



of NEIWPCC 1947 - 2022

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NEIWPCC is a regional commission that helps the states of the Northeast preserve and advance water quality. We engage and convene water quality professionals and other interested parties from New England and New York to collaborate on water, wastewater, and environmental science challenges across shared regions, ecosystems, and areas of expertise.

## Interstate Waters

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NEIWPCC 650 Suffolk Street, Suite 410, Lowell, MA 01854 *Tel*: 978-323-7929 **www.neiwpcc.org**  Greetings friends,

s I write this, NEIWPCC is about to celebrate its 75th birthday on July 31, 2022. Quite a feat. I remain proud of the entire NEIWPCC organization, staff and its commission members. Our work is critical to the well-being of the people who live in the Northeast, and as the years pass, I see no lessening of this crucial work.



Reflecting back to June 30, 1948, Chairman Vlado A. Getting, M.D. wrote in NEIWPCC's first annual report that NEIWPCC was making rapid progress toward establishing a comprehensive program based on approved water quality standards and classifications of interstate streams in New England. He states, "the Commission is mindful of the advantage accruing to New England through the full cooperative actions of the several states in all matters dealing with the abatement of water pollution within the region."

For seven and a half decades, NEIWPCC has been helping our member states - Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont - protect and restore the waters of our region. Over this time, NEIWPCC has continued its progress, as illustrated in the timeline found in this issue, which highlights significant initiatives, accomplishments, and legislation that addresses ever-emerging concerns.

In 2022, NEIWPCC has an annual budget of \$54 million and 99 full-time, eight part-time, and 21 seasonal/intern staff situated throughout the Northeast. Our growth directly correlates with the quality and quantity of the work NEIWPCC does to help the states of the Northeast preserve and advance water quality. We were created to engage and convene water quality professionals from New England and New York to collaborate on water, wastewater, and environmental science challenges across shared regions, ecosystems, and areas of expertise. Seventy-five years later, NEIWPCC continues this essential work.

ultra Jan

Susan J. Sullivan NEIWPCC Executive Director

# Interstate Waters

Volume 6, Number 2



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### **Biotic Index Assesses Stream Health**

Resource managers in Southern New England have a new tool to assess biological conditions and water quality in slow-moving streams. The index of biotic integrity (IBI) uses biomonitoring - the use of organisms such as fish, benthic macroinvertebrates, or algae to measure environmental impacts. The tool specifically applies to low-gradient freshwater streams - those with low slopes, slow water movement, and few or no riffle habitats - in the coastal areas of Massachusetts and Rhode Island, which include the watersheds of southern Cape Cod, Narragansett Bay, Buzzards Bay, Martha's Vineyard, and Nantucket. These streams provide essential aquatic habitat, support wildlife and human recreational activities - yet are impacted by development, pollutants such as pesticides and road salt, and harmful algal blooms. An increased understanding of the biological integrity of these streams will inform decisions regarding their management, planning, and local and regional regulation.

The index was developed by NEIWPCC and the Southeastern New England Program (SNEP) with Tetra Tech, the Massachusetts Department of Environmental Protection, and the Rhode Island Department of Environmental Management.



A low-gradient, slow-moving stream in the SNEP region.

# Engaging Neighbors to Restore and Protect Waterways

The Lake Champlain Basin Program has launched "Stream Wise," a new program that works to bring neighbors together to protect and restore healthy waterways across the region. The goal of the program is to educate and engage streamside property owners to enhance and protect vegetated stream buffers on their land. Stream buffers provide increased flood resiliency and benefit water quality and habitat.

Stream Wise equips partners, such as watershed organizations, conservation districts, and other water groups,



Housing area where stream buffer enhancements could be made.

with a variety of tools, resources, and messaging to work directly with their local stream communities. Partners conduct outreach to streamside landowners about best practices for stream health and resiliency, perform assessments of stream buffers, and recognize property owners who maintain wide buffers of native plants along their section of river or stream. Stream Wise also showcases a plethora of regional technical resources that are available for property owners and project partners in Québec, New York and Vermont.

### Shoreline Project Addresses Impacts of Climate Change

A new \$1.85 million resiliency project will help the Hudson River's popular and scenic Dockside Park in the village of Cold Spring, New York withstand severe storms and flooding due



Active construction of the new Dockside Park shoreline, March 2022.

to climate change and sea-level rise. The design concepts for these improvements began in 2013 with a project funded by NEIWPCC and the New York State Department of Environmental Conservation's (NYSDEC) Hudson River Estuary Program in collaboration with the NYSDEC Hudson River National Estuarine Research Reserve.

The 26-acre state park has been hit by previous flooding, including Hurricane Sandy in 2012. To address the impacts of climate change, design elements include grading the shoreline, installing bank stabilization features – such as ice breaker boulders – and planting native wetland and upland vegetation for erosion control and improved habitat. Construction is anticipated to be completed by the fall of 2022.

