



Water Efficiency

AN AT-HOME GUIDE



About Us

According to the United Nations Educational Scientific and Cultural Organization, “To ensure our basic needs, we all need 20 to 50 litres of water free from harmful contaminants each and every day” (UNESCO.ORG). In The Regional Municipality of York every resident uses an average of 200 litres of water each day.

Although excess water usage is a problem throughout our entire country, you’ve told us that you want York Region communities to be sustainable. To this end, we are dedicated to protecting Lake Simcoe, Lake Ontario and our groundwater sources by providing the information and tools to use less water. There are many ways we can do this efficiently at home and in the garden without sacrificing our quality of life. These changes will also contribute to healthy water bodies and provide future generations with clean sources of drinking water.

Water conservation also offers the potential for energy and greenhouse gas savings, because water use involves significant energy. Large amounts of energy are required to pump, treat and distribute water as well as to collect and treat wastewater. By reducing the demand on municipal water and wastewater treatment facilities through water-efficiency and conservation, we will directly reduce energy use and protect our many streams, rivers and lakes. This energy savings will also result in a reduction in your energy bill, as approximately 15 per cent of the total energy consumed in the home is used to heat the water in your hot water tank.

In 1998, York Region initiated *Water for Tomorrow*, a comprehensive water-efficiency and conservation program designed to promote the importance of water conservation through education and practical tools. Since its inception, *Water for Tomorrow* has helped York Region save an average of 26 million litres of water each day. That’s enough water to provide for a community of 126,000 people.

York Region released the *Long Term Water Conservation Strategy* in 2011. This 40-year strategy identifies new and innovative approaches to water-efficiency and conservation and builds on the success of the *Water for Tomorrow* program.

With numerous awards to our credit and ever-evolving programs, we look forward to continuing to assist our residents with their water conservation efforts.

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

Table of Contents

IN THE HOME

TOILETS	6
SHOWERS	9
FAUCETS	12
DISHWASHERS	14
CLOTHES WASHERS	16
HUMIDIFIERS	18

IN THE GARDEN

OUTDOOR SPACE	22
LANDSCAPE	25
CARE	30
LAWN MAINTENANCE	34
GARDEN MAINTENANCE	37



In the Home

The average daily domestic water use (per capita) in Canada is 251 litres (Environment Canada) which is one of the 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

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 for used tissues and the garbage can for 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).

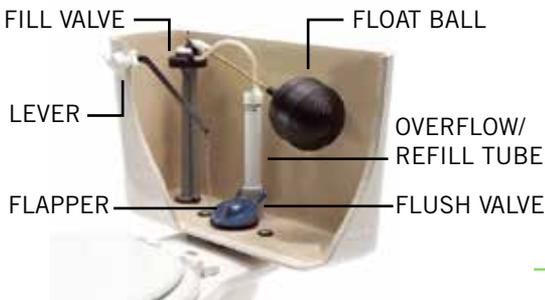


Repair

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-alikes. 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.

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.

Fact or Fiction? Low flow and high-efficiency toilets do not work as well as 13 litre toilets.

Fiction. It is a common myth that water-efficient toilets require double flushing. While this may have been the case when they were first developed, today's high-efficiency toilets flushing at 4.8 litres work extremely well, without the need for double flushing.





Showers

Reduce

If you installed 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.

Water Efficiency AN AT-HOME GUIDE



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	39.9	52.99	66.5	140
10	57.0	75.7	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 and grease 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).

Putting fats, oils and grease (FOG) down the drain can clog the pipes that take wastewater from your home. This can cause untreated sewage to back up and flood your basement. Be sure to cool FOG and then scrape it into your green bin. Learn more at york.ca/fog

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

When replacing or installing a new furnace-mounted humidifier, choose a model sending 50 litres of water or less to drain each day. This will ensure you're using the least amount of water possible.



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.





