You’ve had your Growing Naturally home visit, now let’s get started!

The Growing Naturally Home Tips Booklet is intended to help you have a great lawn and garden with less impact on the environment.

This booklet provides easy tips in the six categories covered during your home visit: water conservation, garden care, natural lawn care, energy conservation, waste diversion and pollution prevention practices. These helpful tips combined with your custom report will get you on the right path to having a great lawn and garden that will save you time and money, with a reduced impact on the environment.

If you have any additional questions, please contact us at 519-661-2500 x 5081 or email growingnaturally@london.ca

Reading this guide because it was passed to you by a friend or neighbour? Contact us to book your own Growing Naturally home visit.
Water conservation

Water conservation outside and in your garden is just as important as saving water in your bathroom or kitchen. During the summer months, residential water usage can increase substantially. High water use activities may include lawn and garden watering, car and driveway washing, and outdoor pool use. Through simple outdoor water conservation methods, your overall water consumption and monthly bill can be reduced significantly.

Water is important to everyone, and the City of London delivers high-quality water to our residents. By better understanding the water needs of your lawn and garden, you will be able to grow healthier, stronger plants without wasting any water.

Easy lawns and gardens

Lawns, gardens, soil, and weather vary from house to house within the city. So, it is important to learn about the specific needs of your property. Knowing your lawn and garden's specific needs will help you keep them healthier and heat and drought tolerant.

Weeds and insects are indicators of a bigger problem. A healthy lawn will keep the pests and weeds away. Simple activities such as Overseeding, fertilizing, and aerating your lawn every year will keep your property healthy and out-compete any unwanted weeds and insects.

The province of Ontario's Cosmetic Pesticide Ban went into effect April 22, 2009. This provincial legislation prohibits the sale and use of pesticides for cosmetic purposes on lawns, gardens, parks, and school yards, and includes many herbicides, fungicides, and insecticides. There are many natural options to use in place of pesticides including corn gluten meal, beneficial nematodes, and diatomaceous earth.

Energy conservation

In combination with conserving water, it is also important to conserve energy in and outside your home. Simple changes in habits can significantly reduce your energy consumption and bills. By replacing existing light bulbs with more efficient bulbs, running pool and hot tub pumps during off-peak hours, and planting trees to shade your home in the summer – you can help conserve energy.

Water treatment, distribution, and wastewater treatment are the highest electricity consumers in most cities. By conserving water you are helping to conserve energy, reducing the overall impact of water and wastewater treatment.

www.reduceimpact.ca is a website launched by the City of London where residents can share stories about their efforts to reduce energy use. The website offers some great ideas of actions to take inside and outside your home that will help reduce your energy consumption.
For more information on water conservation please visit the Water Conservation page located at: www.london.ca/water or watch our Be Water Smart Videos located at: www.london.ca/bewatersmart.

Increase your garden size
To decrease the amount of maintenance and water your property requires consider minimizing the amount of grass. A garden bed filled with native and other drought tolerant plant species can diversify your yard and minimize maintenance and watering.

Let water sink into your yard
Keep water from running off your property. Providing porous surfaces like gravel and vegetation around your home replenishes groundwater and local creeks and can also reduce strain on stormwater systems. Plant a rain garden in a natural depression on your property where water either runs through or pools in. High water demand plants and vegetable gardens are optimal for these locations.

Washing your car, driveway, and walkway
Pull your car onto your lawn when you want to wash it. The wash water will irrigate your lawn. The soapy water has also been shown to be effective in controlling lawn pests such as grubs. Save even more water by sweeping your sidewalk and driveway instead of washing it down the storm drain.

Efficiently watering your lawn
If you water your lawn the best time is the early morning. Avoid watering in the late evening when there may be long periods of dampness which can cause disease and fungus.

It is best to purchase grass seed that is suited for your soil type. It will grow better and require less watering.
Irrigate responsibly

How you water your lawn is just as important as how often and how much you water your lawn. If you choose to use an irrigation system, be sure to choose the right system for your property and avoid using a lawn sprinkler. If you must use a sprinkler, install the most water efficient device such as a low rise sprinkler head, soaker hose, or a micro and drip irrigation system. While doing your weekly weeding check that your sprinkler and timer systems are operating properly. Make sure you are not watering sidewalks and driveways. To make your system as efficient as possible, eliminate hose and tap leaks by using hose washers between spigots and water hoses.

