



Dredging Project Empties Blair Pond

By Meg Muckenhoupt

Blair Pond is getting dredged. Hundreds of cubic yards of sediment have been removed from one of Belmont’s hidden ponds along with fish, turtles, and breeding habitat for birds. The much-needed project, which will increase the pond’s flood water storage and expand its wetlands habitat, was originally scheduled for fall 2011. Unfortunately, it was delayed until this spring, with catastrophic effects on the animals and birds that raise their young there every year. In the long run, though, the dredging is necessary to keep Blair Pond from filling in completely—and will doubtless need to be repeated someday.

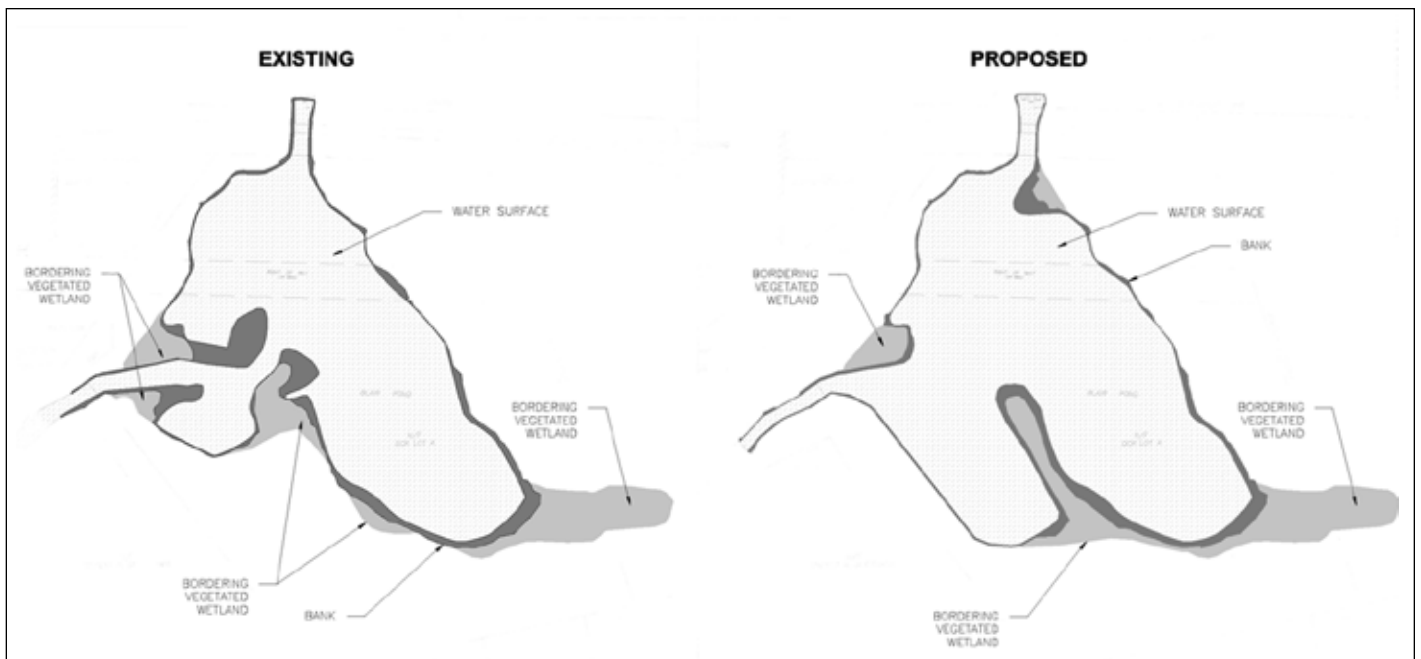
Nestled behind the White Hen Pantry and the former Zeff Photo building off Blanchard Road, Blair Pond receives stormwater runoff from more than 1000 acres, including the southern half of Belmont and a portion of Watertown,

via Wellington Brook, according to the 1999 *Blair Pond Master Plan*. Blair Pond also receives some stormwater runoff from the Cambridge Highlands neighborhood; it discharges water via three 48-inch pipes that run north under the railroad tracks to Perch Pond and on to the Little River and Alewife Brook.

All this runoff carries sand, dirt, and pollutants, and Blair Pond has been gradually filling in with sediment. The dredging will restore the knee-deep pond to a maximum depth of 10 feet, providing more than 9500 cubic yards of stormwater storage and habitat for a more diverse selection of wildlife.

Old Clay Pit, New Habitat

Blair Pond was once merely a clay pit, dug sometime in around 1900 as part of the local brick-making industry, according to the 1999 *Blair Pond Master Plan* put together by the now-defunct Metropolitan District Commission.



MASS DCR/ MEG MUCKENHOUP

Sketch plan of Blair Pond before (left) and after dredging (right).

Belmont's Clay Pit Pond dates to the same era, but Blair Pond was much smaller—currently, Blair Pond covers just one acre—and only reached a depth of 10 feet. Blair Pond's banks are made up of old fill, including bricks and bottles dating to the 1920s.

The pond has had a troubled environmental history. In 1970, Harvard University, which then owned Blair Pond, planned to fill it in and build 248 units of low-income housing on the site. The housing plans were halted when the Massachusetts Department of Natural Resources (a precursor to the Executive Office of Environmental Affairs) denied the permit. In 1989, Harvard donated 15 acres

of land, including Blair Pond, to the state of Massachusetts as part of a deal to renew a 99-year lease for \$500 a year to continue to use Harvard's Weld Boathouse on the Charles River, which rests on state-owned land; the state assumed ownership of the land in 1993.

