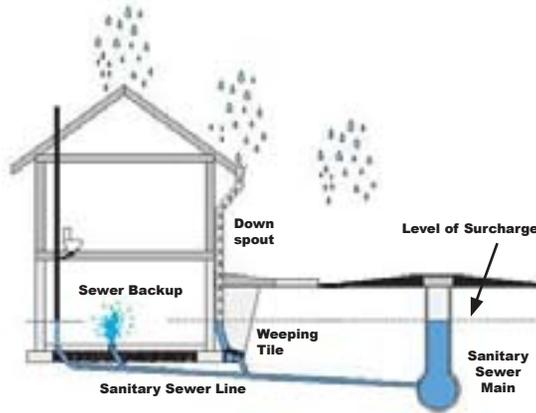


Sewer Backup - Prevent it!

Not only can water from rain or snow melt damage your foundation, it can also overload the Sanitary Sewer, causing a sewer backup. Reducing house water usage especially during heavy rainfall or snow melt will lessen the load on your sewer line. Refer to the Water Conservation New Construction Bylaw for information on water-efficient plumbing and mechanical fixtures.



Talk to a qualified Plumber before you install any sewer backup protection devices. Plumbing fixtures such as toilets, sinks, showers, floor drains and washing machines that are set below ground level require special protection from sewer backflow. Read the information on the devices below to decide if they can help you.

- **Screw Cap** - if you're having trouble with your floor drains, a screw cap installed upstream from the trap seal of the floor drain may be all that you require.
- **In-Line Sewer Backwater Valve** - a simple one-way valve that prevents water or sewage from backing up the line. Backwater valves do a great job when maintained properly and checked regularly.
- **Gate Valve** - where a backwater valve isn't sufficient protection, installing a gate valve in addition to the backwater valve may be the answer for basement plumbing fixtures susceptible to backflow.

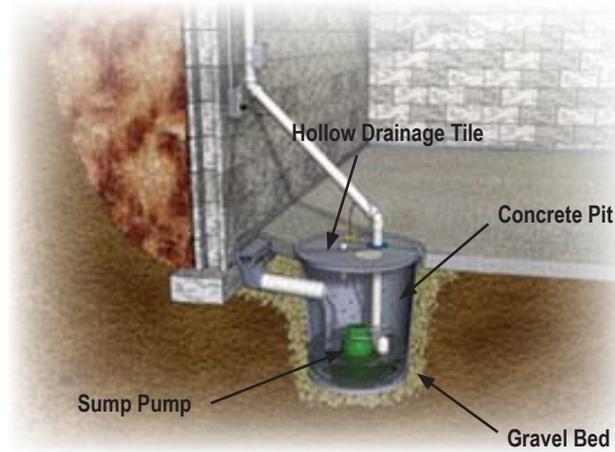
What will it Cost?

The cost of any protective measures you take will

depend on the amount of existing development in your basement and the degree of certainty you wish to achieve in "flood-proofing" your basement. Check with your Plumber before you make any installation. He/she is the most qualified person to advise you.

Sump Pumps can Help

A sump pump may be the most practical solution if water is frequently forced into the basement by a high water table. Try this option first before starting exterior excavation and repairs.



For further information

City of Edmonton – Homeowner's Guide to Flood Prevention:
www.edmonton.ca/for_residents/ForHouseholds/Homeowners_Guide.pdf

The Alberta New Home Warranty Program – Surface Water Mgmt:
www.anhwp.com/documents/SurfaceWaterBrochure.pdf

Questions? Contact Us.

Town of Olds

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Office Hours: 8.30 am to 4.30 pm Mon to Fri

Closed Statutory Holidays

The information in this brochure is also available at our website: www.olds.ca/pubworks.html

Drainage around Basements

Information for Homeowners



Your Partner in Sustainable Opportunities.

Help! I have water in my basement!

If you have water coming in to your basement after rain or snow melt, it's probably because:

- downspout water outfall is too close to the house and is collecting around the foundation
- the ground immediately around your house slopes toward the house, allowing water to seep into the foundation
- your window wells are leaking
- you have cracks in your basement walls or floor

Where the Water Goes

The Sanitary Sewer system in Olds is designed to carry domestic sewage as well as weeping tile drainage from building foundations. Surface water from rain and snow melt is to be disposed of through a separate system of Storm Sewers. To reduce the amount of surface water entering the Sanitary Sewer system, it is important to understand the critical relationship between the roof and lot drainage systems and their effects on the weeping tiles around your home.