### Lake Champlain Basin Program Updates Management Plan

During a lakeside event in June, the Lake Champlain Basin Program (LCBP) released an update to its management plan, "Opportunities for Action: An Evolving Plan for the Future of the Lake Champlain Basin." U.S. Senator Patrick Leahy, representatives from New York, Vermont, and Québec, and EPA officials from Boston and New York City attended the signing ceremony. The plan will guide the LCBP's work over the next five years to improve water quality and aquatic ecosystem health in the watershed.

It addresses the latest challenges and opportunities surrounding nutrient loading, aquatic invasive species, habitat conservation, and cultural heritage preservation. The updated plan also highlights two overarching goals: addressing the impacts of a changing climate on water quality and ecosystem health of the Lake Champlain watershed, and including diverse voices in decision processes and supporting communities with environmental justice concerns related to the lake.



### **NEIWPCC's 2021 Annual Report Available**

NEIWPCC's annual report for the fiscal year 2021 highlights the staff's work throughout the Northeast to preserve and advance clean water. Available on NEIWPCC's website, the report focuses on the continued coordination with member states around issues including environmental surveillance for COVID-19, wastewater cybersecurity, and PFAS monitoring and management. It also highlights the establishment of NEIWPCC's first internal Justice, Diversity, Equity and Inclusion (JDEI) Task Force, which provides a platform for staff across program areas and locations to collaborate on JDEI and environmental justice issues.



Lake Champlain Basin Program staff are joined by U.S. Senator Patrick Leahy and his wife, Marcelle.

# Nonpoint Source Conference Celebrates the Clean Water Act

The 32nd Annual Nonpoint Source (NPS) Conference, held this past April in Vermont, drew more than 100 environmental professionals from the private and nonprofit sectors, and state and federal agencies. With the theme "Clean Water Act: Past and Future," speakers reflected on the past 50 years and the future of work in the region. Session topics included financing NPS projects, partnership building and community engagement, and structural and non-structural best management practices. Tom Schueler, executive director of the Chesapeake Stormwater Network, gave the keynote address, "Urban phosphorus reduction strategies for New England lakes worth stealing from the Chesapeake Bay Watershed," offering relevant connections for the Lake Champlain phosphorus TMDL.



### Regional Approach to Hydrilla Management

Hydrilla is a federally listed noxious weed growing in dense beds, causing significant economic and ecological impacts. These include shading out native plants, slowing water flow, clogging flood-control canals and pump stations, impeding



Hydrilla is a submersed perennial herb native to Asia. It was imported to the United States in the early 1950s for use in aquariums.

swimming and boating, and impairing fish habitat by altering water chemistry and lowering oxygen levels. A regional effort to address this unwanted species was launched in 2017 during a Northeast Aquatic Nuisance Species Panel meeting. The panel is the lead coordinator for the Connecticut River Hydrilla Project, which published a five-year plan recommending the best management practices for the watershed, relying heavily upon monitoring and adaptive management practices. NEIWPCC is working with its member states to raise awareness and secure funding for hydrilla management efforts.

### Annual Northeast Aquatic Biologists Conference

The Northeast Aquatic Biologists (NAB) Conference returned to an in-person format, held this past March in Maine. The conference covered topics such as emerging contaminants in water and wildlife, data visualization and automation, regional monitoring networks, national lake assessments, aquatic invasive species, and climate change.

Dave Courtemanch, freshwater science and policy analyst at the Maine chapter of The Nature Conservancy, served as the plenary speaker, discussing his efforts to bring biomonitoring experiences in Maine to places such as Kenya and the Dominican Republic. Maulian Dana, Penobscot Nation tribal ambassador, gave the keynote address about educating and advocating for policy and laws that impact and protect the Nation's sovereignty, culture, natural resources, and general welfare.

### National Tanks Program Has Cleaned Up 90% of Petroleum Releases

L.U.S.T.Line, produced twice a year, reports on news from federal and state programs to control leaking underground storage tanks (LUST). The latest issue celebrates the cleanup of more than 500,000 petroleum releases from underground storage



tanks (UST) since the establishment of the national UST program more than 30 years ago. Mark Barolo, acting director of the U.S. Environmental Protection Agency's Office of Underground Storage Tanks, explains that almost 90% of UST releases in the United States no longer pose a threat of harmful contamination to the public's health and our soil and groundwater.

Additional articles in this issue explore the potential implications of the presence of PFAS at LUST sites, a pump explosion in Tennessee, and an interview with Rick Long of the Petroleum Equipment Institute, reflecting on his career in the tanks industry.

### **Rewarding Jobs with a Great Mission: Clean Water Industry**

Jeff Kalmes, superintendent of the Billerica Water Resource Recovery Facility in Billerica, Massachusetts, enthusiastically encourages viewers to consider a career in water resource recovery – also known as the wastewater industry – in a new video featured on NEIWPCC's website and social media channels. The video aims to shine a light on this often outof-sight, out-of-mind industry that is facing a crucial staffing shortage. Kalmes explains that the benefits of working in this field include recession-proof job security as well as the pride of providing essential environmentally-friendly services to the communities.

