



WATER PROGRAM PRIORITIES

2020 UPDATE



Hudson River at Norrie Point Environmental Center

October 2020

INTRODUCTION

NEIWPCC's Water Program Priorities articulate the near- and medium-term programmatic goals of the organization and are updated every five years. The purpose of this document is not to catalogue all of the organization's work—past, present, or planned—but to provide a snapshot of the evolving water-related topics on which NEIWPCC is poised to make progress and on which our member states have indicated interest in our attention. Expression of the priorities in this document is not intended to discount any aspect of the totality of NEIWPCC's ongoing work. More information on NEIWPCC's work can be found on our [website](#) and in our publications, including our [Annual Report](#), [Interstate Waters magazine](#), and [e-newsletter](#).

This document was written by NEIWPCC staff using input from NEIWPCC Commissioners, staff, and partners. In early 2020, feedback was solicited from this group using an online questionnaire, from which we received 140 responses. Because of the nature of the questions and responses, this document is not a direct interpretation of those results, though important insights are reflected here and descriptive feedback received provided context and texture. Select quotes from NEIWPCC Commissioners are included below after each topic area discussion. In addition, content of recent Executive Committee and Commission meetings was reviewed for guidance on prioritization of topics. Finally, NEIWPCC's Division Directors, Executive Director, and Commissioners have reviewed and approved this document.

NEIWPCC's 2020 Water Program Priorities include the following five topics:

- Contaminants of Emerging Concern/PFAS
- Watershed Planning and Waterbody Protection
- Infrastructure and State Revolving Fund
- Clean Water Act Modernization
- Training and Certification

Strategic Plan

In April 2020, NEIWPCC published a [strategic plan](#); the first of its kind for the organization. This document builds from that plan and describes relevant linkages to it throughout. The plan includes our mission, vision, and values and describes the five categories in which our work falls:

- Connections
- Protection
- Training
- Education
- Engagement

Our work on all of our identified priorities is multi-dimensional and falls into many, and sometimes all, of these areas of impact.

The plan also describes three critical objectives related to Funding, Workforce Development, and Engagement, with associated strategic goals for each. In each of the priority topic areas described below, linkages to the three critical objectives in the strategic plan are discussed.

Climate Change & Resiliency

This iteration of NEIWPCC's Program Priorities is taking a new approach to the consideration of climate change and resiliency, recognizing that all of NEIWPCC's work is completed on a backdrop of a changing climate. Each priority topic has its own considerations that are linked to the impacts of climate change and to resiliency, which are described under the narratives for each topic area.

COVID-19 Pandemic

The process of this update began before the global pandemic became a local reality for the NEIWPCC community. As the crisis unfolded, NEIWPCC leaned in on its role in the region, becoming a hub for information for the water community and enhancing communication and coordination among water professionals as unprecedented situations continued to emerge each day. The priorities below are not written outside of the reality of the current situation and relevant considerations are discussed. The pandemic has and will create structural challenges that will influence how we address priorities. A nimble approach allowing adaptation to the realities of our work during and after this pandemic has and will continue to be important for success in our endeavors.

Commitment to Clean Water for All

NEIWPCC recognizes that communities with lower socio-economic status and those with larger minority populations are disproportionately those that contend with serious water quality issues and threats to their access to clean and safe water. NEIWPCC's vision statement—Clean and sustainable water throughout the Northeast—is inclusive of those communities. Our work in service of underserved and underrepresented groups is a key aspect of our priorities and is described throughout this document. NEIWPCC understands that we are not achieving our mission and realizing our vision until all of our communities have access to clean and safe water.



Sarah Schaefer, NEIWPCC staff at the Peconic Estuary Partnership, participates in the 2019 Estuary Day celebration.

Measuring Progress

An important aspect of conceptualizing our priorities and thinking about subsequent iterations is being able to evaluate the progress we have made in relevant work activities. We strive to be transparent and celebrate our successes. Moving forward, NEIWPCC will include linkages between our work and these priorities in our communications products, highlighting our work that advances them in our Annual Report, State Summaries, and other publications.

