Water for Tomorrow

Your water. Your community. Your choice.

In the Home

The average daily domestic water use (per capita) in Canada is 343 litres (Environment Canada), which is the second highest in the world. Approximately 65 per cent of water consumption in the home occurs in the bathroom, mainly through toilet flushing and bathing. Water use in the kitchen accounts for approximately 10 per cent of the consumption, with laundry responsible for approximately 20 per cent of the remaining water used (Environment Canada, Water Efficiency Master Plan).

By updating fixtures and changing some habits, it is possible to reduce a household's water use by more than 40 per cent without affecting lifestyle (Environment Canada).

To cut down on water use, simply follow the 3 Rs:

Reduce	water use by changing a few habits
Repair	leaks promptly
Retrofit	fixtures to today's water-efficient performance standards

York Region

Toilets

If your home was built before 1996 and you have not replaced your toilet, there is a good chance that your toilet is using 13 to 20 litres of water every time you flush. On average, a person flushes the toilet five times each day, which means that approximately 65 to 100 litres of water per person per day is used just flushing these older toilets. Make sure your toilet uses the least amount of water possible and is in excellent working condition.

Reduce

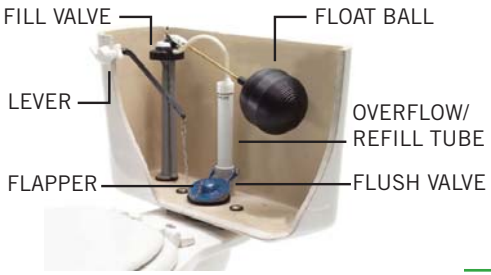
Do not use the toilet as a means to dispose of garbage. Use the green bin and garbage can for used tissues and dental floss; not only will this save water from unnecessary flushes, dental floss and excessive facial tissues are not good for our sewage systems. Floss can get wrapped around our pump propellers and excessive facial tissues can cause clogging due to their thickness and additives (like lotion).

Repair

It is estimated that 25 per cent of toilets in Canada are leaking at any given time (Environment Canada). A leaking toilet tank can waste up to 200,000 litres of water per year, which could add up to a lot of money on your water bill (Natural Resources Canada, Environment Canada). Not all toilet leaks may be obvious. A toilet tank leak differs from other leaks as it is not easily seen or heard. To check if your toilet tank is leaking, put a drop or two of food colouring into the tank. If the coloured water becomes visible in the bowl after 15 minutes without flushing, then there is a leak. Toilet tank leaks can occur for a number of reasons:

- Flush valve or valve seal is worn, letting water escape from the tank
- Inlet valve is worn and does not close completely
- Float mechanism needs repair or replacement

Most toilet tank leaks are easy to fix using household tools and proper replacement parts. If your toilet is leaking, consult a reputable repair guide or contact a professional for service. If you choose to do the work yourself, be sure to choose parts compatible with your toilet fixture's make and model.



To keep toilets in good working order, avoid disinfectants and dissolving cleaners that are placed in the toilet tank as they can corrode the mechanical parts.

Retrofit

It is possible to update older tanks in good condition to low-flow look-a-likes. This can be done by installing a water-saving device inside the tank to act as a dam. One way to do this is by replacing the flush valve with an early-closing flapper. This device closes the valve when the tank has been only partially emptied – saving water with each flush. An alternate option is to use a plastic bag or bottle filled with water suspended inside the toilet tank. It will displace the water so less water is needed to fill the tank. If you choose to do this, be sure it does not interfere with the internal mechanisms of the toilet.

The most effective way to reduce your water usage is to replace an existing high volume toilet with a high efficiency toilet (HET) or a dual flush toilet. These models provide the same flush power while using a great deal less water. Changing a 13 litre toilet to a 4.8 litre water-efficient toilet will save an estimated 41 litres per person per day. Dual flush toilets use a maximum of six litres per flush for solids and a half flush of three litres for liquids, resulting in a savings of 35 to 50 litres of water per person per day. These water-efficient toilets can cut indoor water use by about 30 per cent if you have not replaced your toilet prior to 1996 and are still currently using a high-volume toilet.

To encourage residents to switch to a water-efficient toilet, *Water for Tomorrow* offers financial rebates on the purchase of eligible toilets for York Region residents. Single family homeowners in York Region who replace their toilet with a *WaterSense®* labelled, water-efficient toilet can receive a rebate. Please consult the list of eligible models and review the terms and conditions at www.waterfortomorrow.ca prior to purchase. Only those models listed qualify for the rebate.

Showers

Reduce

If you replaced your showerhead before 1996 and you haven't made any upgrades, your shower could be using up to 20 litres of water per minute. For a 10 minute shower, this means you are using 200 litres of water.