NEIWPCC assists in these efforts by providing regional wastewater training programs at locations throughout New England and New York State. The courses cover all aspects of water and wastewater treatment operations, maintenance, and management to ensure that environmental professionals are equipped with the latest knowledge and skills.



### Jeff Kalmes, superintendent Billerica Water Resource Recovery Facility

### **NEIWPCC Work Summarized State by** State

NEIWPCC produced individual "State Summaries" for the fiscal year 2021, which focus on the specific scope of work accomplished in each of its seven member states. The reports also illustrate NEIWPCC's regional impact, from providing training for environmental professionals, to coordinating across state



lines on issues as diverse as COVID-19 in wastewater, per- and polyflouroalkyl substances (PFAS), and road salt pollution. The State Summaries are available on NEIWPCC's website.



## 11th U.S. Symposium on Harmful Algae

October 23-28, 2022 Albany, New York at the Hilton Albany

### **Science to Support Solutions from Shore to Shore**

From freshwater to marine systems, the prevalence of harmful algal blooms (HABs) is a national environmental challenge, and solutions are needed. Celebrating this event in New York - the only state with Great Lake shorelines, marine coasts, and the diverse range of ecosystems between these extremes - creates an ideal setting to discuss progress in understanding algal bloom ecology and the solutions necessary to prevent and reduce HABs.

For more information, go to: www.neiwpcc.org/ events/ushab11

Logo by Thayne Yazzie

For more information about these stories, go to the News page on NEIWPCC's website, at www.neiwpcc.org. You can also get our online news posts sent straight to your inbox! Email communications@neiwpcc.org to subscribe to our e-newsletter, "Streamlined."



By Beth MacBlane

By the early 1900s, the nation's waterways had become filthy disregarded resources, in a country that was changing from an agricultural society to one focused on industry, and with a rapidly expanding population. The waterways played a vital role in that evolution, with mills popping up along riverbanks, and the creation of dams and canals to help fuel the booming industrial era. With little legislation or standards and minimal public concern, sewage, trash, and industrial contaminants were disposed of in creeks and streams.

YEARS

1947-2022

**OF NEIWPCC** 

Congress finally recognized the need for states to coordinate on water pollution control measures, and in 1947 passed legislation allowing for the formation of interstate water pollution control commissions. Connecticut, Rhode Island, and Massachusetts responded immediately by forming NEIWPCC (originally called the New England Interstate Water Pollution Control Commission). Vermont, Maine, New Hampshire, and New York State joined shortly thereafter.

NEIWPCC's early work focused on creating water quality standards and classifications for interstate waters in the region. The extensive water quality sampling and surveying naturally led to issues surrounding wastewater treatment. By the early 1950s, the region saw a rapid pace of construction of municipal wastewater treatment plants – a boost for water quality.

Explore this timeline for significant national and regional environmental events and legislation, as well as NEIWPCC milestones.

Beth MacBlane is an information officer in NEIWPCC's Communications and Outreach Division. Archived NEIWPCC annual reports were sourced for this timeline content.

### 1940s - 1950s

- **1940s** Per- and polyfluoroalkyl substances (PFAS) are first developed.
- 1947 July 31, NEIWPCC is established by an act of Congress.
- 1948 The Water Pollution Control Act offers state and local governments technical assistance and funding to protect water quality.
- **1950** NEIWPCC receives its first federal research grant to fund a study of industrial waste problems in the region.
- **1955** NEIWPCC expands projects in public relations, radioactive waste control, and boat pollution control. Industrial waste research remains a priority, with NEIWPCC publishing a study on reducing pollution from synthetic fiber mills.
- **1956** 61% of the total population of sewered communities in the region are served by wastewater treatment plants, up from 39% 10 years earlier.



Three states send representatives to NEIWPCC's founding meeting in November of 1947. Four more join by 1955. Above, commissioners from Vermont and Connecticut.

### 1960s

From protests and sit-ins to marches, the civil rights and equal rights movements – among other social and political causes – are in full swing in the 1960s and 1970s. People are demanding change and becoming aware of the impacts of pollution to human health and on the environment. There is a push for stronger legislation to control the amount of pollution being released into the environment. NEIWPCC delves into wastewater operator training – filling a crucial industry need – and launches the New England Regional Wastewater Institute (NERWI) in 1969 in Maine.

- **1960** NEIWPCC approves classifications for waters in 18 of the 27 interstate drainage basins in the compact area.
- **1962** "Silent Spring" by Rachel Carson is published, documenting the adverse environmental effects caused by the indiscriminate use of pesticides.
- **1965** The Water Quality Act charges states with setting water quality standards for interstate navigable waters.
- 1968 NEIWPCC holds its first wastewater training program with operators from all six New England states attending.
- **1969** The Cuyahoga River outside of Cleveland, Ohio catches fire, sparking water pollution control activities. This was the 13th time the river had caught fire since 1868.

