

PREPARING FOR A FLOOD



Floods are typically caused by seasonal melting snow, ice jams, heavy spring rains and summer thunderstorms. Flash flooding is often caused by violent rain storms or breaking dams, and usually occurs with little or no advance warning.

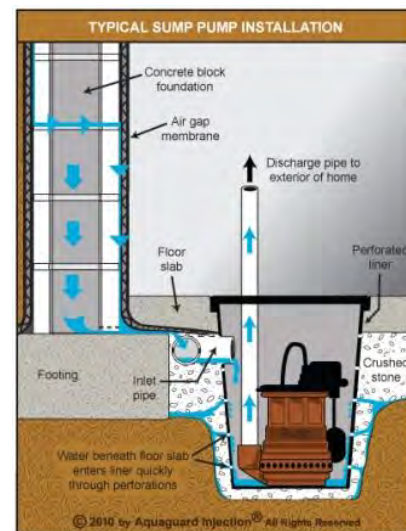
The sewers in Niagara Falls are designed to handle most storm events. However, we are experiencing more severe weather events with higher levels and more intense rainfall than historically recorded, which increases pressure on the sewer system. The City has introduced programs that will help reduce the risk of flooding in identified chronic basement flooding areas. The City is working to make improvements to its complex system of underground infrastructure, but these improvements alone cannot protect a home from basement flood.

Basements can flood for a number of reasons. Water can enter basements through a crack in the home's foundation, basement windows or doors. Poor lot drainage, overflowing eavestroughs, and even leaking or plugged downspouts can also result in water making a way into a home.

Preparing for a Flood

- Put weather protection sealant around basement windows and the base of ground-level doors. Fix leaks in basement walls and around windows.
- Increase green space and use soft surface landscaping (ie. porous pavement and shrubs) to allow water to soak into the ground.
- Install flood prevention devices such as a sump pump, and check regularly that the device is working properly.
- Consider installing a battery or water-powered backup on your sump pump in case of a power outage.
- Install "backwater valves" or "backflow preventers" in sewer traps to prevent floodwater from backing up into the drains of your home. Make sure they are regularly cleaned and maintained.
- Clear leaves and other debris from your eaves troughs and downspouts.
- Ensure the drainage for downspouts is a sufficient distance from your residence to ensure that water moves away from the building. Disconnect your downspouts that empty into the City's sewer system and direct the rainwater to your lawn and garden or into a rain barrel, where feasible.

- Ensure the ground is sloping away from your home's foundation walls.
- Clear roadside sewer grates (catchbasins) of debris and leaves if safe to do so.
- Keep any important documents or keepsakes out of the basement and store them at a higher level to protect them from flood damage.
- Do not use carpet flooring in basements. Hard surfaces can usually be dried, disinfected and saved.
- For gas and water valves, keep shut off instructions close by and read them carefully.
- Reduce household water use during heavy rainfall, if possible, to reduce the strain on the sewer system.
- Review and discuss the safety tips with your entire household to make sure everyone understands what to do during a flood.



How the City of Niagara Falls Can Help...

Free Video Inspection of Your Sanitary Lateral

In order to determine whether your sewer lateral is in good working condition, book a free video inspection by City staff. DVD copies are available for \$10.00. Call 905-356-1355.

If the lateral is in a collapsed or deteriorated condition, you may wish to contact a professional to obtain a permit and have the private portion of your lateral repaired.

If the affected lateral within the municipal right of way, the City will repair their portion of the lateral.

Weeping Tile Removal Assistance Program

The City offers an incentive program to assist homeowners with the disconnection of weeping tiles from the sanitary sewer called the Weeping Tile Removal Assistance Program (WRAP).

