



Belmont Citizens Forum

Fifty Million Gallons of Sewage Released

Discharges to Alewife Brook Have Persisted for Two Decades

By Kristin Anderson and David White

Fifty million gallons of sewage-contaminated stormwater have been discharged into the Alewife Brook from the cities of Cambridge and Somerville in 2021, according to websites for those two cities and the Metropolitan Water Resources Authority (MWRA) for the Alewife/Upper Mystic Combined Sewer Overflow (CSO). There has been as much sewage-contaminated water discharged into the Alewife Brook in 2021 as there was in 1997 before the implementation of a \$200 million plan to modernize the area's antique combined sewer systems.

Pollution persists in the Alewife sub-watershed because the area, already prone to flooding, is densely developed with impervious surfaces including pavement, rooftops, and sidewalks. To make the matter worse, during major flood events when the Mystic River rises, it flows backward into the Alewife Brook, reversing the brook's direction. This conveys the contaminated flood water containing untreated sewage back upstream through vulnerable neighborhoods in East Arlington and North Cambridge, into the Little River and Belmont, and into residents' homes, yards, and parks. The situation is expected to get worse due to climate change.

Sewage discharges continue for decades

The reported 2021 discharge volume shows no reduction in the

volume of discharge compared to the base year of 1997. That's the year that the MWRA chose as the standard in its original Long Term CSO Control Plan (LTCP) to reduce the amount of combined sewage discharge in the Alewife/Upper Mystic River Basin.



An Alewife Brook combined sewer overflow outfall with warning in 2016.

ANNE-MARIE LAMBERT

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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.

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Cambridge and Somerville have been sending untreated sewage mixed with stormwater directly into the Alewife Brook through sewer outfalls. An outfall is a pipe or conduit that carries stormwater (sometimes combined with raw sewage) into a body of water. These sewers, relics of combined sewer systems from the 19th century, are known as “one-pipe systems.”

The combined sewer system carries stormwater, industrial wastewater, and untreated domestic sewage away in a single pipe out to the Deer Island water treatment plant. This one-pipe system is often overwhelmed during and after storms, when a mix of untreated sewage and stormwater is discharged, via outfalls, directly into the Alewife Brook. Rains, tides, and river currents then carry the pollution to Boston Harbor via the Mystic River.

As a result of the landmark Conservation Law Foundation’s Boston Harbor cleanup court case in the 1980s, the Environmental Protection Agency (EPA) enforced the Clean Water Act and required that the CSO pollution end. The Clean Water Act created federal standards for discharges of pollution. The Massachusetts Legislature then created the MWRA to manage and modernize the Boston water and sewer system, including creating the new sewage treatment facility at Deer Island. It was determined that the cost of totally replacing the existing CSO system would be very expensive and burdensome to the ratepayers, especially in less affluent communities. Thus a political compromise was made to only do part of the work.

The 12-year plan to fix CSOs

For the Little River-Alewife Brook watershed, the plan was to eliminate half of the Alewife CSOs and construct a wetland in Alewife Reservation to clean some of the discharge. According to the DEP’s 2019 Alewife Mystic Final Variance Fact Sheet, the initiative to close and control the CSOs promised the public an 85% reduction in sewage pollution while satisfying the DEP requirement that improvements were being made. The LTCP split this work into seven large projects which took more than a dozen years to complete. All of this work was finished by 2015.

What is a CSO?

A combined sewer overflow (CSO) is the discharge of untreated sewage mixed with stormwater into local waterways. These overflows happen when heavy rains or snow melt overwhelm a sewer system where sewage and stormwater pipes are connected. Normally, these pipes send sewage to the Deer Island treatment plant, but when they overflow, sewage flows out through the stormwater pipes into rivers and brooks like the Little River and Alewife Brook.

In 2015, victory was declared at a ribbon-cutting ceremony at the newly created Alewife Reservation Constructed Wetland in North Cambridge. This celebratory event marked the completion of the first LTCP for remediating the CSOs. Cambridge had good reason to celebrate: this project is a rare example of cutting-edge bioengineered green infrastructure.

The wetland collects stormwater from Cambridge’s Huron Village neighborhood, north to Fresh Pond Parkway. The stormwater is pumped from the surrounding commercial and residential areas into a holding tank known as a “forebay,” where sediment is allowed to settle before the water is released into the wetland to be biologically filtered for contaminants and then conveyed into the Little River just above where it becomes the Alewife Brook at the Minuteman Trail footbridge.

To many people, this beautiful park appears to be an urban wild, with its trails, 119,000 native plantings, great blue herons, ducks, swans, eels, and other wildlife. But it is so much more than that. The wetland provides flood relief and reduces sewage pollution via bioremediation while helping to protect Cambridge’s water supply at Fresh Pond. Constructed wetlands are tertiary treatment systems that use natural processes involving wetland vegetation, soils, and their associated microbial assemblages to improve water quality, according to the EPA.

It is hard to imagine how much worse off the area would be without the excellent work that was completed in 2015.

Pollution persists today

How is it possible that in 2021, after all the work that was done to reduce the CSO discharges, that we are now experiencing the same volume of hazardous pollution as we did before making any investments in green and gray infrastructure?

It has been a wet year, but that cannot completely explain the fact that the CSO activations are six times worse than the original LTCP promised. Sometimes just one inch of rain can activate a CSO in the Alewife Brook.

Is the rate at which the rain fell in 2021 to blame for the unexpectedly large volume of CSO discharge? Is it because the ground absorbs less water, as developers continue to build one new building in the area after the next, with impervious rooftops, impervious access roads, and impervious parking lots?

How is it possible that we are now experiencing the same volume of hazardous pollution as we did before making any investments in green and gray infrastructure?

Is it that new developments are tied into the combined sewer system lines, further reducing system capacity? Is it due to the vanishing trees and vegetation which normally used to slurp up groundwater as the roots aid infiltration and send the rainwater into the water table (where it becomes a resource rather than a waste product)? Are we experiencing more storms because of climate change?

The answer is probably a combination of these factors, but it is clear that we are losing ground.

We must continue the work of modernizing the sewer systems and employing green infrastructure and other nature-based solutions or the problem will get worse.

Improvements have to be made to reduce the damaging impact of the CSOs. There have been no investments since that ribbon-cutting ceremony in 2015. But there is now an opportunity to create a second Long Term Control Plan, which we will call LTCP2.

LTCP2 should include everything that was part of the first LTCP:

- Sewer separation
- Closing of the remaining Alewife Brook outfalls
- Green infrastructure including bio basins, bioswales, planter boxes, rain gardens, permeable asphalt roads
- A holding tank for stormwater with extra capacity to help relieve flooding
- Another bioengineered wetland park with trails and native plantings

This plan would take a big step towards climate change resiliency.

In addition to sewer infrastructure upgrades, necessary improvements in the Mystic River must be made to reduce flooding. An important key to controlling Alewife area flooding is the proper operation, maintenance, and upgrades at the Amelia Earhart Dam. Looking into the future, if the Amelia Earhart Dam is breached or flanked during future storms, a surge of water will be pushed up the Mystic into the Alewife Brook and into the neighborhoods of our most vulnerable populations.

A review of FEMA flood maps reveals there are an estimated 1,200 East Arlington residents, 3,500 Cantabrigians, and 300 Belmont residents living in the Little River-Alewife Reservation's 100-year floodplain. This number does not count

Topography and flooding

For the Mystic River and Alewife Brook, topography is destiny. Both streams are below the mean high-tide level of Boston Harbor and have historically been tidal, with the water flow direction changing with the tide. For many years, this tidal flow was used to power mills.

Because of pollution and malaria concerns, the river flows were changed in 1909 with the construction of the Craddock Dam and tidal gates at Medford Center. This dam was replaced in 1966 by the Amelia Earhart Dam and pumping station at the mouth of the Mystic that pumps water into the harbor as needed to maintain a predictable water level.

The Amelia Earhart Dam is the key to reducing flooding in the Mystic River and Alewife Brook. If the Mystic rises too high, water can flow backward in Alewife Brook towards Cambridge and Belmont. With global warming and sea-level rise, this dam will have to be reinforced to continue to protect the Mystic and the Alewife.

the 643 residents living in housing on the former Belmont Uplands/Silver Maple Forest site, who would be completely stranded and surrounded by water in the event of a 100-year flood.

There will likely continue to be flooding in some extreme events, but antique combined sewer systems make flooding much worse by contaminating floodwaters with raw sewage. We can close the outfalls. Six have already been closed on Alewife Brook, and there are six more to go.

