

Welcoming Two New Science Staff

Sarah Bounty, has been our Environmental Engineer for the last two years, heading up CWMN (our volunteer water monitoring program), helping towns prepare for new stormwater requirements, and identifying spots where communities could build “green-street” retrofits to reduce polluted runoff. As a key member of the NepRWA team, we were very disappointed to learn that her husband’s job will be taking them out of state.



While we are sad to see Sarah moving on, we are also very excited to welcome her successor, **Chris Hirsch** who will be our new Environmental Scientist.

Chris is a native of Baltimore, who spent two years working with **Blue Water Baltimore**, collecting water quality samples and developing a volunteer-based illicit connection detection program similar to NepRWA’s Hotspot Program. He earned his masters degree in Restoration Ecology, and has worked on a number of wetland and wildlife habitat restoration projects. Chris is excited about the opportunity to work on the Neponset and connect with our volunteers and municipalities.

Assisting Chris, at least for the next few months and hopefully longer, will be our new Field Sampling Coordinator, Meghan Rauber. Many of our volunteers have already gotten to know Meghan over the last few months in her previous role as our CWMN Intern and we are thrilled to have her become an official member of the staff.

Eagles on the River

A pair of Bald Eagles have taken up residence along the Neponset in Milton this winter and caused quite a stir, often seen soaring over the estuary and taking advantage of our healthy fishery resources. Bald eagles have also been spotted upstream lately at Willett Pond in Walpole.



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Mark Your Calendars!

April 9 Non-native Invasive Plant Control Canton Public Library

Join NepRWA and the Watershed Action Alliance of SE Mass for this workshop on managing exotic plant invaders around your home or business. Registration required, details at neponset.org/events.

April 30 Neponset Estuary Cleanup Along the Quincy RiverWalk and Neponset Greenway

Join NepRWA, the MA Department of Conservation and Recreation and other partners on Saturday April 30 from 9-12 for our Spring River Cleanup! This year we will have sites along the Quincy RiverWalk and the Neponset Greenway in Dorchester. Sponsored by Neponset Landing in Quincy. Details and a pre-registration at neponset.org/volunteer.

June 8 Annual Meeting Endicott Estate, Dedham

Save the date for our annual meeting, June 8, 6:30 PM at the beautiful Endicott Estate in Dedham. We’ll hear from a great keynote speaker (details soon!), learn what’s happening around the watershed, and connect with old friends. Our favorite event of the year!

September 24 Neponset River Fall Cleanup Hyde Park, Mattapan & Milton

Save the date for our fall river cleanup covering sites in Hyde Park Mattapan and Milton: Saturday, September 24.



Spring 2016

Neponset News

Protecting Our Water, Wildlife and Land

Towns Making Progress Toward Cleaner Water

Municipalities are the key to cleaning up water pollution across the Neponset Watershed. Our communities own and maintain sewer and stormwater infrastructure, and just as importantly, regulate the way private developers design and maintain private infrastructure.

It’s a big job. A smaller town in our watershed would typically discharge stormwater into streams at **150-300 “outfall” locations**, and would own more than **3,500 storm drain inlets** that need to be cleaned, inspected and repaired regularly. These and many other stormwater-related tasks are usually the responsibility of municipal departments, which tend to be understaffed.

In spite of these challenges, many of our communities are making strides toward improving their infrastructure. A few examples:

- **Stoughton** has upgraded its infrastructure maps and worked with NepRWA to secure a grant to treat polluted stormwater at the Gibbon’s School.
- **Boston** has finished its initial inspection of storm drains along the Neponset and removed almost 120 cross connections that were sending sewage into the river via storm drains.
- **Dedham** also won a grant with NepRWA to capture and treat polluted stormwater at three sites that drain into Mother Brook.
- **Westwood** recently updated its stormwater bylaw to better regulate polluted runoff from private development projects.

Continued, page 3



Funding Investments in Municipal Stormwater Infrastructure

The largest remaining source of pollution affecting the Neponset is the polluted stormwater runoff discharged to the river and its tributaries by **municipal stormwater systems**. These are the pipes and storm drain inlets that collect runoff from streets and neighborhoods and bring it to the river, usually with little or no treatment.