The pond was ignored, for good and for ill. As Minka vanBeuzekom put it in the Spring 2010 *Mystic Messenger*, "For decades, Blair Pond and its surrounding acres have been neglected by all but a few avid birders, ice skaters and the cleanup crew from Friends of Alewife Reservation (FAR)."

Blair Pond became an "urban wild," an oasis of nature close to dense human development. The *Master Plan* found more than 60 species of plants in and around the pond, and over the past 10 years local birders have spotted 95 different species of birds visiting Blair Pond.

At the same time, it was difficult for visitors to find the pond, with no signs on main roads. Public access is at the end of little-known Flanders Road, behind the White Hen Pantry on Brighton Street. Uncontrolled pedestrian access to the pond means that the visitors who did find their way there trampled vegetation and disrupted wildlife habitat. The *Master Plan* cited neighboring property owners encroaching on public land around the pond as well.

Some other uncontrolled species have also damaged the pond. By 2001, Blair Pond was saturated with more than 31,000 water chestnut plants, according to a *2010 Tenth Year Project Review Alewife Brook Subwatershed Water Chestnut Eradication* by Roger Frymire. Assiduous harvesting over the next eight years brought the totals to a mere 34 plants by 2009—but even a few plants can rapidly reinfest the pond and downstream areas. Meanwhile, the shoreline became overrun with invasive plants including purple loosestrife, phragmites, and Asiatic bitter-sweet.

The *Master Plan* recommended providing access to the pond by creating parking and pedestrian pathways (including a path to the pond that complies with the Americans with Disabilities Act), installing signs, cleaning up the pond and its banks, installing a "siltation control structure" to keep the pond from filling, creating an open meadow (as opposed to a lawn), reclaiming property from encroachments,

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Belmont Citizens Forum Inc. is a not-for-profit organization that strives to maintain the small-town atmosphere of Belmont, Massachusetts, by preserving its natural and historical resources, limiting traffic growth, and enhancing pedestrian safety. We do this by keeping residents informed about planning and zoning issues, by participating actively in public hearings, and by organizing forums. Our *Newsletter* is published six times a year, in January, March, May, July, September, and November. Published material represents the views of the authors and not necessarily those of the Belmont Citizens Forum. Letters to the editor may be sent to P. O. Box 609, Belmont MA 02478 or to info@belmontcitizensforum.org.

and providing a limited-access area set aside as a wildlife refuge zone. The *Master Plan* also recommended a one-time dredging. That dredging began in April.

The Current Project

The current Blair Pond Restoration Project has four main components:

- Dredging the pond down to a maximum depth of eight to 10 feet
- Creating a detention pond/forebay within Blair Pond to collect silt and sand (where it can easily be removed without damaging the rest of the pond's habitat)
- Building a new six-foot wide trail
- Replacing damaged vegetation with native plants including speckled alder, buttonbush, and winterberry holly.

In the meantime, though, the pond is a mess. The DCR contractors have built temporary 20-foot wide road from Mooney Street to the pond so that trucks can get to the site. That road will be reduced to a six-foot-wide path by the end of the project, but for now, it looks

awful—as does the mud pit that used to be a pond.

The dredging started just as turtles, fish, frogs, and birds were ready to lay their egg, destroying the breeding habitat for a year. Four turtles were plucked from the mud and moved to Wellington Brook according to Ellen Mass, president of the Friends of the Alewife Reservation.

It wasn't supposed to happen this way. The Environmental Notification Form submitted to the Massachusetts Executive Office of Environmental Affairs for the project in 2010 states, "The construction period is proposed for summer and early fall, to allow for lower water levels, limit impact to wildlife breeding and nesting, and facilitate establishment of proposed new native species plantings." The spring 2010 *Mystic Messenger*, published by the Mystic River Watershed Association, proclaimed, "This year, the Department of Conservation and Recreation (DCR) has received a permit from the Cambridge Conservation Commission to dredge the pond and restore native wetland plants to the shores and surrounding acres." A July 2011 agenda of the Tri-Community Working Group on Flooding Issues refers to "Blair Pond

dredging - July 2011

Bid, Construction in the fall." The project was only put out to bid on November 2, 2011, according to DCR records, and site work began in January 2012.

Asked about the delay, Robert Lowell, DCR Project Manager for the Blair Pond dredging, wrote:

"DCR and its consultant (AECOM) intended to bid the work last September [2011] but we ran into concerns regarding discovery of demolition debris in upland soil that was to be excavated which required additional testing and charac-



An emptied Blair Pond, March 2012

terization. Also, when the project was bid in October we ran into a problem with two of the submitted bids and had to re-bid the work to comply with state procurement law. . . When the excavation began in January, the contractor ran into additional demolition debris that was not identified previously that required a week to run additional samples and report findings to DEP.”

SAK Environmental of North Andover has been analyzing soil and sediment found at the site to ensure that contaminated materials are disposed of properly. As of April 19, SAK had

found varying levels of metals (including lead), petroleum hydrocarbons, old bricks and debris, and an entire junked car sitting under the muck.