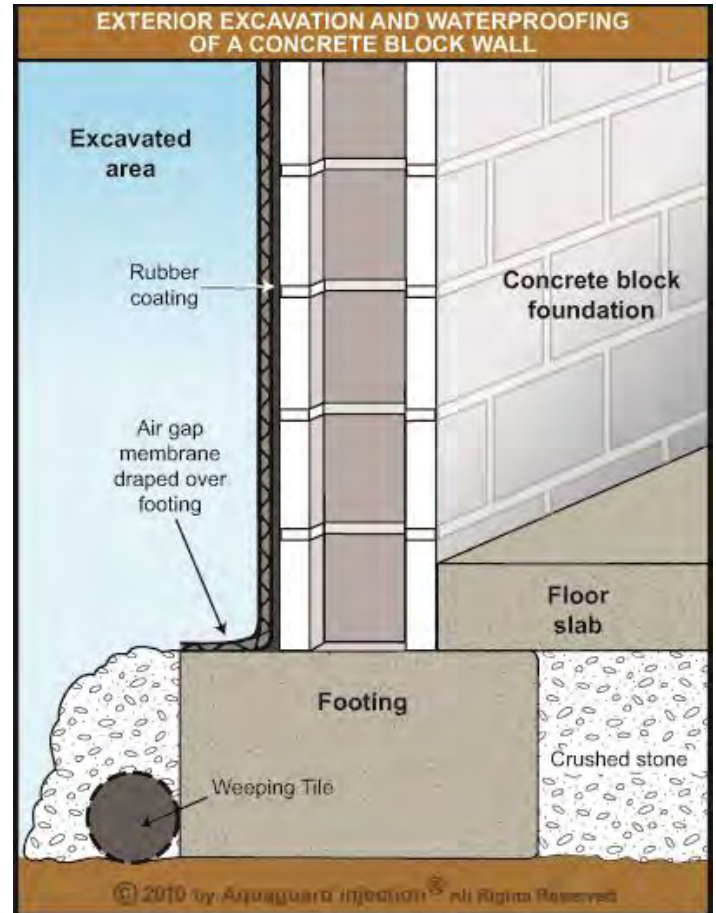
Weeping tile is also known as foundation drain. Weeping tile drains the water that runs along the foundation and basement walls of your home and is located adjacent or below the foundation. Weeping tile is primarily found on homes constructed since 1946 and on some homes prior. Weeping tile connection to the sanitary sewer was an accepted practice up until 1989.

The WRAP incentive program includes installation of a sump pump and back-up pump to direct weeping tile drainage out onto your lawn and away from the house.

The goal of the WRAP program is to:

- Reduce basement flooding
- Reduce sewage over-flows into the natural environment
- Reduce sewage treatment costs
- Increase public awareness
- Provide financial incentives to homeowners who disconnect their weeping tile

If you are interested in making an application under the WRAP Program please call 905-356-7521 ext. 4212 or visit the City's website at www.niagarafalls.ca.



During a Flood

Types of Provincial Flood Messages

The **Provincial Flood Watch** provides consistent and timely technical information regarding flood potential to those agencies that must respond to or deal with flood emergencies. The message prepares the provincial emergency response system for flood conditions that may develop somewhere in the province.

The **Provincial Watershed Conditions Statement** provides information on provincial watershed conditions relative to the flood potential. The report also provides an outlook of expected spring flood conditions.

Types of Local Flood Messages

Flood Warning indicates flooding is imminent or occurring within specific watercourses and municipalities.

Flood Watch indicates the potential for flooding exists within specific watercourses and municipalities.

Watershed Conditions Statement indicates a potential for flooding or other conditions that pose a risk to personal safety, such as high flows, unsafe ice, and high lake levels.

There are two types of statements

Water Safety indicates that high flows, melting ice or other factors could be dangerous for such users as boaters, anglers and swimmers but flooding is not expected.

Flood Outlook gives early notice of the potential for flooding based on weather forecasts calling for heavy rain, snow melt, high winds or other conditions.

If you are indoors

- Prevent Electrocutation
– Turn off the power if there is standing water or the possibility of electrical wires coming into contact with water or soggy materials. Disconnect



electrical appliances. Do not touch electrical equipment if you are wet or standing in water.

- If you smell gas or if the flood water has risen above your gas appliances, gas meter or regulator set, call the emergency number 1-866-763-5427.
- Do not flush the toilets or run the water.
- Listen to the radio or TV for emergency information.
- Keep children and pets away from water or sewage.
- Do **not** eat fresh food in contact with flood waters.
- Move essential items to an upper floor.
- If you have time, bring in outdoor furniture.

If you are outdoors

- Do **not** walk through moving water. Six inches of moving water can make you fall. If you have to walk in water, walk where the water is not moving. Use a stick to check the firmness of the ground in front of you.
- Be aware that flash flooding may occur. If there is any possibility of a flash flood, move immediately to higher ground. Do **not** wait for instructions to move.
- Keep children away from flood water.
- If you are in a car, do not drive through flood waters, if possible.