The US EPA issues permits to municipalities authorizing these discharges, and because stormwater continues to be such a major source of pollution across the state, **EPA is about to issue new rules requiring municipalities to do more to reduce the amount of pollution discharging from their storm drains**. While that’s good news for the

river, it represents a challenge for municipalities who will need to increase spending to maintain this large and often neglected piece of infrastructure.

NepRWA has been working with a regional group of nine towns and our partners at the Metropolitan Area Planning Council (MAPC) to help our communities lay the groundwork for success with the new permit requirements, and no piece of that puzzle is more important than helping communities figure out how to pay for the work.

One innovative funding option is a so called **stormwater utility** or stormwater enterprise fund. Instead of relying

Continued, page 2

Staff: Ian Cooke, Executive Director; Sarah Bounty, Environmental Engineer; Nancy Fyler, Outreach Director; Chris Hirsch, Environmental Scientist; Nancy Mahon, Office Manager; Dee Mulien, Development Director; Tom Palmer, Willlett Pond Manager; Meghan Rauber, Field Sampling Coordinator.

Corporate Members: Columbia Gas, Melissa Gilroy, CPA

Sponsors: Cedar Grove Gardens, Dedham Savings, Toll Brothers

Patrons: Bank of Canton, Boston Scientific, Porter Sales and Service, VJ Properties

Benefactors: Analog Devices, Boston Water & Sewer Com., Brookfield Engineering, GHT Foundation, Copeland Family Foundation, ESRI GIS, Hollingsworth & Vose Co., Kraft Group/New England Patriots, MA Environmental Trust, Walpole Cooperative Bank

Board Members: David Biggers, Elisa Birdssey, Theresa Dolan, Charles Foster, Christine Grady, Jim Green, Charles Johnston, Peter Kane, Taber Keally, Paul Lanenstein, Martha McDonough, Rory McGregor, Richard O’Mara, Les Tyrina

Officers: Brendan McLaughlin, President, Maura O’Gara, Vice-President, William Wiseman, Treasurer, Jerry Hopcroft, Secretary



Neponset River Watershed Association

The Watershed Association is a member-supported conservation group founded in 1967 to protect and restore the Neponset River, its tributaries and surrounding watershed lands.

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Director's Corner

Fishable-Swimmable

The Watershed Association works on quite a few issues, from stream habitat restoration, to protecting land, to volunteer river cleanup days.

But our bread and butter issue has always been cleaning up water pollution. After all, fish and wildlife can't thrive in dirty water, nor can local families safely recreate along polluted waterways.

This edition of our newsletter focuses squarely on where we stand and where we're headed in the effort to restore the Neponset and its tributaries to "fishable / swimmable" water quality standards.

The attached chart of changing water quality in the Neponset River Estuary tells the story of just how far we've come, but by the same token, the map of our recent volunteer testing data from wet weather days—when polluted stormwater runoff makes its way into local waterways—is a sobering reminder of just how far we still have to go.

We're grateful for the steady work of the many volunteers who help with our water quality program, and pleased to see so many of our municipal partners taking steps to reduce pollution.

To achieve our goals it will take leadership from our municipalities. If you are reading this newsletter, you are part of the local constituency for investing in clean water in your community. It's our job to make sure that our municipal officials and staff have the political support needed to get this job done.

Sincerely,

Ian Cooke,
Executive Director

Hotspot Project Gearing Up

Thanks to the generous support of our members during our year-end challenge grant, we are very excited to be gearing up for our **2016 Hotspot Monitoring Program**. The goal of the project is to begin revisiting 38 Hotspots—areas with elevated pollution levels that have been identified through our regular volunteer monitoring program or through anecdotal reports—and perform more detailed sampling with the goal of zeroing in on specific pollution sources and working with local officials to get them fixed.



While sampling can't begin until warmer weather arrives, we are already beginning to scout out conditions in our target areas, conduct preliminary site, visits and research sewer and drain maps. Our very first target for sampling will be **Unquity Brook in Milton**, a persistent problem spot which is also home to a spawning run of migratory rainbow smelt, who would benefit greatly from improved water quality. Additional matching funds from the **Office of Coastal Zone Management** will allow us to use genetic testing to determine the sources of bacteria in Unquity Brook, and identify sites that could be retrofitted to cleanup stormwater runoff before it is discharged.