Kristin Anderson is an Arlington Town Meeting member whose home was occupied by the untreated sewage flood waters of the Alewife Brook during more than one 100-year flood event within a two-year period. David White is an Arlington conservation commissioner who has been involved in environmental activities for many years.



Watershed Modeling Enhances Flood Resilience

By Julia Hopkins and Julie Wood

Climate change isn't coming—it's here. Sea-level rise, drought, blistering heat; the tangible effects of global warming are already happening in Massachusetts, and our highly urbanized watershed and those who call it home are increasingly vulnerable to its impacts. It also

November/December 2021). More flooding. A few inches of increase in rainfall across the watershed has the potential to increase the Charles River's volume by millions of gallons during a heavy storm. Our aging stormwater infrastructure can still withstand today's rainfall patterns (for example, it may be designed for



Road flooding upstream in the Charles River watershed in Dover, Massachusetts.

means extreme weather and severe inland flooding are some of the greatest threats to our watershed and our lives.

In the northeastern United States, precipitation during heavy rain events increased by more than 70% between 1958 and 2010 according to the Fourth National Climate Assessment released in 2018. This trend is expected to continue as our climate warms. Today's 25-year rain event is predicted to become a 10-year rainfall event in 2070. Today's 100-year rain event is predicted to become a 25-year rain event in 2070.

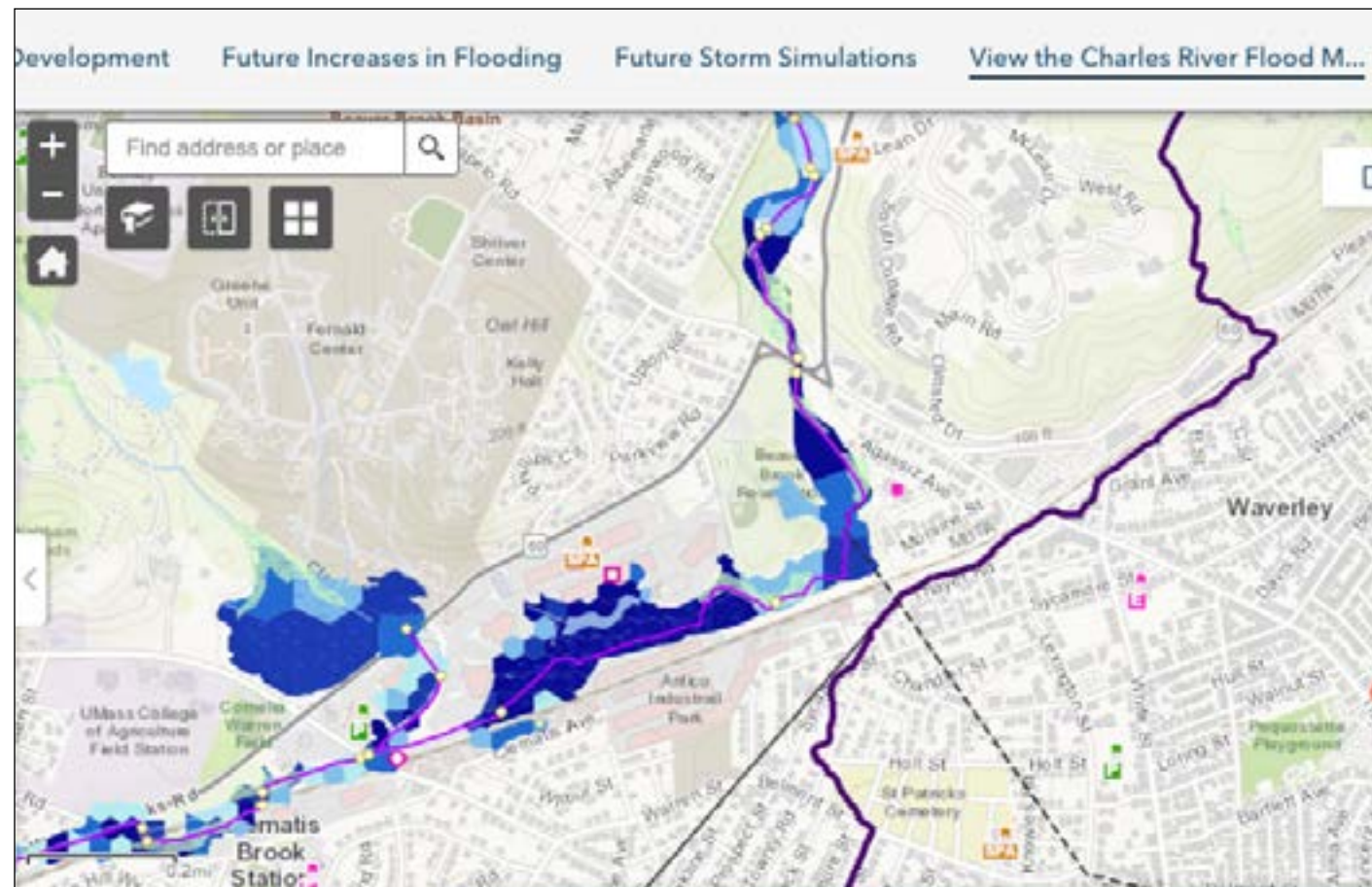
What does this mean for the Charles River, which drains about a third of Belmont's land? (See "CRWA Works to Keep the Charles River Clean," Belmont Citizens Forum Newsletter,

today's 25-year storms), but it will not be able to handle future heavy precipitation events, causing even greater flood risks.

A watershed-wide collaboration

That's where the Charles River Flood Model comes in. A first-of-its-kind watershed-scale flood visualization, this model is a vital tool that will help our watershed prepare for extreme weather and inland flooding. Its unique power is its regional scale and ability to encourage communities in the watershed to collaborate and share resources to collectively prepare for this growing threat.

The Charles River Flood Model visualizes the impacts of various storm events, including



The Charles River Flood Model's predictions for a 10-year rain event in Belmont in 2030. Shades indicate water depth: the darkest areas on this map correspond to flood waters three feet or deeper. For more information, see crwa.org/watershed-model.html.

current and projected future storms. The model can also test adaptation and mitigation strategies that protect homes, critical infrastructure, and livelihoods. The model can help quantify the potential results of flood mitigation strategies, providing communities with a level of confidence in the potential impact of their investment.

The Charles River Flood Model was created in partnership with the [Charles River Climate Compact](#), established by the Charles River Watershed Association (CRWA) in 2019. This group of 21 municipalities is working together to build regional climate resilience. A subgroup of these communities—including Arlington, Dedham, Franklin, Holliston, Medway, Millis, Natick, Needham, Newton, Norfolk, Sherborn, Watertown, Wellesley, Weston, and Wrentham—partnered to obtain funding from the [MA Executive Office of Energy and Environmental Affairs](#) and the [Municipal Vulnerability Preparedness Action Grant Program](#) to develop

the model. [Weston & Sampson](#) was the technical lead on the project. The model is a critical step in helping our communities protect vulnerable populations and property from flooding by predicting where and when flooding will occur and recommending adaptation and mitigation strategies.

Developing the model began at the ground level, creating a network of features that move water across the region including streams, culverts, stormwater pipes, manholes, and catch basins. The model is overlaid with two-dimensional cells to depict where floodwaters may go, accounting for how quickly stormwater runoff may reach a stream.

In highly urbanized areas with large areas of impervious cover, stormwater flows off roofs, parking lots, and roadways directly and quickly into the river, increasing flood risks for downstream areas. In contrast, in low density, relatively undeveloped areas with protected wetlands, mature trees, and open space, a higher

What is a 25-year rain event?

Planners talk about 10-year, 25-year, even 100-year rain events as shorthand for how likely it is to have a storm that big any given year. A 10-year rain event has a 10% chance of happening this year; a 25-year rain event, 4%; a 100-year rain event, 1%.

proportion of rainwater is absorbed into the ground rather than directed into storm drains, mitigating heavy precipitation and reducing flood risk. The Charles River Flood Model was developed at the watershed scale which recognizes that cities and towns are interconnected, as highly developed areas upstream affect the rest of the watershed and its ability to weather an extreme storm.

Flood predictions, flood solutions

The Charles River Flood Model found that without intervention, in 2070 a projected 100-year storm will impact more than 50 critical facilities such as schools, medical offices, police stations, and water supply wells, and flood up to 12,500 acres of land within the watershed. This exceeds the estimated 10,400 acres of flooding during the severe rains of March 2010, which caused a state of emergency, widespread evacuations, public transit shutdowns, and resulted in considerable damage to homes, businesses, and municipal buildings.

