Daylighting Streams Improves Water, Life

By Meg Muckenhoupt

In some places, water becomes invisible. A stream enters a culvert (an underground pipe) and vanishes, but the water does not disappear. It keeps flowing, to a storm drain, an open water body like Clay Pit Pond, or a stream like Alewife Brook. Since the 1990s, some municipal planners have been “daylighting” these streams—removing their culverts and allowing the water to flow on the surface. It can seem counterintuitive, but exerting less control over where water flows can have economic, ecological, and social benefits.

Culverts’ Benefits and Woes

From the beginning of civilization, city builders have controlled water: 4,000 years ago cities in the Indus Valley, Punjab, Greece, Egypt, and Crete all built drains under their streets. In nineteenth century America, concerns about keeping drinking water separate from street drains (and keeping stormwater runoff separate from street trash like horse manure) led cities to put hundreds of miles of streams and rivers into pipes underground—including portions of Boston’s Muddy River.

Putting rivers underground didn’t just keep drinking water safe, though. It also enabled developers to build roads and houses on top of formerly uneven, marshy ground. As the National Park Service put it on NPS.gov, “Once the streams were buried underground, the towns also found it easier to grow. They built streets, housing, and industrial plants over the buried streams. And the public health problems also disappeared—at least for awhile.” Flat, dry land was perfect for building grids of streets and houses, with even-sized lots and wide roads for automobiles. Over time, many of Belmont’s waterways were placed in culverts, including Atkins Brook, Winn’s Brook, and Wellington Brook.

Wellington Brook “appears to originate somewhere near Maple Street,” according to Glenn Clancy, Belmont’s Director of Community Development. It runs in a culvert through Pequossette Playground, under Trapelo Road towards Sabina Way, under Beach Street to

This unnamed stream alongside Sunnyside Lane, Lincoln, was daylighted in 2012 by the National Park Service in partnership with the Massachusetts Division of Ecological Restoration in order to “restore ecological integrity and a historic landscape.”
Waverley Street to the Town Yard, and finally emerges at Common Street. It then flows in culverts into and out of Clay Pit Pond, until it appears again at Flanders Road, where it flows into Blair Pond. Winn’s Brook has an equally complicated, lengthy, culvert-bound course. Atkins Brook generally runs parallel to Somerset Street (see map opposite.)

Water in culverts doesn’t go away; it continues to flow underground. In coming years, keeping it there may become very expensive.

Underground pipes leak and eventually collapse, and replacing underground pipe is expensive. Without specialized equipment like underground cameras, it’s difficult to tell if buried pipes are still intact or gradually collapsing. Pipes installed more than two decades ago may be too small to hold future peak stormwater flow, thanks to our stormier climate and increased runoff from impervious surfaces like roads and roofs. An early spring flood collapsed the culvert holding Darbee Creek in Roscoe, New York, in 1996. Could that happen in Belmont?

Water in culverts doesn’t go away; it continues to flow underground. In coming years, keeping it there may become very expensive.

Underground culverts may have an insidious effect on water quality as well. According to preliminary research by the U.S. Environmental Protection Agency (US EPA), waterways that are closed off from sunlight are poor at removing nitrogen from the water. Nitrogen removal is important because this nutrient—commonly the result of runoff from lawn and garden fertilizers—is a major cause of nutrient pollution. Too much nitrogen in the water can cause algae blooms that reduce the oxygen content so much that fish and other organisms cannot survive.

“So far what we found is that the daylighted streams are far more effective than buried streams at processing nitrogen, up to 23 times more effective,” said US EPA ecologist Paul Mayer, PhD. The US EPA researchers’ theory is that bacteria living in the sediments of streams convert nitrogen into nitrogen gas, which leaves the water and enters the air. Underground streams running through pipes can’t support these bacteria, so they can’t convert the nitrogen into harmless nitrogen gas.

