

News From the Neponset

A Publication of the Neponset River Watershed Association

February - March 2004

NepRWA Project Update: Public Participation Needed

NepRWA is working on two projects that will have many beneficial long-term effects on the Neponset River Watershed.

If after reading the summaries below, you would like to learn more about these projects or any other programs in which NepRWA is involved, please contact us at 781-575-0354. Over the next several months, NepRWA will be reaching out to Neponset River Watershed communities for input on these endeavors, so we hope to be hearing from you!

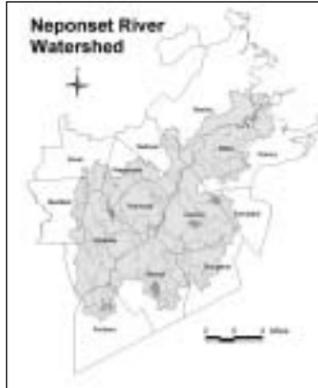
Boston Harbor Watershed Assessment & Action Plan

A project that NepRWA will actively work on through the summer is a partnership with the Fore, Weir and Back River Watershed Associations, UMass Boston, and the Boston Harbor Association to create the *2004 Boston Harbor Watershed Assessment and Action Plan*.

The Neponset, Fore, Weir and Back River Watersheds are part of the larger Boston Harbor Watershed.

NepRWA is currently assessing the condition of the Neponset River Watershed in terms of water quality, watershed hydrology, wildlife habitat, open space and land use. Once this assessment is complete, NepRWA will seek public input concerning recommendations to include within the report for actions and initiatives to be supported by state environmental agencies or undertaken by NepRWA or other local stakeholders to protect and restore the local environment and the quality of natural resources.

The developers of the *2004 Boston Harbor Watershed Assessment and Action Plan* are excited about these projects' positive long-term effects on the watershed.



Walpole Septic System Maintenance Utility

This project is part of a larger initiative funded by the Environmental Protection Agency and the Department of Environmental Protection to reduce the amount of non-point source pollution entering local waterways.

NepRWA is partnering with the Town of Walpole to investigate methods for more effectively maintaining and managing Walpole residents' septic systems. NepRWA encourages the use and proper maintenance of septic systems, as this type of wastewater treatment system – as opposed to the municipal sewer system – recharges groundwater supplies, helping to maintain adequate flow in local streams. Approximately half of Walpole homeowners use septic systems.

NepRWA is working with the Walpole Board of Health, the Water and Sewer Department, a local septic hauler, and residents to discuss ways in which Walpole septic systems can be properly maintained. Proper maintenance will ensure that local groundwater is recharged and septic system failure and pollution of local waterways is avoided.

This spring, NepRWA will approach Walpole residents for input on committee-selected methods for ensuring proper and timely maintenance of septic systems. Methods currently being considered by the committee include an active residential education campaign, a pilot program in which a select number of residents pay for a town-managed service to pump and maintain septic systems, and the proposal of a by-law to grant permission to the town to maintain residential septic systems.

If you would like to receive notification about public meetings or copies of the committee recommendations, please contact NepRWA.

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

Neponset River Watershed Association
NepRWA is a nonprofit conservation group founded in 1987 to protect and restore the Neponset River, its tributaries and their watershed lands. News from the Neponset is published six times a year. Printing by Blue Hill Press, Canton.

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NepRWA's Wish List



Do you yearn to apply your special skills to watershed conservation?

NepRWA would do *somercatis* for:

- Assistance with website maintenance.
- Photographs of the Neponset River. Digital images would be most useful.
- Donation of a digital camera.

Restoring Water Quality in Pine Tree Brook



Many Milton residents cherish the natural beauty and local travel route provided by Pine Tree Brook, a waterway that heads northeast from Milton's Pope's Pond, beneath the Blue Hills Parkway, past the Milton High School and residential developments, and under the Thacher Street bridge. The Pine Tree Brook corridor serves as a walking route for students, residents and their pets.

The natural systems and access route provided by Pine Tree Brook have also caught the eye of the Neponset River Watershed Association (NepRWA) – along with periodic elevated levels of fecal coliform bacteria in the brook's waters. With funding through the Clean Water Act, NepRWA, GeoSynTec Consultants and the Milton Department of Public Works (DPW) have developed a strategy to protect and restore Pine Tree Brook to fishable, swimmable conditions. At a February 5th Community Meeting in Milton, this plan was presented to the public.

