



Of Note

NepRWA Seeks Volunteer Water Sampling Drop-Off Coordinator

The NepRWA Citizen Water Monitoring Network ("CWMN") program seeks a volunteer to fill the position of Canton Drop-off Coordinator. The Coordinator oversees the drop-off of water samples by CWMN volunteers six times each year, from 6:30-7:30AM on sampling days. No direct water sampling is involved. Contact Bill Guenther, NepRWA Environmental Scientist, at 781-575-0354 x302 or guenther@neponset.org.

wat • er • shed (n): 1. the area of land draining into a particular body of water

Neponset River Watershed Association

NepRWA is a nonprofit conservation group founded in 1967 to protect and restore the Neponset River, its tributaries and their watershed lands. *News from the Neponset* is published six times each year. Printing by Blue Hill Press, Canton.

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2. a crucial turning point, 3. communities connected by water

Director's Corner: Setting New Program Direction

I hope you share my pride in the Neponset River Watershed Association's many achievements over the last few years. It is your generous support that has produced the cleaner, healthier river we all enjoy today.

Particularly in these difficult times, we owe it to you to set our priorities carefully, to focus our programs for maximum effectiveness, and to get the most for every dollar you contribute.

Accordingly, for the past several months, NepRWA's staff and Board have been taking a fresh look at where the river stands, and what we hope to accomplish over the next few years.

We have decided to focus on three key challenges facing the Neponset: polluted runoff, wasteful water use and damaged habitats. We have analyzed the driving forces that underlie these challenges and what has to be done to solve them. We also have carefully examined the strategies that proved most effective at promoting these solutions in the past.

We are in the final stages of deciding how we will focus our programs going forward. I know you will be interested in the results of this "miniature strategic plan," and we outline our latest conclusions in this newsletter edition.

Thank you for your membership and support!

Sincerely,

Ian Cooke
Executive Director

NepRWA to Focus on 3 Key Challenges & Strategies

For the past several months, NepRWA's Staff and Board have been taking a fresh look at where the river stands, and how NepRWA can best achieve goals. Below, we give you a brief snapshot of our thinking so far, on goals, challenges, what makes NepRWA unique, and the best strategies for NepRWA to maximize its impact going forward. The Board is now in the process of finalizing specific program objectives for the next few years. Look for the results in your next newsletter.

GOALS & CHALLENGES

The Neponset River Watershed Association's core goal is to assure a healthy river and watershed.

While the Neponset faces many threats, NepRWA's Board has prioritized three key problems that currently represent the greatest challenges to the future health of our watershed:

- Polluted runoff
- Wasteful water use
- Damaged habitats

PREREQUISITES FOR SUCCESS

The solutions to our watershed's challenges are varied, but any successful effort must begin with:

- A broad base of informed citizens motivated to take steps at home and to support appropriate action by local and state agencies;
- Knowledgeable public officials, especially local officials, equipped with the expertise, funding, regulatory authority and political support to address each problem.

NEPRWA'S ROLE

NepRWA's primary role is to mobilize citizens, property owners, towns or government agencies to act. In some cases—as with controlling Purple

loosestrife or implementing town water conservation programs—NepRWA takes a more direct role, recruiting resources from diverse partners and using our own staff or volunteers to implement the work.

One of NepRWA's distinguishing features is that we are "place-based." We focus on working with local people to achieve real change in our 14 communities. Our long-term commitment to a "single patch of earth" gives us deeper roots in the community and a more intimate knowledge of the watershed.

After careful review, NepRWA's Board of Directors has decided to focus primarily on three proven strategies to achieve our goals over the next few years.

STRATEGY 1:

EDUCATION & ADVOCACY

Working through events, the press, the schools, and advocacy campaigns, NepRWA's public education work mobilizes individuals, community organizations and young people. Technical outreach and advocacy to local officials, legislators and permittees shapes state, local and private decision making. Recent examples have included:

- Working with developers, large and small, to clean polluted runoff, reduce water use, and "daylight" portions of the Neponset River.
- Working with schools to teach third and fourth graders about the water cycle and water conservation.
- Securing the unanimous endorsement of 25 local groups for a formerly controversial plan to restore herring and shad runs.

