



## Belmont Citizens Forum

# Neighborhood Opinion: Tank Process is Flawed

### Local Residents Challenge Tank Location, Planning

*By Judith Ananian Sarno and Lisa Oteri*

At a cost of over \$500,000, Belmont is launching an initiative to replace two underground storage fuel tanks located at the Department of Public Works (DPW) yard adjacent to a residential neighborhood—but local residents still have many questions about the tanks' effect on the neighborhood, and whether the tanks should be in that location at all.

The current tanks, which serve Belmont's fleet of vehicles, need to be replaced as they are single walled and no longer comply with state regulations and are no longer insurable. Town officials have proposed replacing the underground tanks with two 6,000-gallon above-ground tanks, one for gasoline and one for diesel fuel.

The tanks will be placed in the DPW yard, approximately 75 feet from the nearest residential property. The current underground fuel tanks are not visible to neighbors.

In June 2020, Town Meeting approved the Capital Budget Committee's request to spend more than half a million dollars to replace the existing storage tanks. Because changing the town's license from below-ground to above-ground tanks requires a

public hearing, an initial hearing was held in August 2020. At that hearing, both the Select Board chair and the DPW director stated that underground tanks could no longer be installed and that all new tanks must be installed above ground.

The hearing, which lasted only 10 minutes, included no specifics about the project and allowed for only three questions from the public, leaving concerned residents with unanswered questions about schematic diagrams, cost-benefit analysis, lighting, security, traffic, and aesthetics. Following the hearing, several residents researched the matter and found that below-ground tanks are in fact, allowed, so long as they are double-walled. However, this option is not being pursued by the town.



A photograph from the town's website showing fuel tanks similar to those being proposed.

# Belmont Citizens Forum

## Officers

Grant Monahan, President  
John Dieckmann, Vice President  
Evanthia Malliris, Secretary  
Radha Iyengar, Treasurer

## Directors

Sumner Brown  
David Chase  
Vincent Stanton, Jr.

## Newsletter

Meg Muckenhaupt, Executive Editor  
Jeffrey North, Managing Editor  
Sue Bass, Newsletter Committee,  
Director Emerita  
Virginia Jordan, Evanthia Malliris,  
Vincent Stanton, Jr.

**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.

The *BCF 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 [bcfprogramdirector@gmail.com](mailto:bcfprogramdirector@gmail.com)

[belmontcitizensforum.org](http://belmontcitizensforum.org)

© 2021 Belmont Citizens Forum. All rights reserved.

A second and final public hearing was scheduled as a 20-minute agenda item at the Select Board's February 1, 2021, meeting. In preparation for that hearing, on January 28, the town and consultant engineers hosted an informal neighborhood meeting to review some recently obtained information about the above-ground fuel tanks. At the meeting, it was clear that many details remain elusive including any cost-benefit analyses of above- vs. below-ground tank options, evaluation of alternate locations (distance from residential properties), and whether lighting could affect neighboring homes. While no one questioned the need and urgency of tank replacement, the scale of such a project and proximity to a densely populated residential neighborhood heightens the need for a comprehensive and appropriate planning and approval process.

Belmont is active in historic and environmental preservation and engaged in community path and smart-growth initiatives. Our town should be as thoughtful and forward thinking with any infrastructure project that has the potential to raise safety, environmental, and property concerns.

## Resident Safety and Quality of Life

Installing two 6,000-gallon above-ground fuel tanks between two DPW garages, with bulldozers, heavy equipment, and trucks entering and exiting at all hours could pose an unnecessary risk for accidents. A truck backing into the above-ground tanks could cause a catastrophic fire or explosion. The existing tanks are underground and the space is open and allows for easy passage, so the current location does not pose a hazard.

Any research on the pros and cons of above-ground tanks vs. below-ground tanks points out that above-ground tanks should not be sited near high traffic areas. In fact, every town neighboring Belmont has underground fuel tanks, including Cambridge, Watertown, Waltham, Arlington, and Lexington. Above-ground tanks in Concord are located far from residential areas.

If Belmont officials are unwilling to install underground tanks, then an alternative solution would be to install the above-ground tanks at an alternative location, such as the town's incin-

erator site. That site is a town property reserved for municipal use, and it does not abut a densely populated area.

At this time, our national leaders in Washington, our state governor and legislature, town officials, and many community leaders in Belmont have identified climate change as one of the greatest threats to our planet and have pledged to implement strategies to mitigate its effects.