The Charles River Flood Model also shows the [flood mitigation benefits of nature-based solutions](#) such as land conservation, green stormwater infrastructure, and/or reducing impervious surfaces. However, bold action and significant investment will be required to mitigate projected flooding at present-day levels. Initial modeling found that none of the nature-based solutions investigated were enough to mitigate the future impacts of climate change. The heavily developed watershed is already susceptible to damage from present-day storms, and climate change will exacerbate flooding, heightening the need for bigger, more aggressive measures to keep our communities above water.

One of the [nature-based solution scenarios](#) investigated in the Charles River Flood Model

tests the impact of developing unprotected land vulnerable to future development. Developing just half of the watershed's remaining undeveloped and unprotected land without incorporating flood control measures would result in a 33% increase in flooded area in a present-day 10-year storm, and another 20% increase in flooded area in a 10-year storm in 2070. Allowing development without aggressive flood protection will cause downstream flooding and directly impact vulnerable residents.

"Modeling results demonstrate the need to work together as a region, and show there may be areas of the watershed that it makes sense to leave undeveloped while encouraging greater density in other areas," said Emily Norton, CRWA's executive director.

In September, the Baker-Polito administration awarded \$233,000 to CRWA and 19 Charles River watershed communities for [Building Resilience Across the Charles River Watershed Phase II](#), which will result in the development of a regional Adaptation Implementation Plan for freshwater flooding. The plan will include the design of up to four site-specific flood mitigation projects within the Charles River watershed.

"This additional funding will allow us to help cities and towns take bold action to reduce the dangerous flooding already happening, and prepare for the even more intense rainstorms of the future," said Norton. "The Charles River Flood Model clearly demonstrates the impacts coming to our region, but it allows us to test out the benefits of potential flood mitigation strategies so we know we are making sound investments."

In addition, the plan will include policy tools and resources to support each municipality in implementing additional strategies that the model demonstrates to be effective, such as reducing impervious cover and increasing green stormwater infrastructure. These efforts will help bring nature-based solutions for flood mitigation into the mainstream and give communities the tools they need to advocate for these solutions.

Julia Hopkins is communications and outreach manager for the Charles River Watershed Association. Julie Wood is deputy director of the Charles River Watershed Association.

Belmont Awarded Climate Change Grant

By Jeffrey North

Belmont has received a \$195,000 Municipal Vulnerability Preparedness (MVP) grant from the Massachusetts Climate MVP Program to identify Belmont’s current and future stormwater flooding risks from climate change. The project, known as the Stormwater Flood Reduction and Climate Resilience Capital Improvement Plan, will include the development of a 2-D stormwater model to assist in locating flood risk areas and evaluating how to make those areas more resilient.

The primary goals of this project are to understand the town’s vulnerability to flooding and climate change on a street-by-street basis using an enhanced town-wide 2-D drainage hydraulic model, and to identify and prioritize infrastructure improvements. Infrastructure improvements are especially important in environmental justice communities because they help reduce current and future flood risks while providing other benefits such as increased social equity, water quality, and open space improvements as well as urban heat island reduction with nature-based solutions.

Other goals include:

Environmental Justice Communities

According to the Massachusetts Executive Office of Energy and Environmental Affairs, a neighborhood is defined as an environmental justice population if one or more of the following four criteria is met:

- the annual median household income 65% of the statewide annual median household income or less
- minorities comprise 40% or more of the population
- 25% or more of households lack English language proficiency
- minorities comprise 25% or more of the population, and the annual median household income of the municipality does not exceed 150% of the statewide annual median household income.

- Engage residents in shared solutions for climate change impacts through public outreach.
- Address high-priority action items identified during the MVP process.
- Improve the existing 1-D drainage model by creating a 2-D model upgrade with an enhanced climate evaluation.
- Document current and future flooding problems in Belmont using the revised model.
- Integrate Belmont’s drainage model into the regional 2-D hydraulic model to evaluate both the impacts of the planned regional interventions on Belmont and Belmont’s planned improvements on the regional system.
- Identify site-specific green infrastructure/nature-based controls for implementation.
- Identify any needed grey stormwater infrastructure improvements.
- Identify the associated benefits from resilience improvements for prioritization.
- Create an action plan.

The MVP program provides support for cities and towns in Massachusetts to plan for climate change resiliency and implement priority projects. Belmont’s MVP plan can be found on the town’s website on the Office of Community Development page at bit.ly/BCF-MVP.

Nearby, the city of Waltham was awarded a \$362,000 MVP grant for that municipality’s project, Bringing Climate Resilience to Beaver Brook. Waltham’s previous flood mitigation and stormwater improvement plan ranked resiliency measures in Beaver Brook as a top priority for mitigating flooding in an environmental justice neighborhood. This project will implement flood mitigation including brook restoration design, permitting for brook restoration and stream crossing improvement, and preliminary design for wetland storage.

More information about the grants awarded to other towns and cities can be found at bit.ly/BCF-MVPGrants.

Jeffrey North is managing editor of the Belmont Citizens Forum Newsletter.

Time To Pass An Updated Bottle Bill

By Janet Domenitz and Julia Blatt

We need to stop kicking the can down the road. Since its passage nearly 40 years ago, the bottle bill has created a successful recycling program in Massachusetts. But time is catching up to the law, and it needs updating to deliver the best results.

A lot has changed in Massachusetts since the original bottle bill was established in 1983. First, our waste problem has worsened. According to the new Trash in America report released by MASSPIRG and other regional public interest groups, the average American throws out nearly 1,800 pounds of trash each year. That’s a massive increase from the 1,300 pounds of trash the average American discarded in 1980. And Massachusetts is not immune to this wastefulness. We produce nearly six million tons of waste in the Commonwealth annually. Most of this trash consists of goods used for a matter of minutes before throwing away — like beverage containers.

Second, the beverage market has changed dramatically. In 2015, the bottle bill kept over 1.2 billion beverage containers out of our trash, but 6 billion beverage containers were sold in Massachusetts that year. Most of those containers didn’t, and still don’t, have a deposit under the current law. That’s because many drinks on grocery shelves today — water bottles, sports drinks, iced teas, and more — did not exist when the law passed in 1982. These new containers litter our parks, clutter our waterways, and consume our landfills.



Finally, a nickel is not what it was in 1983. The incentive for consumers to redeem their beverage containers is not as much as it once was. The Commonwealth’s redemption rate peaked at 71% in 2010, but fell to 43% in 2020, the lowest of any bottle bill state. At the other end of that spectrum, states with the highest redemption rates, like Michigan, Oregon, and Maine, have 10-cent deposits and redemption rates of about 85%.

With these changes in Massachusetts over the past 40 years, it’s time for the bottle bill to catch up. When we and other advocates tried to update the law at the ballot box in 2014, the bottling and beverage industries spent more than \$9 million dollars opposing the change, promising “better ways” to recycle. Ultimately the initiative was defeated. Since then, no promised “better way” has appeared, and recycling in

Massachusetts has stalled. Meanwhile, new container deposit laws have been enacted for more than 350 million people around the country and the world, and laws have been modernized with great success. When Oregon updated their bottle bill in 2017 to include more types of beverage containers and a 10¢ deposit, the redemption rate jumped from 64% to 86% over two years. Likewise, since updating their extensive container deposit law in 1990, Michigan has seen the redemption rate rise to 89% and their total waste stream reduced by 6% to 8% each year. In response to growing piles of litter and waste, State Representative Marjorie Decker

and State Senator Cynthia Creem have filed an updated bottle bill (H3289/S2149) which will cover nips, water bottles, and more container sizes and types of beverages, and increase the deposit from 5 cents to 10 cents. With this bigger, better bottle bill, we could more effectively clean up our roadsides, reduce plastic in our rivers and waterways, and stop burying or burning our beverage containers in landfills and incinerators.

As with any big problem, there’s no one silver bullet. Updating the bottle bill is one of many

steps we must take to move away from our throwaway, single-use culture. The facts show that deposits on containers reduce waste and litter, and improve our communities. But an updated bottle bill doesn’t need to start from scratch, or build anything new. We just need to double down on what already works: the tried-and-true recycling success of the bottle bill.

Janet Domenitz is executive director of MASSPIRG. Julia Blatt is executive director of the Massachusetts River Alliance.



CITY OF CAMBRIDGE

Food waste and climate change

America wastes nearly a third of the food it produces. Each year, over 100 billion pounds of food is thrown away. Food loss and waste have a significant environmental impact due to the loss of land, water and energy resources.

If global food waste were a country, it would be the third largest greenhouse gas emitter after China and the United States. Waste occurs at every stage of the food supply chain—production, packaging, distribution, transportation, retail, and consumers.

