# Friday, Aug. 2, 2024

# **Mayor's Newton Update**



### Flooding in Newton

In Newton, we know firsthand that we are experiencing an increasing number of intense rainstorms. As a result, we are having more flash flooding.

We're not alone. We're seeing this phenomenon across New England, including dramatic flooding in Leominster and North Attleborough last year and just this week in St. Johnsbury, Vermont.

The Hydrologic History of Newton

Newton was founded in 1630, incorporated as a town in 1688, and officially became a City in 1873, 150 years ago. In those early years and continuing through the post World War II era, our predecessors leveled hills, converted forests and fields to neighborhoods and roads, covered over streams and forced them into culverts, and filled in or built over wetlands.

This <u>1892 map</u> of "Areas Requiring Drainage" shows many low-lying areas of Newton. The City built a drain system in the late 1800s and early 1900s that put nearly all of the natural streams into drain pipes and culverts with some open water channel systems. (Newton's Chief Environmental Planner Jennifer Steel recently gave an informative presentation at a Newton Conservator's online meeting that gives a full history of the City's buried streams and the environmental impacts of these decisions. Click <u>here</u> to watch the presentation titled "Newton's (Buried) Streams – Now You See Them....Now You Don't!")

In addition, many homes in Newton were built (before environmental regulations were established) in low-lying areas directly adjacent to streams and wetlands.

Do you want to see if your home is in a low-lying area, potentially explaining why you have a soggy backyard or a constantly running sump pump in your basement? Find a hydrological map of your home by going to the City of Newton Assessor's Database on the front page of our website (newtonma.gov), putting in your property address in the top right, then clicking in the top rightish area on "themes," and pulling over the tab for "Topography." Zoom out a bit and read the numbers around the property. If you are a low number compared to your neighbors, then you're at a low point where water naturally collects. (See more information at the very end of this writeup on how to read the topography lines.)

Concurrently, over the decades before 1970 the amount of impervious surface area in Newton increased. New buildings, roads, parking lots and driveways were constructed. Impervious surfaces don't allow rainwater to soak into the ground; instead, the rain accumulates and flows quickly (too quickly if it is raining hard) into our storm drains.

We estimate that the capacity of Newton's storm drains is sufficient in over 99% of our rain events. (By the way, we have precipitation on average 125 days a year in Massachusetts.) But, in very heavy rain events, the <u>drainage system</u> can be exceeded and flooding occurs. The flooding almost always subsides in a short period of time.

Our Department of Public Works team watches the forecast carefully and takes steps to prepare, particularly when we expect 2 inches of rain or more in a short period of time (over 2 to 4 hours) as this can exceed our storm water system capacity in flood prone areas. They proactively clear storm drains and have teams on standby to clear drains during the storm.

The bottom line is that the increase in impervious surfaces and homes built in low-lying areas along with the intensification of heavy rainfall in short periods created by climate change has exacerbated flooding situations in locations across the City.

## What are We Doing to Address Flooding?

Planning and Funding:

The City developed its first full-fledged Stormwater Infrastructure Improvement Plan in 2015. (As a City Councilor, I worked with Councilor Deb Crossley, Councilor Lenny Gentile and the DPW team on that first plan.) The plan includes culvert replacements, stream improvements, actions to address localized flooding as well as water quality improvements. Stormwater projects are included in the City's Capital Improvement <u>Plan</u>.

Every year we re-evaluate each project, add new ones, and reconsider the priority. We are currently underway on a significant update to Stormwater Infrastructure Improvement Plan.

Importantly, we are also working to establish a long term funding plan to accomplish this work as we are aware of the increased number and intensity of flooding incidents. Newtonians pay for stormwater costs through fees, rather than taxes. We will keep you informed of our projections as we expect the extent of the work and the costs to grow (and to be coupled with federal mandates for reducing the amount of phosphorous in our stormwater, which will also be extensive and, alas, costly).