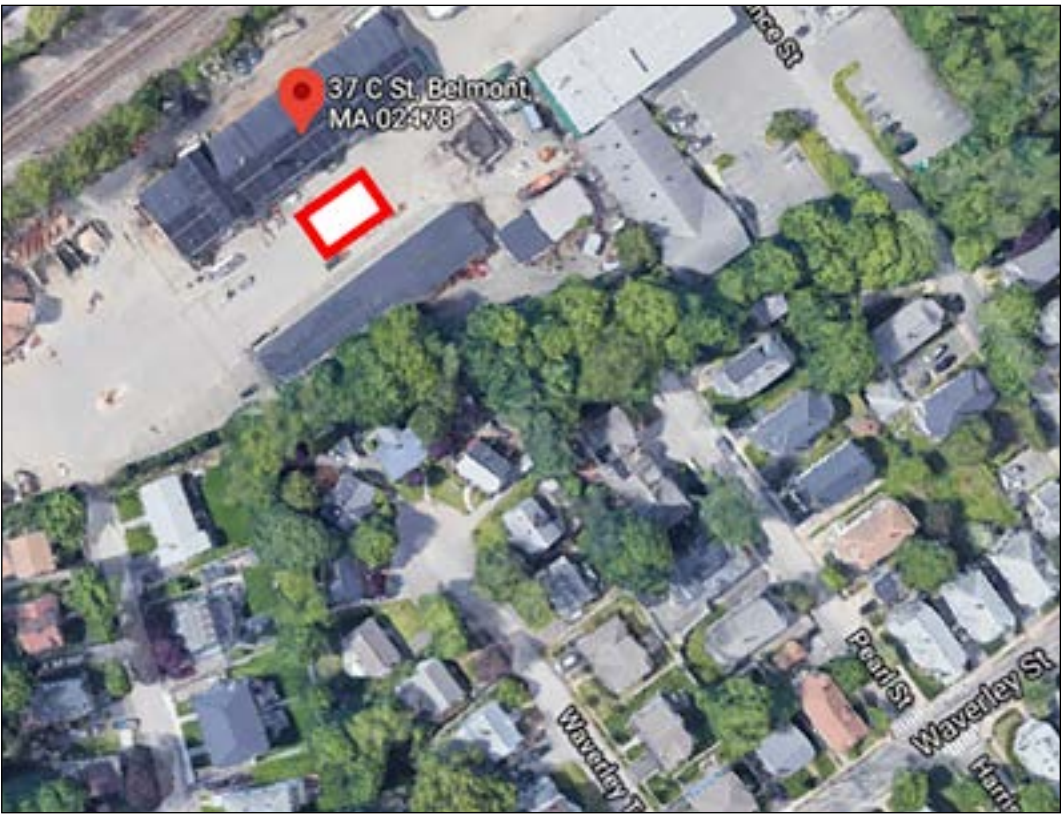
Among the local strategies to combat climate change is to reduce the use of fossil fuels by converting the town's fleet to electric vehicles.

Given that objective, why would our town officials elect to install two new 6,000-gallon tanks, at a cost of more than \$500,000, for internal combustion vehicles if they are likely to be replaced by electric vehicles in coming years? Would it not be wiser to seek less expensive alternatives such as smaller, dual-use (gasoline/diesel) underground tanks, and invest in alternative fuel solutions in anticipation of fleet conversion?

## Smart Growth and Development

The proposed tanks will be located adjacent to the South Pleasant Street corridor, an area frequently pointed to as providing commercial and possibly multi-unit residential development. The tanks would threaten the area's development potential and would be inconsistent with Belmont's "Town of Homes" image.

Moreover, the DPW facilities will require replacement within 10 years. Several Massachusetts communities have redeveloped their public works facilities with neighborhood-friendly designs for buildings, fencing, and greenery. By contrast, Belmont seeks to install visible fuel tanks near residents' homes without a 10-year plan for the large DPW property.



The location of the proposed above-ground tanks, outlined below the place marker

The town should seek forward-thinking and low-impact solutions which reduce, not increase, blight and fit within a larger environment- and resident-friendly plan.

## Use of Scarce Financial Resources

It is not clear that the proposed plan will be the most cost-effective option. Would the cost to replace the old tanks with new double-walled below-ground unit(s) be significantly greater? Are there opportunities for shared resources with other towns or even private partnerships with service stations? Belmont's citizens simply have not been provided with enough information to know what is best.

## Select Board Response

Jay Marcotte, Belmont's Director of Public Works, provided some summary numbers concerning the cost difference between above-ground and below-ground tanks at a February 1 Select Board meeting. He stated that below-ground tanks would cost about \$90,000 more, and that the required monthly inspections for Belmont's current underground tanks costs \$700. He did not offer detailed cost breakdowns

for the two options and suggested that such information could only become available after a project was put out to bid. It is apparent that no research was conducted to understand these costs more fully in the five months since the August public hearing was conducted.

The Select Board, accompanied by several town leaders and two engineers from the town’s consultant on the project, Weston & Sampson, responded to questions raised by neighbors and concerned citizens over the past several months.

According to Epstein, locating tanks at the incinerator site, where there is no infrastructure or utilities, would subject police, fire, and highway vehicles that need fuel to a four-and-a-half mile round trip on busy traffic on Mill Street and possible delays. He also stated that electric vehicles will not replace police cruisers, fire trucks, or snow plows anytime soon, so fossil fuel will be required for the foreseeable future.

Marcotte presented diagrams showing that the tanks should not be visible above the existing roof lines of the DPW buildings on the site. However some nearby homes are at a higher elevation than the DPW, a perspective that was not taken into account. Concerns over lighting from the site leaking onto abutting properties, positioned at a higher elevation than the DPW, will be examined by DPW staff.

Marcotte described the planned above-ground tanks’ safety features. The tanks carry a UL 2085 rating with a two-hour fire rating—meaning that it should take two hours of being engulfed in flames before the inner wall of the tank gets hot enough to be damaged. Expansion valves and fire suppression gear will be installed. They have been ballistics-tested with rifle fire. No data could be found on the potential blast radius of exploding tanks.

Glenn Clancy, Belmont’s Director of Community Development, stated at the February 1 public hearing that an above-ground tank could be located only within two small areas at the incinerator site because the rest of the site will be capped to contain landfill material, in accordance with a state Department of



The proposed tank location at sunrise.

JEFFREY NORTH

Environmental Protection mandate. He also indicated that the entire incinerator site is close to a wetland area, and therefore would likely require permitting from the Belmont Conservation Commission.

How Are We Planning for the Future?

Currently, Belmont is facing a \$6.4 million property tax override on the April ballot. The town’s financial resources need to be spent carefully, fairly, and as part of a comprehensive plan. To spend \$500,000 on an initiative that may not be the best solution makes no sense.