It should take four months altogether to dredge the pond and restore and regrade the bank. Some plantings will be installed this spring, some will be put in this fall. A bench will be installed near Flanders Road next to the parking lot. The project should be completed by October 2012, just in time for the fall migrations to end. Unfortunately, the new fence protecting the newly paved Alewife-to-Brighton bicycle path from the railroad tracks bars some animals from crossing from Blair Pond to the rest of the Alewife Reservation—notably coyotes and humans—as the Friends of Alewife Reservation have repeatedly observed.

Still, by next spring the pond will be deeper, cleaner, richer than it was before. Perhaps the alewife and blue-black herring will return next spring, when there will once again be enough water to spawn—and perhaps even to swim upstream to Clay Pit Pond.

Meg Muckenhoupt is Editor of the Belmont Citizens Forum *Newsletter*.



MARINA MASSIDA

Great Blue Heron

Rain Barrels for Belmont

Sustainable Belmont will once again be selling discounted rain barrels. Rain barrels are an easy way to water your garden and plants, conserve water and energy, and reduce local flooding. Check them out and order your barrel at Town Day on Saturday, May 19, and at the Belmont Farmer's Market on Thursday, June 14 and Thursday, June 21.

Barrels cost \$69 will be ready for pick up Saturday, June 30, from 9 to 11 a.m. at the Belmont Department of Public Works Yard on C Street.

The barrels can be ordered on line at www.greatamericanrainbarrel.com. For more information, contact sustainable-belmont@gmail.com

New Map Will Get Belmont Walking

By Anne Paulsen

The new Belmont Walking Map will be unveiled at a press conference on Monday, May 7, at 6 p.m. at the Wellington Station at the corner of Concord Avenue and Common Street.

The map will feature routes to take to explore neighborhoods, to walk from one town center to another, to seek out historic houses and barns, and to enjoy Belmont's conservation lands. In addition the map will show interesting walks into neighboring communities. People can use the map to learn about Belmont's amenities and take a vigorous walk or a pleasant stroll.

It takes only 20 minutes to walk from Belmont Center to Cushing Square. In fact, it might be less time-consuming to walk than to drive and look for parking.

To create the map, Jay Szklut, Belmont's Planning and Economic Development Manager, applied for a grant from Walk Boston, Boston's leading advocate for walking and safe walking conditions.

Belmont was a good candidate for the grant because almost all of Belmont's neighborhoods have sidewalks. We have also been encouraging walking via the Walking School Buses, the Gold Shoe Hunt at Claypit Pond, and walks organized through the Senior Center.

Traffic calming and safe crossings have been incorporated into the town's road maintenance programs. Both the Comprehensive Plan adopted by the Planning Board and the Board of Selectmen and the town's Climate Action Plan

created by Sustainable Belmont call for support for walking for transportation in Belmont.

Belmont's planning department worked with Bob Sloane, Walk Boston's project manager for walking maps, to develop the map and decide which streets and routes should be included. Jenny Fallon and Anne Paulsen joined in the effort and assisted in the development of the walks and the routes. This map project is another

Sample Belmont Walk

From the new Belmont Walking Map:

Historic houses and landmarks

Pleasant Street from Stella Road to the Town Hall is the town's largest historic district, including 75 structures that are historically protected. Look for:

- the William Flagg Homer House, 661 Pleasant Street
- the Stephen Frost House, 467 Pleasant
- the Town Hall campus with the School Administration Building (the original Town Library) and Homer Building (originally a school).

Under the railroad bridge on Common Street, look for Wellington Hill Station and the War Memorial. A map of the Historic District is available on the Historic District Commission's website www.town.belmont.ma.us [search for "Map of the Historic District"].

Other notable historic homes include:

- the Christopher Grant House, 325 Common Street
- the Jonathan Stone House, 150-152 Washington Street
- the William Goodrich House, 323 Waverley Street
- and the John Chenery House, 52 Washington Street.

step in creating a community where the quality of life meets residents' expectations.