CONTAMINANTS OF EMERGING CONCERN / PFAS

Contaminants of Emerging Concern (CECs) have historically and consistently remained a priority issue for NEIWPC's member states. The occurrence, fate, and transport of CECs, their ecological and human health effects, and implications for wastewater and drinking water facilities unfailingly rise to the top of issues that NEIWPC staff, our member states, and Commissioners must work together to address. While the current CEC of the moment might change with the time, the need for coordination and research remains the same.

Per- and Polyfluoroalkyl Substances (PFAS) are a class of emerging contaminants that have received much attention in recent years, due to their persistence and mobility in the environment and potential harmful human health effects. In 2016, the EPA issued a lifetime health advisory level of 70 parts per trillion (ppt) for two major PFAS compounds- perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). Many states have adopted the EPA's health advisory level, while others have developed more stringent standards or guidelines and expanded guidance to include other PFAS compounds. The variety of approaches to defining standards/guidance and the resulting disparity in drinking water values has exacerbated challenges related to risk communication in many states.

The federal PFAS focus has remained primarily on drinking water and groundwater, with other media and water matrices being slated for the future. NEIWPC states, however, have begun work on ambient surface water quality standards and have begun the necessary research and planning to expand their understanding of PFAS surface water issues. Because these concerns are not currently the primary focus at the U.S. EPA, the onus of organizing the required efforts still remains primarily at the state level.

PFAS, like many CECs, are a cross-cutting issue- affecting many aspects of NEIWPC's work. The northeast sewage sludge infrastructure is experiencing stressors related to PFAS that impact regional capacity for effective waste management. Several northeast sludge incinerators have been closed due to more stringent EPA air standards. Currently available sludge disposal options do not address destruction of PFAS. With public awareness and outcry driving quick regulatory actions regarding PFAS, the trace amounts detected in wastewater solids have led to several states (VT, NH, ME) currently having restrictions on land applications. With pending legislation and legal responsibility uncertainties, many landfills have become reluctant, either reducing or altogether stopping the acceptance of sludge containing PFAS. The sludge generation and management community have proven resilient in their ability to quickly recover from stressors and provide the required and necessary services. However, these recent issues have brought to light deficiencies in regional wastewater sludge treatment, transportation, and disposal options, causing major concern for the NEIWPC member states.

NEIWPC has addressed this issue by providing discussion platforms for our states to come together and coordinate responses and actions at a regional level. CECs are discussed at both the staff and commissioner level, through our workgroups and regular commissioner meetings, respectively. We also provide technical assistance to the states on any issues requested. As we move forward, we have plans in place to develop online information platforms to allow for storage of relevant documents and data, as well as a forum for collaboration, fostering continued cooperation among the states.

PFAS isn't the first CEC that the northeast has grappled with, and it most certainly won't be the last. In the coming years, issues with 1,4-dioxane, arsenic, chloride, and temperature are

expected to be at the forefront of the contaminant focus for our member states. Being poised to provide information and support to our member states is a critical priority for NEIWPCC. We also plan to continue to seek out opportunities and strategies to translate lessons learned into proactive and standardized approaches to addressing CECs in the future.

Climate Change & Resiliency

With precipitation events predicted to become more intense and less consistent in nature under climate change, drinking water systems will be tasked with navigating potential supply issues during future droughts. The threats of CECs, such as PFAS, pose additional challenges in this environment, as discovery of contamination and work on remediation may lead to existing stress on water supply systems, potentially exacerbating difficulties experienced during future droughts. As climate change continues to affect our groundwater and surface water systems, in terms of both water quality and quantity, those varying conditions are likely to affect the fate and transport of PFAS compounds.

Strategic Plan

Funding: Successful management of the current challenges with PFAS will require significant and sustained funding. Meeting this critical objective for this priority topic will require NEIWPCC to ensure enough funding is available to continue existing efforts and identify new sources to assist our states on future efforts, where appropriate and necessary.

Workforce Development: Work on PFAS-related issues is tangential to this objective, though related trainings help improve the capacity of the existing workforce to address PFAS challenges.

Engagement: NEIWPCC's work on PFAS epitomizes our efforts to meet this objective. We have engaged our network of state, federal, academic, and NGO partners in workgroup meetings and Commission meetings to compile and communicate critical information to our states and work to address these challenges at a regional scale.