At the very least, residents with increasing property tax burdens have the right to expect that the town will consider low-impact development solutions that shield residents from risk, blight, noise, and pollution, and promote our town’s environmental values.

Beyond merely the concerns about two fuel tanks, does Belmont have the capacity to fully realize a comprehensive and equitable future for the town? Do we scrutinize a development in one part of town and rubber stamp another across town because we have lower standards or expectations? A solution that works outside of Belmont is not necessarily the best fit for Belmont. A rigorous and comprehensive planning process that inspires public confidence is the best investment in Belmont’s future.

Lisa Oteri and Judith Ananian Sarno are both Precinct 3 Town Meeting members and resident advocates.

Select Board Candidate Answers BCF Questions

Each year, the Belmont Citizens Forum asks Select Board candidates questions about issues facing our town. This year, Mark Paolillo, who is running unopposed, provided answers. He was limited to 1,200 words.

Describe your vision for preserving and enhancing Belmont’s quality of living, learning, working, and connecting.

Preserving and enhancing Belmont’s quality of life must begin with making town finances stable and sustainable. This will require a more in-depth approach to long-term structural reform. Belmont should consider the use of performance management budgeting which measures resource input against the resulting output of services for each department. That will help us measure the rate of return Belmont gets on its investments. Additionally, a serious 5- to 10-year financial plan must be developed.

These steps will allow us to maintain the level of town services on which our residents depend, invest in our aging infrastructure including roads and sidewalks, and increase our investment in our Level One School District. It should even be possible to develop a plan to build a new library and skating rink that will be utilized and enjoyed by Belmont residents for generations.

What steps would you take to ensure that the design and construction of the community path proceed efficiently?

After decades of work, the Community Path Project Committee (CPPC) and Nitsch Engineering produced the Conceptual Design Report for Phase 1a and Phase 1b of the community path; the Massachusetts Department of Transportation (MassDOT) reviewed and



Mark Paolillo

COURTESY OF MARK PAOLILLO

approved it. Belmont will soon submit a 25% design plan to MassDOT. MassDOT final approval will allow the 75% and 100% design phases to proceed.

Proactive work with all stakeholders is needed so Phases 1a and 1b of the community path project can be approved and funded with the hope that construction will begin within the next two to three years.

What are your top categories of concern related to climate change, and what steps should the town take to address those risks?

Climate change is an existential crisis facing the planet, country, state, and our town. A Belmont Energy Committee (BEC) 2018 report provided a roadmap for strategic decarbonization for Belmont that includes an aggressive strategy



### meeting future compliance set forth by state and federal regulatory agencies?

Federal and state regulators have found that Belmont's discharges into receiving waters do not improve their quality. Therefore, Belmont is required to correct the leaks in some 77 miles of sewer pipe and associated sewer laterals plus an unknown number of illicit connections that put home sewer water into the town's stormwater drains. The remedial program already developed and put into place by Glenn Clancy, Community Development director, would benefit from more aggressive funding.

The remedial plan begins with water-quality sampling to identify sanitary sewers lacking structural integrity

and dye testing to identify problems with sewer laterals or illicit connections. Correction requires relining sewers and laterals with cure-in-place technology that has a 100-year lifetime.

### Do you think that a tax rate override, to pay for the things Belmont needs, would be approved by voters considering the recent increases in property tax bills? Why or why not?

Financial Task Force I, which I chaired, recommended a \$4.5 million override in April 2015 to address a substantial operating budget structural deficit. The successful override lasted for six years.

Belmont is faced with significant structural deficits for fiscal year 2022 and beyond. As a member of Financial Task Force II, I worked on financial modeling and budget deliberations which have led to the conclusion that a \$6.4 million-dollar override vote is needed to address these structural deficits. The additional tax revenue from this override will dramatically increase investment in our schools, provide additional support for our seniors, and address

the significant backlog of capital repairs and replacements.

I strongly support this override, even as I understand that its timing is not ideal. Some Belmont residents are struggling financially due to the pandemic, and many seniors are on fixed incomes. Additional measures are needed to support them. Nevertheless, funding is needed to prevent dramatic, long-lasting cuts to both town and school services.

### Belmont is faced with significant structural deficits for fiscal year 2022 and beyond.

### What changes to transportation infrastructure would help Belmont move better and more efficiently?

A 2019 town-wide traffic study confirmed that:

- regional congestion contributes to cut-through traffic in Belmont;
- adjacent towns cause a high percentage of cut-through traffic;
- peak traffic flow is commuter based; and
- many neighborhoods near congested main roads experience high cut-through traffic volumes.

Increasing traffic volumes adversely impacts the quality of life for our residents, but improvement is challenging and complex.

The Transportation Advisory Committee working with the Office of Community Development, established a Traffic Calming Policy adopted by the Select Board in 2020. This policy provides the framework through which Belmont's traffic problems can be addressed. In addition, a long-term plan resulting in the implementation

of traffic-calming methods throughout Belmont that is also aligned with neighborhood concerns and safe routes for our school children is needed.

### Do you see any emerging benefits or "silver linings" for Belmont resulting from the challenges of 2020?

2020 will long be remembered as a most difficult and challenging year. The pandemic resulted in the tragic loss of hundreds of thousands of lives and untold suffering and pain for many more. We have seen civil unrest and political turmoil. We have witnessed the sacrifices of frontline health care workers, first responders, teachers, educators, and many other citizens have made to provide service to those that were most impacted by the scourge of this pandemic.

