



Get Pumped!

Are you a Walpole resident and a septic system-owner?

If so, NepRWA invites you to host a small, educational workshop at your home. NepRWA is working with the Walpole Board of Health to improve Walpole's water quality, and one of our goals is to make septic system maintenance easier. (Properly maintained septic systems recharge groundwater with clean water.) At each workshop or "pump-out party," NepRWA and BOH will give a presentation, a septic hauler will answer questions, and the host will receive a free septic system pump-out. Attendees will be offered discounted pump-outs. To learn more, contact Carly: 781-575-0354, rocklen@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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New Mixed-Use Development — Smart Growth for Westwood

Drive along Rte. 128 in Westwood and you'll see a large sign hanging from the MBTA/Amtrak station announcing the development of "Westwood Station," a mixed residential/commercial/office project "coming in 2007." Though the timing may be optimistic and the design is not yet final—even the name Westwood Station is tentative, according to developer Cabot, Cabot and Forbes (CC&F)—virtually everyone, including NepRWA, is excited by the idea of replacing a very large area of factories, warehouses, and parking lots with a development served by a major public transit station.

This development is an example of Smart Growth. Smart Growth projects "reinvigorate our cities, bring new development that is compact, walkable, and transit-oriented, and preserve the best of our landscape for future generations"—a description offered by NRDC of such projects in the University of Wisconsin-Stevens Point's publication *The Land Use Tracker*, Vol. 2, Issue 4, Spr. 2003.

NepRWA is working closely with CC&F and with the Town of Westwood to ensure that the project improves stormwater treatment, protects existing water supply wells, creates new open space, and provides pedestrian access to the Neponset River and an extensive network of trails in the Blue Hills Reservation, across the railroad tracks and Rte. 128.

Town of Milton and NepRWA Sign Water Quality MOU

Under the EPA Phase II Stormwater Permitting program, the Town of Milton—like all towns in the Neponset Watershed—faces a federal mandate to take a variety of actions to ensure that town-owned drainage systems are not contributing to pollution in the Neponset River or its tributaries. Among the requirements that towns face are establishing public education and involvement programs and locating and eliminating pollution sources that reach the river through town-owned drains. Many of these requirements are addressed in part by the work of NepRWA's Citizen Water Quality Monitoring program.

In February, the Milton Department of Public Works (DPW) and NepRWA took the unprecedented step of signing on to a formal Memorandum of Understanding or "MOU" that outlines how the two organizations will work together to advance their mutual goals of regulatory compliance and ensuring clean streams for the citizens of Milton.

The MOU, approved by the Milton Selectmen, calls on

The development would be mammoth in proportion; currently planned are 1,000 residential units, 400 hotel rooms, 1.2 million square feet of retail, and 300,000 square feet of office space. In spite of its size, the project presents a unique opportunity to remedy many longstanding environmental issues in the University Avenue area. NepRWA is particularly interested in ensuring that the project:

- Significantly reduces impervious surfaces and otherwise improves a now poorly designed stormwater management system;
- Incorporates "low impact development" (LID) techniques like porous pavement for parking areas, bioengineered treatment of stormwater, a decentralized approach to increasing groundwater recharge, etc.;



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NepRWA to take the lead in organizing a volunteer-based water quality-monitoring program in Milton that will help involve the public, raise awareness of water pollution issues and locate any water pollution problem areas.

The Milton DPW will help NepRWA to target monitoring efforts by sharing knowledge of known or suspected problem areas, and by taking the lead in repairing any problems which the monitoring effort turns up. The DPW will also provide up to \$5,000 of funding to help run the sampling program, with NepRWA taking responsibility for raising the balance of needed funds from other sources.

The partnership makes sense for both partners because it saves the DPW the time and effort of having to invent their own monitoring program and it gives NepRWA access to a small amount of funding and, just as importantly, to the DPW's intimate knowledge of Milton's drainage system.

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Industrial Past is Reflected in Canton Ponds

A large, brightly colored poster summarizes a study recently completed by two Wellesley College students and their advisor. Titled “Geochemical Signatures of Historical Industry in Canton, MA,” the poster details their examination of industrial pollutants in four Canton ponds. Students Anna Wall and Christine Grant, and their supervisor Dan Brabander, examined the chemical make-up of sediments in Factory, Upper Forge, Lower Forge, and Bolivar Ponds in this project partially funded by NeprRWA.