Meg McConville, NEIWPCC Intern, conducts a habitat survey for the 2017 EPA National Lakes Assessment.

“PFAS is a clear priority”

WATERSHED PLANNING & WATERBODY PROTECTION

NEIWPCC's member states work tirelessly to protect their waterbodies and plan appropriately to manage and protect their watersheds through not only state programs, but also cooperative efforts with federal agencies. Watershed planning and protection comprises a variety of interconnected components, including water quality monitoring, water quality standards, pollution budgets or TMDLs, permitting, and development and implementation of best management practices.

NEIWPCC works directly on these issues through our administration of place-based programs throughout the northeast. Integrated planning, adaptive management, and monitoring are major foci of the [Lake Champlain Basin](#), [Narragansett Bay Estuary](#), [Peconic Estuary](#), [Hudson River Estuary](#), and [Long Island Sound partner programs](#). Many of NEIWPCC's workgroups focus on these management and protection topics as well, including, for example, the Northeast Aquatic Biologists, Monitoring, Water Quality Standards, NPDES, Nonpoint Source, TMDL, and Stormwater workgroups. Our workgroups provide platforms for information sharing, coordination, and identification of priority topics and needs with which NEIWPCC can address and support state initiatives. In addition to regular workgroup meetings, NEIWPCC also organizes annual conferences that provide an additional opportunity for collaboration between state and federal program staff, as well as academia and utilities.



Peter Stangel, NEIWPCC, participates in the LCBP 2017 long-term monitoring QA assessment.

Recent and continuing focal points and Commissioner-identified priorities for these groups have been the development of a Regional Monitoring Network, PFAS, MS4 Stormwater Permits, nutrient criteria, a water quality standards academy, a collaborative Tracking & Accounting Initiative and a potential update to the regional mercury TMDL. Additionally, NEIWPCC is poised to participate in new and continuing collaborative efforts on the Merrimack River Watershed.

Climate Change & Resiliency

Each component of the watershed planning and waterbody protection process is subject to the challenges of climate change and proactive action will be necessary to ensure these systems are resilient to those impacts. Robust monitoring programs will be critical to understand how watershed and waterbody systems are changing. Adaptive management practices will be important for TMDL and pollution budget alternatives to adapt to changing conditions. As new permits are issued and existing ones renewed, regulators will need to look ahead beyond existing conditions. Nonpoint source pollutants are at risk of higher rates of conveyance from

the landscape to our waterbodies under a regime of more intense storms and increased volumes of stormwater will stress combined sewer systems further.

Strategic Plan

Funding NEIWPCC addresses this topic through a diverse set of programs and actions, the funding of which will need to be maintained to continue making progress. We have fiscal resilience in this sector of our work due to the diversity of funding models and providers; we will need to lean on our experience in this arena to be successful in meeting this objective.

Workforce Development State agencies are currently subject to a wave of retirements, losing not only the capacity to complete necessary work but also enormous amounts of institutional knowledge. NEIWPCC's wastewater management school and Youth and the Environment programs are just a few ways in which we help strengthen the pipeline of knowledgeable candidates from diverse backgrounds, who may fill the needs of our states in the future. NEIWPCC also works to provide professional development opportunities for current state and federal staff by hosting topical conferences and webinars, such as the Annual Non-Point Source Conference. Training opportunities are also made available to state staff to support water planning and protection, such as the Water Quality Standards Academy.

Engagement Continuing our work on this topic will help support meeting this objective. With a myriad of workgroups participating in the work and partners from across the region and the country involved, we are on strong footing to keep moving forward. Program partners provide on-the-ground action toward this objective with scientific, educational, and outreach activities.

“NEIWPCC has the unique ability to cut across all NE states and NY... It's clear that the folks who come to the meetings all listen to and respect one another.”

INFRASTRUCTURE AND STATE REVOLVING FUND

The American Society of Civil Engineers (ASCE) estimates that over the next 20 years, infrastructure needs in the Northeast total more than \$49 billion for each wastewater and drinking water, for a total of nearly \$99 billion¹. Here in the Northeast, many water distribution and collection systems are approaching a century in use. Water main breaks and combined sewer overflows are common, the latter of which can result in hundreds of millions of gallons of untreated sewage running into local waterways. Needless to say, investment in these types of infrastructure in our member states is of the highest priority and the availability of federal funds is key to the feasibility of catching up on the backlog of necessary work.