I have seen this level of sacrifice and service in our town, in the work of the Health Department, the Council on Aging, other town departments, schools, nonprofit organizations, and many Belmont citizens. If there is a "silver lining" for Belmont, it is the knowledge that when the citizens of our town, state, and country are desperate for help, there will be an outpouring of service and commitment to help them. It gives me hope that better days are ahead!



# How to Help Belmont Survive Climate Change

by Anne-Marie Lambert

Flooding caused the collapse of the Trapelo Road culvert over Beaver Brook in 2010, and inundated the train tracks at the Waverley MBTA commuter rail station. Belmont is expected to see its share of future big intense storms, extreme heat, and other disasters from climate change. If it's any comfort, our town now has a preparedness plan, thanks to a state-funded program.



DAVID CHASE

The 2010 Beaver Brook flood, as seen from the Beaver Brook bridge.

The Town of Belmont Hazard Mitigation-Municipal Vulnerability Preparedness Plan identifies local vulnerabilities to flooding, pollution, and traffic jams, and proposes mitigating actions, short-term and long-term, to help vulnerable populations safely shelter from extreme heat, rain, or snow.

The cost of not taking these actions is likely much greater than the cost of funding them. The town's plan was developed by consultants Weston & Sampson under the state's Municipal Vulnerability Preparedness (MVP) plan (see "Belmont Tackles Climate Vulnerability Planning," BCF Newsletter, May/June 2020) which awarded Belmont \$31,000 toward creating the plan's first phase. The town's Office of Community Development (CD) has identified alternative sources for funding the rest.

## Climate Adaptation Actions

At the top of the list of high-priority actions in Belmont's MVP plan is replacing the Trapelo Road culvert. The Trapelo Road culvert is vulnerable to collapsing and flooding in a heavy storm. Every day that goes by without the

Belmont Department of Public Works (DPW) and CD coordinating with the town of Waltham to replace this culvert leaves it vulnerable. If you are a commuter driving over the metal plates by Mill Street (even with light traffic during the pandemic), think about what alternative routes you and other commuters would need to find to avoid this intersection. Making this repair in response to an emergency would be much more expensive than making it beforehand. The same goes for undersized culverts at Concord Avenue/Wellington Brook, the Clifton Street and Hickory Lane intersection, the Belmont and Lexington Streets intersection, and other locations.

There is a potential quick win at the top of the priority list: pay consultants to "model our existing drainage system utilizing updated rainfall data to evaluate flooding conditions under projected climate change conditions." Belmont and Cambridge already have all the necessary data in the same modeling software with the same consultant (Stantec) to create a regional look at flooding risks. Cambridge has based its climate change plan on a model that stops at its border with Belmont. Hence, they

## Top-Priority Hazard Mitigation and Climate Adaptation Actions

General Objective	Specific Actions	Time Frame	Owner	Expense
Culvert replacements and upgrades using climate projection design standards	Replace Trapelo Road culvert	0-1 year	DPW, CD, Waltham	\$\$\$\$
	Roadway flooding vulnerability study	1-3 years	CD	\$\$\$
	Increase culvert sizes to remove key bottlenecks	Ongoing	CD	\$\$\$\$ per culvert
Sewer Infrastructure	Sewer lining and repair	Ongoing	CD	\$\$\$ /yr
Decrease potential leaching hazard from former incinerator site	Install a cap	1-3 years	DPW, CD	\$\$\$\$\$
Stormwater computer modelling	Model the existing drainage system under climate change scenarios	0-1 yr	CD	\$
Develop a comprehensive emergency response plan and ongoing communication program	Draft emergency response plan	1-3 years	Police, Fire	\$\$
	Increase reverse-911 registrations	1-3 years	Police, Fire	\$
Improve the resilience of municipal buildings	Install backup power in key locations	3-5 years	DPW, Police, Fire	\$\$\$ per facility

Legend:

\$ < \$10,000  
\$\$ \$10,000-\$100,000  
\$\$\$ \$100,000-\$250,000  
\$\$\$\$ \$250,000-\$500,000  
\$\$\$\$\$ >\$500,000

DPW: Department of Public Works CD: Office of Community Development

Source: Town of Belmont Hazard Mitigation—Municipal Vulnerability Preparedness Plan, Section 7, Weston & Sampson, May 2020 draft

inaccurately modeled the Brighton Street culvert from Clay Pit Pond as a catch basin instead of a pond flowing into a culvert. Both Cambridge and Belmont are flying blind until the model is expanded to be more regional.

Other important actions on the top-priority list are two pollution prevention projects: the incinerator site and sewer system repairs. Until the former incinerator site is capped, it remains

vulnerable to leaching into Beaver Brook and then into the Charles River during heavy storms. In addition to a cap, the Department of Environmental Protection requires that wetland vegetation be utilized to improve water quality at the site. Moreover, the Select Board has approved post-closure uses of Belmont Light Department sustainability projects, such as solar panels at the former incinerator site on Concord Avenue.

General Objective	Specific Actions	Owner	Expense
Develop a comprehensive emergency response plan and ongoing communication program	Develop a recurring protocol for examining shelter capacity, functionality, and essential equipment and goods. Develop a shelter-in-place guide or toolkit for private, multi-unit facilities	Police, Fire	\$
	Improve emergency preparedness outreach and education for vulnerable and isolated populations including the aged, youth, people whose first language is not English, people experiencing economic hardship, and people who are disabled	Police, Fire	\$
	Document emergency flood preparation and emergency response capacity	DPW, Police, Fire	\$
Develop a fire prevention program and purchase more equipment	FireWise Program to help educate residents on fire prevention and hazardous materials	Fire	\$
Improve the resilience of municipal buildings	Install a generator at the senior center	DPW, Council on Aging	\$\$
Tree management	Increase tree maintenance efforts and funding for tree maintenance contractor	DPW	\$\$\$
	Develop a comprehensive tree management plan which could include planting appropriate species by taking into consideration local air quality, proximity to dense housing and roadways, drought, extreme temperatures, and wind	DPW	\$\$

These projects could help mitigate climate change and help achieve the goal of a 100% emission-free electricity supply stated in the Belmont Climate Action Plan of 2009.