Daylighting Benefits
Daylighting streams isn’t cheap: a 2007 study of daylighting by the Virginia Water Resources Research Center found that daylighting streams can cost $200 to 1,000 per linear foot, depending on exactly how the daylighting is
A map of some of Belmont’s culverted streams. Circles represent Wellington Brook’s culverts; ovals, Winn Brook; and Atkins Brook is shown by triangles.
done. There’s a big difference between a project where a daylighted stream is placed in trench lined with riprap at the edge of a parking lot and an ecological restoration of a stream in a popular urban park.

But underground culverts need to be repaired and replaced as well; once a town has dug up the culvert, it may be cheaper not to put it back. And, daylighting proponents argue, you only need to daylight a stream once. Daylighting projects in the U.S. typically receive grants and federal support, reducing municipalities’ costs.

In addition, daylighting streams has practical and aesthetic benefits. Above-ground streams can generally store more stormwater than underground pipes, reducing flooding in surrounding areas. A daylighted channel in Kalamazoo, Michigan, was so successful at storing stormwater that business owners there no longer have to buy flood insurance. If a daylighted stream gets blocked (by debris or beavers), it’s simple to find the blockage and remove it before it floods.

Ecological restoration is not necessarily part of a daylighting program, but it can enhance the appeal of the area—especially to school groups that can use stream ecosystems as part of educational programs.

Unfortunately, no good research yet indicates how quickly and thoroughly daylighted streams recover their ecological health. The Center for Watershed Protection states that streams where just 25 to 40 percent of the stream runs through impervious cover like culverts “may show promises for partial restoration, but are so dominated by hydrologic and water quality stresses that they normally cannot attain pre-development biological conditions without continued maintenance.” Swales, rain gardens, gravel bars, and other structures can reduce water quality stresses like stormwater debris and pollutants entering a stream, keeping it fresh, and local programs informing homeowners not to put fertilizer or grass clippings near stream edges can reduce nutrient pollution as well.

But even a simple open-water channel appeals to people, whether or not it supports life. Houses near streams have higher property values as long as they don’t flood. People like to be near water. They may not realize how near it is right now.

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### Muddy River Daylighting

In the 1940s, part of Boston’s Muddy River was filled in for a parking lot in front of what was then the Sears building near the Fens Bridge and Brookline Avenue. The Muddy River was channeled into culverts underneath Brookline Avenue and the traffic rotary. Over five decades, sediment piled up in the pipes, constricting their flow. Thanks in part to the pipes’ reduced capacity, in the 1990s the area around the Muddy River started flooding on a regular basis, with the waters sometimes reaching the Kenmore MBTA station.

The Army Corps of Engineers, the Massachusetts Department of Conservation and Recreation, and the Boston Parks and Recreation Department are working together to daylight 700 linear feet of the Muddy River, increasing flood storage and restoring a missing link in the Fenway portion of Boston’s Emerald Necklace of parks. The daylighted sections of the river will be restored to their pre-1940s depth and width, and the shoreline will be replanted with native plants. The project also involves dredging 200,000 cubic yards of sediment from the Muddy River between the Fens and Wars Pond, and installing two new, larger culverts for the parts of the river remaining underground.

For updates on the project, see the Muddy River Restoration Project at [www.muddyrivermmoc.org](http://www.muddyrivermmoc.org).

However, property owners often oppose daylighting for one major reason: wetlands laws. As Clancy puts it, “One of the biggest obstacles to daylighting is that the brook would then become subject to the wetlands and rivers protections acts. Most private property owners do not want the additional regulatory constraints on their property.”

Meg Muckenhoupt is Editor of the Belmont Citizens Forum *Newsletter.*
Belmont Farmers’ Market Opens June 13

By Evanthia Malliris

The Belmont Farmers’ Market opens on Thursday, June 13, from 2 to 6:30 pm. An all-volunteer organization now in its eighth year, the Market features local fresh produce, cheeses, meats, fish, wine, baked goods, preserves, pasta, dips, and teas. You can buy everything you need for a lovely dinner!

The Market is a project of the Belmont Food Collaborative, whose goal is to sponsor education about food and nutrition and to help provide families in need with fresh produce. Last year, the Food Collaborative sponsored a community garden run by volunteers that donated the produce it grew to the Belmont Food Pantry. The Food Collaborative is looking for a space in a sunny back yard to continue this project this summer. If you are interested in finding out more about this, please contact belmontfarmers-market@gmail.com.