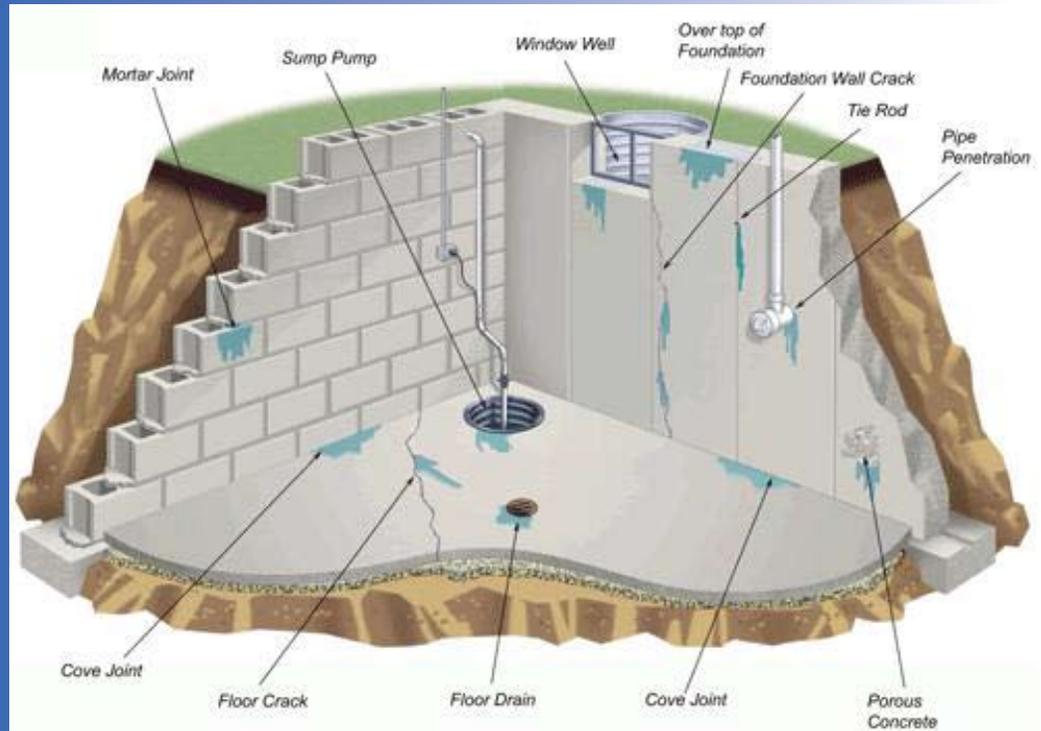
A 2.5 cm (one-inch) rainfall on the roof of a 100 m² (1076 ft²) bungalow will create 2500 litres (550 gallons) of runoff to the ground. Without adequate downspout extensions and proper lot grading allowing water to run away from the house, the majority of water will soak down to the building foundations and may create problems. Water may damage your foundation by seeping through tiny cracks in your basement wall, causing dampness; or it may overload the Sanitary Sewer, causing a sewer backup.

Determine the Cause of Water Leaks

The first step in waterproofing your basement is to determine the exact cause of the dampness. The

Causes of Leaks

- ground slopes toward house
- cracks in walls or foundations or mortar joints leaking
- poor quality backfill around house traps water
- window wells leak and/or trap water against house
- backwater valves and/or gate valves not installed
- sump pump broken or malfunctioning



problem may be one of the above reasons or may be one of high humidity resulting in condensation on water pipes and walls. Moisture may also be seeping through porous foundation walls or through cracks in the walls or floor. The problem may lie in the area outside the building - in some cases, the foundation may not have been adequately waterproofed during construction. Even worse, if the trench around the foundation walls was used to dispose of unwanted construction materials during construction, this poor backfill can dam up pockets of water, preventing its free flow away from the foundation walls. Another source of water infiltration may lie in a high groundwater table. In addition, eavestroughs and downspouts need regular maintenance to prevent the build-up at the foundation of water runoff from the roof.

What can you do?

- ensure storm water is directed away from your home's foundation
- keep downspout extensions in place during rain or snow
- ensure that downspout extensions drain into areas which will not erode - grassed areas are best, but a walkway or driveway will do. Don't allow water to drain onto your neighbour's property.
- repair eavestroughs if leaking and remove debris from troughs once or twice a year.
- ensure water catchment barrels or devices have openings near the top to allow overflow drainage away from the foundation.
- fill in any ground settlement around your home to ensure the ground slopes down away from your house on all sides.
- install a Sump Pump to pump away excess ground water to outside of house and away from foundation.
- repair cracks in your foundation walls and floor
- install weeping tile around foundations