The academic team took core and surface samples of the ponds’ sediments to assess their chemical contents and possibly link them to industrial activity on the ponds’ banks over the last several hundred years. They measured levels of sulfur, potassium, nitrogen, phosphorous, copper, zinc, tin, chlorine, cadmium, chromium, lead, and antimony, reflecting the diversity of products once manufactured on the

banks of the ponds. For example, Factory Pond had a gun powder factory on its banks (before 1801), then a copper rolling mill (1801-1902), followed by a factory that produced rubber and leather products and later a variety of vinyl resin-based products and tapes (1909-present). The chemicals in the mud downstream suggest that these factories may have released at least a portion of their waste into the adjacent waterbodies.

The students found that each pond’s sediment varies in chemical composition according to the type of industrial activities that have taken place on its banks. Factory Pond’s contaminants appear to correspond with the industrial practices at the Revere Copper Works and later at the Plymouth Rubber Company. Each pond has levels of lead, zinc, copper and chromium above the “effects range median” (ERM)—the levels are generally high enough to cause

adverse effects on animals that live in the sediment. Compared to the three other ponds, Factory Pond contains the highest overall levels of lead, zinc, copper, and chromium, while Bolivar Pond has the highest levels of chromium, and Upper Forge Pond has the lowest overall pollutant levels. The study also assessed the locations of specific contaminants in the ponds and their connecting tributaries to pinpoint pollutant sources.

The students concluded that assessing the spatial distribution of surface concentrations of contaminants in ponds is an effective method for identifying point and non-point sources of contaminants. The students noted that they would need to assess the mineralogy of the sediment before they could determine the toxicity of sediment leaving the East Branch. To learn more, contact Dan Brabander at 781-283-3056, dbraband@wellesley.edu.

Willett Pond Neighbors Getting PondsSmart

For years now, neighbors of Willett and Pettee’s Ponds in Walpole, Westwood and Norwood have been asking questions like, “What can I do to help enhance the beauty of the pond?” “What can I do to encourage the kinds of wildlife I enjoy seeing around the pond?” and “How can I repair erosion along the shore and prevent it in the future?” Neighbors from around these two ponds began studying the answers to these questions and more as part of the “PondsSmart” workshop series.

The workshops, organized by NeprRWA and its sister organization, the Neponset River Land Holding Association, with support from Bay State Gas Co., are being conducted by local landscape architect Peter Jackson of Park Planning Associates. The purpose of the program has been to assemble a comprehensive toolkit of information about shoreline landscaping that Willett Pond abutters (and ultimately other Neponset Valley pond abutters) can use to help beauty and protect their pond, its water quality and wildlife. The key idea behind the PondsSmart approach is a simple one—the design and creation of vegetated buffer strips along the shore.

In the fall, families learned to recognize the plants that can be found along their pond’s shoreline. Naturalist Tom Palmer led a discussion about some of the extraordinary native plants that inhabit a healthy shoreline and pointed out that the easiest and cheapest way to restore the shoreline is to take the lazy way out—stop mowing along the water’s edge and let nature do the work (with a little helpful weeding).

However, for those that want to take a more active approach to shaping the shoreline, Peter Jackson has been showing participants in the workshop series how they can pull their lawn back from the edge of the pond and plant a more formal buffer of attractive native shrubs, flowers, and groundcovers. Jackson has provided participants with plant lists, a set of design guidelines, model designs that suit different shoreline situations, and a list of websites where they can find plants that suit their family’s favorite activities around the pond.

Some of the most important workshops are still to come. For example, in the “Permitting Workshop,” Jackson will review the Conservation Commission rules that apply to all activities within 100 feet of the pond and how to obtain required permits for work along the shore. The Conservation Agents in the neighboring towns have all been enthusiastic about this program. In the next month, we will be filming for a new Order of Conditions for Willett and Pettee’s Ponds that will include a generic PondsSmart shoreline treatment—with the goal of streamlining the permitting process for abutters wanting to make changes consistent with the PondsSmart program. This spring we will also be getting into the details of “Planting and Maintenance” with the April seminar, just in time for people to order plant materials to install in June. The final workshop, “Hands-On Planting,” will take place at one or two demonstration sites on a weekend in early June.