Drainage away from house

Basement flooding is a serious problem that affects residents in many municipalities, including London. Basement flooding typically occurs during snow melts and heavy rainfall events when systems become overloaded. Make sure your downspouts are disconnected from the City sewer system, are not clogged, and extend away from your home. You can also improve landscaping around your house to ensure water drains away and is better utilized by vegetation.

Gauge your watering

In general, your lawn only needs 2.5 cm (1 inch) of water a week to stay green. If you choose not to water your lawn it will go dormant and turn yellow or brown. This is natural. Your lawn can go without water for up to three weeks. Using a rain gauge on your property will allow you to determine how much rain your property receives each week.

Mulch

Mulching is one of the easiest and most beneficial practices you can perform on your property whether it is in your garden or on your lawn. Organic mulches come in a variety of forms including leaves, tree trimmings, bark, grass clippings, peat moss, pine needles, sawdust, and wood chips. Mulch protects soil from erosion and compaction after heavy rain events. It also helps maintain moisture, reducing the need for frequent watering. Mulch provides a food source to plants, earthworms, and soil microbes, while also preventing the growth of weeds. When mulching, pull mulch away from the base of the plant or tree. If this is not done, there is an increased chance of the stock or trunk decaying.
Install a rain barrel in your backyard

Rain barrels are an excellent way to conserve water and save money on your water bills. They are easy to install and relatively inexpensive. Harvesting rain water also reduces water pollution by minimizing the stormwater runoff. As stormwater travels off your property it can collect pollutants from your landscape such as nutrients, sediments, chemicals, and bacteria that ends up in the river.

Ensure your rain barrel is properly installed. Follow these installation steps:

1. Rain barrels come in a variety of styles, shapes and colours. Choose one that best fits your needs and preference. Make sure there is a screen on the top of the barrel to stop mosquitoes from entering.

2. Find an ideal location for your new rain barrel. Your rain barrel should be located close to a downspout, easy to access, and close to your gardens, flower pots, and anything else that needs watering. The area where you install the rain barrel should be level. If a level position is not available, use cinder blocks, patio stones, or gravel to develop a flat area for the rain barrel to be situated. You should also consider drainage of the rain barrel. If you have issues with water getting into your foundation, ensure the overflow valve is attached and situated so the water will run away from your house if the rain barrel overflows.

3. Raise your rain barrel off the ground by 30 – 60 cms (or 12 - 24 inches). This will allow your rain barrel to empty easier once it is filled.

4. Connect the rain barrel to the downspout. Mark the downspout where it first comes into contact with the opening at the top of your rain barrel. This is the entry point for the rain water into the barrel. A downspout diverter may be required depending on the make and model of the rain barrel. Carefully disconnect the downspout to cut it. Consult the manufacturer or instructions prior to cutting the downspout.

5. Install the cut downspout and reattach it to the eavestrough system. With your downspout cut at the appropriate height, direct it over the top opening of the rain barrel or run it into the barrel depending on the make and model.

6. Ensure any exit points such as spigots are closed.

7. Set up the overflow port (if one is present). The purpose of the overflow port is to prevent the barrel from overflowing during large rain events and guide the excess water away from your house foundation. With an overflow port you have two options. First you can use it to set up multiple units together using appropriate tubing and creating a rain barrel chain. The other option is to connect a hose or drip line to the overflow port and direct it towards a garden or tree.
For more information on natural lawn care, please visit www.london.ca/growingnaturally

**Grow a strong healthy lawn**

If you choose to maintain grass on your property follow these simple tips to keep your lawn healthy while conserving water and energy in the process:

- Use a mulching or reel mower on your grass. This will reduce carbon dioxide (CO\textsubscript{2}) and other emissions, from gas lawn mowers.
- Cut your lawn only as needed during the growing season. Remove only a third of the blade at each mowing. Lawns are best kept at a length of 7.5 cm (3 inches) as it promotes root growth. Leave clippings on your lawn as they provide valuable nutrients and moisture.
- If you do use a gas mower, clean or replace your air filter after 25 hours of use. Dirty filters restrict air flow and reduce the system's efficiency.
- Aerate your lawn either during the spring or in the fall. Aeration helps the soil breathe, reduces compaction, helps water to reach the soil, breaks up the thatch layer, and recycles nutrients from the soil. Once the ground has thawed and dried out in the spring, take a flat head screw driver and push it into the lawn. If you can't easily push it into the lawn you will need to aerate.
- Sharpen your mower blades annually as dull mower blades tear the grass making it more susceptible to pests, diseases, and water loss.

