

## What else can I do to help prevent a sewer backup?

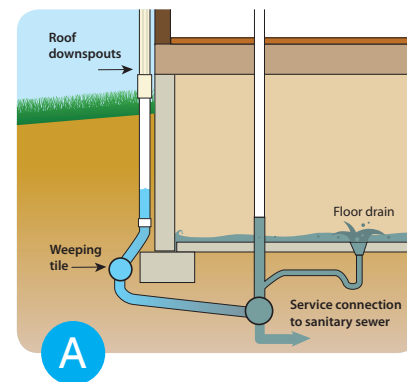
Cooking grease poured down the drain builds up over time and is the main cause of sewer backups and overflows.

- Never pour fats, oils or grease into drains, garbage disposals or toilets. This includes cooking oil, salad oil, bacon fat, lard, marinades, sauces, gravies, butter, margarine, shortening and other food scraps.
- Pour fatty liquids into an empty jar, can, milk carton or juice container, wait until the liquid hardens, then discard hardened liquid in your green cart.
- When draining meat in a colander, place the colander over newspaper to absorb the fat.
- Before washing, scrape and wipe pots, pans and dishes with used napkins, paper towels or newspapers to prevent food scraps from entering the wastewater system. Use strainers to catch food particles and empty into your green cart.
- NEVER use the toilet or sink to dispose of hazardous products, including motor oil and prescription medicines. The City of Greater Sudbury's Household Hazardous Waste Depot is free of charge. Call 3-1-1 for operating hours.

## Do these devices guarantee that I will never have a sewer backup in my basement?

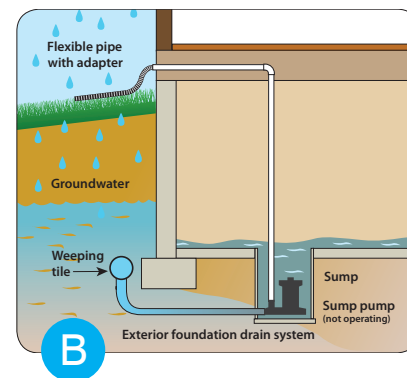
Installation of preventative plumbing flooding devices will provide a degree of protection to the property owner; however, there are no guarantees that basement flooding will never occur. It is the responsibility of the property owner to make any necessary inquiries of qualified professionals to determine the best way to address potential flooding or sewer backups. The availability of a subsidy for certain types of preventative plumbing is not intended to be a recommendation to the property owner for installation. Consultation with a licensed plumber or contractor is a necessary first step.

## Common causes of basement flooding



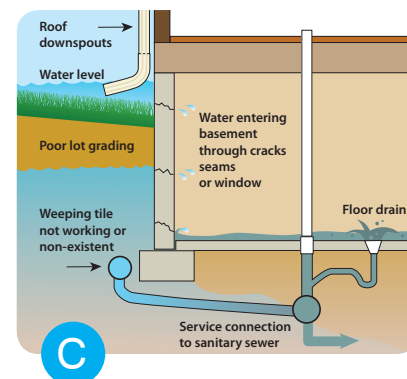
### A Weeping tiles and/or downspouts are connected to the municipal sanitary sewer system.

Municipal sanitary sewer systems are designed solely for wastewater. During periods of heavy rainfall, additional water flow can overwhelm the system, increasing the risk of flooded basements. Direct connections of downspouts to the sanitary sewer system are prohibited under by-law in the City of Greater Sudbury. Disconnecting your weeping tile from the sanitary sewer system can help to reduce the chances of sewer backup and can also reduce the risk of structural damage.



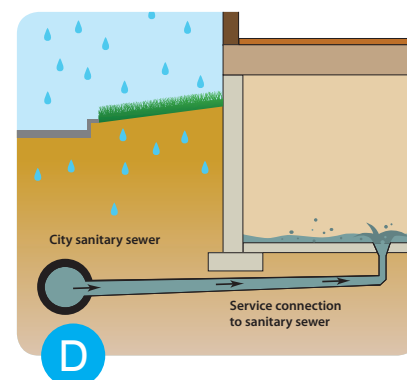
### B Malfunctioning sump pump

Sump pumps are prone to blockage and possible failure if they are not routinely inspected and maintained. Sump pits should be inspected and cleaned of debris each spring and fall. Pouring water into the pit will test whether the sump pump will start automatically. Backup sump pumps and backup power supplies can help to make sure that sump pumps operate during a power outage.



### C Surface water causing basement flooding

Proper lot grading is extremely important. The soil directly beside the foundation wall should be approximately 10-15 cm higher than the soil 1.5 metres away from the foundation. Seal cracks in brickwork, basement foundations and floors. Fill gaps around windows, doors, electrical wiring, phone and television cables and pipes. Water from downspouts and sump pumps should be directed to lawns and gardens.



### D Municipal sanitary sewer pipe is full

Sewer backup can happen when municipal sanitary, combined or storm sewer systems receive more water than they can handle. Excess water can cause the sewers to "surcharge" and push water backwards through home sewer laterals and cause sewage backup into the home through basement floor drains, toilets and sinks. A backwater valve will automatically close if sewage backs up from the sanitary sewer. Proper installation and maintenance is extremely important to ensure proper functioning and to avoid structural damage.