The first step to reducing the amount of water you use while showering is to determine the flow rate of your showerhead. Simply collect the water coming out of your shower in a container for 10 seconds. Measure the volume of water and multiply by six. This is how much water your showerhead is using every minute. If this value is higher than 9.5 litres, you should consider replacing your fixture. Regardless of the flow rate of your showerhead, everyone should consider ways to reduce the amount of water used in the shower.

You can save water and energy by taking quick showers instead of baths. That small change could reduce your water consumption by about 50 per cent, depending on the type of showerhead used. For example, a five-minute shower with a 9.5 litre per minute showerhead uses about 47.5 litres of water, compared to about 100 litres for the average half-filled bathtub (Natural Resources Canada). Reducing your time in the shower a little each day will make a big difference in the amount of water you save. See if you can reduce your shower time by a few minutes.

Repair

Leaking showerheads or dripping bathtub faucets are generally a sign that a part needs to be replaced. With the proper tools and knowledge, repairs in this area can be done on your own. If your showerhead or faucets are leaking, consult a reputable repair guide or contact a professional for service.

Amount of water (litres) used to shower

Shower Time (minutes)	**Showerhead Rate of Flow** (litres per minute)			
	5.7	**7.57**	**9.5**	**20**
5	28.5	37.85	47.5	100
7	69.9	52.99	66.5	140
10	57.0	75.57	95.0	200
15	85.5	113.55	142.5	300

If you are going to try to fix the showerhead or bathtub faucet on your own, make sure you have consulted a reputable repair guide and remember to turn off the water supply so that you do not end up wasting more water than you are trying to save. In order to prevent any screws or small parts from falling down the drain, make sure to cover it with a stopper or a towel before you begin.

Retrofit

Showers are one area where it is possible to obtain major water-savings with a simple fixture upgrade. Low-flow showerheads, using 7.57 litres per minute, use up to 60 per cent less water than a standard showerhead while still retaining strong water pressure. These showerheads also reduce hot water use by 15 per cent, resulting in a savings on your energy bill (Natural Resources Canada).

Bath toys turn bathtime into fun time! Save water by filling the tub only partially full and use the same water to bathe your child and play.

Faucets

Reduce

Water flowing from your faucet accounts for 15 per cent of the entire household water use (US EPA). With this in mind, it is important that saving water from your faucets be a high priority. Changing a few simple habits can save a large amount of water.

Tips to help reduce water usage:

- Turn the tap off while you brush your teeth; you could save as much as 11,350 litres of water per year (US EPA)
- Keep a cold jug of water in the fridge or use a few ice cubes to cool your water instead of running the tap until the water is cold
- Fill the sink rather than letting the water run while shaving, washing vegetables or cleaning dishes by hand
- Use the spray option of an aerator for rinsing dishes and washing your hands; try to save the full stream of water for filling containers
- Thaw food in the refrigerator instead of using water to defrost it

To measure the flow rate of your faucet, run your tap for five seconds while capturing the water in a container. Measure the volume of water and multiply by 12. This is how much water your faucet is using every minute. If your faucet uses more than nine litres of water per minute, you should consider ways to reduce the flow rate of your faucet.

Repair

A leaking faucet that drips at a rate of one drop per second can waste up to 10,000 litres of water a year (Environment Canada). Most leaking taps can be fixed with simple tools and the proper knowledge.

If your faucet is leaking, consult a reputable repair guide, your owner's manual or contact a professional for service.

Retrofit

If your bathroom or kitchen is undergoing a renovation, consider replacing your faucet with a low-flow faucet. *WaterSense®* labelled faucets can reduce water flow by 30 per cent or more, without sacrificing performance (US EPA). This change can save approximately 1,900 litres of water each year (US EPA). If you are not in the market for a new faucet, consider adding an aerator to your existing fixture, which could save you up to 3.5 litres of water per minute.

PROBLEM: Brushing your teeth + letting the water run
= 16 litres of water wasted
SOLUTION: Turn off the tap while you brush
= water saved!

Dishwashers

Reduce

Water use in the kitchen accounts for approximately 10 per cent of the entire domestic water consumption (Environment Canada). Although you might think that washing your dishes by hand could help to save you water, it is shown that when used properly an efficient dishwasher uses less water (Natural Resources Canada).

Tips to reduce water consumption when using your dishwasher:

- Do not pre-rinse dishes before placing them in the dishwasher, instead scrape food into your green bin
- Only run the dishwasher when there is a full load
- Ensure that all dishes are angled so the water can reach them to avoid having to rewash them

If you prefer to do dishes by hand, fill the second sink with clean water for rinsing. Letting the tap run while rinsing wastes approximately nine litres of water per minute, depending on the type of faucet you have. To find out how to measure the flow rate of your faucet please see the faucet section of this guide.