Food Assistance Benefits Community

The Market accepts SNAP benefits (formerly food stamps), which are processed quickly and easily. Please let your friends and neighbors know about this service so that it can better serve the community.

The Market also works with the Boston Area Gleaners to deliver farm-fresh produce that would otherwise go to waste to the Belmont Food Pantry. Last year, the Pantry received 2,929 pounds of produce from the Gleaners, which the Farmers’ Market underwrote.

In addition, the produce that the Market’s vendors donate at the close of each Market day is picked up by Food for Free and taken to area soup kitchens or other food pantries that can use it immediately.

Make Your Own Ravioli Class

The Food Collaborative is sponsoring a spinach and cheese ravioli-making class on Saturday, May 18, 3 to 6 p.m., at the First Church, Unitarian Universalist, 404 Concord Avenue, Belmont. Florence native Anna Tommasi Nathanson will lead the class through tasting the final product. Class size limited to 12. Fee: $40. Visit belmontfood.org for more information.

Sign up for the Market’s weekly e-Newsletter to keep up with market news during the season at belmontfarmersmarket.org, or e-mail belmontfarmersmarket@gmail.com.

Evanthia Malliris is a Director of the Belmont Citizens Forum.

Farmers’ Market produce
One Uplands Appeal Stops, Activists Regroup

By Anne-Marie Lambert

The latest news concerning the fate of the Silver Maple Forest is mixed. The Belmont Conservation Commission's appeal of the Massachusetts Department of Environmental Protection's (DEP)'s Superseding Order of Conditions to permit development was terminated on March 21. Meanwhile, new voices for finding a way to preserve the forest emerged at an energizing Silver Maple Forest forum April 25.

While the Coalition to Protect the Belmont Uplands awaits judgment by three justices of the Massachusetts Appeals Court after a January 16 hearing (see “Judge Questions Map in Uplands Hearing, Belmont Citizens Forum Newsletter, March/April 2013), the Belmont Conservation Commission's appeal of the DEP’s Superseding Order of Conditions ended with a three-way termination agreement signed by the Conservation Commission, the DEP, and Uplands owner AP Cambridge Partners II, days before a March 25 deadline for filing a brief for the appeal.

The Conservation Commission and Belmont's Board of Selectmen each voted in Executive Sessions to terminate the appeal based on advice from Town Counsel, who had taken over the case in December. The decision was announced in court documents and at a recent meeting of the Conservation Commission. At that meeting, the challenge of rebuilding a constructive relationship with the DEP was discussed.

Discussion of Executive Session meeting minutes is on the agenda for the May 7 meeting of the Conservation Commission, when more details will become available concerning the rationale for the decision.

Selectmen “Have Not Given Up”

When asked for comment, Belmont Selectman Mark Paolillo was adamant that he and the Board remain committed to seeking ways to preserve the forest, stating that the Selectmen “have not given up the cause of preserving the Uplands and … ensuring that the ConCom's concerns about stormwater management are appropriately addressed.”

Paolillo explained, “Our recent decision not to continue to fund the appeal at a cost of thousands of dollars was based on the advice of Counsel …. The Board has a fiduciary obligation to protect the town and its assets which was the basis of our recent decision.”

Meanwhile, Lesley University hosted a very successful forum coordinated by Friends of the Alewife Reservation, Green Cambridge, and Lesley University Department of Natural Sciences and Mathematics on April 25. The audience of about 50 attendees included students and citizens from surrounding towns, state Senator Will Brownsberger, and members of the Belmont Coalition to Protect the Belmont Uplands.

Afterwards, the audience was invited to attend breakout sessions to brainstorm strategies for preserving the forest. These sessions included discussions of fund-raising opportunities, letter-writing campaigns, public outreach to increase awareness, and other ideas.