In the Garden

Your backyard is an extension of your home. Outdoor living is a trendy and chic way to increase living space that many homeowners are embracing. Although this can increase your living space, it is important to consider your water use. Municipal water consumption can more than double in the summer due to high outdoor water usage. The following section provides suggestions on how to reduce the amount of water needed for your outdoor space.

Designing a Landscape is More Than Planting

Creating a new yard starts with choosing a good design to fit your landscape. When considering the type of landscape you should create, ask yourself:

- How do I want to use my outdoor space?
- What type of soil do I have?
- What are the natural conditions of my property?
- How much time and effort would I like to commit to my lawn and garden?
- What is the most practical groundcover for my landscape?
- What kind of plants should I use?
- What can I do with the shaded areas of my property?
- Can container gardening enhance my property?
- How do I care for my lawn and garden?
- Should I remove bugs from my landscape?

Outdoor Space

How do I want to use my outdoor space?

There are many options when it comes to designing your outdoor space. Think about who will be using the space (kids, teens, pets, etc.) and what you would like the function of the space to be - play area, dining area, entertaining, flower garden, vegetable garden or all of the above.

Once you have an idea of how you would like to use the space, draw out a quick sketch of what you would like your property to look like. Once you have a sketch of what you want to do with your yard, you can start to look at the details that will go into your future landscape.



What type of soil do I have?

Most soils in York Region are either sandy or clay, while some small areas have loamy soil. To determine what soil type you have, try this quick test. Pick up a handful of moist but not wet soil and squeeze it. Open your hand, if the soil stays together and retains its shape you have clay soil. If the soil falls apart when you open your hand, you have sandy soil. If the soil stays together when you open your hand but then starts to slowly fall apart, you have loamy soil.

Clay soils have a lot of nutrients but are very slow to drain. Sandy soils do not hold nutrients or moisture very well. Loamy soils drain at a moderate rate and retain nutrients. If you have clay or sandy soils there are ways to improve your soil quality.

A good soil base is important for any plant to survive. If you have clay or sandy soil, the best way to improve it is to add organic matter such as compost. Mixing in compost prior to planting provides plants with the nutrients required to thrive while improving the soil's ability to hold an adequate amount of moisture. For an established garden, spread two to three centimetres of compost on top of the soil and under the mulch in the spring or fall. Earthworms and other garden critters will do the work of mixing the compost into your soil, saving you time and reducing the risk of damaging plant roots.



Need inspiration? Visit your local library or browse through some gardening magazines for ideas. If the plants used in the magazines are not water-efficient, they can be easily substituted with those in our Water Efficient Plant Guide.

What are the natural conditions of my property?

Before you begin selecting plants and groundcover, it is important to monitor the natural condition of your property so you will know what type of groundcover and/or plants you should be using. Some elements to familiarize yourself with include:

- The amount of sunlight your property receives and at what time of day
- Areas of shade
- Slope
- Moist or dry areas

How much time and effort would I like to commit to my lawn and garden?

Some people enjoy spending hours working on their lawns and gardens, while others have little time to spend there. Although there is no such thing as a no-maintenance landscape, with proper planning, you can create a low-maintenance landscape.

Choosing plants to match the conditions of your property will make things much easier for your landscape maintenance. Your plants will also be stronger and naturally able to resist pests and disease. Water-efficient landscapes are naturally low-maintenance.

Using a pool cover regularly can reduce water loss due to evaporation by approximately 50 per cent of your total pool volume. Also, remember to inspect your pool equipment and hoses for leaks on a regular basis.





Landscape

What is the most practical groundcover for my landscape?

Now that you are aware of the natural conditions of your property, you can select the appropriate groundcover to match the conditions of the location to be planted. The typical groundcover we use is turf, or grass. If you have areas where grass does not grow well, or if you want a lower maintenance groundcover, then consider some of the many alternatives to grass.