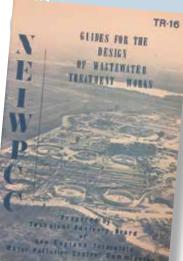


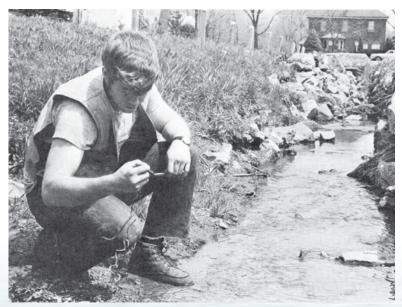
A researcher in Vermont poses beside the state's mobile laboratory, which was being used in the classification work on Batten Kill River. NEIWPCC approved the classification in 1965.



NEIWPCC's first wastewater training class, 1968

- **1970** The first Earth Day celebration is held, mobilizing more than 20 million Americans.
- **1970** The United States Environmental Protection Agency (EPA) is established with the mission "to protect human health by safeguarding the air we breathe, water we drink and land on which we live."
- 1972 The landmark Clean Water Act, amendments to the Federal Water Pollution Control Act, transforms U.S. waterways by requiring states to set clean water standards to protect uses such as swimming and fishing, and establishes the basic structure for regulating pollution discharges.
- **1972** The New England Regional Wastewater Institute (NERWI) begins operating a mobile training van to bring wastewater instruction directly to operators throughout New England.
- 1973 NEIWPCC publishes the first edition of the "TR-16 Guides for the Design of Wastewater Treatment Works," becoming an essential manual for the design of wastewater treatment facilities.
- **1974** The Safe Drinking Water Act is passed, ensuring the quality of America's drinking water.





A research technician at the State University of New York takes temperature readings in Meadow Brook in connection with the salt study being supported by NEIWPCC, 1970.



NEIWPCC Executive Secretary AI Peloquin (middle) and NERWI staff in front of the NERWI training van, 1977.

- **1975** NEIWPCC begins implementing a regional water quality surveillance plan, analyzing data from state and EPA sampling stations in 23 interstate rivers and tributaries.
- **1977** Clean Water Act amendments strengthen controls on toxic pollutants and gives the EPA more authority for controlling wetlands.
- 1978 Residents discover that Love Canal, New York, is contaminated by more than 20,000 tons of buried chemical waste. The pollution is linked to serious health threats such as cancer and birth defects.

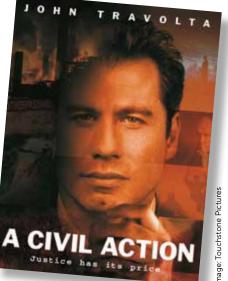


Barrels of toxic waste removed from Love Canal.

In the 1980s, conditions are markedly improved, thanks to a decade of unprecedented legislative activism leading to the passage of laws removing harmful pollutants from the land, air, and water. Pollution is now less visible than in the 1970s, and more complex. Acid rain, hazardous and toxic waste, and groundwater protection emerge as focus areas for NEIWPCC, continuing into the 1990s.

- **1980** Congress passes the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) to clean up uncontrolled or abandoned hazardous-waste sites.
- 1982 Disposal of soil laced with PCBs is selected for Warren County, North Carolina - a predominantly black community - sparking a nonviolent protest considered one of the earliest environmental justice actions in the United States.
- 1982 Recognizing the need for interaction among water, air, and solid waste programs, NEIWPCC coordinates the first joint meeting with the Northeast States for Coordinated Air Use Management and solid waste program representatives.
- 1985 The Long Island Sound Study (LISS) is established, and NEIWPCC manages Maine's newly formed Joint Environmental Training Coordinating Committee (JETCC).

- **1985** NEIWPCC publishes the first L.U.S.T.Line newsletter with support from the EPA's Office of Underground Storage Tanks, covering national industry news.
- 1986 Anderson v. Crvovac federal lawsuit concerning toxic contamination of groundwater in Woburn, Massachusetts. This case was the basis for the book (1996) and film (1998), "A Civil Action," bringing national attention to water pollution issues
- 1987 The New York State Department of Environmental Conservation's Hudson



• 1987 The Water Quality Act addresses several nonpoint source pollution issues.

River Estuary Program is established.

### 1990s

 1990 The Lake Champlain Basin Program (LCBP) is established to restore and protect the lake's water quality, fisheries, wetlands, wildlife, recreation, and cultural resources.



Youth participate in the Hudson River Eel Project.

- 1990 NEIWPCC establishes a Nonpoint Source Pollution Workgroup and coordinates the first annual Nonpoint Source Conference.
- 1990 NEIWPCC's Youth and the Environment Program launches, aimed at high school students interested in careers in the environmental field.
- 1993 The National Environmental Justice Advisory Council, a federal advisory committee to EPA, is formed.
- 1995 EPA's Brownfields and Land Revitalization Program outlines the way communities address and manage contaminated property, providing grants and technical assistance.
- 1996 The Drinking Water State Revolving Loan Fund is established.
- **1999** Partnership with the New York State Department of Environmental Conservation's Hudson River Estuary Program and NEIWPCC begins.