Birds, Fish Return With Spring

On the land, the spring bird migration is at its peak and has returned a wide range of birds to the area, and the annual run of alewife herring is about to begin. Some alewives will find their way up Little River to Blair Pond, Clay Pit Pond, and past the Uplands to Little Pond and Spy Pond. The fish should find somewhat cleaner water in Spy Pond with the completion of a highway department maintenance project at Route 2, Exit 59, to improve management of stormwater runoff from the highway.

Should Belmont's Stormwater Management Bylaw pass this spring, (see “Stormwater Bylaw Proposed for Belmont,” Belmont Citizens Forum Newsletter, March/April 2013,) water quality will improve. That improvement could partially mitigate damaging effects from the thousands of new residential units under development in North Cambridge and, if AP Cambridge Partners II is successful in pursuing their current plans, 298 units at the Belmont Uplands

Anne-Marie Lambert is a Director of the Belmont Citizens Forum.
On May 4, the Belmont Citizens Forum and Friends of Alewife Reservation cosponsored a Little River Nature Poetry Walk led by Anne-Marie Lambert. Poets Richard Cambridge and Sarah Conn read from their works and were joined by Gerald Wright, who portrayed 19th-century Boston park designer Frederick Law Olmsted. Participants heard warblers, chickadees, and red-winged blackbirds, smelled spring fragrances from the meadows and flowering cherry trees, and surprised two large wild turkeys in the forest.

Poet Richard Cambridge (left) reads two original works by the Little River; “Frederick Law Olmsted” (Gerald Wright) visits the Little River.

Gerry Wright (left), Anne-Marie Lambert (far right) and visitors enjoy the Alewife Reservation.
Volunteers Clean Up Lone Tree Hill

Saturday, April 20, dawned cloudy and rainy. A bright spot in town was the cheerful green-and-white Belmont Citizens Forum tent on South Pleasant Street at the Coal Road that leads to the Lone Tree Hill Conservation Land. BCF board members and volunteers began to gather for an Earth Day cleanup, armed with trash bags, loppers, and gloves.

It was good to be out, close to the earth, after a week that was sad and subdued, after an anxious day in Belmont and Watertown. Patches of green could be glimpsed through the wet and matted leaves; the sun peeked out now and then. Those who had come together for a common cause shared an earnestness. It was good work. It was, finally, a good day.
Volunteers collected a total of 16 bags of trash and recyclables, two mattresses, and scrap metal from town conservation land.

Belmont High students Alex and Adam biked to the clean-up site on South Pleasant Street.

Siblings Jim and Sharon Crawford were the first to arrive.
Smart Meters Are Coming to Belmont

By Paul Santos

The Belmont Municipal Light Department (BMLD) is replacing some existing electric power meters with newer “Smart Meters” (SMs). The SMs collect power usage information on an hourly basis by communicating wirelessly between the meter and the BMLD’s communications infrastructure; power usage data are collected from older meters once a month. As of this writing, 3,337 SMs have been installed, but those customers are seeing the same electric bills (and also have the same capabilities of monitoring or controlling their electricity usage) as those who have the older meters.

What are Smart Meters?

The SMs are components of the “Smart Grid” that replace the traditional meter. The Smart Grid is a system that aspires to connect suppliers and consumers of electric power more reliably and efficiently on a nationwide basis. The SM can also be used to receive information about changes in the cost of electricity or to control the meter itself. This function enables informed control over electricity use within individual customer’s premises, although the BMLD has no plans at this time to use the SMs in this way.

If SMs are used to their full potential, their advocates claim it will result in the need for less peak load capacity by smoothing out electricity usage and reducing the need for power generation—enabling the BMLD to pay less for peak load protection. SMs may be able to reduce overall electricity usage by increasing customer’s awareness of the cost of their electricity. The SMs also may be able to reduce the operating costs of utilities through increased automation.

SMs Enable Rate Periods

Under the current rate structure in Belmont electricity costs the same no matter when it is used. Rate periods, in their simplest form, establish “peak” and “off-peak” periods for electricity charges, similar to the way night/weekend telephone calls are billed at a different rate than daytime ones. The key to setting peak and off-peak electricity rates is recording both the amount of electric power used and the time at which it was used.