If your area is at risk of being flooded

- Listen to the latest warnings and advisories on the radio and television.
- Prepare your home for a possible extended vacancy and collect necessary personal items you will require if evacuated, such as cash, medication, important papers, identification, and change of clothes.
- Remove valuable items from the basement and lower-level areas.
- Ensure that your cell phone is charged – it may be your only means of communication during an evacuation.
- Be prepared to place your pets in a kennel, as evacuation centres may not accept animals.
- Keep your automobile fueled.
- Evacuate if directed to do so.
- In the event of an evacuation, assist those with special needs such as children and persons with disabilities.
- Secure all boats and items left loose on and around piers, docks or boathouses.

After a Flood

Flood dangers do not end when the water begins to recede.

Take the following precautions following a flood

- Seek out medical assistance, if needed.
- Check on neighbours who may need assistance.
- Report any broken utility lines to the appropriate authorities.
- Be aware of electrical hazards when you enter the affected area. Water conducts electricity.
- Do not use flooded appliances, electrical outlets, switch boxes, or fuse breaker panels until they have been checked by your local authority.
- The water in your home could be heavily contaminated with sewage and other pollutants after a flood. Water can carry bacteria that may affect health. Proper safety clothing should be used. Listen for instructions from your local public health unit as to what to do.
- Disinfect the entire premises.

Escape of water from the Sanitary/Storm Sewer System

If water entered your basement from a floor drain, sink drain or toilet, contact the City of Niagara Falls at (905) 356-1355 to investigate the public sanitary system. City crews cannot clean the lateral with standing water in the basement. Water must recede or be pumped out before crews attend so they can access the lateral. Please be aware that call volumes during a storm event will determine response times. Please be patient.



Insurance

In the event your basement floods, immediately contact your insurance company or representative. Provided you have coverage, your Insurance company can recommend the services of a qualified contractor experienced in mitigating and restoring the damage sustained.

If you do not have insurance, consider contacting an experienced restoration contractor to ensure the damage is mitigated and properly restored.



CLEANING TIPS

It is important that:

- protective equipment (i.e. rubber gloves, goggles and boots) is worn when handling anything contaminated with sewage. Never touch raw sewage with bare hands, and protect all cuts and scrapes.
- bleach and ammonia are never mixed for cleaning – it creates a deadly gas!
- the water is extracted/drained,
- building finishes and contents that have either been submerged or have absorbed water be inspected / removed and assessed for restoration or disposal. (It is advisable that an accredited restoration contractor be consulted)
- drying of the exposed structure takes place. Mold can begin to grow within 48 hours of water exposure and may cause adverse health conditions. Properly drying areas and objects that have water damage will help reduce further mold growth and damage to the premises. Whole house air conditioners or furnace blowers should be used only if standing wastewater did not get into air ducts.
- photos of the affected area should be obtained and preserved, prior to the removal of the items/finishes.
- if your home has a septic system, call your local health department for advice on how to dispose of water or sewage.

Claims for Damages

If you, or your insurance company, are of the opinion that the Region or local municipality ought to provide compensation for the damages, a written request for the same should be directed to the Clerks department at the Region or local municipality.

Unlike a claim under one's home insurance policy, a claim against a municipality is usually founded upon an allegation of negligence. In order for a Municipality to compensate homeowners for damage resulting from the escape of water from a sanitary or storm sewer system, the Municipality must have done or failed to have done something that caused the back-up. The mere occurrence of a blockage or surcharge does not mean a Municipality is or will be found responsible to pay for the resulting damage: despite all prudent measures, blockages and back-ups may occur within a system that is so extensive.

The City's Risk Management section will consider the factors that caused the back-up including the design, operation and maintenance of the system. The investigation of these factors can take some time, dependent upon the scale of the back-up.

Once the investigation is complete, Risk Management will communicate a decision to the homeowner or their insurer. During this process, it is the responsibility of the homeowner to take all reasonable steps to mitigate their damage.

If you have any questions, please contact Risk Management at 905-356-7521, extension 6700.

Sources

Ontario Ministry of Community Safety & Correctional Services
Ministry of Natural Resources