September - October 2009

...Continued, Page 2

3 Challenges & Strategies, from page 1

STRATEGY 2:

RESEARCH & MONITORING

Good watershed science is critical to good watershed management. Finding pollution “hot spots,” measuring water levels, tracking invasive species, inventorying dams—all these provide the data to design smarter restoration strategies and drive investments in watershed infrastructure. Recent examples include:

- Finding dozens of sewer leaks and working with responsible parties to get them cleaned up.
- Inventorying obsolete dams and poorly designed stream culverts.
- Partnering with Wellesley College to study contamination in river sediments.

STRATEGY 3:

DIRECT IMPLEMENTATION

Sometimes, other agencies lack the workforce, expertise or other resources to address a critical problem. In such cases, NepRWA can play a unique role by bringing public and private resources together, often across town lines, and stepping in to do the work with our own staff or volunteers. Successful examples of this “hands-on” approach have included:

- Installing more than \$800,000 worth of devices to intercept and clean-up polluted runoff in partnership with area towns.
- Recruiting 90 volunteers to control invasive Purple loosestrife plants.
- Saving millions of gallons of water by helping Sharon, Walpole and Milton implement water conservation programs.

NEXT STEPS

Having decided to focus on these three broad strategies, the NepRWA Board of Directors is in the final stages of defining specific program goals for the next several years.

For more information, visit www.neponset.org or call 781-575-0354.

NepRWA Fights Polluted Runoff with Tree Box Filters

POLLUTED RUNOFF IS

A MAJOR CHALLENGE

One of the biggest challenges facing the Neponset is polluted runoff from streets and other paved surfaces. Every day thousands of miles of paved surfaces in the watershed accumulate oil, fertilizers, pet waste, sand and litter. Then it rains, and all that pollution gets carried, almost always untreated, to the nearest stream, quickly contaminating the river. With more than 100 rainy days each year, that’s a lot of pollution!

Because runoff is flushed straight into the stream, rather than recharging groundwater and slowly feeding the river through springs, pavement also contributes to low summer flows.

NEPRWA TAKES HANDS-ON ROLE IN PROJECT IMPLEMENTATION Through efforts like the recently completed tree filter box project in Milton, NepRWA is tackling the problem of polluted runoff head-on.

A tree filter box is a deceptively simple device that to the passerby appears to be a normal street tree. Consisting of a concrete box, soil and a tree, and positioned along a gutter, the tree box intercepts polluted runoff before it reaches the neighborhood stream, removing up to 90% of the pollutants.

Working with the Milton Department of Public Works, NepRWA has helped to plan, fund, and install 14 tree boxes along Brook Rd. and Lincoln St. near the Pierce Middle School, to help cleanup Pine Tree Brook

The tree boxes provide a vivid demonstration of how NepRWA is increasing its impact in key areas by taking a more hands-on role in project implementation.

“The Milton DPW was a great partner on this project,” said Ian Cooke, NepRWA Executive Director. “While the Milton DPW knows they need to be working on runoff problems, like most of our towns, it’s hard to get started when you are stretched thin. Having NepRWA pull together outside grant funding and help administer things



made the project do-able.”

EXTENDING THE IMPACT TO OTHER TOWNS

Just as important as the immediate goal of protecting the brook, the project serves as a demonstration of some of the newer, more effective technologies available to solve polluted runoff problems, especially in existing neighborhoods.

Primary responsibility for reviewing permit applications and deciding whether they meet state guidelines for controlling polluted runoff rests with volunteer-staffed town Conservation Commissions. Managing polluted runoff requires a complex blend of technical knowledge and legal expertise, and it can be a challenge to keep up with all the latest developments, especially when it comes to dealing with pollutants like *E. coli* and fertilizers.