The second pollution prevention project is to line and repair breaks in our sewer system to prevent sewage from leaking into our waterways, especially during heavy rain. Belmont made significant progress on sewer lining and repairs in 2020 and early 2021 as part of a 2017 consent order from the Environmental Protection Agency to address violations of Clean Water Act requirements, but there is still a great deal of sewer repair work to be done. The main bottleneck appears to be lack of sufficient municipal staff to oversee contractors working on multiple measurement and repair sites simultaneously (see “Carrots and Sticks Nudge Belmont’s Cleanup,” BCF Newsletter, November 2020).

In addition to the top-priority items, the MVP plan identifies some medium-priority items which could be done in the next one to three years. Thanks to state Representative Dave Rogers and Town Administrator Patrice Garvin, the town was recently able to take advantage of funding at the end of the last state budget cycle to address one of these “quick hits”; the town now has an additional \$50,000 to develop a better tree management plan and to plant more trees.

During a big storm or heat wave, communication with our vulnerable populations is an important element of being prepared. Many of the communication-related priorities, such as increasing reverse-911 registrations, would also have been helpful during the COVID-19 emergency as a way to improve communications.

Finally, installing a generator at the Belmont Senior Center was identified as a medium-

priority item. Installing backup power at the Chenery School, police station, and data centers were all classified as high priority.

Next Steps

A tremendous amount of time, energy, and thought went into the Town of Belmont Hazard Mitigation-Municipal Vulnerability Preparedness Plan. The consultants at Weston & Sampson followed a state-prescribed process to facilitate an all-day workshop that included many stakeholders, from municipal staff to community leaders. Even after the pandemic temporarily halted in-person public meetings, more than 100 people participated in an online feedback session and survey, possibly more than would have participated if it had been done in person. I hope the Office of Community Development tries again to apply for MVP Action Grant funding this year, and that department heads, members of the Select Board, Warrant Committee, and Town Meeting use the MVP plan as a guide

when deciding the town’s 2021 annual budget priorities.

Anne-Marie Lambert is a former director of the Belmont Citizens Forum.



Beaver Brook in 2010.

DAVID CHASE

### The Municipal Vulnerability Preparedness Program

The Municipal Vulnerability Preparedness (MVP) program provides grants for cities and towns in Massachusetts to begin the planning process for climate change resiliency and implementing priority projects. Communities that complete the MVP program become certified as an MVP community and are eligible for MVP Action Grant funding and other opportunities.

Belmont has completed the MVP planning process, identifying several priorities to advance progress towards resilience, and will be eligible for MVP Action Grants and Federal Emergency Management Agency grants. Belmont’s Hazard Mitigation-Municipal Vulnerability Preparedness Plan currently proposes the following:

- Convening a core team of municipal department heads who provided key input through meetings, online surveys, and interviews.
- Engaging stakeholders through a virtual community resilience-building workshop and the public through a virtual, interactive meeting.
- Conducting a vulnerability and risk assessment of historic hazards and the potential impact of climate change.
- Documenting the town’s capacity to mitigate and respond to hazards.
- Updating the progress of the previous hazard mitigation plan.
- Developing an action and implementation strategy.

Check out the [Belmont MVP overview on Belmont Media](#).

# Belmont’s Invasive Plants: Garlic Mustard

## Allaria petiolata Threatens Local, Regional Biodiversity

By Jeffrey North

Invasive plant species are disrupting ecosystems globally and here in Belmont. Biological invasions are a leading cause of biodiversity loss and even species extinction, and invasive plants are permanently altering the ecology of our forests, fields, and gardens.

This article is the first in a series on invasive plant species found in Belmont and the implications of their presence, spread, and ecological damage potential, as well as hopes for their removal and remediation.

Garlic mustard (*Alliara petiolata*) is changing the character of the woodlands in the Northeast. It can outcompete native herbaceous species, depriving the natives of light, moisture,

nutrients, and space. It also adversely affects the mycorrhizal fungi (fungus which form a symbiotic relationship with the roots of a seed plant) that make up important underground networks, the “central nervous system” of a forest.

### The Invasive Plant Garlic Mustard

A visually attractive plant, garlic mustard prefers moist, shaded areas but it can be found in a variety of habitat types, including fields, upland forests in different stages of growth, floodplain forests and their edges, roadsides, along trails, and in your backyard and flower beds. Because of its shade tolerance, garlic mustard can dominate a forest understory.

The plant is a biennial. In the first year of growth, it is a basal rosette, when its growth is relatively slow. In its second year, growth is rapid as it reaches three feet or more during early spring. The plant is capable of cross- and self-pollination. The good news is that the plant only lives two years. The bad news is that each plant can produce thousands of seeds that can live for up to seven years in the soil.

Garlic mustard successfully invades woodlands and displaces native plants due to its ability to pollinate itself (a single plant can carpet a forest), its high seed production, and its rapid growth during the second growing season. Because of garlic mustard’s ability to colonize understory habitats, it may be impos-

sible to eliminate the plant from large areas of habitat it has already invaded, but containment and control may be achievable.