Selecting the right groundcover

More and more gardeners are turning to groundcover alternatives to grass. Groundcover alternatives are plants that are low-lying and will spread quickly to cover large areas. These alternative groundcovers need little if any maintenance once established, will grow in areas that grass will not and are inexpensive to maintain.



There are a wide variety of groundcovers including perennial plants, shrubs, evergreen trees, ornamental grasses, ferns and herbs. Many groundcovers are drought-tolerant and thrive in exposed, dry locations, while others tolerate wet soils and deep shade. For locations where little else will grow or access is difficult, plant one or more groundcovers and the area will be transformed in very little time.

Selecting grass seed

If you decide that grass is the most appropriate groundcover for your property, there are a few things you should consider to help create a more robust lawn. When purchasing seed, look for a high quality blend for 'Northern Climate' which is virtually weed free. By using a blend of seeds, you are introducing a variety of grass types into your lawn to create a healthier and more resilient turf area. Generally, a mix of Kentucky Blue Grass, Perennial Rye Grasses and fescues are a good mix for your lawn. You may also consider White Clover (20 – 25 per cent in the mix), which is a great addition to a grass seed. It stays green during hot, dry weather, requires little mowing, and the roots of the plants produce nitrogen in the soil.

Before you buy, read the product label and look for Canada Certified No. 1 seed. This provides assurances about the purity and per cent germination rates.



Did you know? Washing your car with the hose can use approximately 400 litres of water per wash. The best way to reduce your water consumption is to go to a commercial car wash. This will not only reduce your water usage but will also prevent chemicals and pollutants from entering our storm sewers because car washes discharge to the sanitary sewer instead of the storm sewer. If you must wash your car at home, try using a bucket and sponge instead of running the hose - this could save you approximately 300 litres of water.

What kind of plants should I use?

Similar to grass and groundcover selection, designing a landscape includes choosing the appropriate plants for your specific garden. By selecting plants suitable to the conditions of the site, very little irrigation will be necessary. For help selecting the appropriate plants for your needs, please visit your local garden centre or download our Water Efficient Plant Guide at york.ca/waterfortomorrow



What can I do with the shaded areas of my property?

Shade gardens offer a cool place away from the heat of summer. Similar to the other areas of your property, evaluate the natural conditions of the shaded area and choose your plants according to the proper conditions.

Below are some tips to help in your plant selection:

- If the area is mainly shaded but gets more than four hours of sun each day, look for plants that thrive in part-shade or part-sun
- If the area receives dappled sun throughout the day, look for water-efficient plants that do best in full shade conditions
- If the area gets little to no sun at all, you may want to consider an alternative to plants such as a decorative mulch, a sitting area or some interesting garden artwork
- Plants such as Hostas and Heuchera (Coral Bells) come in many different varieties with an assortment of foliage that can add constant colour to shaded areas

Can container gardening enhance my property?

Container planting is a great way to add colour and beauty to patios, decks, steps and walkways. While window boxes, hanging baskets and other planters are charming accents for homes, daily watering is often required to keep plants healthy and blooming. It is possible to create beautiful container gardens that do not require daily watering by choosing from a large selection of water-efficient annuals, perennials, herbs and ornamental grasses.

Water wise annuals for container gardens

African Daisies, Cornflowers, Golden Fleece, Portulaca and California Poppies can provide a colour-packed display throughout the season and require little water and maintenance. For a complete list of water-efficient annuals, download our Water Efficient Plant Guide at york.ca/waterfortomorrow

Herbs and grasses add visual interest to planters

Many herbs have flowers, are drought-tolerant and thrive in average to poor soil. Combine herbs, annuals or perennials in one container or try a collection of herb-filled planters. Many herbs have pleasing foliage and aromas, so once the flowers are spent you can enjoy the greenery – or snip a bit to add to your cooking or salads.

For a dramatic statement, consider using ornamental grasses in your containers. Grouped or individually, grasses add architectural interest to any planter arrangement. Before purchasing ornamental grasses check for their height at maturity as some grasses grow very tall.

