

Water Conservation

Water is the most valuable resource on earth. It's the principal substance that separates our planet from all others and makes life possible. That's why it's so important to know your water conservation facts. The availability of water impacts every part of our lives. When you know and fully understand your water conservation facts, you won't take water for granted. While salt water is quite abundant on our planet, fresh water sources become more depleted every year as ever-greater demands are placed upon them.

In temperatures like one in Tecumseh, a person can live without food for three weeks or more, but without water for only five to seven days. Careless use of our water resources is the surest way to bring about a future water crisis. The place for each of us to start saving is in our home, and most people are surprised by the impact they can make there. There are hundreds of water conservation techniques that you can use to save around the house, from installing a low-flow showerhead to sweeping the driveway instead of hosing it off.

We at Town of Tecumseh would like to contribute and make efforts to protect our environment and one of our initiatives is to educate people about water conservation and develop a new consciousness amongst the residents of Town of Tecumseh.

If you make a mindset for water conservation, you'll know how simple habits can make saving easy. Turning the water off while brushing your teeth can save nearly thousands of litres a year for an average family household. Waiting until you have a full load to wash clothes can save thousands of litres of water every month. With small lifestyle changes we can have a huge effect on our current and future water resources.

Leak Facts

(Taken from American Leak Detection Company ®)

A 1/8 inch hole in a metal pipe, at 40 psi, leaks 9500 litres of water in 24 hours.

A leak the size of a pinhead can waste 1,300,000 litres per year, enough to fill 12,000 bathtubs to the overflow mark.

A leaking toilet can use 340,000 litres of water in 30 days.

A dripping faucet/hose bib can lose up to 680 litres a month or 8,160 litres per year.

Approximately 1 in every 20 pools has a leak.

A typical toilet leak at today's rate can add \$400 + sewage charge to a single water bill.

One trip through a car wash uses 570 litres of drinking water.

Collecting water for gardening from the hot water faucet while waiting for hot water saves about 950 Litres of water a month.

Using a broom to clean the sidewalk instead of a hose saves 570 litres of water.

Using a pool cover prevents about 3,750 litres per month from evaporating.

Facts about water use and conservation

(Taken from Rapid City Water Division)

Water Conservation provides benefits in every household by saving money in three different ways:

1. Water Conservation will lower water bills.
2. Water Conservation in the winter will lower your annual sewer charge.
3. Conservation of water saves you energy costs for heating that water.

A Town of Tecumseh family of four uses up to **1000 litres** of water in the home per day by...

Tap running for two minutes: 12 - 20 litres.

Flushing toilet once: 20 – 27 litres

Showering, five minutes: 75 – 135 litres. Full bathtub: 230 litres

Automatic dishwasher: 40 – 75 litres

- Water the lawn and garden at dusk when the day is cool, watering during the heat of the day can account for up to 60% evaporation loss.
- Mulch the garden to retain moisture in the soil.
- Use a bucket of suds to wash the car and only rinse with the hose using a nozzle.
- Sweep walks and driveways instead of hosing them.

Water Efficient Fixtures Can Cut Household Water Use by 30%

(The following data is for one individual)

The average person living in a typical single-family home without water-conserving fixtures uses 280.05 litres of water each day around the home. Here is how it breaks down:			By installing more efficient water fixtures and regularly checking for leaks, households can reduce daily per capita water use by 30% to about 83.35 litres per day. This saves up to \$100 each year. Here's how water use breaks down for households using conservation measures:	
Type of Use	Litres per Capita per Day	Percentage of Total Daily Use	Litres per Capita per Day	Percentage of Total Daily Use
Showers	50	17.85%	42	21.35%
Clothes Washers	63.6	22.71%	45	22.88%
Toilets	73	26.07%	35.2	17.90%
Dishwashers	3.8	1.36%	3.8	1.93%
Baths	4.9	1.75%	4.9	2.49%
Leaks	35.6	12.71%	17.8	9.05%
Faucets	43.15	15.41%	42	21.35%
Other Domestic Uses	6	2.14%	6	3.05%
Total	280.05	100%	196.7	100%

Outdoor Usage

(Taken from Water Use It Wisely ®, USA)

Did you know that up to 50% of the water used in the summer is for your lawn?

