatment plants.

Ocean and Coastal Management

The Northeast's coastal ocean is home to a diverse array of ecosystems that provide numerous benefits and have supported coastal communities for many years. However, increasing human use and inadequate management have put these systems at risk. Degraded water quality, depleted fish stocks, and damaged habitat are all signs that more attention must be directed toward management and protection of the region's ocean and coastal areas. The Northeast Regional Ocean Council (NROC) is a state and federal partnership that provides a forum for the New England states and federal partners to coordinate and collaborate on regional approaches to support balanced uses and conservation of the Northeast region's ocean and coastal resources. NEIWPCC and its member states are active members of NROC and will continue to participate in this effort to work toward protection and restoration of these very important resources.

Pharmaceuticals and Personal Care Products

NEIWPCC member states have identified pharmaceuticals and personal care products (PPCPs) as a cross-programmatic priority issue. The member states are particularly interested in the occurrence, fate, and

transport of these chemicals, in addition to their ecological and human health effects and implications for wastewater and drinking water treatment facilities. These compounds—especially endocrine disruptors—are a growing concern for the New England states and New York and there is a need for action and leadership at the local, state, and regional levels. Ongoing research should be focused on the environmental impacts of these compounds, including research on the prioritization of compounds of greatest concern, the development of better detection and analytical methodologies, source characterization, and human health and ecological impacts.

Staff Development

NEIWPCC strives to provide career-development opportunities for its staff to allow them to learn new skills and take on higher levels of responsibility. Professional development is offered through external and internal training programs, and informal learning is encouraged through collaboration among staff. Moving forward, NEIWPCC intends to continue to make it a priority to give staff the support they need to advance in their careers and become effective leaders. This commitment benefits not only the Commission, but its member states as well, as staff will be better prepared to take projects and initiatives to the next level.

Storm Resiliency

Our region has been greatly affected by recent intense storm events, including Irene and Sandy. These events have especially impacted the water sector, with flooding, power outages, infrastructure failures, and degraded water quality resulting from the storm impacts. In particular, extreme temperatures, intense precipitation, and high winds can all impact stormwater, drinking water, and wastewater infrastructure—including treatment plants—and can dramatically affect operations. These events require our states to respond to a range of complex challenges before, during, and after the storms. Our states should coordinate efforts and funding to ensure that they are capable of adapting to the complex challenges posed by these types of events and to prepare for all hazards. The region must prepare for the immediate needs of the water sector during such crises while also adequately planning for disaster preparedness, response, and recovery from similar events in the future. Intelligent storm response and emergency preparedness ("storm smart") efforts will foster resilience across the water sector, from natural systems to the built environment.

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Stormwater

Like all states across the nation, our member states must confront water quality impairments caused by polluted stormwater runoff. Our states' programs are heavily focused on developing and implementing the next generation of stormwater permits, particularly MS4 permits, while paying careful attention to the pending Massachusetts and New Hampshire MS4 permits to be issued by EPA. Our states are also interested in improving the use of stormwater permits to implement TMDLs. Finally, they are interested in the initiation of stormwater utilities whereby municipalities or stormwater management districts could collect fees—based on impervious area or some similar metric—to fund stormwater management and treatment efforts. Utilities or other fee structures may provide an avenue for sustainable funding of municipal stormwater programs.

Wastewater Certification

The training and certification of qualified wastewater treatment plant operators is essential to protecting our states' waters and preserving the improvements made by the many millions of dollars invested in our water infrastructure. But as state resources diminish, we face an additional challenge: doing the work of retired staff who for many years coordinated training, technical assistance, and certification programs. Our states are looking for ways to streamline and possibly regionalize training

and certification activities. NEIWPCC already serves as the wastewater certification administrative organization for two states (MA and ME) and also serves on the governance council for another (NY). Other New England states are beginning to explore options and opportunities for maintaining these important programs while making them sustainable.

Wastewater Treatment Plant Operator On-Site Technical Assistance Training Program (Section 104(g))
In 1982, the federal government acknowledged the need for training requirements as an integral component to proper operation and maintenance of the United States' vast infrastructure investment by establishing the Section 104(g) Wastewater Treatment Plant Operator On-Site Technical Assistance Training Program in the CWA. The goal of the 104(g) program was to provide direct on-site assistance to operators at small publicly owned community wastewater treatment facilities in order to help the facilities achieve and maintain consistent permit compliance. The 104(g) program helped to bring these facilities into compliance, improve plant performance, and assist with training of staff. This program also protected public health, improved water quality, and safeguarded capital investments and upgrades at treatment plants. Unfortunately, this program has not received funding since 2007. NEIWPCC encourages the New England congressional delegation to reinstate funding to the 104(g) program at $5 million. Its positive impact and value are indisputable, and it is even more vital now with the aging of wastewater infrastructure.

Water Quality Standards for Viruses
The 2014 West African outbreak of Ebola has brought the transmission of viruses via water or bodily fluids to the attention not only of human health agencies, but also their environmental counterparts. Wastewater treatment workers that might come into contact with raw sewage containing human waste from infected patients could be at risk, and should follow guidance on protection and hygiene from the Centers for Disease Control and Prevention. Because of Ebola's fragility when separated from its host (it can survive only minutes in water), experts do not believe that there is risk of waterborne infection after wastewater is treated. More broadly, the outbreak has prompted requests for EPA to develop water quality standards to protect waterbodies designated for swimming and other recreational use from viral infection risks. NEIWPCC and the northeast states working with the state's public health agencies will monitor any EPA efforts to develop recommended water quality criteria for viruses in anticipation of adopting these criteria into state water quality standards.