The rest of the summer will be dedicated to tackling as many of the other hotspots as possible this year with the goal of allocating one day a week to field sampling and lab work, and a second day each week to following up on results. Look for more updates via our blog, facebook and twitter as the summer progresses!

Funding Municipal Stormwater Infrastructure

Continued from page 1

on property tax revenues to fund stormwater, this approach uses a **stormwater fee** based on the amount of pavement or impervious surface on each property in town, in the same way that water and sewer infrastructure is funded using a fee on water and sewer usage.

This approach has a number of benefits, not least of which is that it distributes the cost of stormwater infrastructure in proportion to the amount of runoff being generated by each property. It also creates strong incentives to reduce the amount pavement which is at the root of the problem.

Over the last several months, we and MAPC have been working closely with the **Town of Milton** to support their efforts to adopt a stormwater fee for their community. We are pleased to report that Milton's Town Meeting

approved this new initiative by a substantial margin in February, making Milton the first community in the watershed to adopt this approach. In Milton, the proposed fee would be on the order of **\$9 per quarter** for a typical single family home, and the money collected through the fee would reduce the amount of property tax currently used for stormwater.

In March, we also held a regional workshop on stormwater utility basics for our other partner communities, who will need to wrestle with how to fund their stormwater needs over the coming months. This included distributing data on the amount of pavement on each parcel in the watershed, and a preliminary analysis of how much communities would need to charge to raise various amounts of money through a fee.