### The Problem

Why is garlic mustard a concern? In short, it is changing the ecosystem of New England as it invades and pervades new landscapes. This species is changing the character of woodlands as it displaces native edge and understory plants.

Garlic mustard, as well as other invasive plants, are leading suspects in the decline of insect populations and thus the decline of sustenance for birds. The impact of invasive plants on native plant biodiversity is increasingly seen as a major cause of insect population collapse among ecologists, although the idea is still controversial. No bugs, no birds. The result is a loss of biodiversity as garlic mustard outcompetes native plants for water, nutrients, sunlight, and space.

The effects go up and down the food chain as this invasive plant species toxifies the soil in ways that hamper the function of fungi and soil microbes that are critical for the germination of seedlings and the growth of trees.

Moreover, mycorrhizal fungi are increasingly recognized as key to connecting trees and plant networks for many types of communication for resources, defense, and kin recognition. Healthy mycorrhizal fungi enhance understory seedling survival and growth. Garlic mustard produces a host of chemicals that retard or halt the growth of the mycorrhizal fungi that are critical for the health of forests.

To compound the injury, garlic mustard contains chemical compounds that make the plant unpalatable to herbaceous insects and other creatures that would eat it. In short, garlic mustard has been shown to decrease native plant diversity, reduce native plant growth, decrease insect and butterfly survival, and alter nutrient cycling.



First-year garlic mustard leaves.



Garlic mustard in bloom.



Second-year garlic mustard stems and flowers.



Garlic mustard flowers and seed pods.

In Belmont, garlic mustard is easy to find. It appears in early spring along both sides of Mill Street between McLean Street and Concord Avenue. Volunteers in past years have pulled the plant at Rock Meadow in the area near Lorimer and Vernon Roads. At Lone Tree Hill, it will spring up near the parking lot, in the meadow near Mill Street, and along various paths. That is just a sample of invaded spots in Belmont.

The Solution

Pull it. Unlike some other invasive plant species, hand pulling can be effective in removing this shallow-rooted plant, preferably before it sheds its seeds into the soil. The trick is to pull the plant, with its root, before the seed pods are ready to open. Grab the stem close to the root and gently tug. Organizations such as New England university extension programs and others advise that hand pulling is most effective in March through mid-May and again in September into October. Once the plants are pulled, they should be bagged and sent to the landfill. Composting is a bad idea as it would just spread the seeds. Even burning the plants might not kill the seeds. While complete eradication of the species from large parcels of land might be very ambitious, containment at sites the size of infestations found in Belmont should be achievable,

even while avoiding chemicals. Garlic mustard can be treated chemically, but the best method of removal is to pull it in early spring and summer before the white blossoms turn to seed pods.

Fun Facts

- Garlic mustard was first recorded in the United States on Long Island in 1868, but it was likely introduced by colonial settlers for food or medicine much earlier.
- Sixty-nine insect species consume garlic mustard in its native range in Europe; none of those species live in North America.
- You will know it by its heart-shaped leaves.
- It smells like garlic when crushed.
- You can eat it.

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

Garlic Mustard Pesto

Be sure to harvest wild plants where no chemicals have been sprayed.

- 3 tbsp. garlic mustard roots, chopped
- 4 garlic cloves, minced
- 1 cup wild garlic mustard leaves, chopped
- ¾ cup fresh parsley, minced
- 1 cup fresh basil leaves, diced
- 2 cups of walnuts, chopped
- 1/2 cup black olives, chopped
- ½ cup olive oil
- ½ cup yellow miso (if unavailable, add salt to taste)

Pulse all ingredients in a food processor until the mixture is finely ground. Serve as a spread for crackers or bread or as a pasta topping.

*Adapted from K. A. Holbrook, National Park Service.*

Letters to the Editor

To the Editor:  
Great articles in this issue, as usual. I know there’s an Earth Day cleanup at Lone Tree Hill, but can knowledgeable volunteers help with the removal of invasives and planting of natives that Jeffrey North described?

Art Kreiger

*Jeff North responds:*  
*Thank you for your letter, Mr. Kreiger. Watch these pages for future announcements of volunteer days for invasives removal and restorative planting. The stewards of Lone Tree Hill are eager to organize volunteers for pulling garlic mustard and other restoration work as soon as we can safely gather. Look for an initiative following examples such as the Lexington Conservation Stewards’ Stewardship Saturday Program.*

To the Editor:  
Walking in certain areas of Lone Tree Hill, I have found wintergreen, a low-growing plant. I didn’t see anything in the article about the wintergreen growing in Lone Tree Hill (“Committee Battles Invasives at Lone Tree Hill,” BCF Newsletter, January/February 2021). Will it be affected by the restoring of the native plants at Lone Tree Hill?

Joan Seaver

*Jeff North responds:*  
*Thank you for your letter expressing care and concern for the flora at Lone Tree Hill. The planting plan for the restoration area A1 has not been finalized. For the next growing season (maybe the next two), the priority will be to get the invasive plants under control, so only a ground cover planting is intended in the near term. When replanting commences, the Land Management Committee for Lone Tree Hill will add wintergreen to the planting plan. In the meantime, you might very well find some along the forested area near the Coal Road as wintergreen is a forest plant found near natives like mountain laurel in moist, acidic soils.*  
To the Editor:

I was pleased to see John Dieckmann’s article about bikeway projects underway in the area (“Bikeway Building Booms Beyond Belmont,” BCF Newsletter, January/February 2021), but I’d like to point out one he missed: the Cochituate Rail Trail, extending from the commuter rail station in downtown Natick to the Saxonville area of Framingham. Construction is now mostly complete. The Cochituate makes connections previously served only by some of the most bicyclist-unfriendly road infrastructure in the region. The Cochituate has an underpass under the Massachusetts Turnpike, remaining from the abandoned rail line, and there are two impressive new overpasses at Route 30 and Route 9. The Cochituate provides access from the Natick train station and residential areas to Cochituate State Park and the Framingham shopping malls. Bicycling conditions on streets at either end are relatively tame, and the Cochituate provides a useful link for longer bicycle travels.