While these workshops are focused on two ponds, the resources and tools being developed are widely applicable to other ponds in the Neponset Valley, and NeprRWA will make them available to other interested pond groups or abutters. To learn more, contact Laura at hallowell@neponset.org.

Get Active with NeprRWA

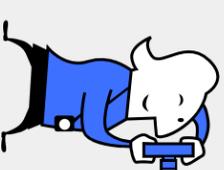
Night Hike & Pub Visit, March 24

Join us for a hiking adventure beneath the stars! Listen for frogs and owls and participate in activities along the trail as Jayne DiCandio, local environmental educator and NeprRWA Board Member, leads us on a night hike in Sharon’s Moose Hill Audubon Sanctuary. Wear sturdy boots to maneuver around roots and stones in possibly muddy paths. No flashlights are permitted (one emergency flashlight will be available). Adults and children over the age of four are welcome (no strollers). 20 participants maximum. Waitlist may form. Hike starts at 7:30PM and ends at approximately 8:30PM. Afterwards, all interested and of-age will caravan to a local pub. Meet at Moose Hill Audubon Sanctuary. For directions, visit www.neponset.org. Registration is required: Please contact Carly Rocklen, 781-575-0354, rocklen@neponset.org. Please indicate # of people in your party. Heavy rain cancels. Join us!



Calling all Photographers

Handy with a camera? Proud of your artistic eye? NeprRWA needs your help! We need photographs of sites around the Watershed. Contact Ian Cooke to find out more: 781-575-0354, cooke@neponset.org.



Be a NeprRWA Board Member

Are you a dedicated NeprRWA member who’s passionate about mending the local environment? You may be just who we’re looking for! NeprRWA is recruiting for our Board of Directors. The Board meets once each month to make decisions about a variety of topics key to NeprRWA’s operation, such as prospective projects, events, budget, and overall direction. Board members also help to organize events, represent NeprRWA at activities around the Watershed, and contact prospective members and donors. We’re especially looking to recruit new Board members from Dorchester, Mattapan, Hyde Park,

Deham, Dover, Foxborough, Medfield, Norwood, Quincy, Randolph, Stoughton and Sharon to broaden our representation of the Watershed. Please contact Ian Cooke to learn more: 781-575-0354 tel, cooke@neponset.org.



Smart Growth in Westwood, from Page 1

- Increases protection of the existing Dedham-Westwood Water District well; and
- Creates appropriate open space.

Equally important, NeprRWA is asking the developer to create links to the large areas of open space, waterways, and a trail network that lie adjacent to the new project, though separated by train tracks and/or Rte. 128. As mitigation for project impacts, NeprRWA is asking C&F to build (or fund the building of) a canoe launch with a few parking spaces on the Neponset River, and to increase access to trails by:

- Making it easier for hikers and cyclists coming from the train station and the new development to get across the train tracks to access open space (currently, pedestrian access is possible only through the train station);
- Building a short trail along the River, running beneath Rte. 128 and connecting Blue Lodge St. in Canton with the Skyline Trail and others in the Blue Hills Reservation as well as with the Burma Rd. trail that extends to Paul’s Bridge on Neponset River Plkwy;;
- Building pedestrian/bicyclist bridges

from Page 1

- to cross streams and wet areas that crisscross the current trail atop the MWRA sewer line that runs through the wetlands from Dedham St. to Blue Lodge Rd.; and
- Creating a trail link from Royal St. near Reebok Headquarters to all the above-mentioned trails and to the train station and new development.

These efforts are complicated by the fact that none of this land is owned by C&F; most of it belongs to the MA Dept. of Conservation & Recreation (formerly MDC). More importantly, Mass Highways is planning major changes to the interchanges connecting Rte. 128 with the portion of I-95 running to and from Providence, RI. For example, as now planned, a large portion of Green Lodge St. in Canton (as well as Blue Hill Dr. in Westwood, across the tracks) would become an entrance ramp to I-95 S.

NeprRWA is working closely with Mass Highways to ensure that the new roadways will accommodate our desired connections to the existing trails. We are confident that this can be accomplished. To learn more, contact Steve Pearlman, 781-575-0354, pearlman@neponset.org.