The tips for water conservation in outdoor uses are as follows

- Buy a rain gauge to track how much rain or irrigation your yard receives.
- Check your sprinkler system frequently and adjust sprinklers so only your lawn is watered and not the house, sidewalk, or street.
- Avoid planting turf in areas that are hard to water such as steep inclines and isolated strips along sidewalks and driveways.
- Install covers on pools and spas and check for leaks around your pumps.
- Plant during the spring or fall when the watering requirements are lower.
- Check your water meter and bill to track your water usage.
- Minimize evaporation by watering during the early morning hours, when temperatures are cooler and winds are lighter.
- Use a layer of organic mulch around plants to reduce evaporation and save thousands of litres of water a year.
- Use a broom instead of a hose to clean your driveway or sidewalk and save 570 litres of water every time.
- Divide your watering cycle into shorter periods to reduce runoff and allow for better absorption every time you water.
- We're more likely to notice leaky faucets indoors, but don't forget to check outdoor faucets, pipes, and hoses for leaks.
- Periodically check your pool for leaks if you have an automatic refilling device.
- Only water your lawn when needed. You can tell this by simply walking across your lawn. If you leave footprints, it's time to water.
- Adjust your lawn mower to a higher setting. Longer grass shades root systems and holds soil moisture better than a closely clipped lawn.
- Use the sprinkler for larger areas of grass. Water small patches by hand to avoid waste.
- Use porous materials for walkways and patios to keep water in your yard and prevent wasteful runoff.
- Direct downspouts and other runoff towards shrubs and trees, or collect and use for your garden.
- Water your summer lawns once every three days and your winter lawn once every five days.
- Install a rain shut-off device on your automatic sprinklers to eliminate unnecessary watering.
- Choose a water-efficient drip irrigation system for trees, shrubs and flowers. Watering at the roots is very effective, be careful not to over water.
- Remember to check your sprinkler system valves periodically for leaks and keep the heads in good shape.
- Don't water your lawn on windy days.
- Water your plants deeply but less frequently to create healthier and stronger landscapes.
- Make sure you know where your master water shut-off valve is located. This could save litres of water and damage to your home if a pipe were to burst.
- When watering grass on steep slopes, use a soaker hose to prevent wasteful runoff.
- Group plants with the same watering needs together to get the most out of your watering time
- Avoid installing ornamental water features and fountains that spray water into the air. Trickling or cascading fountains lose less water to evaporation.

- Teach your family how to shut off your automatic watering systems. Turn sprinklers off if the system is malfunctioning or when a storm is approaching.
- Set a kitchen timer when watering your lawn or garden with a hose.
- Use a grease pencil to mark the water level of your pool at the skimmer. Check the mark 24 hours later. Your pool should lose no more than 1/4 inch each day.
- Use a screwdriver as a soil probe to test soil moisture. If it goes in easily, don't water. Proper lawn watering can save thousands of litres of water annually.
- Insulate hot water pipes so you don't have to run as much water to get hot water to the faucet.
- Use a hose nozzle and turn off the water while you wash your car and save hundreds litres

Indoor Water Use

(Taken from LCRA, USA)

Bathroom

Bathroom use accounts for about 75 percent of the water used inside a typical Town of Tecumseh home.

- Check regularly for any leaks in your toilet, faucets and water hose bibs and fix them. *Water saved: up to 750 litres per day.*
- Install a low-flow showerhead. *Water saved: about 7.5 litres per minute.*
- Replace older, larger-use toilets with the newer higher efficiency toilets. *Water saved: 2 to 20 litres per flush.*
- Take short showers and save the baths for special occasions. *Water saved: 8 to 20 litres per minute.*

Kitchen

About 8 percent of in-home water use takes place in the kitchen.

- Wash only full loads in the dishwasher. An efficient dishwasher usually uses much less water than washing dishes by hand.
- Install a low-flow faucet aerator, which can cut water use in half. *Water saved: 4 to 8 litres per minute.*
- When buying a new dishwasher, consider purchasing a water-saving model. (New models use up to 25 percent less water than older ones.) *Water saved: 12 litres per load.*

Around the house

- Wash only full loads in the clothes washer. Washing small loads uses over twice as much water per pound of laundry.
- When buying a new clothes washer, consider purchasing a water-saving model. *Water saved: up to 150 litres per load.*
- Insulate hot water pipes where possible to avoid long delays (and wasted water) while waiting for the water to "run hot." When building a new home, keep the distance short between the hot water heater and showers and other places that hot water is used.

