

Protect your home from basement flooding

It's important to protect your home from basement flooding because your home could be at risk of basement flooding. **Why?**

- Heavy rainstorms that fall over short periods or moderate rainfalls over long periods of time can overwhelm Town's sewer systems.
- Overloaded sewers can back up through private drain connections and flow into basements that aren't protected.
- Even if you or your neighbourhood have never experienced problems with basement flooding, your home can still be at risk.
- In heavy storms, the total amount of rainfall, and how fast it falls, can vary greatly from neighbourhood to neighbourhood across the Town.
 - As an example, on June 5, 2010, over 90 millimetres (4 inches) of rain fell within 4 hours in Tecumseh.

What can be done to protect your home?

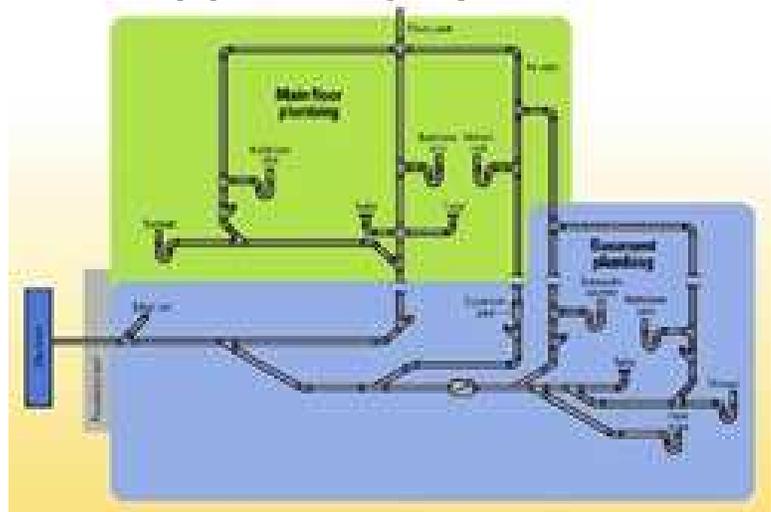
Along with improvements made by the Town, the following protective steps that **you** can take greatly reduce the risk of sewer backup and basement flooding:

1. Install a backwater valve
2. Install a sump pit drainage system
3. Improve drainage around your house
4. Install a sewage ejector on your sanitary sewer connection



Install a backwater check valve and sump pit drainage system

You should install this equipment if your home doesn't have these features.



Backwater Check Valve

A backwater check valve is a device that prevents sewage in an overloaded sanitary main sewer line from backing up into your basement.

- The valve automatically closes if sewage backs up from the main sewer.
- A properly installed backwater check valve must be placed so that sewage backup is stopped and does not come out through other outlets in your basement, such as sinks, toilets, showers and laundry tubs.
- With a backwater check valve alone, weeping tiles connected to the sewer line can't drain when the backwater valve closes, causing water to overflow into your basement from the floor drain.
- This is not fool-proof. Regular maintenance is required and if the back-up of sewage is significant it could by-pass closure.
- Once closed, use of plumbing fixtures could result in flooding as the fixtures cannot drain.

Sump pit

A sump pit drainage system includes a sump pit, a sump pump and a pump discharge pipe.

- The sump pit, set into the basement floor, collects storm water from the weeping tiles around your basement.
- The pump pushes the water outside your house through the discharge pipe.
- Where there is no storm sewer connection, place your sump pump discharge pipe so that it drains somewhere onto your property where water can be absorbed, such as your lawn or flowerbed.
- Do not allow water from your sump pump to drain directly onto neighbouring properties, lanes, sidewalks, boulevards, streets or into your home's floor drain.

You will need a permit and inspection to install a backwater valve and sump pit. Since part of the basement floor will be dug up and because proper placement of these items is important, we recommend that you use a licensed plumbing contractor.

Check your Phone Book for reputable contractors, and ask friends and neighbours for referrals. We recommend that you:

- Get at least three estimates
- Ask for and check contractor references
- Call the Better Business Bureau for a reliability report on contractors
- Make sure your contractor obtains the necessary information and permits by calling the Town's Planning and Building Services Department at 735-2184

Check and maintain your backwater check valve and sump pit drainage system regularly

Here are some things to do to make sure that your drainage system continues to operate properly. **Check the operating instructions for more detailed information and safety guidelines, or ask your plumber to explain the details of your system to you.**

Backwater valve

- Make sure that you can get to the valve at all times.
- Check the valve regularly and remove any material that may prevent the valve from operating properly.

Sump pit

- Clean the pit each year. Weeping tile drainage may carry small amounts of soil, sand and debris into the pit from around your basement.
- Some water may remain in the pit and cause a musty smell if it sits for a long time. If so, you can flush the pit by adding fresh water until the pump removes the stale water.