The Clean Water and Drinking Water State Revolving Fund programs (CWSRF and DWSRF) are two mechanisms through which infrastructure improvements are funded. NEIWPCC member states have been successfully administering these programs for decades and their continued funding and implementation is maintained as a priority in the region.

¹ Infrastructure needs were compiled from individual states' recent ASCE Infrastructure Report Cards (published from 2015-2020), each of which is, in turn, based on [EPA's Clean Watersheds Needs Survey 2012](#) (published 2016) and [EPA's 2015 Drinking Water Infrastructure Needs Survey and Assessment](#) (published 2018).

NEIWPC maintains a focus on assisting our states on these topics through a variety of means. First, we represent our member states' in communications to state and federal congressional delegations and in comment letters on specific policies, including letters on allocation of funding for the CWSRF program and funding for water and wastewater infrastructure in the region. NEIWPC will also be providing technical assistance and convening experts through a series of National SRF Infrastructure Financing and Training workshops. These were slated to begin in 2020, though the first workshop has been postponed to 2021 due to the COVID-19 pandemic. In the meantime, NEIWPC is hosting a series of 4 webinars in 2020, focusing on priority topics identified at the national level.

NEIWPC is also directly involved in projects to upgrade wastewater infrastructure. NEIWPC is supporting New York City Department of Environmental Protection (NYC DEP) in upgrading and maintaining wastewater treatment facilities in the watersheds from which they receive drinking water. We are also partnering with NYC DEP on another effort to administer funding to communities in the East of Hudson watershed for planning efforts to address inadequate wastewater treatment and protect drinking water supplies for NYC.

The realities of the COVID-19 pandemic have laid bare the importance of the availability and affordability of clean water and sanitation services. Capital improvements to necessary infrastructure will be important to maintaining access to these services in the Northeast and NEIWPC is dedicated to assisting our states in accessing funding and performing the work necessary to make progress.

Climate Change & Resiliency

New stressors on our water and wastewater infrastructure will emerge as the effects of climate change are realized and existing challenges will be exacerbated. An influx of funding early, that is sustained to meet existing demands, will be necessary to update and upgrade our infrastructure to modern standards. Consideration of climate change-related risks during capital investments will be critical to build resilience in water and wastewater systems for the future.

Strategic Plan

Funding Engagement on infrastructure-related work provides NEIWPC with the potential to access new and different funding opportunities and make progress in meeting this objective.

Workforce Development Though most of this work is focused on physical infrastructure, similar investments in human capital will be necessary to run and maintain water and wastewater systems of the future. A continued focus on NEIWPC training programs and support for youth programs, which often reach underserved communities, will provide the foundation for success in meeting this objective.

Engagement Our existing activities on this topic are already helping us move forward toward this objective, particularly by representing our states in comment letters and in our efforts to support SRF programs.

“Aging and failing infrastructure is the number one problem facing water and wastewater utilities. Several wastewater treatment plants have not been upgraded since the original Clean Water Act in the mid-1970s. Hundreds of miles of pipeline are over 100 years old and have passed the end of their useful life but are still in service.”

CLEAN WATER ACT MODERNIZATION

The 1972 Clean Water Act does not provide the tools to solve our nation's 21st century water challenges and remains a priority and focus for NEIWPCC. More and more frequently, issues have arisen regarding complex topics - nutrients, contaminants, stormwater, nonpoint source pollution, CWA jurisdiction, aging water and wastewater infrastructure, the energy-water nexus, climate change, and cross-media concerns - that cannot be adequately addressed by the current Act. While NEIWPCC and our member states recognize this is a long-term effort, short-term regional attention, and action when appropriate, on this issue is urgent and essential to creating the legal and policy constructs necessary to ensure that clean water is available to sustainably meet economic, social, and environmental purposes today and in the future.