The Challenge

Several years of water testing in Pine Tree Brook have exposed periodic elevated levels of fecal coliform bacteria. These microorganisms originate from pet waste deposited along streamside paths and in nearby streets. Rainwater and snow meltwater carry the waste into the brook's waters, often first through stormdrain grates and underground pipes. In addition to pet waste, water that flows over the ground also gathers pollutants such as oil, antifreeze, fertilizers and salts, all of which pour into the brook.



These compounds reduce the waterway's ability to support a healthy array of plants and animals or to safely host human recreation. Water contaminated with pet waste may host viruses, parasites and bacteria. It may also support excessive plant and algal growth, which blocks sunlight from submerged aquatic vegetation and yields low oxygen levels within the

water. Once the thriving plants and algae die, the bacteria that decompose them consume more of the water's oxygen, further stressing other aquatic organisms.

A Solution

Once implemented, the restoration strategy will filter contaminated stormwater through the ground before it can enter the brook. In this way, pollutants such as dog waste will be removed from the water to break down in the soil or be used by vegetation. Besides making for a cleaner brook, this process will also reduce Pine Tree Brook's flooding, erosion and sedimentation by decreasing the speed and amount of entering water.

On the northern bank of Pine Tree Brook, stormwater will be filtered through shallow depressions in the ground (*bioretention cells*) that are lined with permeable soil and planted with species of trees, shrubs and smaller plants that are able to quickly absorb significant amounts of water. In this way, stormwater will better absorb into the ground to be used by plants or slowly seep through the soil into the brook.

On the southern bank of Pine Tree Brook, runoff from the Home, Inc. residential development will flow through a long, shallow grass depression (*grassed swale*) and then along the path of a former stream through a wooded wetland, eventually to join the brook. Along the way, some water will be absorbed into the ground and some will evaporate. During large rainfalls, water from Home, Inc. will be divided into two flows – one into the old streambed and one into the pipe that leads directly into the brook. In this way, upland flooding will be averted.

The project will also create a formal recreational pathway where there is now a dirt trail along the northern bank. Waste receptacles will be installed next to dispensers for plastic "mutt mitts" that will provide dog-walkers with a means to pick up their pets' waste. Signs will be erected that remind people to pick-up after their pets, and interpretive signage will provide visitors with both a natural and general history of Pine Tree Brook.

Only with the help of Milton residents will Pine Tree Brook's restoration continue over the long-term. Thus, with an eye to the future, residents will be kept abreast

of project work via articles in local newspapers and a bill staffer. Residents will also be invited to participate in brook restoration events and in a community meeting. The meeting will enable residents to ask questions and provide feedback and direction for the project.

There will also be a door-to-door canvass and storm-drain stenciling conducted in the neighborhood just north of the brook. A brook clean-up will also be held in conjunction with the Pine Tree Brook Neighborhood Association. Finally, once construction of the structural aspects of the project is completed, Milton residents will be invited to learn how the structures function. Throughout these activities, NepRWA will emphasize the connection between residents' activities and the quality of the brook.

Through a combination of Milton resident participation and the functioning of the stormwater treatment structures, Pine Tree Brook will become a higher quality element of the local environment and the Neponset River Watershed.

A Book Club for NepRWA!

NepRWA has started a book club!

Our selections are about nature, the environment, sense of place, and any other relevant topic. The format can be non-fiction, fiction, memoirs, or any other compelling print media.

We meet for one evening each month to discuss the book over snacks and good company. Please join us!

Our next selection is: *Living on the Edge* by Jeff Corwin (ISBN 1579547923).

Publisher Comments: "One of America's favorite nature show hosts gives readers the adventure and education they expect from him while exploring rare wildlife in four exotic ecosystems."



For more information, please contact: Wendy Parisi, paris@neponset.org or 781-575-0354.

"Goodbye" from Jessica Stephens

Jessica Stephens will soon be leaving her position as Water Resource Analyst at NepRWA to participate more directly in the realm of Massachusetts environmental politics.

"It has been incredibly interesting, fulfilling and fun to work at NepRWA. I want to thank all of our members and volunteers who I have had the pleasure of working with because I truly feel that you are the people who are making big changes for this watershed and for the environment as a whole. I have been inspired by individuals who want to protect local natural resources, either by collecting water samples at 6 AM, speaking out at local Conservation Commission and Planning Board meetings, or by contacting legislators and the Governor's office to ask for responsible decision-making in regards to our environmental agencies and regulations in Massachusetts.

