Belmont's Flooding and Climate Resilience Planning Summary of Public Survey Results

Between April 8 and May 9, 2022, 34 people participated in Belmont's Flooding and Climate Resilience Planning Project Survey. This following includes summaries of open-ended participant feedback on locations of <u>green infrastructure (GI)</u> projects, flooding and hot spot locations, design ideas, and other considerations.

34

16:05 Average time to complete

Responses

Question 1: Describe your Relationship to the Community

2

The majority of people who completed the survey live in Belmont (34), shop in Belmont (20), and/or work in and commute through Belmont (7). Several others noted being Town meeting members and using parks for recreational activities in the area. Most respondents were between the ages of 36-45 or 46-55. The respondents do not fully represent the racial demographics of the community, with only one participant noting that they are of Hispanic/Latino origin, four people of multiple races, and four more people of Asian ethnicity.

I live in Belmont34I work in Belmont7I commute through Belmont7I shop in Belmont20

Other









Question 2: Where have you seen the most flooding occur within the Community? Please reference specific cross streets or street addresses.

Survey takers noted where they saw the most <u>flooding</u> within Belmont. Multiple people noted key cross streets adjacent to Clay Pit Pond (Becket, Goden, School St.), Concord Ave., PQ Park, Beaver Brook by the playground, Fairview at School St., Brighton St. by the railroad, and School and Orchard St. Three people did not report any flooding areas. Other cross streets mentioned in flooding observations included Agassiz, Beech, Belmont, Blanchard, Brighton, Cedar, Cherry, Common, Creeley, Edgemoor, Emerson, Fleet, Gilbert, Horace, Lawrence, Maple, Mill, Oliver, Orchard, Payson, Radcliff, Royal, Sargent, Trapelo, Townsend, Unity, Waverley, and Winn Brook Neighborhood.

Concord Ave	5
Clay Pit Pond	4
PQ Park	3
Beaver Brook by Playground/Agassiz Ave.	2
Blanchard Rd.	2
Fairview at School Street	2
Brighton St next to the railroad	2
School and Orchard St	2

Question 3: Where have you experienced the most extreme heat within the community? Please reference cross streets or a street address

Survey takers also noted where they experienced <u>hot spots or a heat island effect</u>. Respondents noted the most heat at streets without trees (2) or homes without air conditioning (1). The most popular locations noted were **"Trapelo Road"** (4), **"Belmont Center"** (3), and **"Chenery Middle School"** (2). Locations with more than one vote are listed below:

Location	# Responses
Trapelo Road	4
Belmont Center	3
Chenery Middle School	2
Cushing Sq	2
Town Field	2
Underwood Pool	2
Waverly Sq	2
Waverly St	2
Wellington Elementary	2
Anywhere without trees/shade	2
Asphalt roads/parking lots	2

Locations of observed flooding and heat are also shown in this google map: <u>https://tinyurl.com/BelmontGImap</u>



Question 4: During periods of heavy rain, how does stormwater directly affect your life? Please include locations if possible

Survey takers noted how stormwater directly affected one's life and locations. The most frequent responses noted they experience basement (9) or backyard (6) flooding; street drains/catch basins being backed up and blocked (4); problems for pedestrians or bike access (4). Other frequent issues included concerns about erosion and having to monitor storm drains to predict flooding at their home.

Question 5: If stormwater affects your life, how often does it affect you?

Under half the respondents (16) were frequently affected by stormwater, with the majority only affected during large storms or not often at all.





Question 6: On what kinds of sites would you most like to see stormwater mitigation projects installed within the watershed? Please select all that apply.

Sidewalks and streetsides were the most popular sites for future stormwater mitigation projects, followed by parking lots and schools.







Question 7: Are there any specific locations where you would want to see stormwater mitigation projects installed within the watershed? Please indicate cross streets or addresses where possible.

Survey takers also noted specific locations where they wanted to see Stormwater mitigation projects within the watershed. Several respondents (4) noted "Concord Avenue" as a location where the community would want to see stormwater mitigation projects. Other areas noted repeatedly included "Common Street" (3), "Orchard Street", (3), "PQ Park" (3), "School Street" (2), and school fields and lots (3).

Locations of observed flooding and heat are also shown in this google map: <u>https://tinyurl.com/BelmontGImap</u>

Question 8: What else do you think would improve areas that frequently flood? These amenities will be considered in the design of future stormwater management solutions or as ideas for future projects. Please rank the following.

Survey takers noted more plantings, more trees and shade, and increased safety and amenities for pedestrians and cyclists as the top co-benefits to be included in design of future stormwater solutions.

Rank Options

- 1 More plantings (e.g. groundcover vegetation, rain gardens, shrubs)
- 2 More trees/shade
- 3 Increased safety for pedestrians (e.g. crosswalks, lighting, larger sidewalks, ADA accessibility)
- 4 Bike lanes and bike amenities (e.g. bike parking, bike fix-it station)
- 5 Protected open space
- 6 Improved bus stops (e.g. shaded, benches)
- 7 More seating areas
- 8 Cleaner (e.g. trash cans)
- 9 Improved traffic flow
- 10 More public art





Question 9: What considerations should the design team be aware of in designing stormwater management and climate resilient solutions in the community?

The most common considerations were to choose low-maintenance systems, be budget conscious, prioritize for areas with the worst flooding, and plan long-term. Several people (5 each) want the Town to improve tree protection and urban forest practices, use permeable asphalt and green infrastructure, and define who is responsible for maintenance, followed by "planting more native plant and tree species" (4). The top design considerations are listed below:

Design Consideration	# Responses
Long term planning/prioritization to deal with flooding and heat concerns	7
Low maintenance systems that are cost effective/Budget conscious	7
Improve urban forest practices and replace trees when removed	5
Permeable asphalt/Green infrastructure	5
Who is responsible for upkeeping and removal of trees?	5
Increase native plants and trees	4
Reduce or limit construction and parking lots	3

Several creative ideas were offered, including:

- Linking projects with the community path
- Providing incentives for rain barrels and/or tree planting to property owners
- Put utility lines underground
- Encourage alternative transportation to reduce need for parking lots
- Explore solar trash receptacles

The rest of the considerations are summarized below:

- Be prepared for water/energy, ever more violent and erratic storms.
- Study hydrology
- Address Street Safety and conditions/Emergency Access when flooded
- Cleanout drains
- Distribute projects equitably around different neighborhoods with similar level of improvements
- Replace old sewer lines to avoid overruns/leaking and contamination of rivers and wetlands
- Little Pond rises too quickly due to stormwater runoff
- Favor solutions with many environmental benefits (pollinators, etc.)
- Poor water drainage in roads/stop curbing where could put trenches
- No artificial turf



This project was funded by a Fiscal Year 2022 Municipal Vulnerability Preparedness (MVP) Action Grant provided by the Massachusetts Executive Office of Energy and Environmental Affairs.