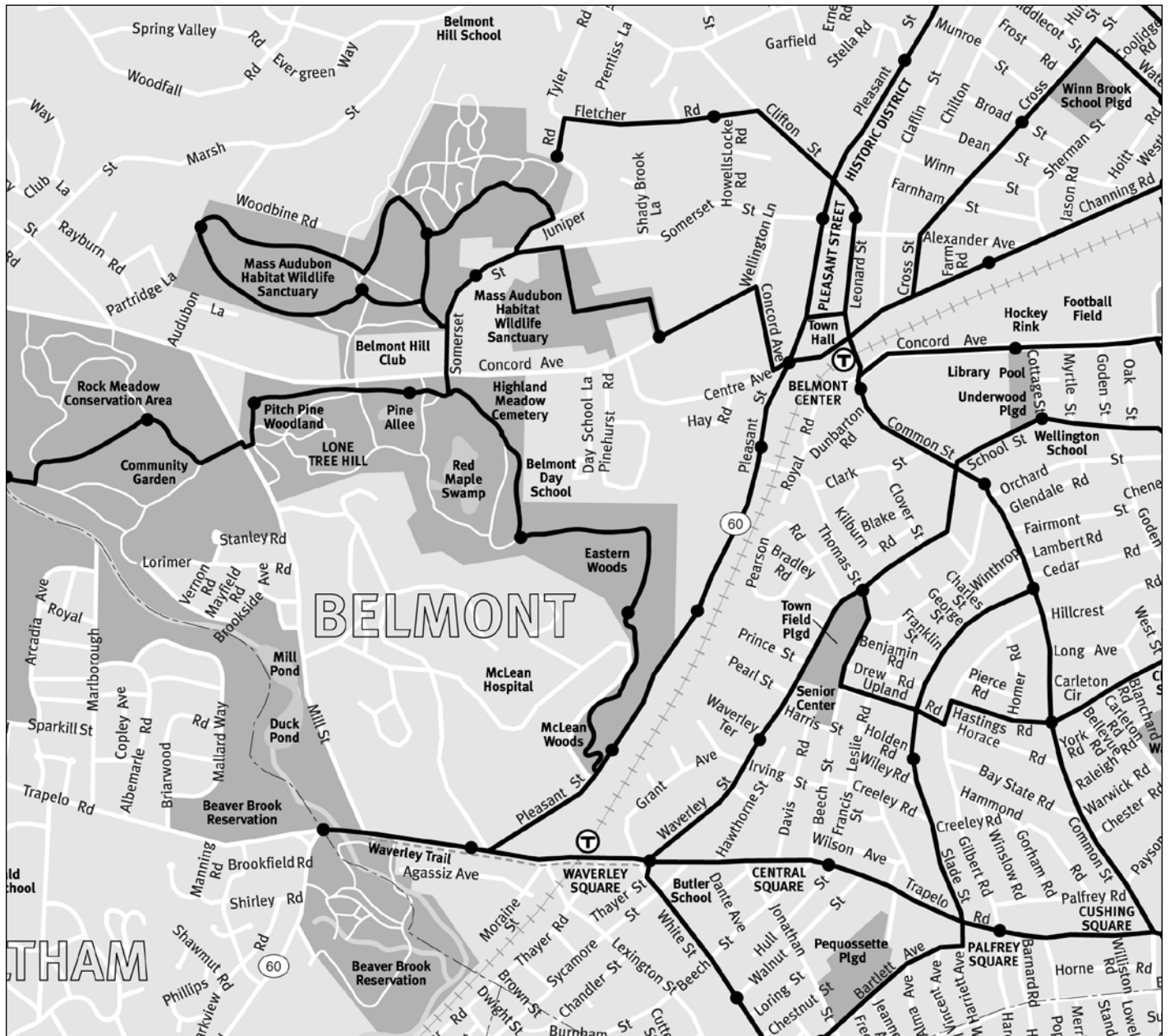
In addition to listing interesting walks, the walking map will encourage residents to get on their feet and walk to the centers, to the library, to the post office, and to community activities, and leave their cars at home.

The map will help residents understand how compact our community is and how short many of the distances are from one part of town to another. The walking routes shown on the map measure the distances in five-minute segments. It takes only 20 minutes to walk from Belmont

Center to Cushing Square. In fact, it might be less time-consuming to walk than to drive and look for a parking spot.

The maps will be available to residents and visitors at the Town Hall, the library, the Senior Center and also on the town and WalkBoston web sites, www.walkboston.org. The town web site also features a bicycle map, available under Forms and Documents.

Anne Paulsen served as Belmont's state representative for 14 years.



Sample walking routes from the new Belmont Walking Map. The distance between two dots is a quarter mile, equivalent to five minutes of walking.

Selectmen Pick Community Path Committee

By John Dieckmann

On March 19 Belmont's Selectmen appointed the Community Path Advisory Committee to evaluate routes for connecting the existing Brighton Street-Alewife bicycle trail to the future Waltham-Berlin path. The name reflects the fact that these paths are open to all forms of non-motorized transportation, not just bicycles. The seven appointees are:

- John Dieckmann, long time community path advocate
- Jeff Roth, former member of the Arlington Bicycle Committee
- Price Armstrong, bicycling planner and Mass Bike staff member
- Kevin Sullivan, media specialist and bike path enthusiast
- Brian Burke, representing the Belmont business community
- Cosmo Caterino, Channing Road resident
- Joe Noone, Channing Road resident

The committee was appointed in response to the Belmont/Waltham Community Trail Alignment Study by the Metropolitan Area Planning Council (MAPC) (see "MAPC Shows Potential Bike Routes," Belmont Citizens Forum *Newsletter*, March 2012.)

This study identified potential alignments for a community path from Brighton Street to the Waltham-to-Berlin bike trail that will be developed by Massachusetts Department of Conservation and Recreation along the former Central Massachusetts Railroad right of way. The final report and a detailed map are available on the MAPC web site, www.mapc.org/resources/bike-transport.

David Loutzenheiser, the MAPC's bicycle and pedestrian transportation planner, presented the results of this study to the Board of Selectmen in August, 2011. Loutzenheiser recommended appointing a committee to evaluate the alternate routes identified in the Alignment Study.

The Board of Selectmen voted unanimously at that meeting to appoint a Community Path Advisory Committee. Over the next several

months 25 people submitted applications to serve on the committee.

The committee is charged with evaluating routes for the community path identified by the study (and others that may yet be identified) gathering and reviewing all existing studies, and listing all criteria, positive and negative, to determine where the path may be feasible. The committee will also draft a written report with recommendations.

Criteria for evaluating routes include whether alignment alternatives put the path off the road and connect to other off-road segments; right-of-way ownership and availability for a path; the terrain, both with respect to safety and to construction difficulty and cost; and nearby residents' and abutters' concerns.