SMs can either use two separate counters—one for peak periods, one for off-peak periods—or simply collect usage information whenever the rate changes from peak to off-peak or vice-versa. However, rate periods do not require SMs. There are traditional meters that simply accumulate usage information in separate counters, and can be read in the usual way.

SMs can also perform “load control,” reacting to changes in the cost of electricity to reduce the load on the electrical grid during peak usage times. Consumers can use either manual or automatic controls to take advantage of changing electricity prices due to increased demand. For example, the reverse 911 calls we get during peak usage periods urging us to cut down on our A/C (followed in some cases by our actually doing that!) are a form of manual load control. Taking
the concept one step further, if we knew that electricity cost less at a different time of day, we might be able to shift some of our consumption patterns accordingly. We might time dishwasher loads to run in the middle of the night, for example. Finally, full-blown load control involves having “smart” appliances and thermostats, all linked together by a home area network to the SM that can react to price signals received by the SM from the utility.

SMs can help with energy monitoring. The BMLD plans to create a web portal for SM customers to be able to view their usage hourly, daily, weekly or monthly, and compare it with the town average. In general, this information cannot be obtained in real time; to do that, a display needs to connect to the SM over the home area network. Users do not need to wait for SM installation to have energy monitoring. There are many devices available to consumers for energy monitoring, ranging from a single power outlet to a whole house.

In some geographic areas that use SMs, the utility has extended the capability of their communications infrastructure to provide public wireless internet that covers all locations where SMs are deployed.

Concerns

There have been some concerns over radiation safety of wireless SMs. This concern appears to be misplaced, since the wireless technology used by SMs is on a par with or less than commonly used household devices. The SM used by BMLD is the Elster REX2 model. Its radio frequency (RF) power density is equivalent to a wireless internet router.

The Belmont Municipal Light Department plans to create a Web portal for Smart Meter customers to be able to view their usage hourly, daily, weekly or monthly, and compare it with the town average.

The SM power density is far below the power density of cell phones and cordless phones, which are used close to the human body and transmit electromagnetic radiation continuously when in use. There have been similar concerns about radiation from devices associated with home area networks used for automatic load control. Again, these do not appear to represent any greater risk than any WiFi enabled device.

Another concern has been the privacy of the usage information transmitted by SMs. However, this information is given the same level of protection as any other sensitive wireless data; it is encrypted. Encryption “scrambles” the information so that for practical purposes it is impossible to decode it.

There are claims that SMs may permit hackers to gain control over customer appliances. This threat may or may not be credible, but the BMLD/SM communication is one way only, from SM to BMLD. The BMLD-installed SMs currently do not have any remote control capability.

Some critics claim that SMs could create economic inequality. If rate periods are set up and only some customers can take advantage of the lower pricing for off-peak usage, then costs may go up for those that can’t, compared to the single rate pricing applied to all. This issue is a byproduct of rate periods and is independent of whether SMs are used. If the payback on SMs depends on the customer’s economic capacity to install additional equipment (e.g., smart appliances), then SMs would give an advantage to wealthier customers. For now, though, the BMLD is not creating rate periods, and has not indicated what rates would be for those periods.
There have been several instances within the US that SM rollouts have been stopped because the program was deemed not cost-effective. In these cases, the cost recovery for installation and maintenance of the SM system was not offset by ratepayer savings. For example, the amount of load shifting was very small because in practice there was no significant application that made such load shifting easy. Electric ovens are used at mealtimes, few people stay up late to run clothes dryers, and many households already use setback thermostats to minimize their use of air conditioning when it is not needed. (A setback thermostat allows you to set different temperatures for different periods during the day, and in some cases days of the week.) Some tasks like plug-in electric vehicle charging can be done at night. However, there will be insufficient demand for vehicle charging for some time.

There has not been a significant public discussion in Belmont about an SM program, as there was for the new BMLD substation. Since the BMLD is concentrating on finishing the substation, it is probably not going to open up a new discussion soon. This delay is probably best, since it gives more time for equipment to drop in price, interfaces and protocols for SMs and home area networks to be standardized, and for full-function pilots of SMs in Belmont to yield quantitative results.

