

## ***What Can I do to decrease the risk of water in my basement?***

Preventing wet or flooded basements requires that you understand the cause of the problem and how to direct the drainage from your property appropriately.

Drainage from your property is of two types:

1. Water from storm and snowmelt will drain from the roof of your residence and from the ground around your house. Ideally, the excess water that does not stay on your property should be collected by the storm sewer system.
2. Water from appliances and plumbing fixtures such as toilets, showers, sinks, dishwasher and clothes washers is directed into the plumbing system in your home and collected by the sanitary sewer system.

Wet or damp basements can usually be addressed by regular maintenance and by improving the drainage of your property:

- Check for and fix leaks in walls, floors, windows and doors
- Use window wells around basement windows to prevent your window sills from rotting
- Clean debris from eaves troughs regularly. If they overflow even when clean, replace them with larger size eave troughs and downspouts.
- Extend downspouts so that water flows away from your home and doesn't pool next to the basement walls or windows. If your downspouts are connected to your home's interior plumbing system, disconnect them. Splash pads can be used to direct the water that is discharged from a downspout.
- Build up the ground around your house so that water flows away from your basement walls. Note that sidewalks, patios, decks and driveways can settle over time and allow water to drain back toward your home.
- Consider landscaping that allows storm water to soak into the ground
- Repair/replace damaged weeping tile systems
- Have a plumber or drainage specialist inspect your homes protective plumbing devices, such as backwater valves, sump pump, floor drains or caps to ensure they're working properly

## **Ensure that drainage improvements do not affect your neighbour.**

Flooded basements can be harder to deal with, as the cause of the flooding may originate inside your home, but may also be part of a larger system wide problem.

Please visit [www.cityofhumboldt.ca](http://www.cityofhumboldt.ca) for more information to reduce the chance of having a sewer back up or seepage problems at your residence. 1

Flooding that originates inside your home may be caused by tree root blockage, a build-up of grease in your plumbing system or the insertion of inappropriate objects into your plumbing system. To prevent this type of flooding:

- Have your connection to the main sanitary sewer cleaned periodically
- Avoid pouring grease into your drains
- Avoid putting inappropriate objects into your plumbing system

### *What is a Backwater Valve?*

Installing appropriate protective plumbing devices in accordance with City by-laws and building code requirements will help to protect your property against sewer backup.

A backwater valve is a device that prevents sewage from the sanitary sewer system from coming into your home's plumbing system. A properly backwater valve must be placed so that sewage backup will be stopped and not come out through plumbing fixtures or the floor drain in your basement. You may need more than one valve depending on your home's internal plumbing. A licensed plumber can look at your system and recommend the appropriate installation.

If installing a backwater valve will permanently alter your plumbing, a licensed plumber must install it properly and a City of Humboldt plumbing permit is required. The valves also require periodic inspection and maintenance to reduce the risk of failure.

It is important to note that a backwater valve is designed to be closed during sewer surcharge conditions, to keep water from the sanitary sewer system from getting into your home. When the backwater valve closed, water from the inside of your home cannot get out. When there is risk of sewer surcharge, such as during a storm event, you should avoid using the toilet, sink, shower or any appliance that utilizing the sanitary sewer system. The water will not be able to get past the valve and will result in self-flooding. The City of Humboldt is not responsible for self-flooding.

Even if you install a backwater valve, if storm water from your property still enters the sanitary system, you are increasing the risk that other properties may flood and, if your backflow prevention system is activated, that your own property will self flood.

*If you redirect drainage from your property to the storm system, you will reduce the risk of flooding for yourself and for your neighbours.*