This first phase of the committee's work will take about six months. Any further work on the path will require funding for engineering feasibility studies (a relatively modest cost), detailed design (more expensive) and, ultimately, construction (a major expense); the committee will also identify public and private funding sources for developing the trail.

John Dieckmann is a Director of the Belmont Citizens Forum.



Partners in Play To Support Public Spaces

By Meg Muckenhaupt

Two Belmont playgrounds abruptly shut last fall; the Grove street tennis courts faced demolition in 2010; the Underwood Pool is nearly 100 years old. Many of Belmont's public places are falling apart. A new group is forming to support these spaces where Belmont's community gathers. Belmont Partners in Play seeks to raise awareness, recruit volunteers, and raise funds to support places like Belmont's parks, playgrounds, the Underwood Pool, the skating rink, and other spaces. "This is about. . . the places where we get together with people and lead our lives," said Ellen Schreiber, a Partners in Play co-founder.

"This is about. . . the places where we get together with people and lead our lives," said Ellen Schreiber, a Partners in Play co-founder.

Belmont Partners in Play began as a collaboration between the Winn Brook Joey's Park committee and the Butler Elementary School playground committee. Both the Butler School playground and Joey's Park, a town-owned playground abutting the Winn Brook School, were closed for safety violations in November 2011.

While the Butler School committee was aware that their playground was coming to the end of its useful life, and had prepared a new design, the closure of Joey's Park came as a shock to Winn Brook Parents. "I saw the faces of kids walking past the yellow [caution] tape every day. I don't want to see that again," said Schreiber. The two committees cooperated to ensure that they wouldn't end up competing against each other for scarce funds and town attention. "We

all need to be working together," said Schreiber. "We don't want to lose these places. We want to put them on the [town's] agenda."

Partners in Play intends to act as a "friends" group like the Friends of the Belmont Public Library, the Friends of the Belmont Council on Aging, and the various patrons groups at Belmont High School. As a public-private partnership, Partners in Play plans to raise awareness, build a base of volunteers for work like park clean-up days, and raise funds to support public spaces. The group is planning to incorporate and file to become a 501(c)3 tax-exempt nonprofit.

Partners in Play will kick off its organization with a launch weekend on June 9 and 10. The group plans a community walk, a "Playground Playdate" and an evening kick-off meeting. For more information, visit the Belmont Partners in Play web site, belmontpartnersinplay.org

Meg Muckenhaupt is Editor of the Belmont Citizens Forum *Newsletter*.



New Residents Born in Habitat Meadow

Two spring lambs have arrived at Weeks Meadow this spring, the newest additions to the flock at Belmont's Habitat Education Center and Wildlife Sanctuary. The older sheep have also undergone their annual shearing—undignified but necessary to help the animals stay comfortable in the coming summer heat.

The sheep and several dwarf Nigerian goats are on view at Weeks Meadow at Habitat through the fall. For a map to the meadow, visit the Sanctuary at 10 Juniper Road or see www.massaudubon.org.



SUSAN JONES



SUSAN JONES

Kevin Ford shears a surprisingly docile sheep.

Illegal Sewer Connections Can Cost Big Money

By Sumner Brown

Belmont homeowners can make illegal connections to our sanitary sewers with impunity, pouring stormwater into our sanitary sewers and making them overflow during storms. Then raw sewage floods into streets, streams, and basements during heavy rainstorms, and we get high water bills for processing rain at the Deer Island Sewage Treatment Plant.

I asked Glenn Clancy, Belmont's Director of Community Development, how Belmont handles illegal sanitary sewer connections. Glenn replied, "DPW advises the homeowner of the illegal nature of the connection and recommends they remove it. I wouldn't say the policy is to forgive an illegal connection. However, there is certainly recognition that the fix is a costly one. We have performed a sewer system evaluation survey where we discovered many illegally connected sump pumps. We are in the process of developing a plan to eliminate the illegal connections."

Roughly half the sewage we send to Deer Island shouldn't be there.

Sump pumps are not the only problem. It's also illegal to connect area drains and rain gutters to sanitary sewers. The town should catch these problems by inspections during new home construction. Homeowners probably have no idea if their gutters and drains are illegal.

How bad is the sewer abuse problem? Look at your water bill, which has separate charges for water and sewer. The sewer charge is about twice as big as the water charge. This discrepancy means that collecting water in the Quabbin reservoir, treating the water, bringing the water to Belmont, and distributing it costs about half as much as taking sewage to Deer Island, treating it, and sending it about ten miles out to sea.

Roughly half the sewage we send to Deer Island shouldn't be there. Some of the extra water, called infiltration, comes in through leaks in town sewer pipes.

Belmont has been relining sewer pipes for years, spending approximately a million dollars every two years using low or no interest loans from the MWRA. This fix stops infiltration.

The rest, called inflow, is due to illegal sewer connections. If both inflow and infiltration could be reduced to zero, our sewer bills would shrink by more than one third because the Massachusetts Water Resource Authority (MWRA) bills communities for both the total sewage volume and the peak sewage flow which occurs during rainstorms.

Peak flow comes overwhelmingly from inflow and infiltration, and peak flow is what stresses Deer Island's capacity. (See "Belmont Flood Data Show Leaking Sewers," Belmont Citizens Forum *Newsletter*, May 2010.) We cannot hope to eliminate inflow and infiltration, but that is not the point. We should do more than nothing about illegal inflow.