For consumers, waste happens at our kitchens, where food spoils in our refrigerators and cabinets. The average American family of four throws out \$1,800 in food per year.

The good news is reducing food waste and food loss is one of the top solutions to climate change as analyzed by [Project Drawdown’s 2020 review](#).

Please join the campaign to Reduce Belmont’s Food Waste. To learn more, visit lpriyas.wixsite.com/belreducesfoodwaste.

How can Belmont Reduce Single-Use Plastics?

By Vincent Stanton, Jr.

The United States generates more plastic waste than any other country in the world: 42 million tons, or 286 pounds per person, in 2016. That includes plastic waste the US exports to other countries with weak recycling systems (see links at end of article for details). Plastic waste lasts a long time and has many noxious effects (See “[Think Twice About Single-Use Plastics](#),” Belmont Citizens Forum *Newsletter*, November 2021). The Massachusetts legislature, a recycling leader in 1981 when it passed the “bottle bill” over Governor Ed King’s veto, has become a laggard. (See “Time To Pass An Updated Bottle Bill” on page 9 of this issue.) Maine, Oregon, and California are among the states with far more comprehensive recycling measures and limits on single-use plastics.

Municipalities step up

While state-level leadership has stalled, Massachusetts’ cities and towns, including Belmont, have moved forward with new initiatives to reduce plastic waste. The most widely implemented municipal measure is to ban single-use plastic bags. According to the Massachusetts

chapter of the Sierra Club, as of October, 2021, 146 out of 351 Massachusetts cities and towns, representing over 60% of the state’s population, regulate or outright ban single-use plastic shopping bags. Belmont is one of them, having passed a ban in May 2018. The only state with more municipal plastics bans (of all kinds) than Massachusetts is California.

[The Sierra Club](#) has collected data on Massachusetts municipal bans on four other types of plastic, summarized in the table below (there is overlap among categories because some bans focus on the type of plastic, others on the use). The table oversimplifies the variety of these municipal bans; each city or town has crafted its own law (though often modeled on another ban). Thus there is truly a patchwork of legislation across the state.

In the communities that have enacted bans, the business community has generally been opposed, but not always. There are no data on whether the bans have affected business viability, but the mayor of Attleboro, Paul Heroux, who has made Attleboro a leader in limiting use of disposable plastics, [told the Attleboro Sun Chronicle](#), “Critics have said that this will hurt businesses. I counter by saying

Type of plastic	Main users	MA communities limiting/ banning	First year limited in any MA community
Shopping bags	Grocery stores, retail	146	2012
Styrofoam cups, food containers, plastic utensils	Fast-food restaurants, coffee shops, convenience stores	54	2012
Single-use plastic beverage containers (water, juices, tea)	Fast-food restaurants, convenience stores	25	2012
Straws and drink stirrers	Coffee shops, convenience stores	12	2015
Nip bottles	Liquor stores	5	2018

several businesses have already started the move, businesses in other communities that have enacted similar measures have not seen their businesses suffer, and we want environmentally responsible businesses in Attleboro who care about sustainability.”

Perhaps more consequentially, several states now have bans on disposable plastics. For example, Maine recently banned expanded polystyrene food containers. Large national chains like Starbucks and Dunkin have been moving away from plastics for years. Starbucks banned plastic straws last year and is working to eliminate the layer of plastic that lines the interior of its paper cups. Dunkin eliminated styrofoam cups in 2020, replacing them with double-walled paper containers and recyclable tops.

What (else) can Belmont do?

Belmont’s disposable plastic bag ban was a great start. Limits on other categories in the table would be a logical next step. My first choice, based on experience picking up trash

in Belmont, would be single-use plastic bottles, with styrofoam containers a close second. Such legislation would have an immediate effect in Belmont, reducing litter. It might also incrementally push the legislature—in the form of another (organic) straw on the camel’s back—closer to finally addressing the issue statewide.

Getting a state law passed

How can it be so challenging to pass a state law when Massachusetts municipalities are, on a per capita basis, leading the nation in enacting such bans, when over 60% of the state’s population lives in communities that have already passed some kind of ban, when other states have already blazed the trail, and when the big food and drink retailers have been moving away from disposable plastics? The influence of local businesses is certainly a factor, and plastics industry groups demonstrated their power in 2014 when the last Bottle Bill referendum failed. Those groups seem to have the ear of leadership, especially in the Massachusetts House.

Belmont residents can lobby their state legislators, though they hardly need convincing.

State Representative David Rogers has introduced at least three relevant bills in the current session of the legislature: H.996 (An Act to improve plastic bottles and their recycling), H.997 (An Act to incentivize the reduction of residential waste disposal), and H.998 (An Act restricting distribution of single-use plastic straws). All have been referred to the Environment, Natural Resources and Agriculture Committee, one of two house committees with jurisdiction over recycling initiatives. The other committee, the Telecommunications, Utilities and Energy Committee held a public hearing on September 13, 2021, which may have provided a clue to how state-wide legislation can be advanced.

Robert Mellion, executive director of the Massachusetts Package Stores Association testified, surprisingly, that his group now supports expansion of the bottle bill—specifically H.3284, concerning nip bottles. The Eagle-Tribune reported on his testimony:

“Bob Mellion, executive director of the Massachusetts Package Stores Association, told lawmakers that his organization isn’t standing in the way of the latest push to expand the bottle bill, but it wants handling fees charged by retailers to increase to cover the cost of recycling bottles, cans and other containers.

““We support a bottle bill expansion, with some key issues being addressed,” Mellion said during Monday’s livestreamed hearing. “These user fees haven’t been increased since the advent of the bottle bill.”

While Mellion cited the need for a higher deposit to cover retailer’s costs (stores receive a handling fee of \$0.0225 per unit, paid by distributors), it seems fair to speculate that the recent move by five towns to limit or ban nip bottles might have also been a factor. Mellion disclosed that nip bottle sales account for over one third of total sales in some liquor stores.

The Package Store Association has a voice, but the supermarket lobby is more powerful and has deeper pockets. They too may be changing their tune on plastics. A 2021 article in Waste Today magazine, a trade journal, quoted a representative of the Massachusetts supermarket industry group concerning plastic bags:

““There’re so many different local restrictions now, and that makes it difficult for the



Baled plastic bottles ready for recycling.

industry, especially multi-store or multi-state operators,’ Brian Houghton, senior vice president for governmental affairs and communications for the Massachusetts Food Association, which represents supermarkets and other food retailers, says. ‘It’s really getting to a tipping point.’”

Based on the comments of Messrs. Mellion and Houghton, the recipe for an expanded state plastics ban involves continuing pressure from municipalities enacting local bans and an increased deposit or fee system, with more of the money going to retailers via processing fees.

Lexington Representative Michelle Ciccolo is cautiously optimistic that an expanded bottle bill and plastic bag limits can pass the legislature this year. She notes that while municipalities have indeed led the way, one challenge for the legislature is finding middle ground for state laws that would preempt the patchwork local laws; the communities that have enacted more restrictive measures want to keep them, while those with more business-friendly laws are similarly disinclined to change.

Ciccolo cofounded the legislature’s Zero Waste Caucus two years ago and introduced a bill (H.869) that would comprehensively limit or ban all of the plastics categories in the table and more, in contrast to the narrower bills that dominate the legislative docket.

Vincent Stanton, Jr. is a director of the Belmont Citizens Forum.



Community Path Passes Phase 1 Milestone

By Jarrod Goentzel, Sara Smith, and Eric Batcho

The town recently passed a major milestone in the development of the Belmont Community Path when town consultant, Nitsch Engineering, submitted the 25% Design for Phase 1 to the Massachusetts Department of Transportation (MassDOT). Phase 1 is the section of the Belmont path from Brighton Street to the Clark Street Bridge just beyond Belmont Center, including a spur to the Belmont High School and Middle School via a tunnel under the MBTA Fitchburg line (bit.ly/BCP-P1-25). The Belmont Community Path is a critical two-mile link in the Mass Central Rail Trail, a 104-mile, off-road path that will ultimately link communities between Boston and Northampton.

The engineering drawings in this 25% design package leave a lot to the imagination, so during a November 4, 2021 presentation (bit.ly/BCP-20211104-video), John Michalak of Nitsch and Sean Sanger, landscape architect and principal with Copley Wolff Design Group, shared details and drawings of the path, including:

- A 12-foot wide path with a 4-foot shoulder for walking/jogging and an additional 2-foot grassed shoulder
- A drainage swale and sub-drain along north side of path to intercept and collect stormwater runoff
- An underpass beneath railroad tracks at Alexander Avenue connecting the path to Concord Avenue
- Proposed lighting at the Alexander Avenue underpass
- A new traffic signal at Brighton Street for improved safety

This meeting was attended by 117 people and provided an opportunity for community members to offer comments and ask questions. Anyone can share feedback on the 25% design package and provide suggestions for upcoming design work via the form on this page: bit.ly/BCP-25comment.