If You Are Interested

The town website provides contact information for the BMLD, its supervisor (the Board of Selectmen), and its advisor, the Municipal Light Advisory Board.

Paul Santos is a long-time Belmont resident interested in energy usage and storage.

How to Get an Energy Monitor

There are two levels of electric energy monitors: simple and whole-house monitors.

The simpler ones cost as little as $18 and provide basic information on electricity used from a single outlet. They plug into a standard wall outlet and have a place to plug in the electric cord. They measure the electricity as it passes between the cord and the wall, showing how much electricity an individual appliance, or an entire power strip, is using. Most show watts (the instantaneous amount of energy), amperes (the electric current), and kilowatt hours (the amount of power used over the time you are measuring). For example, a monitor measuring a 100-watt light bulb left on for 10 hours will tell you the bulb has used 1 kilowatt hour of power.

If your household has appliances that require a 220-volt outlet, (such as clothes dryers and stoves) or are hard-wired (such as wall switches, central A/C and water heaters,) or you want to know what the entire household is using, you will need a whole household-monitor. These models usually cost at least $100 and sometimes require an electrician to install. Some can also measure individual circuits at the power panel. They all come with portable wireless displays that can be used anywhere in the house.
Women-Powered Bike Workshop

**Thursday, May 16, 7-8 p.m.**
MassBike sponsors this workshop for women as part of Bay State Bike Week. Topics include women-specific bikes and gear, route planning, how to travel with children, and rules of the road. Free and open to women who live or work in Cambridge. Baystatebikeweek.org, jlawrence@cambridgema.gov. Cambridge City Hall Annex, 544 Broadway, Cambridge.

Canoe/Kayak Trip at Nahanton Park

**Saturday, May 18, 1 p.m.**

2 Seconds

**Wednesday, May 15, 7:30-9:30 p.m.**
Free screening of the film 2 Seconds sponsored by MassBike in honor of Bay State Bike Week. Covered bicycle parking available. Harvard Film Archive, 24 Quincy Street, Cambridge.

17th Annual Mystic River Herring Run: Run, Walk, or Paddle for the Fish!

**Sunday, May 19, 9 a.m.**
The Mystic River Watershed Association’s Annual Herring Run and Paddle includes a 5K run/walk race, three paddling races (3, 9, and 12 miles), educational booths, children’s activities, and more. Registration info at mysticriver.org, beth@mysticriver.org, (781) 316-3438. Blessing of the Bay Boathouse, 32 Shore Drive, Somerville.

Planting & Pruning at Habitat

**Sunday, May 19, 2013, 9-11 a.m.**
All ages are welcome. Tools, gloves, and instruction provided. Register online www.massaudubon.org/catalog, habitat@massaudubon.org, (617) 489-5050. Habitat, 10 Juniper Road, Belmont.

BIKE-Arlington Tour

**Sunday, May 19, 9:30-11:30 a.m.**
This easy-paced family-friendly bicycle tour around town is organized by the Arlington Bicycle Advisory Committee in celebration of Bay State Bike Week. Baystatebikeweek.org. Mystic Lake Dam parking lot (between the Lower and Upper Mystic Lakes) off of the Mystic Valley Parkway Medford.

3rd Annual “Wild Edible Walk” and Lunch at Nourish with Russ Cohen

**Tuesday, May 21, 10 a.m.-1:30 p.m.**
Join Russ Cohen, expert forager and author of Wild Plants I Have Known...and Eaten, for a morning talk in Lexington to learn about at least 18 of the tastiest wild plant species in our midst. Russ will present information for each species on identification tips, edible portion(s), season(s) of availability, and preparation methods, along with general guidelines for safe and environmentally responsible foraging. Lunch follows at the Nourish restaurant. To register, call (781) 674-2400. lexfarm.org, info@lexfarm.org. Nourish Restaurant, 1727 Mass Avenue, Lexington.
Sustainable Belmont Meeting: “The Diet-Clim ate Connection” by David Freudberg

**Wednesday, May 22, 7-9 p.m.**

David Freudberg will discuss “The Diet Climate Connection,” a four-part series he produced for National Public Radio. www.sustainablebelmont.net, sustainablebelmont@gmail.com. Assembly Room, Belmont Public Library, 336 Concord Avenue, Belmont.