Belmont's sewage going to Deer Island gets measured in "real time," which means the flow gets sampled about a hundred times a day. From this data, if you knew the rate at which rain falls, you could estimate components of inflow and infiltration. Rain gutters attached to sanitary sewers will cause sewer inflow, which rises more quickly than water that soaks into the ground before it seeps into sewer pipes. But water from sump pumps and area drains has similar peaks as infiltration because the water must seep into basements before being pumped into the sewers.

The MWRA makes separate estimates of inflow and infiltration, but they cannot plausibly explain their basis. This means we do not know how much of our problem is due to illegal connections.

How Many Illegal Connections Exist?

How many illegal sewer connections does Belmont have? The town knows that the problem is substantial, but the details are fuzzy. One source of information is from DPW workers who go into basements to unclog backed-up sewers. In some parts of town, such as parts of Winn Brook that were built on an area known as the "Great Swamp," in colonial times, every home seems to have a sump. Not all sump

pumps are illegally connected. They can legally be connected to storm drains, or the water can be directed to the yard. But all too frequently they are connected illegally. Unfortunately the town does not keep a log of what the DPW workers find.

Another source of information is in-house inspections that were conducted by Belmont's sewer consultants, Fay Spofford and Thorndike.

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They looked in about 600 basements on streets where sanitary sewer flow data pointed to sump pump problems. The inspections found that close to half of the homes had problems, with 213 confirmed and 86 suspected illegal sewer connections.

Are Pre-Sale Inspections the Answer?

Back in 2003, Belmont's Vision 21 committee suggested one possible plan. They proposed that we could make slow, steady progress on illegal sewer connections by requiring that a house pass a sewer connection inspection before it is sold. The average cost of removing one hundred rain gutter connections from sanitary sewers and connecting the rain gutters to storm sewers was \$10,000 in 2004. (See "What's the Cost to Fix Belmont's Sewers," Belmont Citizens Forum *Newsletter*, the November 2006.) Ten thousand dollars would anger a homeowner for sure, but if it were part of selling a home for \$800,000, the average Belmont single family

house selling price in 2011, it would not seem nearly as bad.

In 2003, Fred Paulsen suggested inspecting homes before sale. I asked him why nothing happened to his suggestion; he could point to no particular reason why nothing came of it. Some communities, such as Berkley, Illinois, have such a policy, so it can be done. Would this policy be too slow? Of the 84 residential properties on Channing Road, 48 have changed ownership since January 1, 2000.

Like all towns in the MWRA community, our inflow and infiltration has remained about half of the total water we send to Deer Island. That seems like a failure. However, due to water conservation efforts, both our water usage and our inflow and infiltration are going down. If the MWRA communities can further improve, Deer Island will have excess capacity. Then other communities could join Deer Island and share the substantial costs of debt service for the facility. The only way to determine if this is possible is to try. Requiring sanitary sewer connection inspections before real estate sales is a plausible way to prevent raw sewage floods and reduce water bills for everyone.

Sumner Brown is a Director of the Belmont Citizens Forum.



Are LED Light Bulbs a Cost or an Investment?

By David Chase

Making changes to save energy often costs money, and it can be hard to convince yourself that the up-front costs are worth it. One way to frame conservation spending is to treat it as an investment, then see what the returns on it are. LED light bulbs make a good test case for this kind of thinking.

I recently bought an LED light bulb to see if it was “good enough,” and to solve a lighting problem where a compact fluorescent bulb was not working well. The LED bulb is working well, but was it worth the expense, compared to an incandescent bulb? With tax a 15-watt LED bulb (which gives as much light as a 75-watt incandescent) cost \$32. That’s a lot of money.

However, suppose I regard that \$32 as an investment. I could treat it as money loaned as a mortgage and paid back in savings on my electricity bill over the projected lifetime of the bulb or five years, whichever is shorter. What interest rate will my bulb “pay” me on this loan?

The light is on about five hours a day, every day, and electricity costs \$.15 a kilowatt-hour in Belmont. Each month the LED light costs \$1.35 less to run than an incandescent bulb. Furthermore, incandescent bulbs (which cost about a dollar) need replacing about once every 1500 hours of use. That’s another \$.10 per month. In total, the LED light saves \$1.45 each month. If we treat this like a loan of \$32 dollars paid back in 60 monthly installments of \$1.45, we get a monthly interest rate of 4.13 percent, making for a yearly interest rate of almost 50 percent. That’s pretty good.

Hours/Day	Months to Payback	Annual Interest Rate	Total Hours On
1	110	-22%	1800
2	55	3%	3600
4	28	36%	7200
6	12	62%	10800
8	14	85%	14400

Like all investments, there are risks. The two most prominent are that the bulb might fail early, or that you might not run it as many hours as you thought. The bulb could fail, but the one I bought came with a 5-year warranty, so I ought to be able to get my money back in that case.

If we treat this like a loan of \$32 dollars paid back in 60 monthly installments of \$1.45, we get a monthly interest rate of 4.13 percent, making for a yearly interest rate of almost 50 percent.

The risk of underuse will cut your rate of return, but you will not actually lose money until you use it less than 2 hours per day. At two hours per day the yearly rate is only 3.35 percent; still better than you can get in a 5-year CD, but not by much. However, even three hours per day raises your rate of return to more than 20 percent.