Be sure to check our Water Efficient Plant Guide at york.ca/waterfortomorrow before buying ornamental grasses. Try to choose one of the plants from the guide to avoid planting an invasive species.



Tips for water-hungry containers

To reduce water use and keep your plants happy and healthy throughout the season, try the following:

- Line porous containers including terra cotta, cement pots and fibre-lined wire baskets with plastic bags to reduce moisture loss
- Apply five centimetres of mulch on top of the soil to help keep the soil cool and reduce moisture loss
- If you are going to be away for a few days, set pots in a shallow container of water and move them to a location that is shaded during the hottest part of the day
- Group containers close together so plants will help shade each other
- Use a narrow spout watering can or hose attachment to reduce spillage
- Where possible, set containers in a deep base and water from the bottom to encourage roots to move downward and away from the warmer, dryer surface soil



For very hot areas, consider creating a container with some of the many varieties of succulents.

Care

How do I care for my lawn and garden?

Achieving and maintaining a healthy lawn and garden is simple. Understanding how to care for your lawn and plants will ensure that you are not wasting time on unnecessary maintenance.

How much water does my lawn and garden need?

During the summer, water demand can more than double in York Region due to outdoor water use. It takes a lot of power and chemicals to treat water to ensure it meets all of the federal guidelines and provincial standards for drinking water. It also takes significant energy to pump the water throughout York Region. As a result, there are restrictions on the amount of water that can be treated. When excessive outdoor water demand occurs in the summer, it can drop our reservoir levels to the point where no extra water is available for emergencies (such as fire fighting).





To reduce your water use in the summer months, try using less tap water outside. One way to do this is by installing a rain barrel. Rain barrels collect stormwater by connecting directly to your downspout. The water can then be used on your garden instead of using treated tap water. For more information please visit york.ca/waterfortomorrow

The time of day you choose to water your lawn and garden is just as important as how much water you apply. The best time to water is in the early morning or during the evening hours. Watering your lawn or garden during the hottest part of the day will increase water loss due to evaporation. It also increases the chances of burning your grass and/or flowers when water droplets magnify the sun's rays.

Specific tips for lawn watering

Excessive lawn watering leads to shallow root growth, which makes the grass more vulnerable to diseases, pests and drought. Water once a week at most and only if there has not been sufficient rainfall (1.5 to 2.5 centimetres) within the past week. This encourages deep, strong root growth and will ensure that your lawn can better cope with the hot, dry weather of summer. Use a watering gauge to measure the amount of water that is applied to your grass through rainfall and watering.

Why does my grass go brown in hot, dry weather?

Grass, like other vegetation, goes dormant and becomes inactive during drought conditions. Dormancy enables the grass to survive extended periods of hot, dry weather. If your grass turns a tawny or brownish colour during dry spells, it is entering this dormancy condition. When the rain returns so will the green in your lawn.



Overwatering is bad for the health of your lawn so only water when needed to encourage deeper root growth. This will increase your lawn's resistance to diseases, pests and drought.



Water Efficiency AN AT-HOME GUIDE

During periods of extended dry weather, your town or city may implement watering restrictions to protect the municipal water supply for emergency situations. Do your part to help ensure that there is a reliable supply of water for all of the Region's residents by respecting water restrictions when they are in place. To check your local outdoor water use bylaw go to york.ca/outdoorwateruse

Specific tips for garden watering

Once established, your garden (with the right plants in the right place with good soil and mulch), shouldn't need much watering at all. Most of the perennials available on the market are better with less water, rather than too much. Many common garden problems such as mould, mildew, rust, slugs and earwigs thrive in moist environments. To get your plants established, water deeply, once a week for the first three to four weeks. If there has been an extended time without any rain, you may want to add supplementary water for your plants. Once your perennials are established, they shouldn't need much water at all, only during long periods of hot, dry weather. It is normal for your plants to look wilted on a hot summer afternoon as this is a natural adaptation to combat the heat. Once it cools off at night, the plants should perk up again. If your plants are wilted at night, they need some water.