Leaks

(Taken from Saving Water Partnerships ®)

This information will help you identify and locate water leaks in your home or business. Repairing water leaks is a great way to reduce the use of water that's just being wasted.

It's Only a Small Drip...Right?

Slow drips of water can add up quickly. A toilet that “keeps running” after you flush or a sink that drips after it is turned off can waste thousands of litres of water a year. If the drip is hot water, you are paying for wasted energy too. Fix leaks as soon as you find them. They won't go away on their own.

A “Running” Toilet Leak

Toilet leaks can range from small to large, constant or random. Many are even silent. Even a small, silent leak can easily waste \$50 per year in water and sewer costs. Large leaks can waste much more. Fortunately, most toilet leaks are relatively easy to fix. In a properly functioning toilet, no water should move from the tank to the bowl, unless the toilet is being flushed. A leaking toilet loses water from the tank to the bowl without being flushed.

Checking for a leaky toilet:

1. Remove the tank lid. (Don't worry; this water is clean until it enters the bowl.)
 2. Add some food coloring or a dye tablet to turn the water a different color. Put the tank lid back on.
 3. After about 30 minutes, look in the bowl. If you see colored water, you have a leak. If the water is clear, water is not leaking from the tank to the bowl.
- If you do have a leak, there are a number of possible causes. If you remove the tank lid and can easily identify the cause, correct the problem and try your leak test again. Consider that “fixes” such as bending the float back to shape, or adjusting how the rubber flapper falls, often end up failing soon afterward. In most cases, you will simply want to replace the toilet flapper (the rubber thing at the bottom of the tank that keeps water in the tank) and/or the filling mechanism.

Leaking Faucets

A leaking faucet is frequently the result of a bad rubber washer. The washer on a sink is typically located under the handle. A washer is relatively easy to replace, if you have the right tools. It does require shutting off the water under the faucet, and removing the handle. Check local home centers or the Internet (keywords “repairing leaky faucets”) for instructions on how to repair faucet leaks. If you don't feel comfortable doing the repair yourself, a plumber may be your best option. Remember, even if you have to pay a plumber to fix the leak, you will end up saving money in the long run.

Checking Your Meter for Mysterious Water Leaks

1. Locate the water meter. It should be near the street under a metal, plastic, or concrete lid. The water meter is your indicator of water use. When water is not being used, nothing on the meter should be moving. Water meters have numbers or spinning dials, which record usage. Most meters also have a small “leak detector” arrow, which senses the lower volumes of water common with leaks.
2. Turn off every water-using item inside and outside the home or building.

3. Check the meter. Watch the meter for a minute or more. If the leak detector dial or arrow is moving, you have a leak. In some cases, it may move back and forth very slightly, as water pressure in the street fluctuates. If it moves forward continually, even at a slow rate, you have a leak. You may also want to check the main meter reading (numbers) at a set time, and then come back an hour later, after you know no water has been used. If it has a higher reading, there is a leak. If you suspect a toilet may be the culprit, turn the water off from the toilet shut-off valve (on the wall, under the toilet) and check the meter again.

4. If you still can't locate the leak, find the shut-off valve for your home or building. It can be indoors or outdoors, but should be near the location where the water line enters the building. If you don't know where the shut-off valve is, follow a straight line from the water meter to your building, and look for it. If you have a very large building, it is possible you have more than one main shut-off valve.

5. Confirm the location of the leak. If the main shut-off is closed and the meter has stopped, the leak is not between the meter and the building. If the meter still runs with the main water shut off, your leak is between the meter and the building. Since outdoor leaks are relatively rare, be sure to double-check that all indoor fixtures and outdoor hose and irrigation lines are off. Call a plumber to fix underground outdoor leaks.

Have a High Bill, But Don't See a Leak?

Sometimes you may have a leak and not even know it. The best indication will be a high bill compared to past use or compared to how much water your neighbors may be using. There are often two reasons for mysterious water leaks: a leaking toilet or a leak between the meter and the house. A leaking toilet is more likely to be the cause. Outdoor leaks are rare. The first step is to determine whether you actually have a leak, or are just using more water than you expected. Many customers are surprised how much water can be used for activities such as watering the lawn.

Leaking Pipes

Leaking pipes can be a major source for water wastage. If you have a water leak along a pipe and do not have the knowledge to fix it, call a plumber.