A third risk is that you could have bought a smaller bulb; the LED is nice, but really, you could get by with a 60-watt incandescent bulb. In that case, 2 hours of use per day no longer pays off in five years, but 3 hours per day still does, and at better than a 9 percent rate. Five hours per day pays off at 33 percent, still higher than you would get from any traditional investment, never mind one with low risk.

A fourth risk is that you could buy a bad bulb. You do have to be a little careful, because some of the older “LED light bulbs” are really not that good. The newer, better bulbs list a lumen rating, describe the color of the light they produce, have a long lifetime (20,000 hours or more), and often come with a warranty. They’re not made of very many little tiny LED lights; instead, they contain just a few high-powered LEDs of several watts each. I bought an EcoSmart; CREE is another good brand, and so is Philips (though Philips bulbs tend to cost more).

There are bonus returns from this investment. The “payments” are savings, hence not taxed, which gives them an even better effective

return. The bulbs are claimed to have a lifetime of 20 thousand hours; that's about 2 years of continuous use, or 10 years at 5 hours per day. If you use them in a room that gets hot in the summer the energy saved is also heat you don't need to pump out of the room—more electricity saved, or more comfort. They're also more

durable than glass light bulbs, either incandescent or compact fluorescent.

And they do use less electricity than incandescent bulbs.

David Chase is a Director of the Belmont Citizens Forum.

Environmental Events

Belmont Walking Map Release

Monday, May 7, 6 p.m.

The new Belmont Walking Map will be officially released at a press conference. Info: www.walkboston.org, info@walkboston.org. *Wellington Station, corner of Concord Avenue and Common Street.*

8th Annual Spy Pond Trails Day

Saturday, May 12, 9 a.m.-1 p.m.

Join the Spy Pond Environmental Task Group for a morning of trail maintenance, controlling invasive plants, pruning vistas, bagging litter, and generally improving this scenic slice of public land so enjoyed by all. Equipment and snacks will be provided, but please pack your own lunch. Info: www.arlingtonma.gov/spypond, (781) 641-2506. *Location along the path that parallels Route 2 between Lake Street and Pleasant Street.*

Bay State Bike Week

Monday, May 14-Friday, May 20

Take your two wheeler to dozens of breakfasts, rides, films, and classes in Boston and throughout the Bay State. Sponsored by Massbike. To find events near your home or workplace, see baystatebikeweek.org.

Lady Slippers and other Wildflowers

Saturday, May 19, 9:30 a.m.-noon

Come to Habitat to enjoy and learn about these beautiful orchids and the many other late spring wildflowers that are in bloom. Fee \$16 Audubon members, \$20 non-members. Sponsored by Habitat Education Center and Wildlife Sanctuary. Info: www.massaudubon.org, (617) 489-5050. *Habitat Education Center and Wildlife Sanctuary, 10 Juniper Road, Belmont.*

HIP 11th Annual Herb Sale

Sunday, May 20, 9 a.m.-4 p.m.

The Habitat Intergenerational Program (HIP) will hold its annual herb sale featuring Massachusetts-grown organic annual and perennial herbs and vegetables. Info: www.massaudubon.org, (617) 489-5050. *Habitat Education Center and Wildlife Sanctuary, 10 Juniper Road, Belmont.*

16th Annual Mystic River Herring Run and Paddle

Sunday, May 20, 8 a.m.-noon

Join the Mystic River Watershed Association for a fun day along the Mystic River. The day's events include a 5K run/walk race, three paddling races (3, 9, and 12 miles), a bicycle tour, educational booths, children's activities, and more. Info: mysticriver.org/herring-run-paddle, (781) 316-3438. *32 Shore Drive, Somerville.*

Life-Friendly Garden Tour

Sunday, May 20, 12:30-5p.m.

See Watertown gardens full of flowers, shrubs, vegetables and fruits grown without toxic chemicals. Sponsored by Watertown Citizens for Environmental Safety. Info: www.watertowncitizens.org, button@brandeis.edu, (617) 926-2545. *Contact WCES for tour map.*

Green Energy Tour of Belmont

Sunday, May 20, 10 a.m.-2 p.m.

Visit 10 locations to learn how homes and businesses are using solar energy, geothermal heat pumps and energy conservation measures to reduce their carbon footprint. Pick up maps on May 20 at the Beech Street Center, 266 Beech Street, Belmont. The tour will run rain or shine. Sponsored by Sustainable Belmont. Info: sustainablebelmont@gmail.com. *Various locations around Belmont.*

Gardening with Native Plants: A Primer

Tuesday, May 22, 10 a.m.-12:30 p.m.

Native plants can be rewarding additions to your landscape since they are already adapted to the local climate and soil conditions where they naturally occur. Learn which plants would work well in your garden and how native plants are important in our environment, and then walk through the Garden to see them. Registration required: fee \$16 Audubon members, \$20 non-members. Sponsored by Drumlin Farm Wildlife Sanctuary and New England Wild Flower Society. Info: www.massaudubon.org, drumlinfarm@massaudubon.org, (781) 259-2200. *Garden in the Woods, 180 Hemenway Road, Framingham.*

Herring Open House at the Dam

Thursday, May 24, 3-7 p.m.