After the September 11, 2001 terrorist attacks on the World Trade Center in New York City, water-related security measures are heightened. In conjunction with the EPA and the New England Water Environment Association, NEIWPCC develops and conducts security and emergency preparedness training workshops for wastewater facilities in the region. Nationally, growing concerns about climate change are front and center in the news. There is also an increased focus on pharmaceuticals, personal care products, and PCBs in drinking water.

- **2001** The EPA approves the Long Island Sound Nitrogen Total Maximum Daily Load (TMDL).
- 2002 NEIWPCC begins organizing and hosting the Northeast Onsite Wastewater Short Course and Equipment Exhibition, a "one-stop" training/conference event for Massachusetts wastewater professionals and operators.

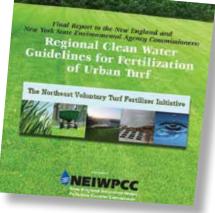
- 2003 NEIWPCC assists EPA Region 2 in managing the New York-New Jersey Harbor Estuary Program.
- 2005 NEIWPCC begins coordinating wastewater operator training, certification exams, and renewals for the environmental professionals based out of Massachusetts.
- **2007** NEIWPCC works with member states to submit the Northeast Regional Mercury TMDL plan to the EPA.
- **2007** The Lake Champlain Basin Program begins placing stewards at high-use boat launches on the lake, informing boaters about aquatic nuisance species spread prevention, collecting data, and performing boat inspections.



A Lake Champlain boat launch steward inspects and decontaminates a boat.

### 2010s

- 2010 The survey report and decision-making resource, "Gauging the Health of New England's Lakes and Ponds" is published by NEIWPCC.
- 2011 The EPA launches the Urban Waters Federal Partnership, aimed at reconnecting urban communities with their waterways by improving coordination among federal agencies.
- 2014 NEIWPCC publishes the "Regional Clean Water Guidelines for Fertilization of Urban Turf" report.
- 2015 The Long Island Sound Study embarks on a new Nitrogen Reduction Strategy, focusing on removing nutrient pollution from urban stormwater, turf fertilizer, and wastowater treatment ave





Youth from the 2019 Youth and the Environment Program learn about wetlands during a field trip.

wastewater treatment systems.

 2016 NEIWPCC releases the smartphone app "Bloomwatch" with EPA Region 1 and CitiSci.org to monitor cyanobacteria blooms.

In 2020, COVID-19 forces NEIWPCC staff to pivot to remote work and pause some projects and programs. The pandemic also puts a spotlight on how essential water and wastewater workers are in ensuring that communities have clean water. Emerging issues such as PFAS, or "forever chemicals," in water sources and biosolids present new challenges for potential human health and environmental risks.

- **2020** NEIWPCC undergoes a rebranding process and develops a strategic plan outlining its mission, vision, and values.
- 2021 Congress passes a \$1.2 trillion bipartisan legislative package, the Infrastructure Investment and Jobs Act. Approximately \$550 billion of the total is new funding, of which almost \$51 billion is allocated to much needed drinking water, wastewater, and stormwater infrastructure funding.

### **Program Partners**

NEIWPCC provides administrative, programmatic, and budgetary support to several place-based programs:

- The Lake Champlain Basin Program works with partners in New York, Vermont, and Québec to address challenges in the areas of phosphorus pollution, toxic substances, biodiversity, aquatic invasive species, and climate change; and improve stewardship of the region's cultural heritage.
- The Long Island Sound Study is a cooperative effort between New York and Connecticut to restore and protect the Sound by reducing nutrient (nitrogen) loads, habitat restoration, public involvement and education, and water quality monitoring.
- The Hudson River Estuary Program and the Hudson River National Estuarine Research Reserve are two intertwined programs in New York. Together, they protect and revitalize the Hudson River estuary and valley through education, training and outreach; stewardship and restoration; and monitoring and research programs.

### 2022: NEIWPCC at



NEIWPCC today is a vibrant organization comprised of more than 110 staff throughout New England and New York; with headquarters in Lowell, Massachusetts, a satellite office in South Portland, Maine, and locations within state agencies and program partners. Twenty active workgroups facilitate regional

collaboration and state-federal engagement on topics ranging from source water protection to wetlands.

Current Water Program Priorities include:

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

NEIWPCC's work and role in the Northeast and national water industry is more vital than ever, as current problems demand action and new, complex challenges arise. Despite the changes over the decades, NEIWPCC remains committed to the same vision set 75 years ago: clean and sustainable water for all.



From left to right: A Long Island Sound wetland study; participants at a Soil Evaluator course; removing invasive plants.

# Video Series Commemorates 75th Anniversary

Est. July 31, 1947

n a new series of videos, NEIWPCC commissioners share their personal experiences in the water industry and of the role NEIWPCC has played in their careers. All videos can be found on NEIWPCC's website, at neiwpcc.org/about-us/ 75-years-neiwpcc, as well as NEIWPCC's YouTube channel. The list below features the first in what will be an ongoing production of new videos.



### **NEIWPCC: A Watershed Moment**

What does 75 years of clean water look like? This video explores NEIWPCC's role in helping the states of the Northeast preserve and advance water quality, celebrates its accomplishments, and sets out priorities for the future.