**Spread compost**

Composting is nature’s way of recycling. Compost returns nutrients and organic matter to the soil, and feeds beneficial micro-organisms, insects, and worms. It also improves the texture, oxygen-retention and moisture of soil. Compost contains fertilizing nutrients that are released slowly over time. This will minimize the need to apply fertilizers. Beyond the benefits to your soil, composting garden and kitchen material removes this material from going to the landfill. This can reduce the weight of garbage by 40% or more. If you do not produce your own compost in your backyard, take advantage of the City of London’s annual Compost Value Day!

**Overseed and diversify your lawn**

Do you have thin or bare patches in your lawn? The best way to solve this problem is to overseed these areas in late spring or fall. Make sure to consult with your local garden centre to determine the appropriate seed mixture for your lawn. To ensure seed growth; apply a light layer of compost and soil to ensure soil to seed contact. Also make sure to keep the seeded area moist by watering until it is established. Overseeding will thicken your lawn and defend against weeds and insects.
Choosing the right grass for your yard

Replacing traditional turf with gardens is a great option for some home owners, but it is important to be considerate of how you plan to use the space. You may still have the need for grass in certain areas, and picking the right grass for each spot is an important step to having a healthy, green lawn. In Ontario, grasses are typically cool season varieties that can handle harsh winters and warm summers. In order to choose the right variety for your yard, it is important to consider soil type, sun exposure, and location. The chart below has information on the three main varieties of grass commonly used in London.

<table>
<thead>
<tr>
<th>Grass Type</th>
<th>Pro’s</th>
<th>Con’s</th>
<th>Best Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perennial Ryes</td>
<td>✓ quick germination &lt;br&gt; ✓ tolerates short mowing &lt;br&gt; ✓ adaptable to moist soils &lt;br&gt; ✓ many contain endophytes &lt;br&gt; ✓ resistant to necrotic ring spot</td>
<td>✗ least winter hardy &lt;br&gt; ✗ possible winter kill means seasonal over-seeding &lt;br&gt; ✗ non self repairing</td>
<td>✓ areas with sun and part shade &lt;br&gt; ✓ areas with poor soil &lt;br&gt; ✓ moderate traffic areas</td>
</tr>
<tr>
<td>Fescue</td>
<td>✓ drought and salt tolerant &lt;br&gt; ✓ tolerates poor sandy acidic soil &lt;br&gt; ✓ fine leaf texture &lt;br&gt; ✓ lower maintenance; low fertility and water needs &lt;br&gt; ✓ many contain endophytes &lt;br&gt; ✓ slower dormancy onset</td>
<td>✗ fall fescues not tolerant of cold temperatures &lt;br&gt; ✗ not winter hardy &lt;br&gt; ✗ not self repairing &lt;br&gt; ✗ clump forming</td>
<td>✓ areas with poor soil &lt;br&gt; ✓ low maintenance areas (low fertility and low watering needs) &lt;br&gt; ✓ boulevards and roadsides &lt;br&gt; ✓ shade &lt;br&gt; ✓ slopes</td>
</tr>
<tr>
<td>Kentucky Bluegrass</td>
<td>✓ good visual appeal; deep green colour, medium fine texture &lt;br&gt; ✓ uniform growth spread &lt;br&gt; ✓ low growth habitat &lt;br&gt; ✓ good spring green up &lt;br&gt; ✓ traffic tolerant &lt;br&gt; ✓ good low temperature tolerance but some only available in sod</td>
<td>✗ higher water requirements &lt;br&gt; ✗ will go dormant during drought periods &lt;br&gt; ✗ slow to germinate and establish &lt;br&gt; ✗ susceptible to necrotic ring worm &lt;br&gt; ✗ will not thrive in sandy or acidic soil &lt;br&gt; ✗ susceptible to pests (chinch, white grubs, KBG weevil)</td>
<td>✓ high traffic areas &lt;br&gt; ✓ sunny locations with well drained soil &lt;br&gt; ✓ areas where high visual quality is required (however irrigation will be necessary to keep it green)</td>
</tr>
</tbody>
</table>
Cut less for a healthier lawn

When you cut your lawn, put your mower on the highest setting. Make sure your grass is at least 7.5 cm (3 in.) in height. At this height your lawn develops strong roots and allows it to need less fertilizer and water to thrive. Taller grass also shades out weeds, reducing ongoing care and maintenance requirements. Remember that in the spring, your lawn will grow much faster than in the hot summer, so rather than cutting your grass on a schedule, adjust your mowing frequency to the growing patterns of your lawn.