The construction cost for Phase 1 is approximately \$17 million, virtually unchanged since the last estimate. The entire cost is eligible for federal funding through the Transportation

Improvement Program (TIP), a five-year budget plan administered by the Boston Metropolitan Planning Organization (MPO). The MPO considered funding the path project in spring 2021, but cost increases for other projects in the TIP pipeline limited new projects.

With the 25% design submitted and this latest cost estimate in hand, the town is in a good position for TIP funding in the spring of 2022. The MPO will once again include comments from the public in their considerations.

Significantly, Governor Baker signed a Massachusetts Transportation Bond Bill in January 2021 that authorizes the state to allocate \$7,500,000 for the construction of the Belmont Community Path. This funding could be added to any federal funds from the TIP.

Nitsch is now working on a 75% design which details path aesthetics and public amenities. Submission of this detailed design to MassDOT is planned for August 2022. The next nine months offer the best time for public input to help make the path beautiful, safe, and useful.

Looking ahead, the town's Community Path Project Committee (CPPC) has requested town Community Preservation Act funds to cover the 25% design for Phase 2 from the Clark Street Bridge to Waltham. The town's Select Board is considering an expanded charge for the CPPC to formally include development of Phase 2.

At the November 17, 2021, CPPC meeting, Select Board member Mark Paolillo noted that without Phase 2, the Belmont Community Path "isn't going anywhere."

We are making steady progress. More than 50 miles of the Mass Central Rail Trail are already open. Let's continue to work to add our two miles and close a key gap.

If you'd like to receive occasional updates and notices about how you can support the path, please subscribe to the email list of the Friends of Belmont Community Path here: belmontpath@gmail.com

Jarrod Goentzel, Sara Smith, and Eric Batcho are members of the Friends of the Belmont Community Path.

NEMBA at Lone Tree Hill

The New England Mountain Bike Association (NEMBA) hosted a volunteer workday this past November at Lone Tree Hill. Fourteen volunteers spent a little over four hours helping to improve the property, about 56 hours in total.

New kiosks were installed at the entrances at Mill Street and near the cemetery on Concord Avenue. An anonymous donor provided the funds for the new kiosks. The signs on the kiosks were jointly donated by NEMBA and the Judy Record Conservation Fund. Drainage work was completed in the eastern woods to remedy erosion along the access road.



TOM GRIMBLE



JEFFREY NORTH

Lone Tree Hill Restoration Gets Strong Start

By Jeffrey North

Late last year, field technicians engaged by the Land Management Committee for Lone Tree Hill (LMC) and the Judy Record Conservation Fund began a multiyear campaign to restore select parcels of the Lone Tree Hill conservation land. These stewardship projects focused first on invasive plant removal at Area A1. Restoration specialists from Parterre Ecological Services hand-cut the bittersweet vines that were smothering the trees there and deployed a forestry mower to obliterate (if only temporarily) the buckthorn and multiflora rose.

The forestry mowing radically altered the appearance of that portion of the property, prompting the few visitors to ask if perhaps the area was being prepared for the construction of condominiums or other commercial undertakings. No, the property is protected by a conservation restriction, but it is not protected from invading, damaging plant species.

The restoration plan for Lone Tree Hill (LTH) has been documented in the Invasive Plant Management and Native Plant Restoration Plan by Parterre and presented to the LMC in May 2020. The LMC approved plans and funding for forest and meadow restoration work on this conservation area, as previously reported in this newsletter (see “Committee Battles Invasives at Lone Tree Hill,” Belmont Citizens Forum Newsletter, January 2021, and “Committee Plans Lone Tree Hill Restoration,” Belmont Citizens Forum Newsletter, July/August 2020). The Judy Record Conservation Fund is providing matching funds for these initiatives.

After the initial preparation of the restoration area, the spring of 2021 saw the launch of this multiyear effort to restore native plant communities and enhance biodiversity in the most visited section of the conservation property.

Restoration plan year 1

Starting in early May, trained horticulturalists from Parterre Ecological Services began removing invasive plants. They treated flowering garlic mustard throughout the area and spot-treated poison ivy vines near pathways, honeysuckle,



A partial map of Lone Tree Hill showing mapped areas and their rating for density of invasive species. Area A1 is in the upper right.



WIKIMEDIA COMMONS

Black swallow-wort.

lily of the valley, Morrow’s honeysuckle, and black swallow-wort. The acre immediately northwest of the parking lot was prepared for seeding and meadow enhancement by applying spot herbicide and hand-weeding aggressive non-native plants.

As invasive plants are cleared, space is made for emergent plants—surprises from the seed bank. Canada mayflower, silky dogwood, carex sedge, and false Solomon seal have filled some of the gaps. A few areas have Jack-in-the-pulpit coming up. While we see some resprouts of the buckthorn that was cut last year, we also see progress and improved competitive positions for the native plants. But the invasive plants are pernicious, often resprouting weeks after treatment. “It’s an uphill battle,” noted Parterre project manager Gabe Siegel. “This year the area looks like a bad haircut.”

In early June, the field technicians returned to apply herbicide to the black swallow-wort in the main meadow and edge areas and to mow Japanese knotweed. Later in June, the restoration crew sowed a cover crop of Canadian wild rye over sunny areas of the northern portion of our restoration area. This area gets the most sun and has some of the most disturbed soil, so the ryegrass is intended to defend the area against resprouting invasives until the natives re-emerge or are reintroduced and replanted. Other native plants present include several species of

goldenrod, Virginia creeper, bluestem grasses, and sumac.

In early July, volunteer Joe Hibbard, a landscape architect and nearby resident, worked with Parterre to begin removing buckthorn in an area adjacent to the main restoration area. Hibbard could be found most Mondays near the path closest to Concord Avenue, making progress against the buckthorn and reclaiming the meadow and oak-pine forest. Following in his tracks, Parterre will cut the buckthorn again and carefully dab the stalks with herbicide so that only the target plant is treated. (See the accompanying article on page 19 for more on Hibbard’s efforts and understanding of the land.)

In July, more black swallow-wort was treated in the meadow and open spaces.

This plant is often mixed in with common milkweed (which is prime monarch butterfly habitat) and so requires careful, selective treatment to preserve the milkweed and other surrounding species.

In August, the horticulture technicians treated more black swallow-wort, bittersweet, grape, porcelain berry, buckthorn, tree of heaven, and multiflora rose. In early September, during the most effective time of year for treatment, the technicians focused on treating Japanese knotweed with herbicide in the wooded side of section A1 and several other patches near the residences and around the cell tower. Knotweed either received a foliar spray application or cut stems were treated with herbicide.

New pollinator meadow at Mill Street

A new pollinator meadow will be cultivated near the parking lot on Mill Street. Currently, the site is a meadow full of weeds including yellow foxtail, mugwort, ragweed, swallow-wort, lambs quarters, three-seed mercury, and nutsedge. The 6,400-square-foot area near the bicycle rack just north of the parking lot will become especially attractive to the birds and the bees.

After careful mowing in mid-summer, invasive plant species near the bicycle rack were removed via hand-pulling and applying a foliar herbicide.

Over several visits the thick patches of yellow foxtail grass by the parking lot were mowed and carefully sprayed, taking care to avoid the mature clusters of common milkweed. Several monarch butterflies have been seen laying eggs on the milkweed.

In early November, the area was seeded with a mix of pollinator-supporting native wildflower seeds, including anise hyssop, purple coneflower, blazing star, foxglove beardtongue, black-eyed Susan, smooth aster, and others.

Future Steps

This year, many invasive plant populations were managed aggressively, but they will still need additional treatment to make sure these persistent plants do not reestablish themselves. This persistence is part of what makes them invasive in the first place.

Some populations of invasive plants such as porcelain berry were knocked back and treated with herbicide, but since they were not the primary focus this year, they will certainly need additional attention.

In the first few years of management of established invasive populations, surprises will emerge from the seed bank. These plants have been

dropping seed for several years and disturbing the area has created ideal conditions for germination. As time goes by, we will transition from treating established plants, to treating resprouting stems, to treating and preventing new emerging seedlings from reestablishing.

The Land Management Committee for Lone Tree Hill will meet with the Parterre Ecological Service team in early 2022 to review the progress made in 2021 and to plan the initiatives for the next season.