### **Executive Director Susan Sullivan:** Celebrating NEIWPCC Successes

Susan Sullivan's career spans more than three decades with NEIWPCC, where she has witnessed significant organizational growth and capacity building, as well as improvements to the region's water quality. "An anniversary isn't just a celebration of success," says Sullivan. "It's a celebration of the trust-based relationships we have built with partners, dedicated staff, and the states we serve. We are celebrating being a part of the Northeast water world, watching it grow and evolve, giving back, and being a part of the story."



## Pete LaFlamme: Depending on NEIWPCC for Collaboration and Problem-Solving

Pete LaFlamme, director of the Watershed Management Division at the Vermont Department of Environmental Conservation, and current chair of NEIWPCC, speaks of the value NEIWPCC brings to the mission of state regulatory agencies and in the joint mission of the states to improve water quality.

## NEIWPCC

Celebrating 75 Years of NEIWPCC: Commissioner Pete LaFlamme



### Jane Stahl: Breaking Gender Barriers

When Jane Stahl began her environmental career in the late 1970s, it was a male-dominated field. Not to be deterred as the only girl in the room, she worked as an environmental policymaker, regulator and consultant; and eventually served as deputy commissioner of the Connecticut Department of Energy and Environmental Protection. In this new video, Stahl reflects on her career, the role of NEIWPCC, and the progress she's witnessed to diversify the environmental field.

## John Sullivan: Fifty Years at the Boston Water & Sewer Commission

In reflecting back upon his 50-year career, John Sullivan, chief engineer of the Boston Water & Sewer Commission (BWSC) shares his perspectives on the successful harbor cleanup and challenges encountered along the way. He also acknowledges NEIWPCC's valuable role in providing training for operators.



## NEIWPCC

Celebrating 75 Years of NEIWPCC: Commissioner Fred McNeill



# Fred McNeill: Improvements in Water Quality Standards

Fred McNeill, chief engineer of Manchester, New Hampshire's Environmental Protection Division, addresses the change in water quality of the Merrimack River since the Clean Water Act, and the role NEIWPCC has played in significant water quality achievements throughout the Northeast.

# From Hand-Written Engineering Designs to Emerging Contaminants: The Changing Water Industry

EIWPCC's Executive Committee and Commission is a cohort of knowledgeable and experienced water professionals, providing leadership and expertise as NEIWPCC sets priorities and navigates the challenges and complexities of advancing clean water. Here, several commissioners share their perspectives on the Clean Water Act, NEIWPCC's contributions and accomplishments, and insights from their own professional experiences through the years.

### **Brian Tarbuck**

General manager of the Greater Augusta (Maine) Utility District

This is a great industry if you enjoy solving multifaceted complex problems that impact public health. It's a noble profession, unsung, underappreciated, but it matters and is satisfying on multiple levels.



We've done so well on environmental cleanup that most people now take clean lakes, rivers and drinking water for granted. Fifty years ago, most people did not drink filtered drinking water. Rivers were sewers. In that short span of time, we haven't just changed practices, we've changed mindsets and expectations.

We are victims of our own quiet and unheralded success, as we are reminded whenever we increase rates to replace aging infrastructure that can no longer provide safe and reliable service. Or, when we testify that proposed regulations are possible to achieve but at an alarming price tag. We are unfairly blamed when our treatment processes can't remove PFAS or microplastics; as if we can simply will this sort of technology into existence.

Meantime, witness the growth of riverfronts into something communities are now proud of, not something they're ashamed of, exemplifying the success of the Clean Water Act. "We've done so well on environmental cleanup that most people now take clean lakes, rivers and drinking water for granted."

NEIWPCC is uniquely positioned to vacuum environmental information into a single hub and push that out to operators, regulators, utilities and environmental partners in an unbiased way. I'm so impressed with the caliber of people who work at NEIWPCC and how much they care and have been able to help me get in touch with people who can help solve problems. Networking is the value I derive most from interacting with NEIWPCC.

### **Dennis Lutz**

Public works director/town engineer for Essex, Vermont

When I got out of the service in 1970, I went to work for Vermont's Environmental Protection Division doing onsite systems. I later switched over to working with communities, to get them to build wastewater systems. Most of the state's systems were straight pipes to the stream. I was

one of two managing engineers each covering half the state, out a lot of nights at local meetings, trying to get communities to use federal and state money to build systems. By about 1984, we had pretty much accomplished the task. I then joined Hamlin Engineers and was responsible for designing the sewer system in Essex – a \$12 million project. I now have operated that system for more than 37 years.

What people may forget is that all this was done with a stubby pencil and paper – there wasn't any CAD, computers, or internet. Almost everything was done by hand or typewriters, and yet we got the work done. When I worked for the state, a fire destroyed our building and all our drawings and records. Only the EPA had hard copies. I spent three days in Boston, with two other engineers, copying those records and trying to piece the program back together so we could keep it going.