Sump pump

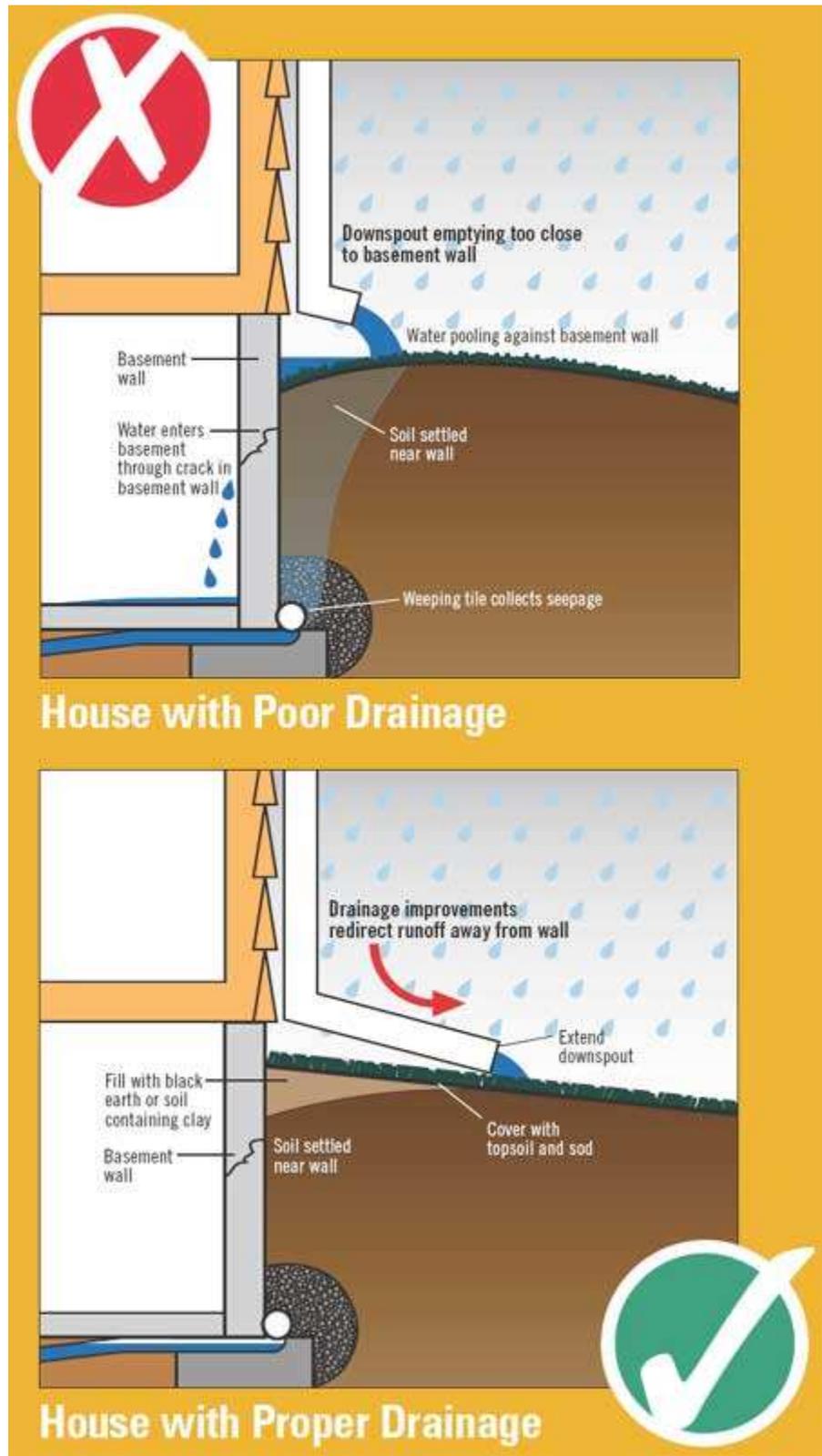
- Check and test your pump each spring before the rainy season begins, and before you leave your house for a long time. Pour water into the pit to trigger the pump to operate.
- Remove and thoroughly clean the pump at least once a year. Disconnect the pump from the power source before you handle or clean it.
- Check the pit every so often to ensure it is free of debris. Most pumps have a screen that covers the water intake. You must keep this screen clean.

Sump pump discharge pipe

- Check the place where the discharge pipe leaves the house. If the pipe is discharging right against the basement wall, the water will drain down into the weeping tiles and continue to recycle through the system.
- Check the discharge point regularly to make sure that nothing is blocking the flow.

Improve drainage around your house

- Build up the ground around your house so that water flows away from your basement walls. Also examine sidewalks, patios, decks, and driveways. These can settle over time and cause water to drain back towards your basement walls.
- Extend downspouts so that water flows away from your house and doesn't pool next to the basement walls or basement windows. If your downspouts are connected to your home's sewer system, disconnect them, but be aware where you direct the rainwater as it will create ice patches on paved surfacing in the winter months.
- Clean debris from eavestroughs regularly. If they overflow even when clean, replace them with larger size eavestroughs and downspouts.