Thank You

The Land Management Committee for Lone Tree Hill and visitors to the conservation land are once again grateful for the continued financial support and sage guidance from the board members of the Judy Record Conservation Fund: Roger Wrubel, executive director; Eugene Record, treasurer; and Andrea Luckens, Mass Audubon.

Jeffrey North is managing editor of the Belmont Citizens Forum Newsletter and the ex officio Belmont Conservation Commission representative on the Land Management Committee for Lone Tree Hill.



JEFFREY NORTH

Last November, Clean Green Belmont (CGB) hosted a cleanup event adjacent to the high school and along Concord Avenue. In less than an hour, Pat O’Dougherty, Joanna Epstein, Anna Churchill, Marty Bitner, Weston Gibney, Dean Hickman, and Lindsay Levine filled their trash bags (recycled plastic and repurposed garden soil bags). The most common items they removed from the land were all single-use plastics. Visit www.sustainablebelmont.net/clean-green-belmont/ to learn more about CGB and to join their next cleanup.

Belmont’s Invasive Species: Glossy Buckthorn

By Joe Hibbard

Take a walk on the north side of the Great Meadow at the Lone Tree Hill Conservation Land and you might notice some recent changes in the landscape. A broad area along both sides of the Pitch Pine Trail, which was until recently an impenetrable thicket of invasive plants, is being cleared and on its way to a healthier forest/ meadow edge landscape. The clearing is part of a long-term project to restore ecological balance to degraded landscapes that are part of the Lone Tree Hill Conservation Land. The project is led by the Land Management Committee for Lone Tree Hill and supported by the Judith K. Record Memorial Conservation Fund.

A key feature of the project is the removal and control of one particularly aggressive invasive species: glossy buckthorn. This species, native to Western Asia, Europe, and North Africa, is widespread throughout the property. Once known as *Rhamnus frangula* (renamed *Frangula*

alnus), glossy buckthorn was introduced to New England in early colonial times. It is among the most temperature-hardy plants, able to survive winter lows of -20F to -35F. As recently as 1969, it was on the then-Arnold Arboretum Director Donald Wyman’s “general list of recommended plants” in his book *Shrubs, and Vines for American Gardens*. With little sensitivity at the time to its potential for ecological destructiveness, it was noted as “a vigorous shrub widely distributed by birds ... easily grown in almost any soil.” A variety called *Columnaris* (*Frangula alnus* ‘Columnaris’), a popular hedge plant, was patented by the Cole Nursery Company in 1955.

Today, after decades of proliferation and successfully competing against native plants, glossy buckthorn is a severe nuisance and threat to natural areas throughout temperate North America. It is not uncommon to find it in pure stands where native plant communities have been all but eliminated. The species and all its varieties have been banned from import, propagation, and sale in Massachusetts.

Removal and control of invasive species like glossy buckthorn are important because these species can destroy native plant communities, resulting in an alarming decline in their ecosystem benefits, particularly their value as habitat for songbirds and other desirable animal and plant species. Invading species often arrest the natural processes of regeneration that allow our native plant communities to sustain themselves over time. In the absence of the natural controls that normally check the spread of these alien species in their home ranges, they are capable of outcompeting and displacing our biodiverse, centuries-old native plant communities.

While glossy buckthorn has invaded nearly every corner of the Lone Tree Hill property, some of Lone Tree Hill’s diverse habitats are more vulnerable to invasion than others. For example, the Eastern Woods, a relatively large area above Pleasant Street extending up to the Belmont Day School and the McLean campus, is a relatively resistant patch of Appalachian oak forest that has an intact canopy of established trees characteristic of this forest type.



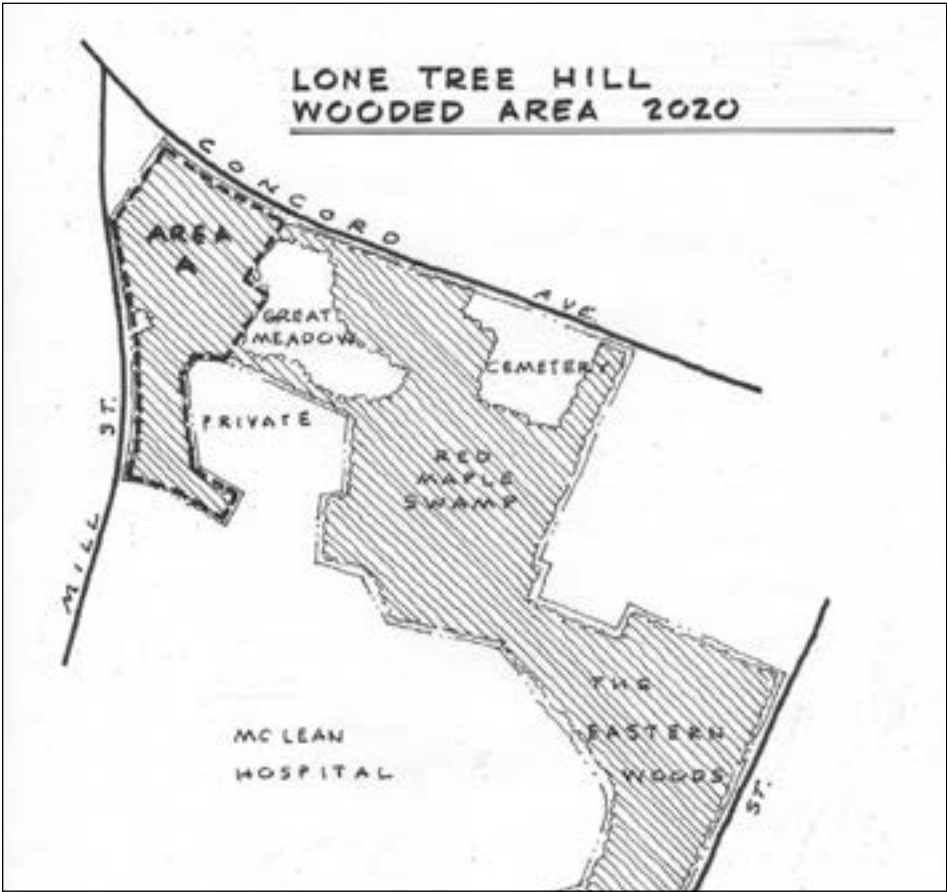
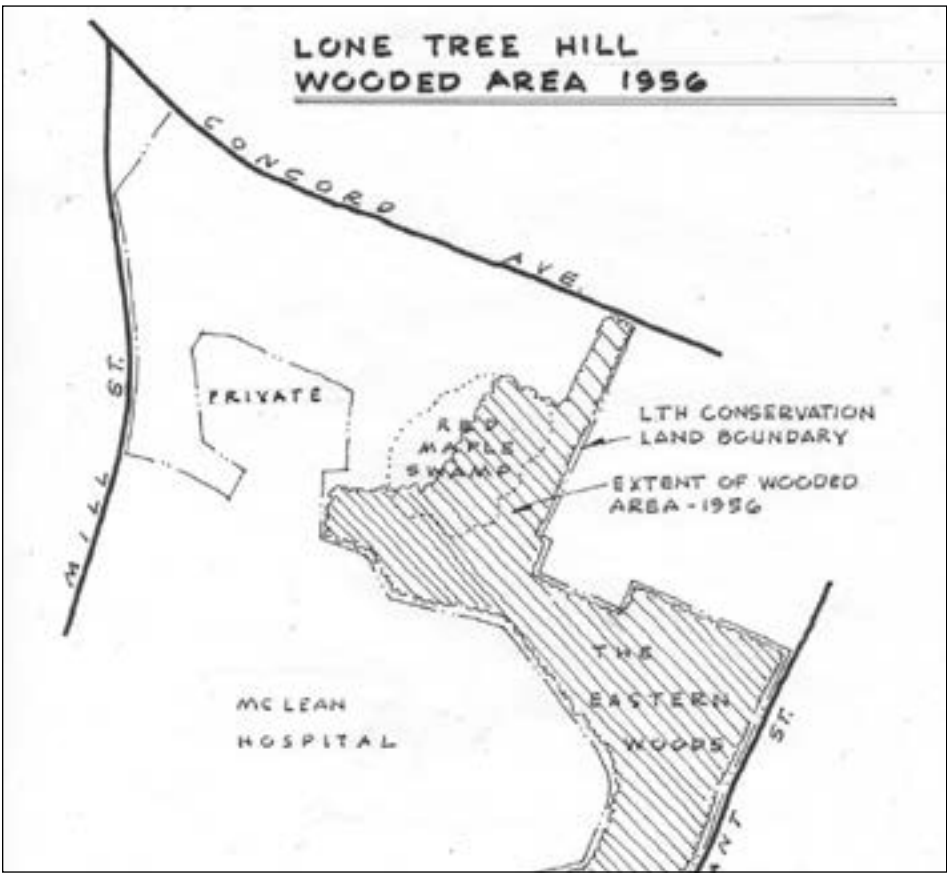
CODY HOUGH/ WIKIMEDIA COMMONS

A young glossy buckthorn plant.