Annuals may require a bit more water through the summer as they do not have the same, well-established roots as perennials. Choose water-efficient species for a better tolerance to dry conditions. If you are unsure about when to water, put your finger into the soil. If it is dry down past 7.5 centimetres, water can be added. The best way to water your garden is with a soaker hose, underneath the mulch. Your garden can get enough water in a little as five minutes with a soaker hose.

Hydrozoning: Grouping your plants according to the amount of water they need to reduce any excess watering. If you have a plant that needs extra water, plant it near your rain barrel or hose for easier watering.



Vegetable garden watering



Most vegetables need some watering to reach their full potential. However, with a few simple practices, you can easily create a water-efficient vegetable garden. Use a watering gauge to keep track of how much rain has fallen during the week, and provide additional water only if there was less than 2.5 centimetres of rain in the past week. There are some exceptions – new seedlings will need to be watered more frequently, and vegetables grown in very sandy soil may prefer smaller amounts of water spread throughout the week. A soaker hose running underneath the mulch works best for watering because it delivers water to the roots where it is needed.

The amount of water needed and when, will also depend on the lifecycle of the plant. Soft fruits and vegetables such as tomatoes require a little extra water while their fruit is setting. Once the fruit starts ripening, less water is needed. For leafy vegetables, more water is needed as their hearts develop; for peas and beans, add water when they are flowering, and for potatoes, when the tubers begin to form. Perennial vegetables such as asparagus and rhubarb need very little water as they have well adapted and established root systems.

Group your vegetables and herbs according to their moisture needs. Herbs such as rosemary, sage, oregano, winter savoury and thyme, do best with little water. Their flavour is actually improved if grown in hot, dry conditions similar to those in their native countries.



Container planting of vegetables will use more water than in-ground gardening. Containers dry out much faster than garden beds and rows.

Lawn Maintenance

Long grass is better for the health of your lawn

Cutting grass too short makes your lawn vulnerable to disease, pests, weeds and drought. Longer grass promotes root growth and shades the soil surface, keeping soil temperatures cooler and reducing moisture loss. Set your mower to a height of six to eight centimetres each time you mow. Cut only the top one-third of the grass blade each time you mow and leave the grass clippings on the lawn.

Overseeding can help build a robust lawn

Overseeding is the process of spreading a mixture of grass seeds on an established lawn. By introducing the right blend of grass seed to your lawn through overseeding, you can create a thicker, greener, more vigorous and stress tolerant lawn.

Most lawns in York Region contain Kentucky Bluegrass, a very high-maintenance grass. Kentucky Bluegrass is usually chosen because of its convenience as a rolled sod



grass rather than for each specific yard condition. When combined with proper mowing height, overseeding with the correct seed mix that includes Perennial Rye Grasses and fescues will improve the appearance and resilience of your lawn preventing weeds from establishing.



Overseeding can be done in the spring, fall or winter. Early spring seeding is good practice to repair small areas that are damaged, bare or thin from the winter. Seeding in the spring is best done between the end of April and the end of May. Applying seed in the fall will allow enough time for the grass to germinate before the ground freezes and during the cooler fall weather there is less competition from weeds.

Seed can also be applied in the winter. For decades, farmers have been doing “winter seeding” with their grass. Adding grass seed after the first frost, but before the snow falls, will set the seeds in preparation for next spring. The seeds will lie dormant over winter, then as soon as the ground temperature warms up in the spring, they will germinate. This process requires little to no water as the ground will be moist enough in the spring for the seeds to germinate.

Aerating improves nutrient and water absorption

Many grass related problems, including weed infestation, pests and wilting, result from compacted soil. If your soil has high clay content, aerating (mechanically removing a core of soil and turf) reduces soil compaction and improves the penetration of water and nutrients. It is best to aerate your lawn every other fall.