Streams, Brooks and Ponds:

We need to keep our streams, brooks and ponds clear of debris as that reduces the flow of water during rain events. A few examples of our work include the project that is underway this summer behind the Countryside Elementary School

to clean out years of accumulated debris in a small stream between the school grounds and neighboring homes.

We recently finished dredging the City Hall Ponds to reduce flooding upstream at the Newton Free Library. Drainage improvements in Edmands Park to address flooding on Blake Street are complete. More improvements are planned along Edmands Brook in Newtonville.

(Photo: A car submerged in Cheesecake Brook after a flash flood in August of 2021.)

Culverts and Stormwater Pipes:

Maintaining and rehabilitating culverts and stormwater pipes is essential as localized flooding can result from failed or blocked culverts and drain lines. The Department of Public Works has completed fixes to these types of



conditions recently on South Meadow Brook at Dedham Street, Hammond Brook at Glen Avenue, Laundry Brook near Cabot School, and investigations are underway to address Border Street in West Newton.

Dams:

We're finalizing the plan to fix the aging Bulloughs Pond Dam so we prevent the possibility of significant downstream flooding if the dam failed.

Stormwater Requirements for New Developments:

In 2022, the City created a new Stormwater Management <u>ordinance</u> that requires developers and residents to install stormwater control devices on all new buildings. The new ordinance is designed to make sure that any new development keeps rainwater on its own property. Often this means that a new building must include underground infiltration systems and/or bioretention basins.

(Photo: With Gov. Maura Healey and Newton Parks, Recreation & Culture Commissioner Nicole Banks accepting a \$1.24 million grant to address flooding challenges around Cheesecake Brook by Albemarle Field.)

Yesterday afternoon, I was pleased to stand with Gov. Healey as the City of Newton received a \$1.24 million Municipal Vulnerability Preparedness State grant to address flooding challenges around Cheesecake Brook by Albemarle Field and build these types of stormwater systems into an exciting City athletic field project.

With great help from the Charles River Watershed Association and Executive Director Emily Norton who helped us apply, this grant allows us to take three

major actions while we refurbish the athletic fields at Albemarle:

Construct a large underground infiltration system to intercept and sequester stormwater runoff from the Crafts Street sub-catchment area before its outfall into Cheesecake Brook;

Construct six in-field bioretention basins; and

Transform a considerable stretch of the brook banks from a mowed grass bank to a lush wet meadow capable of filtering stormwater runoff (while improving habitat for native wildlife).

(Photo: Bioswale at the Newton Free Library.)

Bioswales, Rain Gardens, and Making Newton "Spongy:"

We are incorporating into our building, road, and park/open space projects bioswales and rain gardens that collect (and naturally cleanse) rainwater. Recent examples include bioswales or rain gardens added at Walnut & Crafts Street, the Zervas Elementary School, the Oak



Hill Middle School addition, and the Newton Free Library parking lot. In effect, these make Newton "spongier" so we absorb more water during rain events.

### Street Sweeping:

The City also has a very active street sweeping <u>program</u>, and while we all love to see nice clean streets, this program has many more benefits than just aesthetics. We are now sweeping all our streets eight times a year. This prevents leaves from clogging our street drains and clears debris that has collected along the sides of the road. It also protects the quality of the stormwater which ultimately flows into the Charles River. In addition, we have an active catch basin clearing program to empty out the basins and keep water flowing in the drainage system.

Groundwater and Sewer Infiltration:

Groundwater levels, which rise up and down with the seasons and climatic conditions, impact flooding. Groundwater can enter basements, necessitating the

need for a sump pump, and help create wet conditions in low-lying yard areas, particularly in combination with rainstorms.

Newton, along with all the communities in the Massachusetts Water Resources Authority (MWRA) Sewer Service Area, has been working for years to reduce the infiltration of groundwater (or rainwater) into our sewer lines. We don't want to have clean groundwater enter our sewer lines and end up going to the Deer Island Wastewater Treatment Plant. This both costs all our property owners' money and takes up capacity in the sewer system.