Having evolved relatively untouched for the past 90 to 100 years, the Eastern Woods reflects a recent history of minimal human interference. It is a young forest, but its canopy trees, woody understory, and herbaceous ground layer plants combine to create a setting that has proven fairly resistant to invasion by alien species. A few colonies of invasive species can be found in the Eastern Woods, particularly around its edges and at openings in the tree canopy where sunlight is more abundant and invites invasion from adjacent areas. The interior of the woods is, however, a reasonably intact community of native plants that naturally associate with one another.

Another fairly stable forest patch located at the interior of the Lone Tree Hill property is a wetland forest (referred to as the Red Maple Swamp), which contains mostly red maple and hickory canopy trees, and an understory of native highbush blueberry and maple leaf viburnum. Some of the larger hickory trees with trunk diameters up to three feet are impressive. This wetland forest, while not as free of invasive species as the Eastern Woods, has some interior areas that are relatively pristine.

Since shade suppression is a key factor in minimizing the spread of many invasive species, the healthiest parts of the Red Maple Swamp have a closed canopy that admits very little sunlight to the forest floor, limiting colonization by many invasive species. On the other hand, some of the Red



Changes in Lone Tree Hill's tree cover from 1956 to 2020. Drawings by Joe Hibbard

Maple Swamp's upland perimeter areas with a more open canopy are heavily infested. Lone Tree Hill's chief invader, the glossy buckthorn, is reasonably shade tolerant and is particularly fond of wet sites. Glossy buckthorn has become well established in the Red Maple Swamp perimeter, and it seems only a matter of time before it populates the interior woods in greater numbers than it already has.

Outside of the Eastern Woodland and Red Maple Swamp, nearly all the other plant communities at Lone Tree Hill are somewhat younger, less ecologically stable, and more vulnerable to being overrun by invasive species. Many of them already support robust colonies of glossy buckthorn. This is principally due to the abundance of sunlight in these areas now or in the recent past, and the competitive advantages of the buckthorn.

A 1956 USGS topographic map (sketch on opposite page) shows the Eastern Woods and part of the Red Maple Swamp as the only wooded areas on the then McLean Hospital property bounded by Concord Avenue, Pleasant Street, Trapelo Road, and Mill Street. The rest of the property was open fields with a scattering of tree clusters. These former open areas now include successional woods and the pitch pine woodland located in the northern corner of the property; the Mill Street edge; the edges of the Highland Meadow Cemetery; the perimeter of the Vernal Pool; and the Great Meadow itself. It is in these former open fields and younger plant communities, particularly those in the northern corner of the property, that the Land Management Committee's efforts to control invasive species have begun.

The invasive species control project began in 2019 (See "Lone Tree Hill Restoration Starts Strong" on page 16). Before the recent clearing

effort, A1 had some of the densest populations of glossy buckthorn on the property. It is a former meadow and orchard area that ceased being grazed or mown in the decades following the Second World War. Subsequently, it was colonized by several early succession native plants such as gray dogwood, gray birch, and staghorn sumac along with some canopy trees such as wild black cherry, oaks, and hickories.

However, the abandonment of the pastures and orchards also offered an opening for glossy buckthorn, which by that time had established itself in the ornamental nursery trade and was producing annual crops of berries for birds to disseminate through the countryside. Thus, glossy buckthorn was able to become the dominant species in open areas like A1.

With about three and a half acres of buckthorn clearing accomplished so far in Area A1 and adjacent areas A7 and A9, the fruits of this labor can be seen by those who look carefully. Previously suppressed native wildflower species, sedges,

shrubs, and tree saplings are visible in the ground layer plants, having been released from the smothering effects of the buckthorn.

The immediate plan for the next steps in Area A is to continue with annual follow-up suppression of buckthorn in the treated areas and to expand the removal work in the most heavily degraded areas contiguous to the pilot project area.

The Land Management Committee has made an excellent start to the control of invasive plants at Lone Tree Hill. Belmont owes this volunteer committee its thanks and future support.

Joe Hibbard is a landscape architect and Belmont resident.



NATIONAL PARK SERVICE

Whither the Royal Road Woods?



Bike jump constructed by Belmont youth in Royal Road woods.

By Vincent Stanton, Jr.

Last spring, as playgrounds were being closed statewide to contain the emerging COVID-19 outbreak, a new Belmont pocket park came into existence where COVID restrictions didn't apply. Conceived and built by a group of Belmont boys, the park is hidden from casual passersby by its topography and tree canopy. However, it is well publicized among its users, who have documented their exploits on Instagram, Facebook, and other social media (search for "Belmont Dirt Jumps").

Created for bicycle jumping, a sport that emerged from BMX bike racing, the park initially consisted of a network of crisscrossing paths interspersed with jumps constructed from fallen tree limbs and mud. Later, in the summer of 2020, shipping pallets and railroad ties (likely impregnated with creosote or chromated copper arsenate) were added to construct more ambitious jumps and ramps, and old rugs and

chairs were brought in along with a few stolen street signs to create a clubhouse atmosphere.

The park in question occupies the western two thirds of a 2.1 acre town-owned parcel between Royal Road and the MBTA-owned Fitchburg Commuter Line, west of the Lions Club and east of the Clark Street Bridge. In 1932, Belmont Town Meeting accepted this skinny sliver of land as a gift from the developers of Royal Road and Dunbarton Street, which were laid out in that year. About 75 feet wide and roughly level with Royal Road near the Lions Club, the parcel stretches about 1,000 feet to the southwest, where it widens to about 120 feet near the Clark Street Bridge. At the east end is a Massachusetts Department of Environmental Protection-designated wetland, including a vernal pond. Once seasonal, the pond is now often wet year round. At the west end is a flat basin more or less level with the Fitchburg Line tracks, about 20 feet below Royal Road and Clark Street.

Construction of the bike track started at the west end of the Royal Road parcel where the land is well hidden from street level. Initially the vision of one older boy, it seems, the group of young jump builders gradually expanded over the spring and summer of 2020, eventually encompassing fathers dropping off five gallon buckets and shovels for excavation, and deploying chain saws to remove large logs obstructing the emerging path network. The routes into the park from Royal Road proliferated, progressing eastward and eventually numbering at least six.

If there was a master plan for the dirt jumps, not everyone was aware of it, or convinced of its merit. Signs posted in the spring and summer of 2020 (and still scattered about over a year later) read "STOP. This feature is either under construction, or it is not yet ready to be ridden by bikes!" One sign posted in the fall of 2020 reads "THIS IS A SHARED SPACE! STOP CHANGING JUMPS YOU DIDN'T DIG!! You know who you are."

Perhaps as a result of the haphazard construction, the western end of the park evolved from a network of paths through abundant flora and downed trees to a large dirt bowl, with trees pushed to the margins and all flora trampled. The excavation pits that provided earth for the jumps were dug, in some cases, at the base of mature trees, severing their roots and exposing them to desiccation and disease. Graffiti and trash mar the appearance of the wooded area.

In April 2021, abutters complained to the town about evening noise from the bike park, and on April 28, 2021, at the instruction of the town administration,

the Belmont Department of Public Works (DPW) partially dismantled the jumps and hauled away several truckloads of water-sodden carpet, shipping pallets, chairs, and trash. On April 30, 2021, the Select Board issued the following message (emailed to all Town Meeting members):

"The Town received an email on Tuesday, April 27th, from a resident who asked if a bike course, between Belmont Station and the Clark Street Bridge, was a Town approved activity. The neighbor expressed concern for safety and noted that music was being played at night. Further, the Town received similar calls regarding the activity at this location. Town representatives investigated the concerns on Tuesday afternoon. Town representatives found the property had been disturbed seeing trash, bottles, and permanent structures such as jumps and ramps. The immediate concern was the proximity to the nearby wetland, and being that this was not an approved Town activity, the Town could be liable for injuries. Therefore the Town had no



Pit excavated in Royal Road woods.



Sign posted in Royal Road Woods.

other choice but to clean up and remove the permanent structures that were built at this location.

We can appreciate the residents' reaction to the removal of the structures, but this type of activity would require an in-depth public process to determine the appropriate requirements and funding to conduct this type of activity on Town property."