### **Jennifer Perry**

Bureau chief of the Materials Management and Compliance Assurance for the Connecticut Department of Energy and Environmental Protection

I've been working for the Connecticut Department of Energy and Environmental Protection for almost 30 years, and love that I get to work every day to preserve, protect, and improve our environment. There's nothing better than making a living making a

difference for the future.

NEIWPCC provides great forums to share thoughts, opportunities, and solutions around regional issues. Whether it's addressing wastewater operator training, emerging contaminants, or proposed changes to federal requirements, there's a sense of a shared mission, and knowledgeable staff, dedication and eagerness to help us achieve that mission.

### **Fred Gaines**

Retired, former New York commissioner

During my 45 years as a professional engineer, I worked for several consulting engineering firms and water pollution control manufacturers. I served as a member and chair of NEIWPCC during turbulent times, when a primary objective was to ensure that the member states got their share of the millions of dollars the EPA was pouring into the construction of publicly owned sewer works. The professional staff at the time was small, consisting of AI Peloquin, executive director; an engineer, a scientist, and a part-time accountant. AI would call each of the commissioners "sir" because we were changed so often by the state governments that it seemed a waste of his time to learn our names.

NEIWPCC had two principal operating units: a Technical Advisory Board (TAB) and the

Board of Commissioners. Our primary focus was maximizing the funds to be obtained from the construction funds section of the Clean Water Act (CWA) Amendments of 1972

The commission would have its formal meeting on a quarterly basis and rotate

between the seven states. The TAB met monthly in Boston and we would review the states' list of construction grant applications, and states would be pushed to make certain that they applied for all funds allocated by the CWA. If any of the states failed to request their full allotment, the funds would be returned to the EPA. NEIWPCC always had additional applications ready to be funded and would get some of those leftover funds. During the early years, funding was 85% of all construction costs, and if new technology was introduced, it could be brought to 100%.

### **Fred McNeill**

Chief engineer for Manchester, New Hampshire's Environmental Protection Division

This is a milestone year on many fronts for recognizing and celebrating our nation's clean water achievements. NEIWPCC was a federally created commission tasked in 1947 to become the vehicle of some of our country's first environmental stewards. Over the past 75 years, NEIWPCC's mission has grown, evolved, and diversified, but has never wavered from promoting and protecting our waterways.

Today, NEIWPCC is nationally recognized as an industry visionary, leading some of the most critical environmental programs in the region. I have been privileged to serve as a commissioner since 2008, and during the past 14 years I have seen firsthand the passion, the professionalism,



and the progress that NEIWPCC has achieved. I am confident and excited as the next generation of NEIWPCC water professionals passionately gears up to propel the commission into its next 75 years.

This year also marks the 50th anniversary of the Clean Water Act, the catalyst for perhaps the greatest collective engineering achievement of the past 100 years: the restoration and revitalization of our nation's waterways. Prior to the CWA, pollution had

slowly destroyed the beauty, aquatic life, and recreational use of many of our nation's waterways. Today, most have returned to their natural beauty, supporting aquatic life and full recreational activities, and have become the revitalized economic engines for many of our country's greatest cities.

"NEIWPCC always had additional applications ready to be funded ."

## **MAKING WAVES**

NEIWPCC Commissioner **Janine Burke-Wells** and Environmental Analyst **Jennifer Lichtensteiger** presented "Results from the 2nd National Survey of Biosolids Regulation, Quality, End Use and Disposal in the U.S." at the WEF Residuals and Biosolids Conference.

**Katie DeGoosh-DiMarzio**, environmental analyst, was certified as a Climate Change Professional® by the Association of Climate Change Officers.

Environmental Analysts **Lindsey Drew** and **Noreen Gallagher** presented at the Black River Watershed Conference about the New York State Drinking Water Source Protection Program.

Maryann Dugan, environmental analyst, received NEIWPCC's 2022 Annual Achievement Award in recognition of her enthusiasm, determination, and resourcefulness in moving the 2021 Northeast Aquatic Biologists Conference to a virtual experience.



Maryann Dugan and Susan Sullivan

**Sarah Fernald**, environmental analyst, co-authored the article published in Scientific Reports, "Coastal marshes provide valuable protection for coastal communities from storm-induced wave, flood, and structural loss in a changing climate."

**Richard Friesner**, director of Water Quality Programs, and **Evan Karsberg**, environmental analyst, represented NEIWPCC at Water Week 2022 in Washington, D.C.

**Eric Howe**, program director of the Lake Champlain Basin Program (LCBP) provided opening remarks at the Lake Champlain Research Conference. LCBP Environmental Analysts **Katie Darr, Lauren Jenness, Meg Modley**, and **Matt Vaughan** presented at the conference.

### **Leadership Transition in South Portland Office**

NEIWPCC appointed **Peter Zaykoski** as the new program manager of the South Portland, Maine office, following the retirement of long-time manager **Leeann Hanson** in April.