MyRWA staff and volunteer Herring Monitors will allow visitors access to the fish ladder at the newly renovated Massachusetts Department of Conservation and Recreation's Upper Mystic Lake Dam to see the migrating herring! Drop by anytime 3-7 p.m. to learn about the incredible journey this fish makes. Free and open to the public. Info: mysticriver.org, Beth@MysticRiver.org, (781) 316-3438. *Upper Mystic Lake Dam, Medford.*

Invasive Plant Management Strategies

Thursday, May 31, 6-7:30 p.m.

Join Paul Sutton, Coordinator for Open Space and Special Projects with Boston Parks and Recreation Department, and other invasive plant management experts to discuss managing invasive plants in

home landscapes, community gardens, and urban wilds. Sponsored by the Boston Natural Areas Network. Info: www.bostonnatural.org, karen@bostonnatural.org, (617) 542-7696. *Summer Street, 2nd Floor, Downtown Crossing, Boston.*

Bike to the Sea Day

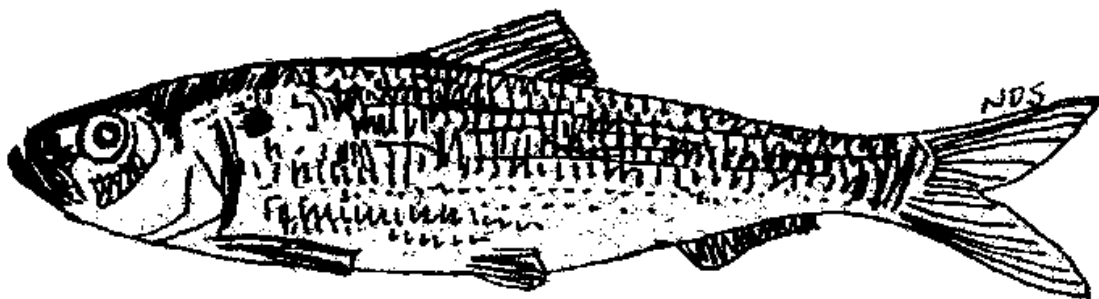
Saturday, June 2, 8 a.m.-10 a.m.

This celebration of the new Everett section of the Northern Strand Community Trail includes a ribbon cutting, a group ride on the newly completed section of the trail, and options of a 20-mile round trip to Nahant Beach or a 14-mile family ride to the Saugus River Marsh. Registration begins at 8 pm. Ride \$20 for individuals, \$35 for families. Pizza lunch served after the rides. Info: biketothesea.com, swinslow4152@gmail.com, (781) 397-6893. *Northern Strand Trail in Everett between Air Force Road and Prescott Street, near 7-Acre Park.*

The Rare Plants of Massachusetts

Wednesday, June 6, 7-8:30 p.m.

From its calcareous cobbles to its coastal plains, Massachusetts has a broad diversity of eco-regions and is home to 1,814 species of native plants. Of these, 254 are vulnerable to extinction and protected by the Massachusetts Endangered Species Act. Bryan Connolly, Massachusetts State Botanist, gives an overview of these many vulnerable plants and the threats they face. Info: grownativemass.org, (617) 354-0502. *Cambridge Public Library, 449 Broadway, Cambridge.*



Blueback Herring

Belmont Time Trade Circle Orientation

Wednesday, June 6, 7-9 p.m.

This meeting of Sustainable Belmont will initiate a Belmont time trade circle. Time trade circles allow members to barter time and skills. Info: sustainablebelmont@gmail.com. Belmont Town Hall Selectmen's Room, 455 Concord Avenue, Belmont.

Partners in Play Launch Weekend

Saturday, June 9, and Sunday, June 10

Join Belmont's new group supporting public spaces for a weekend community walk, Playground Playdate, and organizational meeting. Info: www.BelmontPartnersInPlay.org, bpip02478@gmail.com. Various locations around Belmont.

Citizen Scientist Training Workshop

Wednesday, June 13, 6-8 p.m.

Become trained to join the Mystic River Watershed

Association's water quality monitoring team. Monitors assist with the Baseline Monitoring Program once a month between 6-8 a.m. Free training and no experience needed. Info: mysticriver.org/baseline, Beth@MysticRiver.org, (781) 316-3438. Mystic Learning Center, 530 Mystic Avenue, Room 101, Somerville.



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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:

\$25 \$50 \$100 \$250

Name _____

Address _____

Phone/E-mail _____

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.

Make checks payable to **Belmont Citizens Forum** and mail to Belmont Citizens Forum, P.O. Box 609, Belmont MA 02478.

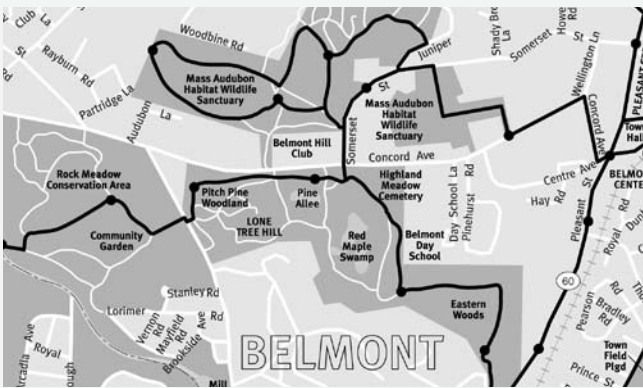
Thank you.

Belmont Citizens Forum
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May/June 2012

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