At its May 5, 2021, meeting, the Select Board discussed the rationale for dismantling the jumps. Select Board chair Adam Dash expressed general support for the concept of a dirt bike track in Belmont, if feasible, and promised to revisit the topic after Town Meeting.

In response to the town's actions, Olin Marinell, a builder of the dirt jumps, started a [petition on change.org](#) asking the Select Board to designate the area for that use. So far the petition has 984 supporters, 45 of whom have authored signed comments of support. Supporters have also posted to a Facebook page.

Ridership at the dirt jumps dropped after the DPW action, but has continued at a low level until the present. There were at least a few riders most days this past summer. The DPW only dismantled the jump ramps, not the track connecting them. A low-level rebuilding campaign has begun, featuring mostly moguls (bumps) rather than jumps (two bumps with a gap).

The dirt bike track represented the first genuine park use of the Royal Road Woods, and it clearly struck a deep chord with those who built it and their parents. As resident David Coleman wrote in support of the petition [on change.org](#):

"Belmont Jumps represents everything we tell our kids to do: get outside, get exercise, work with others, and create something. I support rebuilding the jumps so the kids have the area to use this summer."

However, it may be challenging to overcome the problems noted by the Select Board.

A second article in the March/April 2022 Belmont Citizens Forum Newsletter will explore possible uses of the Royal Road land.

Vincent Stanton, Jr. is a director of the Belmont Citizens Forum. He lives on Royal Road.

Waltham path progress

The city of Waltham has issued a request for bids (RFB) to build a 2.74 mile segment of the Waltham Wayside Rail Trail. A link in the 104-mile Massachusetts Central Rail Trail, Waltham's trail will ultimately span the city from Weston to Belmont; however, the RFB only covers construction from Beaver Street, about 3,800 feet from the Belmont border, to the development along Route 128 anchored by the Waltham Market Basket.

The right of way in Waltham is owned by the MBTA, which in 2010 granted the Department of Conservation and Recreation (DCR) a 99-year lease to a 19-foot wide corridor along the abandoned railroad line. Once the trail is constructed, the DCR will maintain the trail.

Bids are due by January 19, 2022, with the trail construction expected to be finished by June 2023. For more information, including details of a January 5, 2022, bidders zoom call, see www.city.waltham.ma.us/planning-department/pages/walthams-wayside-trail-project.

Letters to the Editor

This letter has been edited for length and clarity

To the Editor:

In response to Jeffrey North's excellent report on the Norway maple, ("Belmont's Invasive Plants: Norway Maple," Belmont Citizens Forum Newsletter, September 2021), I would like to agree with his points about the need for all shade trees, including our old Norway maples, and the possibility of controlling spread by carefully eliminating seedlings.

I assume the three tall maples along the side and dividing my back garden were planted when the entire street was divided into separate plots. Their root systems are certainly shared and they rise to 20+ feet. They are busy with bird and small mammal activity year round. I enclose some photos.

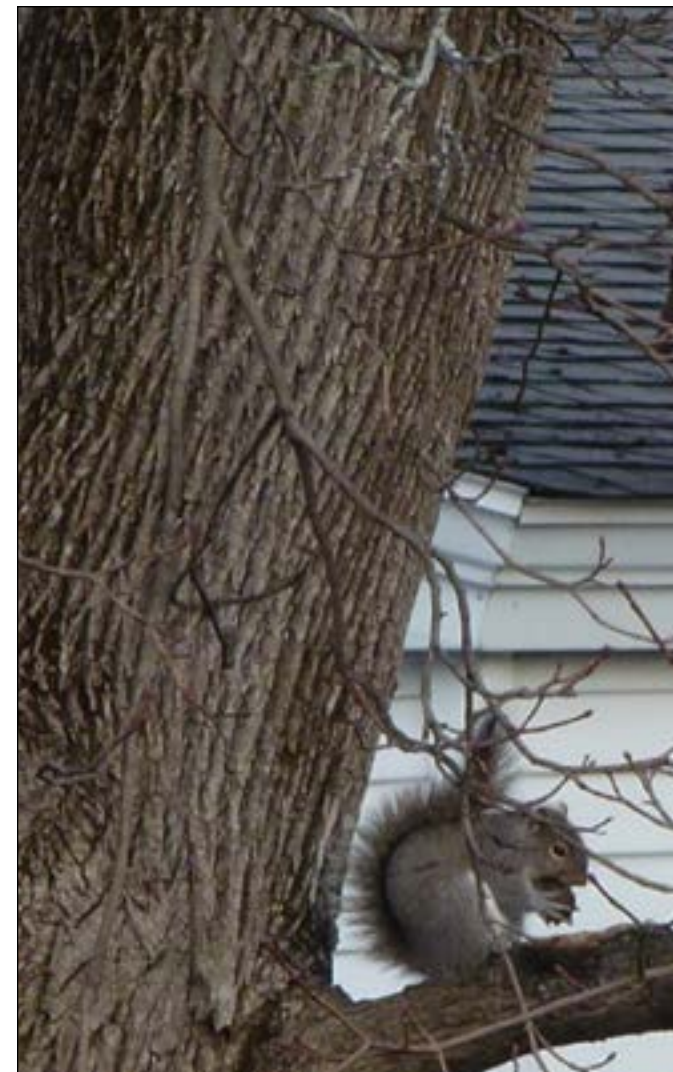
Woodpeckers, as well as all the backyard birds, visit to perch and seek food, as well as hawks visit to get a long view of the neighborhood. A pair of Baltimore orioles built their pendulum-shaped nest at the tip of one long branch in the summer of 2020. After rain all day, a pair of mourning doves lingered on an open branch.

Squirrels nest in convenient cavities, occasionally screech owls.

I have other photos, many of woodpeckers attracted to some dead branches.

Since there are many other trees and shrubs providing a variety of foods, I welcome the shade of the stand of Norway maples.

Irene Fairley
Belmont



To the Editor:
 Just a quick note to say thank you for the latest edition of the Citizens Forum (Belmont Citizens Forum *Newsletter*, November/December 2021). Nicely done. I'm a raptor fan, and I have been following articles about poisonings for a few years. There were quite a few sick and dead squirrels found on the Town Field/Waverley area (including my backyard) a few years ago. Just today, I saw a new post on the Belmont Parents Facebook page about a sick squirrel — symptoms of a larger problem.

Sadly our local red tailed hawk hasn't been seen in months.

Thank you for covering these important environmental issues!

Regards,
 Lisa Oteri

Dear Lisa,
 Thank you for your kind letter. We are fortunate that our legislators Senator Will Brownsberger and Representative Dave Rogers are supportive of efforts to review and consider changes to our pesticide regulations.

There are currently a raft of bills before the State Legislature that intend to rein in future use of toxic pesticides. Go to bit.ly/BCF-Pest-Bills to see summary of the bills under consideration, including priority bills H.926 (Schoolchildren), H.937 (Ecological Mosquito Control), H.3991 (Raptor Bill), & H.910 (Local Control).

Representative Rogers is a cosponsor of several bills meant to protect the public from the use of harmful pesticides. Read his op-ed on the Legislature's recent efforts to reduce our use of harmful pesticides at www.repdaverogers.com/reducing-our-use-of-harmful-pesticides/

Jeff North, Managing editor

Rock Meadow Receives Funding for Mowing and Maintenance

Acting on intelligence provided by the Belmont Citizens Forum, Town Administrator Patrice Garvin and Conservation Agent Mary Trudeau collaborated in October to apply for state funds for mowing and maintenance at Belmont's Rock Meadow conservation area. Belmont was able to secure a budget earmark, facilitated by State Representative Dave Rogers, for the Rock Meadow conservation area in the FY2022 budget for an amount of \$60,000.

The funds will be distributed to the town through the Department of Conservation and Recreation. In working with Garvin to identify funding needs for the town, Commonwealth officials noted that use of this important community resource has increased during the pandemic and was therefore eminently deserving of funding.

Representative Rogers also learned from town officials that the path size was increased to allow for social distancing. Given the increased use and the need for more mowing of expanded paths, funding was all the more critical because the town did not have sufficient funds allocated to continue the upkeep at Rock Meadow.

Representative Rogers visits the Rock Meadow conservation area himself, and he knows how important it is for the community; he saw an opportunity to be helpful. Fortunately, the amendment he filed was passed in the legislature and he was able to secure the funds in the state budget.

The town of Belmont and many visitors to Rock Meadow would like to thank Representative Rogers and his staff for making this funding available.

MARY BRADLEY



Rock Meadow bumblebee

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