"Keep up the good work, everyone! Thank you for your support and enthusiasm. I wish you and NepRWA continued success in protecting the Neponset River Watershed."

Vote on Rattlesnake Hill

On Tuesday, March 2, a Special Election was held in Sharon to determine if Rattlesnake Hill would be protected forever – or transformed into a large residential development.

A part of Sharon's Open Space and Recreation Master Plan since 1986, and the highest point between Cape Cod and Blue Hill, 339-acre Rattlesnake Hill offers spectacular vistas, hiking trails, woods, vernal pools and wildlife habitat. Rattlesnake Hill is also one of the largest remaining undeveloped parcels of land within the Neponset River Watershed. Strong support from Sharon residents to fund only half of the cost to protect this natural landscape would yield a powerful trigger to the State of Massachusetts to cover the remainder.

What should Rattlesnake Hill be protected from? *Development.* Braintree developer Mountain Street LLC plans to construct 250 houses on 230 acres of Rattlesnake Hill. Were Rattlesnake Hill developed, the landscape would be patch-worked with roads and houses. Communities of plants and animals that are an integral part of the landscape would be subjected to altered environmental conditions. If unable to adapt, species would be forced to move elsewhere – or die. Development would also obliterate the largest remaining expanse of nearly unfragmented natural landscape within the Neponset River Watershed.

Moreover, Sharon's Finance Committee has determined that the town would lose money on the proposed development, because the cost to provide services to the homes would exceed the revenue gained from taxes and financing. In fact, over 20 years, Sharon would spend \$3.2 million more on the proposed development than it would if it purchased the land and kept it undeveloped.

If Rattlesnake Hill were acquired by the town of Sharon and the Commonwealth, millions of dollars would be saved and 337 acres of land would be turned over to the Department of Conservation and Recreation and annexed to Borderland State Park. Only 2 acres would be developed.

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Rattlesnake Hill, *continued*

Together, Rattlesnake Hill, Borderland State Park, Sharon-owned conservation land, and Stoughton's Bird Street Conservation Area would yield an expanse of more than 2800 acres of natural lands. This landscape would ensure the availability of high-quality wildlife habitat and provide a continual source of clean water. Sharon already experiences water shortages; why further strain the water supply with 250 new homes?



NepRWA recently mailed a letter to Sharon residents concerning the importance of conserving Rattlesnake Hill and urging participation in the March 2 vote. As always, NepRWA encourages residents to act to ensure that our Watershed is as welcoming a place for our children as it has been for us.

Local Outdoor Events

NepRWA member Steve Olanoff will lead two bird hikes, co-sponsored by the Friends of the Blue Hills and the Brookline Bird Club. Call for more info.: 781-326-6585.

• **Spring Migrants.** April 3, 8AM-12:30PM. Beginners welcome. Meet at the small parking lot on Chickatawbut Road in Milton, east of Randolph Ave. (Rte. 28).

• **Woodcock Walk in Fowl Meadow.** April 3, 5-7:30PM. Witness the Spring mating flight of the American woodcock. Meet at Burma Road parking lot on Neponset Valley Pkwy., near Paul's Bridge.

Events coordinated by the Department of Conservation and Recreation (DCR). Call for more info.: 617-698-1802.

• **Maple Sugar Days.** March 13 & 14, 10AM-4PM. Make syrup in the traditional way at Brookwood Farm. Event parking: take Exit 3 off Rte. 93. At end of ramp, follow signs for Maple Sugar Days parking. Joint program with Massachusetts Audubon Society. \$5/adult and \$3/child ages 3-12 years old (free under 2 years old).

• **Moderate Walk.** March 21, 1PM. Some hilly terrain, 3 miles. Walk from the Donovan School to Ponkapoag Trail and return via Madden Rd. Meet at the Donovan School on Reed St. in Randolph. Coordinated by the DCR Blue Hills Walking Club.

• **Moderate Walk.** March 27, 1PM. Hilly terrain, 3.5 miles. Walk the green dot loop in the Great Blue Hill section via Wolcott Path. Meet at the Trailside Museum north parking lot on Rte. 138 in Milton. Coordinated by the DCR Blue Hills Walking Club.

• **Stone Walls & Cellar Holes.** March 28, 1PM. Discover the back roads of the Blue Hills and look for traces of bygone gardens and cellar holes of Glover Homestead. Registration required.