NEIWPCC will continue to represent the Northeast states in national discussions on this topic, with a focus on modernizing the Act to better serve our current needs and current reality. We work to coordinate our activities and initiatives with those posed by national organizations like WEF, ACWA, and NACWA. NEIWPCC also continues to focus on monitoring the legislative developments related to the CWA and its regulations, providing assessment of proposed modifications, advising our member states and working to ensure that they are protective and aid the northeast states in their efforts to protect water resources. A recent example is the submission of a comment letter on a proposed amendment to the formulation of CWSRF allotment levels, which would have drastically reduced funding to New England and New York.

Climate Change & Resiliency

Without an updated toolkit, our states will be challenged to effectively implement the mandate of the Clean Water Act in the face of a changing climate. Water protections, and effective regulatory mechanisms for implementing them, are more critical as stressors of climate change continue to impact the health of our waters.

Strategic Plan

Funding With re-authorization will likely come new funding opportunities, which would allow NEIWPCC to further support our member states' needs and help meet this objective.

Workforce Development A new focus on Clean Water Act re-authorization may lead to more robust national consideration of the challenges facing the water sector, including those related to workforce. Implementation of related legislation may help meet this objective.

Engagement As NEIWPCC educates our Congressional delegation on the necessity of both re-authorization and modernization, we actively make progress toward meeting this objective. We will continue to collaborate with the efforts of national organizations, ensuring that the needs of New England and New York are considered and included in the broader conversation.

“Keeping the Clean Water Act moving, and improving on it, is a necessary step to ensuring we meet the goals of the original CWA.”

TRAINING & CERTIFICATION

NEIWPCC's training and certification activities have been a cornerstone of our work for decades and success of our long-term wastewater operator and onsite programs continues to be a priority for our member states. Further, NEIWPCC staff are constantly working to develop new training programs that are responsive to emerging topics and evolving member states' needs. While the COVID-19 pandemic has forced us to make changes in how training is offered, we have adapted to the current reality and are offering high-quality training through remote platforms.

NEIWPCC has and will continue to support individual member states' training and certification needs, including, for example, the Joint Environmental Training Coordinating Committee (JETCC) in Maine, and Massachusetts wastewater operator training, certification exams, and renewals. We are committed to assist member states in their future needs in this realm, and ready to draw on our decades of experience administering state training and certification programs.

One of NEIWPCC's strengths is in our nimble adaptation to address priority topics as they arise. We have partnered with US EPA to offer training courses on topics such as Whole Effluent Toxicity, permit writing, and recently developed a number of trainings and forums on topics such as extreme weather events, pretreatment and pollution prevention of brewery discharges, and municipal cybersecurity. We will continue to work with our Commissioners, staff, and partners to identify emergent training needs and develop and deliver effective content on those topics, as well as other regional needs such as the evaluation and update of the current edition of NEIWPCC's TR-16 guidance document.

Climate Change & Resiliency

NEIWPCC's training programs will need to continue to be responsive to how climate change is impacting wastewater treatment facilities. The potential for increased flows at facilities and potential vulnerabilities to flooding due to low lying facility locations are both examples of impacts that we can work to mitigate through proactive training and planning. These challenges are reflected in the 2016 TR-16 update, which added climate change factors including key concepts and criteria related to flooding, storm surge, and extreme weather events, and in NEIWPCC's Preparing for Extreme Weather at Wastewater Utilities Guidebook.



Paul Blain instructs students in a NEIWPCC Fall 2019 Title 5 soil evaluator certification course.

Strategic Plan

Funding NEIWPC's existing diverse array of training and certification programs has provided us with extensive institutional knowledge on funding models for related programs. Meeting this objective will require us to lean on this knowledge in future opportunities.

Workforce Development Training and certification programs are critical to meeting this objective. The Northeast faces challenges with an aging water workforce and high rates of retirement. Through our management school and operator school programs, we are able to interface directly with those new to the water workforce and those with decades of experience. We directly contribute to the water quality professional workforce and our programs are designed to help develop a diverse pool of candidates for current and future water industry jobs.

Engagement Our adaptive approach in our training programs allows us to react quickly to emerging issues – recent trainings, such as those developed in partnership with US EPA described above highlight this. Continuing this work will be crucial to meeting this objective.

“The training program helps the publically-owned treatment works operators to be more efficient and effective, so it should continue and evolve.”
