



## Basement Flooding Survey

### Introduction

The Town of Lakeshore is undertaking a short voluntary survey to learn more about the details and contributing factors surrounding basement flooding events.

All residents are highly encouraged to participate, even those with no previous history of basement flooding. The information provided will help the Town deliver the most effective flood mitigation program and will be used to inform capital program decisions. This survey should only take approximately 10 minutes to complete.

The information on this form is collected under the authority of Section 10 of the *Municipal Act, 2001* and is subject to the provisions of the *Municipal Freedom of Information and Protection of Privacy Act, 1990*. The personal information collected will only be used for the purposes of this survey, to analyze neighbourhood trends with respect to incidences of flooding and mitigation measures, to inform capital program decisions and to provide follow up information on programs offered by the Town. Questions about this collection or any general questions about the survey may be made to the Director, Engineering & Infrastructure, 419 Notre Dame Street, Belle River, Ontario N0R 1A0 at (519) 728-2700.

Thank you in advance for your participation.

### Part A - Flooding Event Information

Please fill out all required fields (\*) as a minimum

\* 1. Please provide your address and postal code.

2. How many years have you lived in this location?

- Less than 5 Years
- 5 - 9 Years
- 10 - 14 Years
- 15 - 19 Years
- 20 - 24 Years
- 25 Years +

3. Please specify if the home at this location is a

- Single-Family Detached Home
- Semi-Detached Home
- Townhouse
- Multiple-Storey Home (e.g. Duplex, Triplex, Fourplex)
- Apartment
- Other (please specify)

4. When was the home at this location built?

Specify year:

\* 5. Does the home at this location have a basement?

- YES
- NO

\* 6. Has your basement ever flooded?

- YES
- NO
- Do not know

7. When did your most recent basement flood event occur?

Month

Year

Most recent flood event

8. During your most recent flood event, did CLEAR WATER or SEWAGE enter your basement?

- CLEAR WATER
- SEWAGE
- BOTH - CLEAR WATER & SEWAGE

9. During your most recent flood event, where did the CLEAR WATER or SEWAGE enter your home through? (Select all that apply)

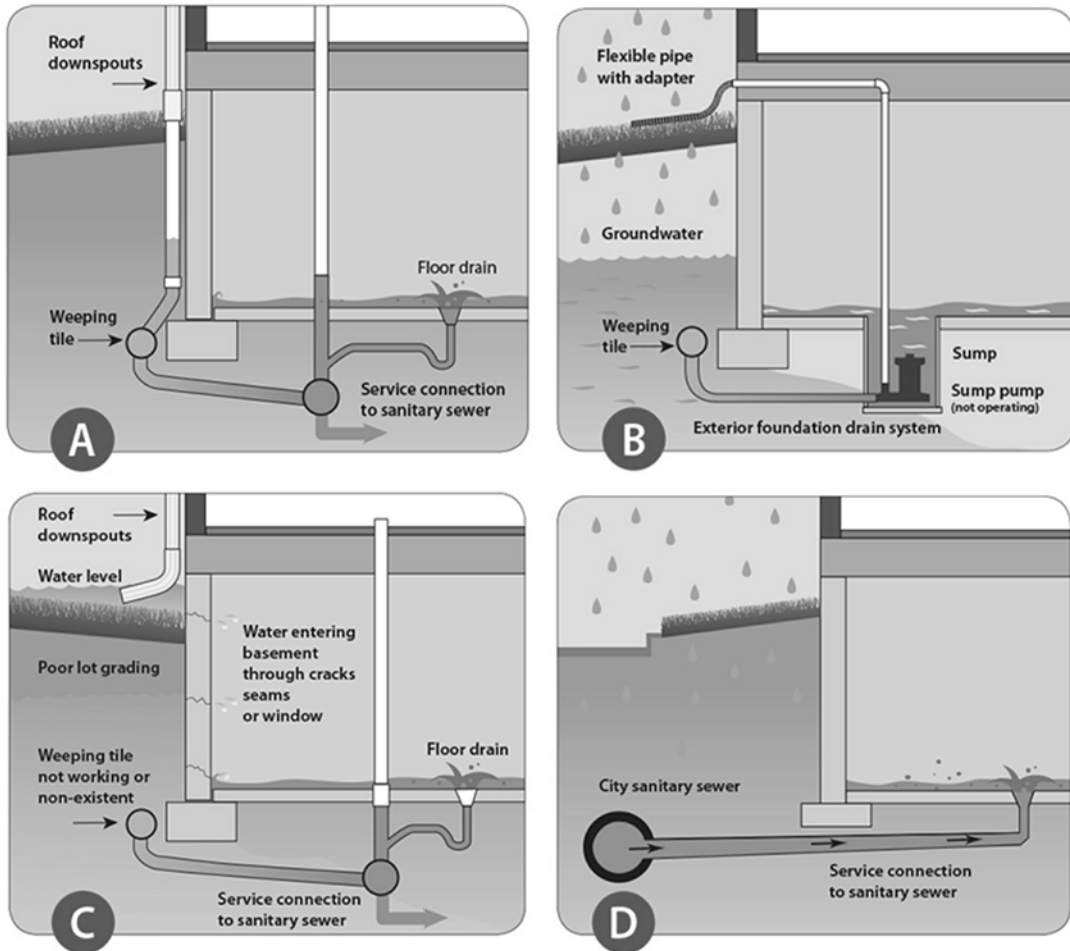
- Floor drain
- Other basement drain (e.g. toilet, sink, shower)
- Sump pump
- Sewer clean out
- Cracks in basement floors or walls
- Basement window or door
- Do not know
- Did flood water enter your home in another way? Please explain?