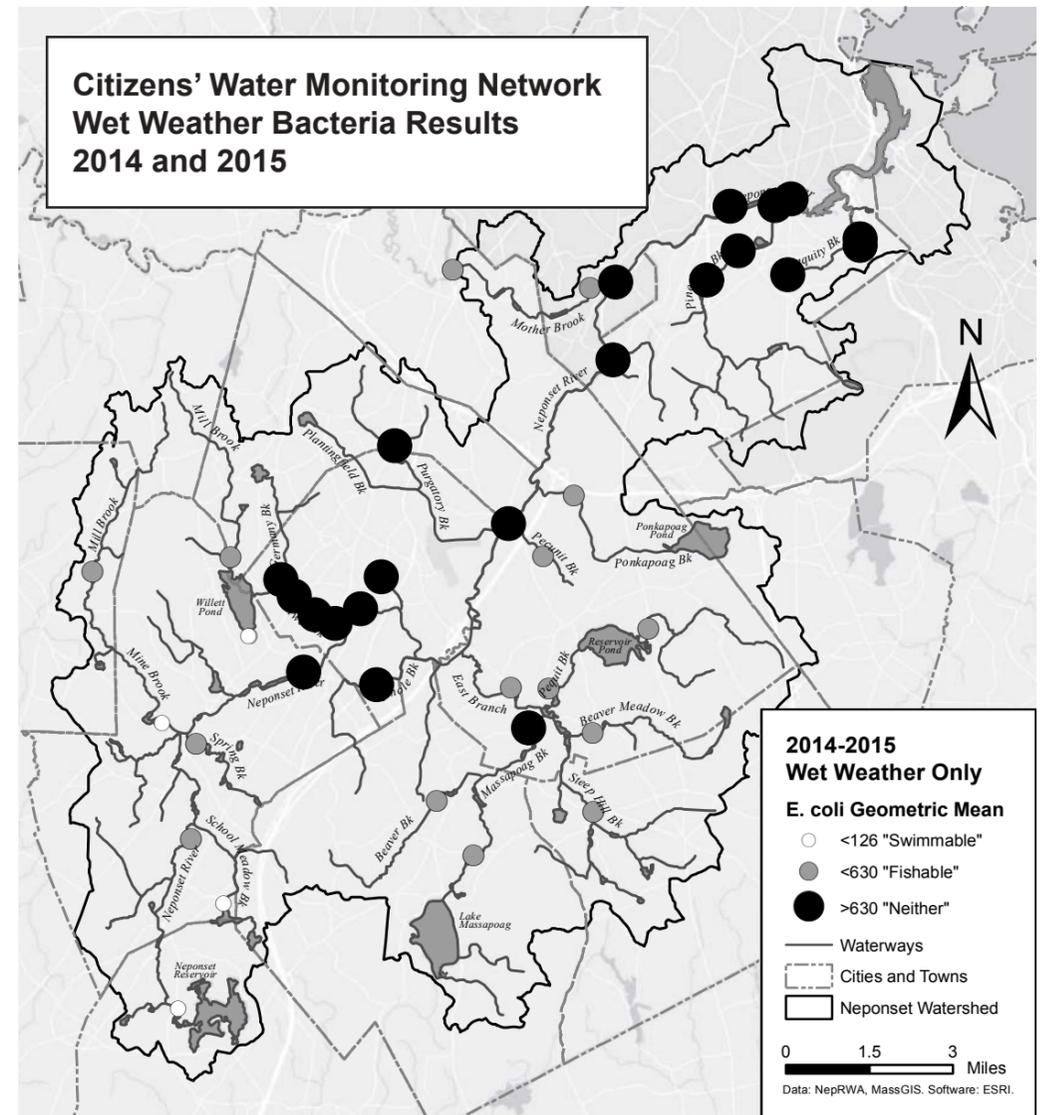
2015 Water Testing Results

CWMN or the **Citizens' Water Monitoring Network** includes more than 60 volunteers who work with us to collect water quality data at 41 sites across the Neponset Watershed. It has now been 24 years since the state collected a water quality sample in the Neponset Valley, and our dedicated volunteers are the sole source of scientific data to track our progress along the river and help flag problem areas.

2015 was another great year for the program with an amazing **1,644 individual measurements** collected.

The map to the right, showing wet-weather data for *E. coli* bacteria collected by CWMN volunteers over the last two years, illustrates the challenge posed by polluted stormwater runoff, and why we spend so much time and effort on this problem.

Learn more about our results, see slides from a recent presentation on the program, or find out how you can help as a volunteer at neponset.org.



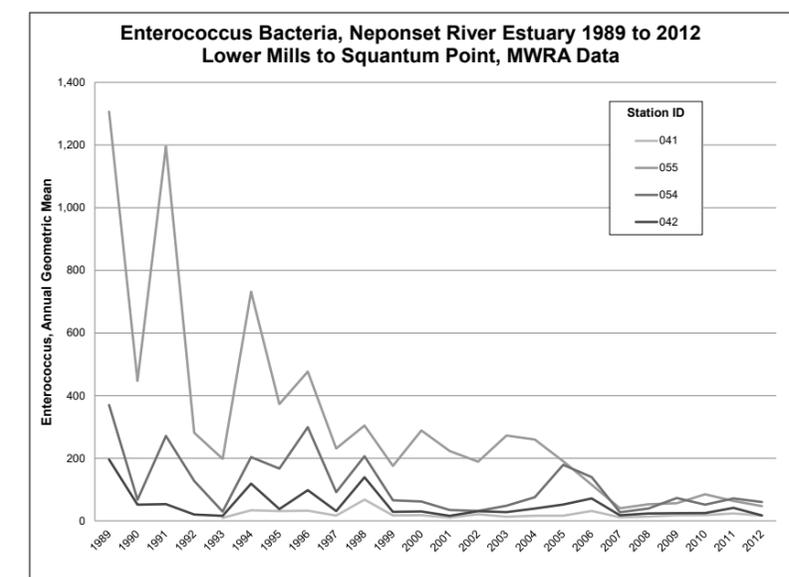
Cleaner Water

Continued from page 1

- **Norwood** has been making progress in reducing a variety of sewer leaks.
- The **Canton Conservation Commission** is revising its stormwater rules to address the effects of changing rainfall patterns that produce larger floods.

While we are the first to point out that there is much more to be done, we are also very pleased to see so many of our communities stepping up to reduce the level of pollution they discharge, and proud to have played a supporting role in many of these efforts.

Water Quality: How Far Have We Come?



This chart, developed from data gathered by the Mass Water Resources Authority, shows just how far we've come. It displays the annual geometric mean of enterococcus bacteria samples at four locations between Lower Mills and the mouth of the river, over the course of 23 years.