If you are in a new development where sod has been laid, annual lawn improvement is critical because the soil on which the sod was laid is most likely to be compacted with very little nutrients. In this situation, you may want to consider aerating and adding compost more frequently, up to two times per year, to help reduce this heavy compaction.

Thatch is a common problem that can be easily solved

Thatch is a common problem that lawns develop when a layer of dead grass builds up around the base of the living grass. It is naturally occurring and only becomes a problem when it builds up to the point of restricting water from reaching the grass roots.

That build up can occur after heavy pesticide use, including fungicides. Ontario has banned the use of cosmetic pesticides. Eliminating these harsh chemicals from your lawn will help to reduce any excess thatch that has built up. If thatch is still a problem, lawn aeration will immediately reduce thatch layers.

Fertilizer provides nitrogen needed for growing

Lawns can be fertilized every spring or fall. Lawns require nitrogen for healthy growth. Natural fertilizers contain nitrogen that does not readily dissolve in water and is able to withstand the elements. Examples of natural fertilizers include: blood meal, dried poultry or cow manure, compost and fish emulsion. Grass clippings are another excellent natural source of nitrogen and should be left on the lawn for this purpose. Try not to fertilize your lawn more than once per year or your grass may grow faster than microorganisms can break it down, which would result in thatch.

Small problem areas on your lawn can be easily repaired

Lawn repair patching is a quick and simple way to resolve small areas that are brown, damaged, bare or thin. Small problem areas can be caused by pets, pests, disease, over-watering or heavy foot traffic.

Early spring is a perfect time to repair small areas. Seed can be laid anytime for patching, however, it is best to repair problem areas in the cooler weather. Try adding a small layer of compost over the seed to keep the area moist but not over-watered. If you have to repair patches in the hot and dry weather of the summer, take extra steps to keep the soil moist.



Garden Maintenance

Mulching provides many benefits for your garden

Mulch can suppress weeds and reduce the amount of water your garden needs by up to 70 per cent. Organic mulches including shredded bark, chips or chopped leaves supply additional nutrients to the soil as the materials break down. Inorganic mulches such as gravel or stones can also be used to keep moisture in the soil and suppress weed growth, but they will not improve the nutrient content of the soil. A good rule of thumb is to add at least five centimetres of mulch to the top of the soil.

It is a good idea to apply mulch in the late spring when plants are small enough to work around. Periodically top up the mulch, depending on the type used and the rate at which it breaks down.

Should I remove bugs from my landscape?

Gardens, lawns and the soil they grow in are home to many living things. The majority of insects found in your landscape do not cause problems; some are even beneficial to your lawn and garden. Before you destroy a bug in your garden, make sure you know what it is. Butterfly larvae are often mistaken for harmful garden pests and wasps are often confused with our native bees. Before you remove a problem insect from your landscape, make sure that it is indeed a problem. The more diverse your landscape is with beneficial insects, the better “natural defence” your landscape will have.

Keep in mind that flowers, trees and shrubs often require insects for pollination. The world’s insect populations are rapidly declining, which not only threatens our gardens, but our food sources as well. Planting native plants and non-invasive, water-efficient plants that attract pollinators will help to enhance your garden, as well as support the pollinator population in general.

LEAF offers a variety of native trees and garden kits that will beautify your property and help the pollinator population. To see which plants and trees are available, visit yourleaf.org





Resources

Provincial

Ministry of the Environment and Climate Change

www.ontario.ca/page/ministry-environment-and-climate-change

Ministry of Agriculture, Food and Rural Affairs

www.omafra.gov.on.ca

National

Natural Resources Canada

www.nrcan.gc.ca

Environment Canada

www.ec.gc.ca

International

Energy Star

www.energystar.gov

United States Environmental Protection Agency

www.epa.gov

United Nations

www.un.org/en

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