John S. Allen

*Thank you for your letter, Mr. Allen. Watch this newsletter for more articles by John Dieckmann about our region’s bikeways and rail trails. John had to limit the scope of his article due to space constraints. He promises to address this omission in subsequent issues of the BCF Newsletter.*



# Letters to the Editor

To the Editor:

I read your article in the Belmont Citizens Forum Jan/Feb 2021 Newsletter (“Building Booms on Belmont’s Border”) with interest. Like many Belmont residents, we experience gridlock traffic at rush hours and wonder about the causes and solutions to this problem.

I noted that your article did not mention the Opportunity Zone that was created in West Cambridge bounded approximately by Linear Park, Route 2, Cedar Street, and the Fitchburg line railroad tracks and can be seen at this link [www.mass.gov/service-details/opportunity-zone-map](http://www.mass.gov/service-details/opportunity-zone-map). This Opportunity Zone overlaps with the B Triangle shown on the upper right of the zoning map in your article.

Opportunity Zones are described on the [www.mass.gov](http://www.mass.gov) website as follows:

“The U.S. Tax Cut and Jobs Act of 2017 created the Opportunity Zone Program to provide incentives for investment in low income communities throughout the country. An Opportunity Zone is a designated geographic area, in which individuals can gain favorable tax treatment on their capital gains, by investing those funds



(through a privately-created Opportunity Fund) into economic activities in the area.”

The summary is that investors who invest in an Opportunity Zone will have past and future capital gains taxes reduced dramatically. This financial incentive leads to a lot of building in these Opportunity Zones. The good news for towns and cities with Opportunity Zones is that they will get a lot of incoming investment going into areas that have not yet been favored by investors.

A few questions for towns like Cambridge arise: (a) Do these areas in Cambridge need an Opportunity Zone to supercharge investment, and (b) Did Cambridge or surrounding towns like Belmont consider the impact on traffic of the federal action to create this Opportunity Zone?

I look forward to reading more about this topic in future editions of the Belmont Citizens Forum.

Mark Carthy  
Town Meeting Member, Precinct 1

*The editor replies:*  
*The city of Cambridge reports in its 2019 Alewife District Plan that 82% of the traffic at Alewife is generated by “through trips” that begin and end outside Cambridge. We’ll keep talking about traffic—but it looks like we’re going to need regional solutions involving all modes of transportation—the T, commuter rail, buses, bike lanes, and pedestrian access as well as cars—to keep everyone moving.*

# Belmont Roots

## Environmental News, Notes, and Events

By Meg Muckenhoupt



So much is still uncertain. Organizations that normally form the bulk of the Belmont Citizens Forum’s event listings are quiet online, leaving their web pages blank and their calendars empty. No one trusts the future to allow us to meet, to learn, to pause to observe the natural world—or grieve the activists who are gone. The Belmont Historical Society, Friends of Fresh Pond Reservation, the Charles River Watershed Association, the Native Plant Trust; if they have anything listed, it’s for a Zoom video. We are all tired of Zoom videos.

Here is what I know for certain about what will happen in and around Belmont in the coming months.

## Woodcocks Will Peent

In early to mid March, the woodcocks will begin their nuptial flights over open grassy areas. In Belmont, they’ll be appearing in Rock Meadow and the Alewife Reservation. [This Mass Audubon article](http://www.massaudubon.org/audubon/article/bit.ly/BCF-Woodcocks) (bit.ly/BCF-Woodcocks) will tell you where to look ... or, rather listen. Woodcocks are mottled brown birds slightly larger than robins, and only begin their mating flights at dusk, making them even harder to see. Although one videographer managed to capture images of a [woodcock at Rock Meadow](http://www.massaudubon.org/audubon/article/bit.ly/BCF-Rock-Woodcock) (bit.ly/BCF-Rock-Woodcock), the most obvious sign of a woodcock during mating season is a

repeated buzzy, loud PEEENT call. As that Mass Audubon blogger [writes](http://www.massaudubon.org/audubon/article/bit.ly/BCF-Woodcocks):

“Keep an ear out for a woodcock’s sharp, nasal “peent!” from sunset to half an hour afterwards. The woodcock will take off after a few calls, wheeling and diving in the sky as their wings produce their signature twitter. Then, the bird dives steeply, its wings continuing to whistle as it falls to the ground to start over.”

In real life, observing a woodcock during its evening flight feels like sitting in an IMAX movie theater while the projector is testing the surround-sound speakers. You can hear fluttering in a circle with a vast diameter as it spirals up into the sky, but actually seeing the bird is unlikely.

If you’d rather test your own system, Mass Audubon is offering an online course titled “[The American Woodcock](http://www.massaudubon.org/audubon/article/bit.ly/BCF-Woodcocks),” Thursday, March 11, 7–8 PM (Mass Audubon members \$15, nonmembers \$20.) As Audubon’s anonymous catalog author writes, “This presentation will introduce you to the woodcock, its unique adaptations and life cycle, and the courtship dance they’re famous for. How are woodcock populations doing in Massachusetts and the northeast, and how can we best protect them? Discover when and where to look for woodcocks on your own or through



An American woodcock (*Scolopax minor*).