We are actively lining our sewer pipes to prevent stormwater infiltration. But, this feels like a situation in which no good deed goes unpunished. In a few locations, the lining of the City's sewer pipes to prevent stormwater infiltration impacts groundwater levels by preventing groundwater from entering the sewer lines, making yards wetter. We take this situation of wet, higher groundwater very seriously. We look for solutions for home or business owners, including actions by the property owner and/or the City.

Incorporating Stormwater Improvements into City Infrastructure Projects:

The City is also incorporating stormwater improvement work into ongoing programs and projects, helping address both flooding issues and water quality. School projects, including the ongoing and upcoming work at Lincoln-Eliot, Countryside, Franklin and Horace Mann, will integrate new on-site stormwater retention structures and bioswales.

Roadway and intersection improvement projects are incorporating vegetated bioswales and removal of impervious surfaces to collect and to treat roadway runoff so that it doesn't enter the drain system and streams during rain events. Road construction is also including improvements to and/or additional catch basins to address ponding issues. Parks and athletic field projects are also incorporating stormwater improvements, such as bioswales at the Burr Elementary School athletic field project.

## What Can We Do Ourselves to Reduce Flooding on Our Property?

As the City takes steps to be more resilient and less flood prone even as climate change increases the ferocity of storms, Newtonians can also take steps to reduce flooding:

- Clear the stormwater catch basin near your home before heavy rain storms. Walk the area near your home to find them on the side of the road or find the location of catch basins by clicking the map <u>here</u>.
- The Federal Emergency Management Agency, FEMA, has <u>suggestions</u> for property owners that include cleaning gutters and downspouts, improving grading, reducing impervious surfaces, and installing a sump pump.
- Determine if your property is located in a floodplain so you know what to expect. (Check <u>here</u>.)

P.S. How Topographic Contour Lines Describe Terrain: Contour lines connect points that share the same elevation. Where they're close together (they never intersect), elevation is changing rapidly in a short distance and the terrain is steep. Where contour lines are wide apart, elevation is changing slowly, indicating a gentle slope. A dashed circle indicates a depression, rather than a peak.

Newton's Assessor's Database Map shows 2' contour lines in green, with yellow lines every 10'. Steep lines highlight the City's hilly terrain. Dashed circle areas highlight depression areas, which have a greater likelihood to flood during larger precipitation events. The "Development Restrictions" tab shows other low-lying areas adjacent to wetlands and waterways that can also experience flooding during certain conditions.



Click here for a tour by Commissioner of Public Buildinas Josh Morse of construction at the new Cooper Center for Active Living at 345 Walnut St., in Newtonville. The project was recently selected as a final runner up in the Massachusetts Embodied

Carbon Challenge which cited the new building's approximately 48% reduction in carbon emissions.

(Photo: Construction of the lobby area at the Cooper Center for Active Living.)

## Thanks to Our State House Delegation

Our State House delegation – Senator Cindy Creem and Representatives Kay Khan, Ruth Balser and John Lawn – brought home to Newton \$410,00 in State funds earmarked for seven projects across Newton. The funds are included in the State budget that Gov. Healey signed on Monday.

I'm grateful to all four of them for working closely with us and asking for funding for these good projects:

• \$50,000 for landscaping along the Mass Pike as part of the Washington Street Pilot Project

- \$100,000 for Crystal Lake stormwater improvements
- \$50,000 for the Braceland Park Master Plan in Upper Falls
- \$25,000 for Historic Newton exhibits
- \$75,000 for improvements at Pellegrini Park and the adjacent building
- \$50,000 for Underwood School area sidewalks and pedestrian ramps
- \$60,000 to continue the Newton Public Schools Phone Free/Mental Health Project at the Day Middle School and possibly expand it to our other three middle schools.