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**Slow & Easy Nature Walk**

**Saturday, May 25, 10-11:30 a.m.**

Join walk leaders Kate Fricker and Marie Roberts on a slow and easy walk on the Brookhaven Nature Trail, following a winding path through the woods behind Brookhaven. Admire the birds, the flowers, the view over the pond, and the two vernal pools along the way. www.clclex.org, kfricker@alum.swarthmore.edu, (781) 640-1276. Trail entrance next to the employee parking lot, 1010 Waltham Street, Lexington.

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**Friends of Spy Pond Park Work Day**

**Saturday, June 8, 1-4 p.m.**


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**Film Screening: Genetic Roulette: The Gamble of Our Lives**

**Monday, June 10, 6:30-8:45 p.m.**

What’s in your food? Learn why doctors are urging patients not to eat Genetically Modified Organisms (GMOs) and how you can avoid them. Join with other consumers and take action to create a healthy food system. Free. lexfarm.org, info@lexfarm.org. Large Meeting Room, Cary Memorial Library, 1874 Massachusetts Avenue, Lexington.

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**MYRWA Citizen-Scientist Training**

**Tuesday, June 11, 6-8 p.m.**

This workshop provides interested volunteers with training on water quality monitoring methods and concepts. Upon completing this workshop, volunteers will be prepared to join MyRWA’s Baseline Monitoring Program. Registration required. Space is limited. To register, email beth@mysticriver.org. mysticriver.org, (781) 316-3438. Conference Room A/B, Cambridge Health Alliance, 195 Canal Street, Malden.

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**Sustainable Arlington Monthly Meeting**

**Tuesday, June 18, 7:30-9 p.m.**

Join Sustainable Arlington to discuss topics include renewable energy, local transportation options, recycling, and local sustainability. www.sustainablearlington.org, (617) 794-5531. First floor, Arlington Town Hall Annex, 730 Massachusetts Avenue, Arlington.

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**Summer Interns Wanted**

The Belmont Citizens Forum (BCF) is accepting proposals and resumes for 2013 Summer internships from college and high school students. Project proposals should align with the BCF mission statement on our website. BCF internships are unpaid. The BCF’s last summer three interns were able to complete enough work to publish articles describing their research in the Belmont Citizens Forum Newsletter.

For 2013, we are particularly interested in students to assist with bike path research such as collecting and organizing data concerning the effects of community and bike paths on privacy, crime, litter, and property values. We are also seeking team leaders for our next Clean up event at an open space location in Belmont.

BCF internships offer a great chance to gain experience with the legwork and research behind local community organizing. If interested, please contact bcfprogramdirector@belmontcitizensforum.org with your resume and any project proposal by May 30, 2013.
We need you.

If you can volunteer even a few hours a month, you can make a difference. You do not need to be an expert—just a person who cares about our town.

I can devote time to:

_____ Archaeology & Historic Preservation
_____ Environmental Protection
_____ Planning & Zoning
_____ Community Path
_____ Walking in Belmont
_____ Mailings
_____ Newsletter

I can help pay for this newsletter:

It costs about $4,000 to publish each issue of our newsletter. Please donate for this purpose:

_____ $50  _____ $100  _____ $150  _____ $250

Make checks payable to Belmont Citizens Forum and mail to Belmont Citizens Forum, P.O. Box 609, Belmont MA 02478, or donate at www.belmontcitizensforum.org.

Thank you!

Many companies support employees in their personal philanthropy and fundraising efforts. When you make a donation to the Belmont Citizens Forum, let us know if your employer has a corporate matching gift program. Your donation goes farther with matching funds. Thank you!

If you have questions, please e-mail us at info@belmontcitizensforum.org. The Belmont Citizens Forum is a nonprofit 501(c)(3) organization. Your donation is deductible from federal taxes to the full extent provided by law.
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