Zaykoski has been with NEIWPCC since 2018, serving as an environmental analyst for the Hudson River Estuary Program and the Hudson River National Estuarine Research Reserve. In his new role,



Leeann Hanson

Peter Zaykoski

Zaykoski oversees the day-to-day responsibilities of the South Portland office, managing the Joint Environmental Training Coordinating Committee (JETCC) training program, and acting as coordinator for other programmatic activities. He continues to serve as NEIWPCC's quality assurance program manager.

Leeann Hanson had worked for NEIWPCC for more than 30 years. As coordinator of the JETCC program she helped to deliver numerous training courses pertinent to wastewater treatment and other environmental issues throughout the state. She also guided the nonpoint source training efforts and licensing and certification work.

Ashley Inserillo, program manager, was nominated to co-chair the Association of State Drinking Water Administrators (ASDWA) Source Water/ Groundwater Committee.

Environmental Analysts **Lauren** Jenness and Matthew Vaughan presented at the annual Nonpoint Source Conference. Heather Radcliffe, director of the Water Resource Protection Division and staff attorney, provided opening remarks on behalf of NEIWPCC.

**Meg Modley**, environmental analyst, was reappointed as the Lake Champlain Basin Program representative to the Aquatic Nuisance Species Task Force.

Sarah Mount, environmental analyst, was interviewed for several publications, including the Hudson Valley 360 article, "Eel researchers hope to save species in decline;" a Washington Post article, "Giving

endangered American eels a hand;" and the video "The shocking truth about eels," by CBS Sunday Morning.

Lynn Porta, environmental analyst, was nominated as an advisor for the UNESCO Groundwater Youth Network. Porta also co-authored the North American Youth Parliament for Water report, "Columbia River Whitepaper." **Christina Stringer**, director of the Wastewater and Onsite Systems Division, served on the planning committee for the "Northeast Science of PFAS Conference: Public Health and the Environment."

**Stringer** also co-authored the research article, "Modeling the relationship between SARS-CoV-2 RNA in wastewater or sludge and COVID-19 cases in three New England regions," published in the Journal of Water and Health.

### Thank You to our Retiring Commissioners

**Roger Sokol** (New York), deputy director of the Center of Environmental Health of the New York State Department of Health; NEIWPCC commissioner since 2013.

**Nelson Thibault** (New Hampshire), chief officer for all municipal clients at Hoyle, Tanner & Associates, a national consulting engineering company, and sat on its board of directors; NEIWPCC commissioner since 1996.

### **In Memoriam**

**Reginald ("Tex") LaRosa**, former Vermont commissioner, serving from 1977-2003. LaRosa worked for the Vermont Department of Environmental Conservation for 35 years, including serving as the chief of operations.



### **PARTING SHOT**



NEIWPCC has come a long way from four founding members in 1947 to now more than 110 employees spread out across six of the member states. Each year in March, NEIWPCC staff members reunite in the Lowell, Massachusetts headquarters area for a two-day meeting of presentations, workshops, poster sessions, networking and socializing.

Although a commitment to the mission of preserving and advancing clean water has never changed, the staff diversity has, from once being overwhelmingly all-male to a more balanced and inclusive representation of gender.





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## **EVENTS**

#### 2022

Sept. 13-15, **27th National Tanks Conference**, Pittsburgh, Pa., www.neiwpcc.org

Sept. 18-21, **New England Water Works Association Annual Conference**, Newport, R.I., www.newwa.org

Sept. 26-28, **StormCon**, National Harbor, Md., www.stormcon.com

Oct. 8-12, **WEFTEC Conference** and Exhibition, New Orleans, La., www.weftec.org

Oct. 23-28, **11th U.S. Symposium** on Harmful Algae, Albany, N.Y., www.neiwpcc.org Oct. 30 – Nov. 2, **National Onsite Wastewater Recycling Association Onsite Wastewater Mega-Conference**, Springfield, Mo., www.nowra.org

Nov. 10, Green Mountain Water Environment Association Fall Tradeshow, Burlington, Vt., www.gmwea.org

Nov. 13-17, **AWWA Water Quality Technology Conference**, Cincinnati, Ohio, www.awwa.org

Nov. 29 – Dec. 1, **ACWA Fall Conference and Exhibition**, Indian Wells, Calif., www.acwa.com Dec. 4-8, **Restore America's** Estuaries Coastal and Estuarine Summit, New Orleans, La., www. raesummit2022.estuaries.org/

### 2023

Jan. 22-25, **New England Water** Environment Association Annual Conference, Boston, Mass., www.newea.org

Feb. 6-8, NYWEA 95th Annual Meeting Technical Conference and Exhibition, New York, N.Y., www.nywea.org

Feb. 15-17, **Northeast Aquatic Biologists (NAB) Conference**, Plymouth, Mass., www.neiwpcc.org March 5-8, **Annual WateReuse Symposium**, Atlanta, Ga., www.watereuse.org

March 28-31, **WEF/AWWA** Utility Management Conference, Sacramento, Calif., www.wef.org

April 11-13, **Annual Nonpoint Source Conference**, Saratoga Springs, N.Y., www.neiwpcc.org

April 16-19, **AWWA Sustainable Water Management Conference**, Minneapolis, Minn., www.awwa.org