I want to give a special shout out to Sen. Creem who immediately went to work after I spoke with her to secure the \$60,000 to extend the terrific program at Day Middle School. The middle-schoolers use a special pouch for their cell phones, creating a "phone free" building during the school day. Click <u>here</u> to learn more about the Yondr Pouches students are using at Day. I'm so glad that Newton Public Schools has formed a working group to look at expanding this program to Bigelow, Brown and Oak Hill Middle Schools and has funding to make it possible. Thank you, Sen. Creem.



Newton Police report nine car thefts across our City since June 1. Many are "crimes of opportunity." Our best defense? Keep vehicles locked and don't leave keys or valuables inside. If you see something, NPD asks that you say something. The NPD non-emergency number is 617-796-2123 and the NPD Tip Line is 617-796-2121.

## Ballots for the State Primary Now Being Mailed

Election staff have begun mailing out ballots to eligible voters who requested to vote by mail for the Sept. 3 State Primary. (Sept. 3 falls on the Tuesday after Labor Day, which is also the first day of school for K-12 students in the Newton Public Schools.)

All registered voters in Newton and across the state are eligible to cast a vote by mail ballot or to vote in the State Primary early in person, or to vote in person on Election Day, Tuesday, Sept. 3.

Important Dates/Times to Remember:

 Last Day to Register to Vote for the September Primary: Aug. 24 by 5:00 p.m. Click <u>here</u> for to register.



- Early, In-Person voting for the Sept. 3 State Primary; Begins on Saturday, Aug. 24 and continues at City Hall, 1000 Commonwealth Ave., through Friday, Aug. 30. Polls are open on Saturday and Sunday from 11:00 a.m. to 5:00 p.m., and on Monday through Friday from 8:30 a.m. to 5:00 p.m. with extended hours until 8:00 p.m. on Wednesday.
- Application Deadline to Vote by Mail in the Sept. 3 Primary: August 26 by 5:00 p.m.
- Sept. 3 Election Day: All ballots must be received by 8:00 p.m. to be counted.

For more information on how to return your ballot, voting locations, and other important details, please visit our website at <u>newtonma.gov/elections</u> or contact our Elections team by calling 617-796-1350 or email us at <u>elections@newtonma.gov</u>.

If you're voting by mail, be sure and allow extra time for your ballot to arrive at City Hall. We recently read an article in the Lowell Sun which quoted that City's Director of Elections saying the US Postal Service's Boston annex is shorthanded, and experiencing longer turnarounds. Your best bet is to drop your completed ballot off at City Hall out front in the front circle in the mailbox reserved for ballots.

Passionate about civic involvement?

The City of Newton has job openings for paid part-time election workers to work at the polls during the State Primary on Tuesday, Sept. 3 and the General Election on Tuesday, Nov. 5. Click <u>here</u> for more information and to apply.



# A Community Night Out with Newton Police

Join members of the Newton Police Department for food and music at National Night Out this coming Tuesday, Aug.6.



Meet our officers and have some family fun at Captain John Ryan Park next to Newton Police Headquarters at 1321 Washington Street in West Newton Square from 5:00 to 8:00 p.m.

Warmly,

Ruthanne

P.S. We're beginning to see more signs and posters on lawns and private property across our City. You are welcome to put them on your lawn. As a reminder, **signs** *cannot* be put on public **property**. They are not allowed on traffic islands (including the center island along Commonwealth Avenue), parks, sidewalk berms (the strip of grass between the paved sidewalk and the curb) or



utility/traffic signal/light poles. (Signs found on public property will continue to be removed by our Department of Public Works which is our standard operating procedure.)



P.P.S. Interested in eight weeks of fresh apples and other in-season fruit starting at the end of August? Registration is now open for **Newton Community Farm's "fruit share"** in partnership with Autum Hills Orchard. Weekly fruit pick up is at the farm, 303 Nahanton Street, on Wednesday or Thursdays between 2:00 and 7:00 p.m. from Aug, 28 through Oct. 17. Registration is open through Aug. 20. Click here for more information and to register.