Grass clippings

When cutting your grass, leave the grass clippings on the lawn. They are 80% water, meaning they break down quickly, and add great nutrients back into the soil.

Thatch

Thatch is a tight layer of living and dead grass stems that build up between the healthy grass and soil. This is natural, especially in heavy traffic areas. When it gets too thick (more than 1 cm) the thatch will prevent water and nutrients from getting into the soil and feeding the grass roots. To remove thatch rake the entire lawn and remove the dead grass.

Aeration

Soils often become compacted, especially in the lawn, where traffic is usually heavier. Compacted soils restrict water, air, and nutrients from getting in and feeding the roots. Aeration, where small deep plugs of soil are removed, is the most effective way to reduce soil compaction. Aeration can be completed in the spring or fall and should be done about every three years.

Feed your soil

A complete traditional fertilizer contains three active ingredients that will be displayed as numbers on the package:

1. **Nitrogen (N):** essential for grass growth, turf thickness, and green colour.

2. **Phosphorus (P):** necessary for proper root development and important in many vital growth processes.

3. **Potassium (K):** (potash) promotes disease resistance, wear and drought tolerance, and winter hardiness.

Fertilize in the late-spring, late-summer and fall.

Learn more lawn tips.
(See back page.)
The right plant

London is located within the Carolinian zone 6, southern Ontario which is a very specific area where certain plants and animals naturally exist. Exploring opportunities to include native plants in our yards is beneficial for us and our environment. Look for drought tolerant plants for hot, dry areas. Locate plants carefully so they receive the correct sun or shade conditions. Other conditions to consider include shelter from wind, morning sun versus afternoon sun, acidic or alkaline soils, fertile clay soils or well drained porous soils. Use the plant list provided in your personalized report to determine the optimal conditions for your selected native plant species.

Produce food in your yard

Growing your own fruits and vegetables is easy! All you need is some dedicated yard space and a water source such as a rain barrel. Backyard gardening has many environmental benefits such as reducing the amount of air and water pollution that is created from commercial agriculture that use herbicides and insecticides. You will also help reduce the amount of fossil fuels used to produce and transport the fresh produce from all over the world to your local supermarket. Other added benefits of growing your own food include saving money on groceries, improving your family’s health, getting physical outdoor exercise, eating fresher food, and reduction in food waste.
Increase the amount of perennials you plant

Consider replacing your costly, time consuming, and high water demand annuals with native and drought tolerant perennials. Perennials easily adapt to weather conditions, are harder than annual plants and have the advantage of coming back year after year. Perennials also have the advantage of having a large range of height compared to low-growing annuals. Begin to invest in the planting of perennials for height, colour, and variety.

Space plants appropriately

Make sure you leave enough space between plants so they have room to grow and mature. Remember, your plants will increase in size both above ground (foliage) and below ground (root systems), therefore make sure you leave room for expansion. Crowding can result in increased disease, poor water distribution, stunted plant growth, depleted soil nutrients, and diminished sun exposure.

Add pollinator plants to your garden

Pollinator plants are both a beautiful and beneficial accent to your yard. With only a few flowers, you can attract bees, butterflies, and other creatures to the area.

To appeal to the needs of pollinators your garden will require colour, fragrance, and flowers with form. The colour and form of a flower often signals certain pollinators to stop by. For example, butterflies are attracted to red, orange, and yellow while hummingbirds prefer red, fuchsia, and purple. Fragrant flowers signal many pollinators, including those that only come out at night.

Companion planting

Just like people, plants have friends too. Companion planting is based on the idea that certain plants can benefit others when they are planted in close proximity. Planting vegetables with other plants helps increase yields, decrease disease, and limit pests. Growing a variety of plants in the same area also helps to regenerate nutrients in the soil essential to the health of your plants. To learn what types of plants to grow together, please consult the Companion Planting fact sheet at www.london.ca/growingnaturally

Wildlife shelters

Place wildlife shelters, such as bird houses or bat boxes around your yard. Birds and bats eat bugs, reducing harmful insects to your garden. Having a bird house in your yard lets you watch birds raise their young as well.
Low Impact Development

Low Impact Development (LID) is an approach that works with nature to manage and reduce stormwater (rain and snow melt moving into the storm sewers and waterways). This reduces pollution, stress on infrastructure and increases the amount of permeable surfaces around the city. Many LIDs use plants to capture and absorb large amounts of stormwater.

