GREEN TECH THE SERIES COLUMN FOR MAY 25, 2016
HEADLINE: SAVING MUNICIPAL WATER; RAIN BARRELS DO WORK

When the press release crossed my desk that the State of Colorado has just approved the use of rain barrels, I was shocked. If there is one state where most of the water is on one side of the mountains and most of the population lives on the other, it's Colorado. On the populous side, drought and water shortages have almost become the norm. I chuckled when they put a restriction of 2 rain barrels per home. Yet, here in Ontario, where they have been acceptable for years, we still only see a small fraction of homes using rain barrels. I started to ask customers why they don't use them and the most common answers were, "They are not easy to use, as the barrel empties the water pressure is poor" and "They are simply ugly!" Very few clients understood the value of rain barrels.

One US study found that 40% of water use in the summer months was for gardening and lawns. On average, according to this study, upwards of 1300 gallons of costly municipal water can be saved annually, per household, using rain barrels on a constant basis. Municipal water accumulates in the soil and has some effect on the roots of plants and vegetables. By contrast, rain water is highly oxygenated, is void of treated water chemicals like fluoride, salt or any inorganic ions. Use of rainwater can reduce this impact and make plants more healthy have a greater tolerance to periods of drought.

Extremes in our climate, including very dry periods, often bring on water restrictions in urban areas. Having a reserve of rain water, especially for your vegetable garden, may make all the difference. The amount of water in a rain barrel will not have a major effect on erosion, as can the effects of a downpour that can pick up soil and move it around in your garden. Other tips include adding rainwater to your compost, keeping it moist and eliminating tap water chemicals. Treated or purified water is sometimes used by pet salon owners, reducing the chemicals when washing your family pet. Washing them outside is often simpler; using the rain water is yet another benefit.

The argument about water pressure is true. You are using a tap and hose at the bottom of the tank and most sprayers simply don't work well once the pressure drops. There is on option called the "RainPerfect" solar powered rain barrel pump system. It can be bought at most garden centers, with prices ranging from $130.00 to $160.00, depending upon the store. This pump will provide up to 13 PSI and pump up to 100 gallons from a single charge. Operating on a solar

rechargeable battery, it can be used on cloudy days for a limited amount of time. The pump is mounted on the top of your rain barrel. A 2.5" hole must be drilled in the top of the barrel before setting up the solar panel to get the best solar gain. The manufacture advises that, if you do not have a top on your barrel, you can set the pump right in the barrel. The only issue I have seen is that the battery has a checkered history and replacement is not readily available. You would likely end up at a specialty battery store if yours failed. Another company with an electric powered rain barrel pump is Algreen. This pump retails in the $50.00 to 60.00 range and pumps upwards of 500 GPH. It also has an adjustable flow control.

The comments that rain barrels are ugly does hold some water for most people! The early models were simply designed to look like a barrel. Today, however, a trip to your local garden center will find numerous kinds, sizes, styles and materials used in the manufacture. The original 55 gallon standard is now gone. Some urn styles hold upwards of 80 to 100 gallons and, as you can see by this week's pictures, styles have really improved to blend in more with a landscaped garden.

I admit to being a fan of these collectors. We actually have two 200 gallon plastic tanks tucked away behind the spa for use in our lawns and vegetable gardens. I was able to consider how the rainwater was collected from the roof when we built the Spa. Not everyone has that benefit, especially if you are dealing with existing downspouts from your roof.

When installing a rain barrel, probably the most important consideration is location; from which downspout you will derive the most rainwater. I have seen installation where the homeowner had an eavestrough contractor redirect the downspouts around the corner of the home and then "Y" them together to get the full benefit of the rain water coming off the roof. Every rain barrel must have an overflow pipe, since there will be times when they will fill up. The largest consideration is to have this overflow pipe directed far enough away from the home that this concentrated flow does not end up running against your foundation. This overflow pipe should be located an inch or two from the top of the barrel so the excess rainwater does not simply overflow the barrel. The last tip, these barrels, when full, weigh a lot, so they must be positioned on ground that is both flat and solid.

We are strong believers in rainwater recycling; most of ours goes to our vegetable gardens where, come fall, we enjoy homegrown tomatoes, cucumbers and other vegetables.

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