P.P.P.S. We want to hear from you as we develop our arts, culture, and community programs. Our <u>Newton Cultural Council</u> wants our programs to reflect our interests and be meaningful to our community. Please take a few minutes to complete the short on-line survey and be heard. Click <u>here</u> to take the survey.



P.P.P.S. Explore plants, fish and insects at two free **BioBlitz events hosted by the Newton Conservators**. Learn to identify the plants of Flowed Meadow and Auburndale Park in Auburndale by the Charles River on Sunday, Aug. 4 from 3:00

## Constant Contact to 5:00 p.m. On the following Sunday, Aug. 11, meet at

Crystal Lake (and bring the kids – this one is particularly child friendly) from 3:30 to 5:00 p.m. to learn about the wildlife there. Sign up and find out where to meet for both



P.P.P.P.S. Enjoy food from authentic Indian food vendors, performances by Newton students, face painting and henna, games and more with the Indian Community of Newton at the **India Day** 



**Celebration** on Saturday, Aug. 17. The festivities are from 5:00 to 8:00 p.m. at the Hyde Community Center, 90 Lincoln Street in Newton Highlands.

opportunities here.



P.P.P.P.P.S. The **Garden City Tennis Series** kicks off on Aug. 16, 17 and 18 with the 1<sup>st</sup> Annual Garden City High Singles Championships for high performance players and continues through the first two weekends of September with the 3<sup>rd</sup> Annual Garden City Doubles Championships for players at all levels. The series, run Newton Parks, Recreation & Culture in partnership with Friends of Newton Tennis (FoNT) is open to residents and non-residents of Newton and takes place at the

Newton North High School tennis courts. Interested in registering? Click on Events at <u>playtennis.usta.com/friendsofnewtontennis</u>.

P.P.P.P.P.P.S. Applications are now open for **Newton Community Pride's fall 2024 community micro grants** to support arts and culture, public art, service and beautification. Click <u>here</u> for more information about the program or to apply for a micro grant ranging on average from \$500 to \$1,000.

P.P.P.P.P.P.P.P.S. Have you taken a look at the draft designs for a **new City Seal?** Check out the designs at <u>newtonma.gov/cityseal</u> and

provide feedback through Tuesday, Aug. 21. You can



Fall 2024 Community Micro Grants

GRANT

Application Due September 1

Calling all Artists. Creatives & Perform

Application

**NOW OPEN!** 

also see them at the Newton Free Library Anteroom (space to the left when you enter from the Parking Lot Entrance at 330 Homer St.), and at City Hall (on the television screen in the front door main entrance) and in the first-floor gallery. At each location, you will be able to scan a QR code or pick up a feedback form to

let us know your preferences. Questions, feedback, or assistance in filling out the survey? Email us at <u>cityseal@newtonma.gov</u>.



Hiring salary range (FY25): **\$61,893 - \$66,629**  P.P.P.P.P.P.P.P.P.S. Ever thought of becoming a City of Newton **Committee Clerk?** The full-time job responsibilities include supporting City Council committees and providing resident services. Learn more and apply <u>here</u>.

Past P.S.s happening soon:

P.S. Sunday Night **Concerts in the Park** continue through Aug. 18 at the open space adjacent to the Newton Centre playground and just down the hill from the hut on Tyler Terrace in Newton Center. The <u>Beantown Buckaroos</u> are on tap to



play this Sunday, Aug. 4 from 6:00 to 7:30 p.m. Note: In case of iffy weather, check <u>@newtonculturaldevelopment</u> on Facebook, or <u>newtonma.gov/culture</u> after noon on the day of the concert.



P.P.S. The **Newton Farmer's Market** is open weekly through October on Tuesdays at Cold Spring Park from 1:30 – 6:00 p.m. and Saturdays at Newton North High School on Lowell Avenue from 9:30 a.m. – 12:30 p.m. Click <u>here</u> for more info and a list of vendors.



Mayor Ruthanne Fuller | 1000 Commonwealth Avenue | Newton, MA 02459 US

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