You can use your rainwater!

It is possible to recover rain water and an increasing amount of households are taking advantage of the opportunity!

Economy, Water Quality and Ecology; Three good reasons why you should too.

Lowering water usage, while supporting the environment and by making economical choices in water treatment within the community for domestic use, it's a "win-win" situation.

The concept can be a little intimidating?

Start gradually, keeping your usage of the recovered water to exterior needs for example watering plants, washing your vehicle or even filling a small pond in your back yard.

A filter and tank installed outside your home are all that's required for those needs. If you want to do more such as wash your clothes or use for your bathroom, the installation of an external or buried tank would be preferable. It will use about 10 microns of filtered water inside the home, but nothing prevents you from actually obtaining drinking water.

There are many advantages to rainwater harvesting, including economical benefits to your municipal water bill which is delivered in the form of municipal taxes, where the amount has been increasing for several years and shows no sign of slowing down.

Another advantage of having rainwater readily available is the quality of that water. The absence of limestone which usually causes problems can be avoided which will increase the longevity of household pipes and faucets. A reduction of 40-60% in the use of soap and detergents will help you to avoid the need for water softeners and is less irritating to your skin. Another added benefit is the resale value of your home with the installation of a water recovery system.

Recycling rainwater can also facilitate the safeguarding of the environment, ie.: the reduction of pumping groundwater and water treatment to make it drinkable.

In addition, reclaimed water does not contribute to runoff, increasing the chance of flooding on flat surfaces. Before being stored in the tank the rainwater is gathered in a collector which is protected & filtered against leaves and small animals.

For home use (washing machine, WC), a filter will be installed at the exit of the pump. *"A 10 micron filtered water is suitable for all purposes, except for food".* Joseph Orszagh a Belgian engineer who has devoted his life to the issue of clean drinking water. He states that for the use of drinking water, a treatment system with reverse osmosis or microfiltration gives perfectly pure water from a microbiological point of view.

How to measure your needs?

The recoverable amount of water - and therefore the optimum size of the tank - depends on the surface of the roof and rainfall in the region. On average in Quebec / Ontario, the estimated recovery capacity is $1m^3$ per square meter of roof.

In a region where it rains 750 millimeters of rain per year, with $100m^2$ of roof, you can get 75,000 liters a year. This figure does not vary much from one region to another: the only variable is the annual rainfall.

This quantity covers between half and two thirds of the needs of a family of four. The size of the tank is to be chosen depending on the size of the roof: you need roughly 5000 to 7,000 liters for a roof of $100m^2$. For "home and garden" use, a family of four, (not including drinking water or dishwasher), a tank of 5,000 liters is perfectly adequate. If you choose to use your tank simply for *"garden use"* you can easily get buy with 500 to 1150 liters.

For a complete use, that same size family can conservatively use a 10,000 liter tank. It is better to take a large tank than one that is too small.

Prices range from $ 660.00 to $ 860.00 for the external tanks. There are plastic models UV treated in 5 different colors. For a more comprehensive use, prices start at around $1570.00 for a tank of 2350 liters, and up to $ 1,760.00 for a tank of 10 000 liters.

As per the manufacturer's suggestion, for $1400.00, you can have the kit needed for an installation (filter, collector, siphon overflow, auxiliary water and 75 psi. pump). With all of these elements you will have the same pressurized system as provided by the city.

A filtration system with charcoal and UV lighting will cost between $1,500.00 to $3,000.00 to obtain drinking water. These items are also available in specialty stores.

You can easily install a recovery system designed for outdoor use yourself. However, for bigger installations or those destined for drinking water, you would be better served to have a professional installation by a plumber or specialist in water treatment. The work includes: excavation, installing in-ground, connecting the pump to the water circuit for underground tanks.

Finally, please note that the materials upon which the rainwater flows affect its quality. Conventional shingled roofs would not influence the ph of the rain water, and are therefore safe. Additionally, some materials are ideal, such as zinc roofs of natural materials, tiles, preferably glazed or natural slate, and even wood shingles. These materials go as far as neutralize the natural acidity occurring in rainwater such as concrete or limestone.

For more information, please contact Viking Distribution
at **514.333.1315** or toll free at **1.800.567.2473**

VIKING *The choice of Professionals.*

BUSHMANS