To help extend the project’s impact, NepRWA Advocacy Director Steve Pearlman made face-to-face visits with Conservation Commissions throughout the watershed. Steve shared the latest technical information on tree boxes and other techniques for removing *E. coli* from polluted runoff. He also discussed the latest legal developments, which have given Conservation Commissions new authority to require developers to address these problems.

To learn more about innovative methods for controlling polluted runoff and the latest state requirements, visit www.neponset.org. Watch a video tour of the Neponset Tree Box Project at www.neponset.org/News&Events.htm.

The Last Chapter on Sewage Pollution in the Neponset

It is fairly obvious that a healthy river must be free of sewage pollution. NepRWA’s advocacy in the 1970s and 1980s focused on getting major problems with sewage infrastructure and industrial discharges fixed. In spite of the success of those earlier efforts, there are a number of areas in the watershed that are still impacted by smaller sewage pollution sources. For the last two years, NepRWA Environmental Scientist Bill Guenther has been spending much of his time trying to find these remaining sewage problems and get them fixed.

One area where Bill has been spending a lot of time is the Town of Norwood. Norwood has sewage problems in Hawes Brook, Germany Brook, Plantingfield Brook and Meadow Brook. On Plantingfield Brook, Bill discovered a town-owned storm drain discharging water with high bacterial and ammonia levels, suggesting that sewer lines from homes or businesses are likely piped into the storm drain, which leads directly into the stream, rather than piped into the sewer system. This type of cross connection between the sewer and storm drain systems is known as an “illicit connection.” Bill also found what appears to be an illicit connection discharging wastewater to Germany Brook.

On Hawes Brook near the Junior High School, Bill discovered that sewer manholes were overflowing during rainstorms, and he identified a small tributary to Hawes Brook which consistently has bacteria levels nearly 10 times higher than the legal limit, though he couldn’t find an exact source for the pollution. All this is in addition to longstanding problems with sewage discharges at Meadow Brook. The town has been working on Meadow Brook for 15 years,

but the sewage discharges continue.

NepRWA contacted the Town of Norwood to discuss these issues, but the Town repeatedly declined to meet. Consequently, NepRWA has urged the US EPA to require the town to make needed repairs. In the mean time, NepRWA has been assisting both the US EPA and MassDEP to collect their own water quality samples in streams around Norwood.

The other problem area Bill has been focusing on is the mainstem of the Neponset River between Hyde Park and Lower Mills, in Boston and Milton. Over the last several years, Bill has identified at least eight storm drain pipes owned by the Boston Water and Sewer Commission (BWSC) that are discharging sewage to the river. Thanks to NepRWA’s longstanding collaboration with the BWSC, they began conducting further investigations inside their storm drain systems as soon as we brought these areas to their attention. So far, BWSC has found at least 12 places where sewers are tied into drains. Several of these already have been repaired, and the remainder have been scheduled for repair.

NepRWA’s goal is to have all of the watershed’s remaining sewage pollution problems fixed within the next few years so that we can shift our full attention to the Neponset’s biggest water pollution problem—polluted runoff from streets and parking lots, resulting from rainstorms.

If you have questions or know of a suspicious discharge or pollution problem in the watershed, contact Environmental Scientist Bill Guenther at 781-575-0354 x302 or guenther@neponset.org.



Intern Joe MacDonald worked with NepRWA Environmental Scientist Bill Guenther over the summer to locate illicit connections in the Neponset River Watershed. Here, Joe sets up optical brightener tests inside pipes on Unquity Brook in Milton. The tests will help to locate any sources of untreated wastewater and sewage pollution.



In September, Mary Keally (top) and Sue Emery (bottom) joined a group of NepRWA Volunteers to install catchbasin markers in Milton’s Pine Tree Brook drainage basin as part of a stormwater cleanup project led by the Town of Milton and NepRWA. View more pictures at www.flickr.com/photos/neprwa.