\* 10. Did you report your most recent basement flood event to the Town of Lakeshore?

- YES
- NO

## Part B - Flood Mitigation Measures

Illustrations A - D provided for reference



Grading is the shaping or sloping of the land in such a way that surface drainage is directed away from the buildings and controlled within the property in a manner that eliminates impact on adjacent properties and Town right-of-way.

11. How is your property graded?

- Towards the house (See illustration C above)
- Away from the house (See illustrations A, B & D above)
- Flat / even
- Do not know

Illustrations A & B above feature a foundation drain. A foundation drain is a drainage pipe placed around the footing of a home to drain groundwater.

\*12. Does your home have a foundation drain (i.e. weeping tile)?

- YES (See Illustrations A & B above)
- NO (See Illustration D above)
- Do not know

13. Where does the foundation drain flow?

- Sump pump (see Illustration B)
- Storm sewer
- Sanitary sewer (see illustrations A & D)
- Do not know

Illustration E



Illustration E features a backwater valve. A backwater valve is a device installed on your drain that allows the one way flow of sewage out of the home, while blocking sewage from backing up during storm conditions. Backwater valves are in the basement floor, usually located near the basement wall that is closest to the road.

\* 14. Does your home have a backwater valve installed?

- YES
- NO
- Do not know

15. Were you responsible for the installation of the backwater valve, or no it was already there when you moved into your home?

- I was responsible for the installation.
- It was already installed when I moved in.

16. Is your backwater valve maintained as per the manufacturer's recommendations (e.g. yearly cleaning or inspection)

- YES
- NO
- Do not know

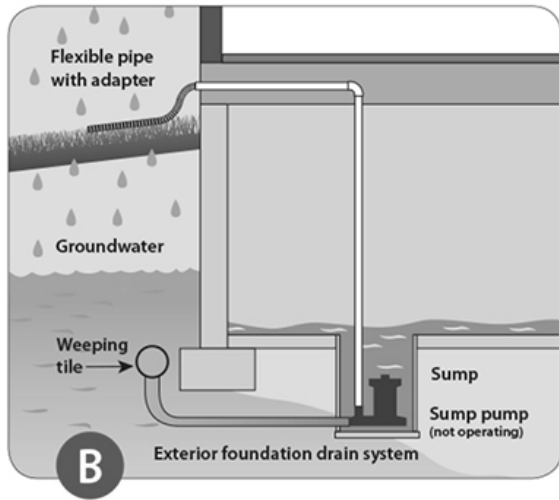


Illustration B above features a sump-pump. A sump-pump is an automatic pump that drains accumulated foundation or weeping tile water in the sump pit to the surface and away from the house, thereby relieving water build-up around the basement walls.

17. Is there a sump-pump in your basement?

- YES
- NO
- Do not know

18. Where does your sump-pump pump water to?

- The surface of the ground outside of my home
- Into my sewer connection
- Into the laundry tub or other internal plumbing
- Do not know
- Other (please specify)

19. Were you responsible for the installation of the sump pump or was it already there when you moved into your home?

- I was responsible for the installation
- It was already installed when I moved in

Eaves trough downspouts that are connected to the sewer system often look like this:



Eaves trough downspouts that are not connected to the sewer system often look like this:



20. How many eaves trough downspouts are on your property?

21. How many of your eaves trough downspouts have been disconnected from the sewer system?

22. Where do your disconnected downspouts drain to? (Select all that apply)

- Grass/Lawn
- Garden
- Driveway
- Patio
- Rain Barrel
- Other (please specify)

\* 23. Have you ever completed any of the following flood mitigation measures?

- Downspout disconnection measures
- Installation of a sanitary backwater valve
- Camera video inspection of your sewer connection piping
- All of the above - Downspout, Camera & Backwater valve
- No, I have not completed any of these measures

24. If so, when did you complete the following measures?

|   | Month | Year |
|---|-------|------|
| Downspout disconnection                 |       |      |
| Backwater valve installation            |       |      |
| Camera video inspection of sewer piping |       |      |

25. If you have not previously completed any of the above flood mitigation measures, what has prevented you from doing so?

- Was not aware of these flood mitigation measures
- Cost
- Time requirements
- Other (please specify)

26. In general, how would you rate your awareness of flood mitigation measures.

| Not at all aware      | Somewhat aware        | Very aware            |
|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



## Part C - Communications & Public Education

\* 27. Would you like to receive more information from the Town of Lakeshore about how to reduce your risk of basement flooding?

YES

NO

28. How would you like to receive additional information from the Town about flood mitigation measures? (Select all that apply)

Email

Pamphlets / Brochures

Resources on the Town's website

Coverage in print media (e.g. newspapers, community publications)

YouTube videos

Social Media

Open Houses / Information Sessions

Other (please specify)

29. If you selected email in Question 28, please provide your email address.



## Basement Flooding Survey

### Conclusion

Thank you very much for your participation. For more information about actions that you can take to protect your home from basement flooding, please visit

<http://lakeshore.ca/lakeshore-1/flooding>

<http://lakeshore.ca/media/files/Lakeshore%20Downspout%20Disconnection%20Nov%208%202012.pdf>