February 2018

# Residential Inflow and Infiltration Subsidy Program (RIISP)

Basement flooding generally occurs during snow melt and heavy rainfall. Risk of property damage from the two main causes of basement flooding - overloaded private drainage systems and overloaded municipal sewer systems - can be reduced with preventative plumbing.

## Mail your completed application form and supporting documents to:

City of Greater Sudbury,  
Att: Compliance Supervisor,  
Water/Wastewater Frobisher Offices,  
Box 5000, Stn. A, 200 Brady Street,  
Sudbury, ON P3A 5P3

## For more information:

Web: [www.greatersudbury.ca/plumbing](http://www.greatersudbury.ca/plumbing)  
Telephone: 705-674-4455, ext. 3600  
Email: [sewerusebylaw@greatersudbury.ca](mailto:sewerusebylaw@greatersudbury.ca)

## Deliver your completed application form and supporting documents to your nearest Citizen Service Centre:

Capreol	9 Morin Street
Chelmsford	3502 Errington Avenue
Dowling	79 Main Street
Garson	214 Orell Street
Lively	15 Kin Drive
Sudbury	200 Brady Street
Valley East	4100 Elmview Drive, Hanmer

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# To apply:

## Step One: Submit your application.

Carefully review the eligibility requirements to ensure your property qualifies for the subsidy. If you have any questions regarding your eligibility for the program, please contact the City of Greater Sudbury at 705-674-4455 ext. 3600.

## Step Two: Review the Preventative Measurement Requirements

Consult with at least two plumbers/contractors licensed by the City of Greater Sudbury to determine the appropriate protective measures to best resolve the potential flooding problems for the property. The property owner will be permitted to hire the contractor/plumber of their choice but the municipal subsidy will be based on the lowest quote.

## Step Three: City Inspection

A no charge site visit by a representative of Greater Sudbury’s Water/Wastewater Services is mandatory. The City will contact the property owner to arrange a visit at the qualifying property

## Step Four: Submit required paperwork.

- A) The property owner must obtain at least two quotes from a licensed plumber/contractor, where the application pertains to the purchase and installation of a backwater valve, sump pit/pump, and/or the installation of the lining for a sewer lateral service
- B) The property owner must be given permission to purchase and install rain barrel devices and/ or eavestrough extender devices for their property by the City. The property owner will be permitted to choose the rain barrel style of their choice and determine how they must be permanently attached to the residential building.

If your application is eligible for a subsidy, you will receive a letter indicating the amount of the approved subsidy. If your application is ineligible or incomplete, you will be sent a letter with an explanation.

## Step Five: Proceed with installation.

Once a letter approving the subsidy is received, the property owner will have up to six months to complete the work and submit proof of payment to the City. The property owner will arrange for a licensed plumber/contractor to install the protective devices, obtain a building/plumbing permit and connection permit for the proposed work if the project involves the installation of a backwater valve, sump pit/pump, and/or sewer lateral lining. Rain barrels and eavestrough extender installations will not require a permit.

## Step Six: Request an inspection.

The property owner must coordinate a mandatory inspection by an official of the City of Greater Sudbury’s Building Services. Installed plumbing must meet and pass the Ontario Building Code. Rain Barrels and eavestrough extenders will be inspected by a City official from Water/Wastewater Services office. Successful inspection by the City Official is mandatory to receive the subsidy.

## Step Seven: Request your subsidy.

The property owner must pay the plumber/contractor for completion of work, making sure to retain copies of all invoices and proof of payment. Property owners must supply an original invoice(s) marked paid in full for eligible installation(s) from a plumber/contractor licensed by the City of Greater Sudbury. The City of Greater Sudbury will issue a cheque for the approved subsidy to the property owner. Supporting documents/receipts for rain barrels and/ or eavestrough extenders will be held for ninety (90) days before the subsidy will be provided.

## What are the conditions to be considered for eligibility?

- Applicants must, at the time of the application and payment of any subsidy, be the current owner(s) of the residential property for which the application is submitted. All owners must apply.
- The property to which the application applies must be within the geographical limits of the City of Greater Sudbury
- The property taxes for the property to which the application applies must be in good standing
- The property which is subject of the application must be currently connected to the City of Greater Sudbury’s sanitary sewer system
- The application must relate to one of the approved “RIISP” solutions
- The eavestrough downspouts and sump pump on any building on the property which is the subject of the application must be properly disconnected from the City sanitary sewer system. This is not required if the City’s General Manager is satisfied that such disconnection is not feasible in the circumstances, based on opinion of a licensed plumber. It is the responsibility of the applicant to obtain such an opinion, at their own costs and submit it as part of their application
- Where the application relates to a backwater valve: (1) the backwater valve to be installed must be a brand approved by the Ontario Building Code (i.e. MAINLINE or Inflow Trolix); (2) the installation must be completed in accordance with the Ontario Building Code; (3) all storm water pipes, drainage services connections, drainage water pipes, drainage sump pump discharge laterals, foundation drains, storm water leaders or eavestrough downspouts shall not be connected to the sanitary sewer; (4) the backwater valve must be installed in such a manner that it is easily accessible for inspection and maintenance by the owner at his/her expense.
- The application relates to first time installations only, not for replacement of existing preventative devices
- Applications for the subsidy will only be accepted within one year of the installation of the protection device

