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Basement Flooding Study Area 42, 44, 62-Downtown

Issue Date | June 2024



During extreme rainfall events, sewers and drainage systems can become overloaded, which can lead to basement and surface flooding. In 2013, City Council approved the development of comprehensive plans across 67 study areas in the city to reduce the risk of flooding. The study for areas 42, 44 and 62 began in 2019, and covers the area generally bound by St. Clair Avenue West to Lake Ontario and Jane Street to the Don Valley Parkway.

These areas have interconnected sewer and drainage systems that span several wards across the city. City staff have studied the factors that contribute to surface and basement flooding in the area, and have developed recommended solutions to address these issues.

Find Out More

If you are the owner of a single-family residence, a street level storefront business, free-hold townhome or a condominium property manager, we want to hear from you. View the recommended solutions in your neighbourhood and register for our virtual public consultation at toronto.ca/DowntownBF.



Virtual Public Meeting Date: Tuesday, June 25 Time: 6:00 - 8:00 p.m.

Please register online by scanning the QR code.



What is Covered by this Study

Following the Municipal Class Environment Assessment process for planning and designing municipal infrastructure, this study has recommended potential improvements to the sewer and drainage system that could be made within the City's right-of-way or City property, such as parks and ravines.

What is Not Covered by this Study

Each property owner is responsible for drainage systems on private property, including operations and maintenance. This includes:

• Lot grading.

- Front and rear-yard or driveway drainage catch basins.
- Foundation drains.
- · Sump pumps and backwater valves.
- Private tree roots and what you put down the drain (fats, oils, grease, etc.).
- Disconnecting downspouts.

Property owners can help protect their home from basement flooding by installing sump pumps and/or back-flow valves. There is a homeowner subsidy of up to \$3,400 per home for eligible applicants. To learn more about the steps you can take, please call 3-1-1 or visit toronto.ca/basementflooding.





Study Recommendations

Following a complete assessment of the existing sewer and drainage system, the City has developed several recommendations to address basement flooding in the area, mainly by increasing conveyance capacity (the ability to carry large amounts of water through the sewer system). While the City's current sewer system effectively manages rainfall from most storm events,

The recommended solutions will help protect against flooding during extreme storm events. The recommended solutions are not yet funded by the City. Further detailed engineering work must be completed to confirm project details, which would take a number of years to complete. This funding approval and detailed engineering work would be needed before any construction takes place.

Recommended Solutions

Sewer Inflow Reduction to Eliminate Sewer Overloading

Catch basin inlet controls to reduce the rate at which surface water enters the sewer system.

Watertight manhole

lids on sewers to reduce leakage of rainwater into sewer pipes.

New storm sewers and catch basins on local roads.

Replacing existing sewers with larger pipes that have more capacity.

Three (3) new large relief sewers, the Sunnyside, Garrison and Cabbagetown relief sewers, to provide additional capacity to relieve the existing overburdened sewers. **Storage Facilities**

Underground tanks or in-line storage pipes in new or replacement sewers to store excess storm water during extreme rainfall events.

Vertical storage shafts in relief sewers.



Locations of sewers and shafts selected based on location opportunities, engineering feasibility and efforts to minimize impacts on transit routes and arterial roadways. A more detailed map is available at **toronto.ca/DowntownBF**

Frequently Asked Questions

- Why will the recommendations from this study take so many years to implement? The recommended solutions are not yet funded by the City. As per Council approved criteria, all City basement flooding projects are prioritized to protect the greatest number of properties, within approved budgets and coordinated with other construction work. Further detailed engineering work must be completed to confirm project details, which would take a number of years to complete. Funding approval and detailed engineering work would be needed before any construction takes place.
- The underground parking garage of my condo building floods during heavy storms. What can be done?

If you own or rent a building unit, please see your property manager, as it is the responsibility of the property owner(s) to maintain the drainage system on private property.

 Can the City just increase the size of all the sewers to handle extreme storms? Unfortunately it is not as simple as making the pipes bigger. The variability in the amount of rainfall and how fast it falls is so vast that it is impractical to design a pipe system to capture it all. Solutions must consider which pipes, how big to make them, and how it will affect other residents. Other constraints can include space availability, conflicts with existing or proposed future infrastructure, basement elevations, pipe depth and environmental impacts. City staff have assessed all these factors as part of the study for areas 42, 44 and 62 and have provided several recommended solutions, which includes replacing some existing sewers with larger pipes.

I have experienced flooding, yet sewer upgrades are not planned for my street. Why?

The sewers on your street are connected to a larger system. Flooding issues could be the result of any upstream or downstream part of the sewer system experiencing overloaded capacity, bottlenecks and/or constraints. Upgrades are aimed at improving the overloaded system upstream or relieving the system downstream at the flooding location. These system upgrades will improve areas spanning several adjacent streets, which is why works may not be planned for every street. Flooding can also be caused by private property issues (e.g. poor lot grading or drainage, clogged/blocked catch basins and cracks/leaks on the private side in the building's foundation or walls). In these cases, sewer system upgrades would not resolve flooding on your property. These issues are the responsibility of the property owner.

• Water remains on our street for some time after a storm. Is this okay? Our streets are designed to carry stormwater flows that exceed the capacity of the storm sewer. Temporary ponding on streets is expected during major rainstorms. If the road has not drained two hours after the rain has stopped, residents are asked to call 3-1-1.

For More Information

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