Repair

When it comes to fixing larger appliances like a dishwasher, it is not as simple as grabbing a household tool and replacing a washer. The good news, however, is that it is often much cheaper to have your dishwasher fixed rather than replaced.

If your dishwasher is leaking or overfilling, the first step to fixing the problem is to make sure the sprayer arms, strainers and water pump are clean. Please consult your owner's manual for information on how to properly clean your dishwasher.

Dishwasher hoses can also have leaks. Water comes and goes through piping and flexible hosing that is often discharged to the drain under the kitchen sink. Prolonged exposure to hot water may cause cracks. Leaks in the hosing can be fixed by replacing the entire length of the hose. If the hoses are intact, try tightening the fittings anywhere that the hosing and piping connect to see if that helps. If the leak persists, then you will likely need to get a professional to help solve the problem.

Retrofit

If you are in the market for a new dishwasher, choose an ENERGY STAR® model. ENERGY STAR® qualified dishwashers are required to use less than 22 litres of water per cycle and must consume nine per cent less energy than the minimum Government of Canada energy standard (Natural Resources Canada).

When buying a new dishwasher, consider purchasing a water-saving model. Newer models can cut water use by 25 per cent and are no more expensive than non-efficient models.

Clothes Washers

Reduce

Clothes washers can account for an estimated 20 per cent of household water consumption (Environment Canada). On average, a top loading clothes washer can use between 150 and 250 litres of water per load (Environment Canada).

Tips to increase water-efficiency when washing clothes:

- Wait until you have a full load of laundry before you wash your clothes
- Use the correct setting for large, medium or small loads
- Pre-treat stains to avoid rewashing

It is estimated that 15 per cent of your hydro or gas bill is due to the energy required for hot water heating (Natural Resources Canada). Using less water per laundry load requires less hot water, which will reduce both your water and energy bills. Using warm water instead of hot water to wash your clothes and rinsing in cold water will not save any water, but you will use approximately 50 per cent less energy in comparison (Natural Resources Canada). If you wash and rinse in cold water you could reduce your energy consumption by 93 per cent per load (Natural Resources Canada).

Repair

If your clothes washer is leaking, consult your owner's manual(s) or contact a professional for service.

Retrofit

Water-efficient clothes washers reduce water consumption by 35 to 50 per cent when compared to older non-efficient models. The most common water-efficient clothes washer is the ENERGY STAR® qualified front loading model. Conventional top-loading clothes washers need to fill the basin up to the top to ensure that all clothes get wet, but front loading machines only need to fill one-third of the basin. Clothes then get lifted up and plunged into the water, similar to the motion of a dryer, using gravity instead of an agitator. The rotating motion of the front loading model ensures all of the clothes get a thorough cleaning. The machines are designed to spin the clothes so well that the drying time can be cut in half. This decrease can save an estimated 30 per cent on your energy bill each year when compared to the standard top-loading clothes washer models (ENERGY STAR®).

Faucets in the laundry room typically have a higher flow rate than other household faucets. To reduce the amount of water coming from the tap, consider installing an aerator on your laundry tub faucet. Aerators are inexpensive and can save up to 3.5 litres of water per minute.

Almost 93 percent of the energy consumed by washing machines is used to heat the water. Less water means less energy and less detergent, resulting in a lower cost to you (and the environment) per load.

Humidifiers

A residential humidifier increases the natural level of moisture of indoor air, improving thermal comfort, creating a healthier indoor environment and protecting natural materials from drying out.

Reduce

To ensure that no water is being wasted, be sure to turn off your humidifier when the heating season is over.

Repair

Research has shown that during the heating season, an inefficient, flow-through furnace-mounted humidifier can waste as much as 200 litres of water each day or approximately 30,000 litres each year (Water-Efficient, Furnace-Mount, Whole Home Humidifiers Final Report, Veritec Consulting Inc.). If you suspect that your humidifier is leaking, consult your owner's manual or contact a professional for service.

Retrofit

As an incentive to switch to a water-efficient humidifier, *Water for Tomorrow* offers two-tiered humidifier rebates for York Region residents. Single-family homeowners in York Region purchasing an eligible, water-efficient humidifier can receive a rebate. Please consult the list of eligible models and review the terms and conditions at www.waterfortomorrow.ca prior to purchase. Only those models on the list qualify for the rebate.

Humidity in your home should be between 30 and 50 per cent in the winter for comfort and health. You can measure the humidity in your house with a hygrometer.

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AURORA

Town of East Gwillimbury

TOWN OF GEORGINA

KING
INCORPORATED 1850

MARKHAM

Newmarket

Richmond Hill

VAUGHAN

TOWN OF WHITCHURCH-STOUFFVILLE

For more information, please visit
www.waterfortomorrow.ca or call **1-888-967-5426**

York Region