Proper drainage helps to...

- reduce the amount of water flowing to your home's sewer system and to the main sewer system, and lessen the risk of sewer backup
- reduce water seepage into your home through basement windows and cracks in your basement walls
- keep the moisture content of the soil around and under your house stable to reduce the chances of cracking and shifting. If water pools next to your basement, it can make its way to the footings that support the basement walls. The increased moisture may cause the soil to swell and the footings to heave
- extend the life of your sump pump by reducing the amount of work it has to do

Be sure your drainage improvements do not cause drainage problems for your neighbour or affect the grading near the property line. Contact 735-2184 if you have questions about your planned drainage improvements.

Have you done everything you can?

Contact Town Hall at 735-2184 for more information on the steps you can take to reduce your risk of basement flooding or for information on installing backwater valves and sump pits.

Protection from Water Damage and Sewer Backup

What steps can I take to protect my home and contents?

There are many things you can do:

- Arrange for a licensed plumber to install a backwater valve on a sewer line in the basement of your home. This device, if properly installed, automatically closes if sewage backs up from the main sewer. A backflow prevention device installed in the floor drain may not be sufficient to provide sufficient protection against flooding.
- Install a sump pit drainage system (includes a sump pit, a sump pump and a pump discharge pipe).
- Check and maintain your backwater valve and sump pit drainage system regularly.
- Don't drain water from your sump pump into your floor drain. Not only is it illegal, it increases the risk of basement flooding for you and your neighbours. The sanitary sewer system is designed to manage only normal flows of wastewater, not sump pump water. Keep the end of the pipe well away from your property line so that water does not flow onto the street, lane, boulevard, sidewalk, or your neighbour's property.
- Improve drainage around your house.
- Build up the ground around your house so that water flows away from your basement walls. Also examine sidewalks, patios, decks, and driveways. These can settle over time and cause water to drain back towards your basement walls.
- Extend downspouts so that water flows away from your house and doesn't pool next to the basement walls or basement windows. If your downspouts are connected to your home's sewer system, disconnect them.
- Clean debris from eavestroughs regularly. If they overflow even when clean, replace them with larger size eavestroughs and downspouts.
- Don't throw garbage down your sinks or toilets. Garbage (e.g., dental floss, diapers, cotton swabs) that gets into your sewer through your drains can clog your sewer and cause sewer backup.
- Avoid pouring fat, oil, and grease down your drain. Grease hardens as it cools and sticks to the inner lining of sewer pipes, eventually causing a blockage.
- Prop appliances such as washers, dryers and freezers off the floor by putting blocks of wood under them so they don't get damaged by water. It is common for backups to be less than a few inches of water.
- Don't store belongings in paper boxes on the floor in the basement. Store them on a shelf or in plastic totes.
- Don't put grass clipping, leaves or other debris on the streets as they can plug the drains and prevent proper drainage, particularly during heavy rainfalls. Plugged drains cause water to build up on the street, which could cause water to drain into the sewer system through manhole covers and increase your risk of basement flooding. If you notice a plugged drain, contact 735-2184.

Downspouts

Downspouts:

- are located along building walls,
- carry rain water from the eavestroughs to downspout extensions
- must have an elbow and an extension or a concrete splash pad to direct surface water away from the foundation.

Downspout extensions

Downspout extensions:

- should be placed far enough away from foundation walls to prevent water damage or seepage back into the structure,
- must not direct surface water onto neighboring properties – this is a violation,
- must remain on your own property and be angled in the direction of the lot grading plan.

Do not connect downspouts or downspout extensions to the sewer inside your house.

Are your downspout extensions in the right place?

There is a right way and a wrong way to place your downspout extensions.



The right way

- Drain the water from your downspout through a downspout extension, onto a splash pad and onto your own property.
- If you notice the water is going onto your neighbour's property, the street or back lane, move the pipe or angle it onto your property so that the water is absorbed before it reaches these areas.





The wrong way

It is prohibited in the Town to direct surface water onto neighbouring properties, back lanes, sidewalks, boulevards or streets.



Some important tips

- Place your downspout extensions so that water flows away from your house and doesn't pool next to basement walls or basement windows.
- Disconnect any downspouts or downspout extensions from your home's sewer system if they are connected.
- Direct the flow from your downspout extensions onto a grassy area or non-paved surface.
- Keep the end of the downspout extensions away from the property line so that the water does not flow onto your neighbour's property, the street, lane, boulevard or sidewalk.
- Clean debris from your eavestroughs regularly. If they overflow even when clean, replace them with larger size eavestroughs and downspouts.