WIKIMEDIA COMMONS

### Write for the BCF!

The Belmont Citizens Forum is looking for authors to write about issues that affect Belmont’s quality of life, and artists, graphic designers, and photographers to show our readers how these issues affect our town.

There are no age, education, or work requirements. If you’re willing to research a topic or create visual content we’d love to talk with you.

If you care about the environment, historic preservation, traffic, zoning, planning, climate change, stormwater, community paths, or the environment, we’d love to talk with you. Email [bcfprogramdirector@gmail.com](mailto:bcfprogramdirector@gmail.com) with your ideas today.



Blue spotted salamander.

a Mass Audubon sanctuary to witness their displays this spring.”

Salamanders Will Slink

Every year, spotted and blue-spotted salamanders and wood frogs return to local vernal pools to mate. Although these creatures tend to trickle in over the course of a few weeks, there is usually a “big night” around the date of the spring equinox (Saturday, March 20, this year.) It will be a night when it’s raining steadily, if lightly, and the temperature is over 40°F. The



Wood frog.

next morning, you can find salamander egg masses attached to branches in the pool and a few shy salamanders scurrying under submerged leaves. The adults depart over the next few weeks; the young will hatch and leave before the vernal pool dries up to become summer dirt.

Mass Audubon is offering an online class titled “Spring’s ‘Big Night’” on Friday, March 26, 7–8:30 PM (Members \$20, nonmembers \$24. Register at [bit.ly/BCF-Big-Night](https://bit.ly/BCF-Big-Night)). Attendees will learn to identify vernal pools,hear about an innovative conser-

vation and education project to restore and create vernal pools, and learn about what Mass Audubon is doing to make vernal pools more resilient in the midst of habitat loss and climate change.

Habitat also offers courses on [ducks and water-birds](#), [frogs](#), [nature writing](#), and [birding by ear](#).

Legislators will listen to lobbyists

This year, one of those lobbyists could be you. The Massachusetts River Alliance is sponsoring a virtual “[Lobby for the Rivers Day](#)” on Thursday, March 18, where you can connect with legislators, water conservation organizations, and fellow river enthusiasts. Meetings will be from 15 to 30 minutes to discuss your top concerns regarding rivers and our environment and natural resources. Register by March 5 at [bit.ly/BCF-River-Lobby](https://bit.ly/BCF-River-Lobby). New citizen-lobbyists should also attend the “Pre-Lobby Day Workshop” on Tuesday, March 16, at 7 PM. [Registration is free](#).

There will be trash at Lone Tree Hill

Unfortunately, the Belmont Citizens Forum will not be able to sponsor a Lone Tree Hill cleanup day on Earth Day (April 22) in 2021. We encourage you to go out and celebrate the Earth by picking up garbage at Lone Tree Hill on Earth Day, and every other day of the year.

The grass will grow again

Perhaps, though, grass isn’t the only thing that should be growing in your lawn. The Native Plant Trust is offering a “live webinar” called “[Diversify Your Lawn](#).” The catalog states, “Who says lawns need to be monocultures or only made of grasses? Enrich the traditional lawn with other complementary plants that bloom at different times and add intrigue. Learn how to identify the plants that already grow in the lawn as ‘weeds,’ and to incorporate new plants that create a rich, wildlife-friendly tapestry.” Catch it Tuesday, March 23, 6:30–7:30 PM. Register at the Native Plant Trust site at [hbit.ly/BCF-Lawn-Class](https://hbit.ly/BCF-Lawn-Class). Cost is \$12 members, \$15 nonmembers.



BY SIDDHARTH PATIL - OWN WORK, CC0, [HTTPS://COMMONS.](https://commons.wikimedia.org/wiki/File:White_Clover_in_Lawn.jpg)

Thank you for your continued support.

*Your contribution makes a difference!*

Each *BCF Newsletter* issue costs about \$4,000 to publish. *Thank you for your support!*

☐ \$50   ☐ \$100   ☐ \$150   ☐ \$250

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

- ☐ Check here if your employer has a matching gift program.
- ☐ Check here if you would like to learn more about volunteering.

Make checks payable to Belmont Citizens Forum and mail to:  
PO Box 609, Belmont, MA 02478

Or give securely online:  
[belmontcitizensforum.org](https://belmontcitizensforum.org)

Contact us:  
[info@belmontcitizensforum.org](mailto: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.*

Thank you to our contributors

WRITERS  
Anne-Marie Lambert • Jeffrey North • Lisa Oteri • Judith Ananian Sarno

PHOTOS/GRAPHICS  
David Chase • John Dieckmann • Jeffrey North • Tim Todreas

COPY EDITORS  
Sue Bass • Virginia Jordan • Evanthia Malliris


NEWSLETTER COMMITTEE  
Sue Bass • Virginia Jordan • Evanthia Malliris • Vincent Stanton, Jr.

MAILING MAESTRO  
Ken Stalberg

Belmont Citizens Forum  
P.O. Box 609  
Belmont MA 02478  
  
Address Service Requested

Nonprofit Org.  
US Postage PAID  
Boston MA  
Permit No. 56393

r

March/April 2021	
	Flawed Fuel Tank Planning Process . . . . . 1
	Select Board Candidate Questions . . . . . 5
	Belmont and Climate Change . . . . . 8
	Garlic Mustard's Threat . . . . . 12
	Letters to the Editor . . . . . 15
	Belmont Roots . . . . . 17

Please visit our website for updates and to read this issue in color: [belmontcitizensforum.org](http://belmontcitizensforum.org)