

What impact do these climate changes have on an urban environment?

Heavy rainstorms are increasingly frequent. During these downpours, large amounts of water flowing into the sewage system in record time may cause sewer backup.

Solution :

IF YOU HAVE A SLOPING ROOF, DISCONNECT YOUR GUTTERS FROM THE SEWAGE SYSTEM!

In this way, you will be able to:

- protect the foundation of your house
- redirect the rainwater in order to preserve your landscaping



Did you know that...

Under Bylaw 2008-47 on water purification, issued by the Communauté métropolitaine de Montréal

« When drainage water from roofs is collected by a gutter system [...], this water must be directed onto the surface of the soil, at least 1.5 metres from a building, while avoiding infiltration toward any foundation drain. »

Would you like information to select the techniques and equipment best suited to your environment?

Contact your Éco-quartier or an environmental organization in your area. There you will be able to obtain advice or get a referral to a specialized resource.

Further information may be found on our website at:

ville.montreal.qc.ca/eaudemontreal

The suggestions in this pamphlet are of a general nature and may not suit all buildings. Since each building has its own specific characteristics, a professional should be consulted in order to make sure that any of the suggested methods is appropriate.



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RECOVERING RAINWATER

Montréal

Faced with climate change

Year after year, the Montréal climate is changing. The summers tend to become longer, with more frequent heat waves and dry spells. Such situations contribute toward worsening already existing problems, including:

- loss of vegetation and withering of landscaping
- moisture deficiency
- cracking of foundations in clay soil

No. of days with temperature 30°C and over in Montréal

*1981-2010 average	Years 2010	Forecast 2030-2040
10 days	12 days	46 days

Source : Environnement Canada, 2011

Nevertheless...

During heavy rainstorms, it is predicted that the rainfall will increase by 15% between now and the middle of the century.

Recovering rainwater...



to protect the foundation of your building

Nearly 50% of Montréal buildings are constructed on clay soil. Champlain clay contracts when it dries. The stress then placed on building foundations may cause cracks in the building. The average cost of a repair is \$17,000.

This problem might reoccur from time to time with the global warming trend. Take precautions. Use rainwater to keep the soil moist.

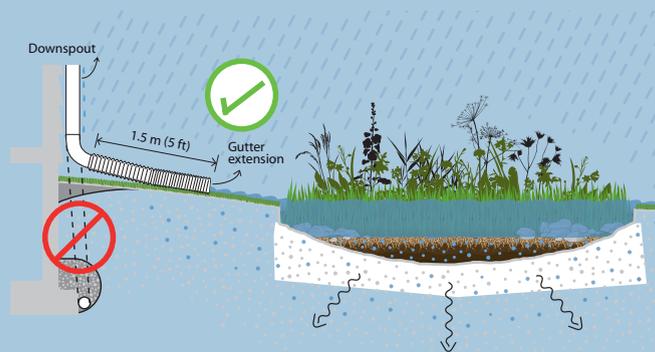
A downspout extender or self-coiling diverter, a percolating well, a drainage trench... These are some of the many ways of redirecting the water from the roof to infiltrate the soil. Just make sure to direct the water at least 1.5 m from your building foundation, without doing anything detrimental to your neighbours.



Photo: Myrene Brown

to preserve your landscaping

A gutter equipped with a simple, inexpensive device that directs the rainwater toward the lawn, the vegetable garden, the landscaping or trees helps hydrate the soil and better preserve the vegetation during dry spells.



to have a reserve of quality water

Storing rainwater in reservoirs helps build up a reserve of unchlorinated water, ideal for watering the garden and plants, in addition to saving drinking water.

Place your barrel at a certain height in order to take advantage of the effect of gravity when watering. "Ready-to-install" equipment is available in hardware stores.

Once your rain barrel has reached maximum capacity, make sure that the surplus water is directed toward a penetrable surface.



Prevent heat stroke: GO GREEN!

In summer, plants keep walls in the shade, preventing heat build-up there. In winter, the falling leaves help store the heat of the sun.

Plants also help purify and refresh the air.

A vegetation barrier may be set up directly on the outside surface materials of your building or by growing climbing plants on a lattice support, a few inches from the wall.

Climbing plants on south and west walls of a traditional house may cut down up to 25% on air conditioning costs (Labrecque and Vergriete, 2007).

How can you do more? Grow a rain garden.

If your grounds are suitable for a rain garden, consider growing one. Select plants that like to have their "feet in the water".