## What is the maximum allowable subsidy?

The installation of plumbing devices and additional available measures can help prevent flooding or sewer backups in homes. The Residential Inflow & Infiltration Subsidy Program offers a number of solutions to Greater Sudbury home owners who are connected to the Greater Sudbury sanitary sewer system by subsidizing the installation or purchase of:

- **Backwater Valve:** Allowable subsidy = 75% of the invoiced cost up to a maximum of \$1,500 including labour, materials, and taxes
- **Sump Pit/Pump:** Allowable subsidy = 75% of the Invoiced cost up to a maximum of \$ 1,875, including labour, materials, and taxes
- **Eavestrough Extenders:** Allowable subsidy = 100% of the invoices cost to a maximum of \$10 per extender, with a maximum of 4 extenders per property, including taxes.
- **Rain Barrel:** Allowable subsidy = 50% of the invoiced cost to a maximum of \$60 per barrel, with a maximum of 2 barrels per property, including taxes.
- **Lateral Lining:** Allowable subsidy = 50% of the invoiced cost to a maximum of \$1,100, including labour, materials, and taxes.

## Objectives of the Program

The objective of the **Residential Inflow and Infiltration Subsidy Program (RIISP)** is to provide financial assistance to property owners that have experienced or could potentially experience flooding of their residential basements as a result of sewer backups during times of heavy precipitation. The financial assistance will take the form of a subsidy to partially reimburse property owners who incurred costs associated with one or more of the approved plumbing solutions covered by RIISP. The approved plumbing solutions include opportunities to bring the home owner into regulatory compliance; to help minimize the potential for the municipal sewer from backing up into the residence; to help direct roof water away from the house foundation, or to protect the basement from flooding, as may be required in individual situations.

### What is a sump pit drainage system?



A sump pit drainage system consists of a sump pit set into your basement floor, a sump pump and a drainage pipe. The system collects water from the weeping tiles that surround your foundation and pushes the water to the surface. It is very important to ensure that the water is discharged at least 1.8 metres away from the basement walls to a garden or lawn where it can be easily absorbed. It is equally as important to ensure that water does not flow directly onto, or otherwise impact, the property of your neighbours. A sump pit drainage system may not be recommended for properties without sufficient grading or in areas where the water will flow directly onto an impermeable surface like a driveway, sidewalk or paved path.

### What is a backwater valve?



A backwater valve can prevent sewage from an overloaded sewer main from backing up into your basement. The valve is placed directly into the sewer lateral at the foot of your basement wall and will close when there is a sewer backflow. A licensed plumber is essential to ensure proper installation. A valve that is improperly placed could result in a cracked and flooded basement floor. A valve should never be installed in homes where the weeping tiles are connected to the sanitary sewer system. When the valve is closed, sewage from an overloaded sewer main could be forced back into the weeping tiles and lead to structural damage. During heavy rainfall, property owners should refrain from using water as a closed valve will prevent household wastewater from entering the sanitary sewer system. A backwater valve must be regularly maintained and inspected as recommended by the manufacturer.

### What is Lateral Lining?:



Sanitary sewer lines that connect the private residential home to the City sanitary sewer are called lateral lines. As homes grow older, the sanitary lateral service line, which is buried approximately 1.8 meters below the surface, can have heave, crack, sag, and collapse in some instances. This type of action, along with debris and tree roots in the lateral line, can cause blockages and a sewer backup. Excavation to replace a sanitary sewer lateral line can be very costly. New advancements in trenchless technology now offers a variety of polymer based application which can repair the damaged lateral line without excavation costs.

## What is Inflow & Infiltration?

Inflow is stormwater that enters the sanitary system through direct sources such as eavestrough downspouts, weeping tiles and sump pumps. Infiltration is groundwater that seeps into the sanitary sewer system through holes and cracks in manholes, laterals and sewer pipes.

## Reducing the amount of rainwater entering the municipal wastewater treatment system.

In some older homes, rain gutter downspouts, weeping tiles and sump pumps are directly connected to sanitary sewers. While this was once an acceptable practice, the municipal wastewater treatment system serves more customers today than in the past, leaving less excess capacity to process rainwater. Systems are designed solely for wastewater. Additional water flow from other sources can exceed the design capacity of pipes and treatment systems. This increases the risk of flooded basements and overflow of wastewater into waterways.

### What is a Rain Barrel?:



A rain barrel is a device which is available for home owners who have external downspouts and want to store rainwater to help water plants, wash a car, and help prevent stormwater runoff into the weeping tiles of their home. Rainwater can be diverted away from the foundation of the home and into the natural environment through the rain barrel extended release hose.

### What are Eavestrough Extenders?:



1.6 meters, where the storm water will not negatively affect the homeowner’s foundation and will at the same time help recharge the natural environment.