Rain gardens

Rain gardens can be strategically placed around your property so water naturally flows into them. They are designed to collect water that runs off impermeable surfaces like your roof and driveway. They look like a regular garden, and can have perennials, shrubs, grasses, and ground-covers in them. Under the garden is loose soil that is able to absorb and filter rain and snow melt, allowing them to prevent large amounts of water from entering the storm sewer. Generally they require the same maintenance as a regular garden, and are a beautiful way to reduce runoff from your property.

Downspout disconnection and redirection

In older homes, downspouts may be connected to the weeping tiles or directly into the storm sewer. By disconnecting your downspouts and redirecting them away from impermeable surfaces like patios and driveways, you are providing an opportunity for stormwater to infiltrate into your yard and be absorbed by trees and plants before being directed into the storm sewer. When you are redirecting downspouts, consider collecting rainwater into a barrel to use for outdoor watering at a later time.
Know your soil

Planning, planting and maintaining a healthy garden starts with your soil. When planning your garden, you need to know your soil along with sun exposure to pick plants that will thrive. The ability of plants to absorb nutrients depends on the soil composition. In London, there are a wide variety of soil types consisting of combinations of sand, silt, clay and organic matter. By knowing your soil type and how to identify nutrient deficiencies in your plants, you can better plan, plant and care for your garden. To get to know your soil better you can purchase a soil test kit at your local garden store.

Common Soil Types:

<table>
<thead>
<tr>
<th>Soil Type</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>Warms up quickly in the spring, Light and easy to work, Free draining, Can dry out in dry weather, Tends to be low in nutrients, Can be worked at almost any time, Needs liming little and often</td>
</tr>
<tr>
<td>Silt</td>
<td>Deposited by rivers and lakes, Warms up quicker than clay but slower than silt soils in Spring, Keeps water longer than sandy soils, Difficult to drain, but less likely to waterlog that clay, Tends to be fertile</td>
</tr>
<tr>
<td>Clay</td>
<td>Warm ups slowly in spring, Heavy soils need well timed cultivation, Lies wet and is prone to waterlogging, Tends to be rich in nutrients, Should not be worked when wet, Needs regular liming</td>
</tr>
</tbody>
</table>
Nutrients in soil

Not all plants that look unhealthy are struggling from insects or disease, sometimes these plants are suffering from a deficiency or excess of different nutrients found in the soil. The most common symptom of nutrition issues is the discoloration of plant foliage. Plants require more than one nutrient to be healthy, so sometimes it is a combination of problems or multiple nutrient issues. The following chart will help you identify potential issues with macro-nutrients; the nutrients the plants require in larger amounts.

<table>
<thead>
<tr>
<th>Nutrients</th>
<th>Deficiency symptom</th>
<th>Fertilizer sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen (N)</td>
<td>• Leaves turn yellowish</td>
<td>• Any compound containing the words: ‘nitrate,’ ‘ammonium’ or ‘urea’</td>
</tr>
<tr>
<td></td>
<td>• Plant growth slows</td>
<td>• Mature fish emulsion, worm castings and blood meal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorus (P)</td>
<td>• Premature leaf fall-off</td>
<td>• Compounds containing the words ‘phosphate’ or ‘bone’</td>
</tr>
<tr>
<td></td>
<td>• Small leaves take on a reddish-purple tint</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Leaf tips can look burnt and older leaves become almost black</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Reduced fruit or seed production</td>
<td></td>
</tr>
<tr>
<td>Potassium (K)</td>
<td>• Older leaves look burnt around the edges and/or wilted, followed by older leaves</td>
<td>• Compounds containing the words ‘potassium’ or ‘potash’</td>
</tr>
<tr>
<td></td>
<td>turning dark green or reddish-purple</td>
<td>• Wood ash, compost, poultry manure, leaves, hay or seaweed</td>
</tr>
<tr>
<td></td>
<td>• Yellowing between the leaf veins</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Less disease resistance and winter hardness</td>
<td></td>
</tr>
<tr>
<td>Calcium (Ca)</td>
<td>• Damage and die off growing points</td>
<td>• Anything with the word ‘calcium’</td>
</tr>
<tr>
<td></td>
<td>• Yellowish leaf edges and curling</td>
<td>• Gypsum</td>
</tr>
<tr>
<td></td>
<td>• Stunted growth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Causes blossom-end rot</td>
<td></td>
</tr>
<tr>
<td>Magnesium (Mg)</td>
<td>• Yellow spots give a marbled appearance</td>
<td>• Epsom salts, magnesium sulphate, dolomitic, limestone if soil pH allows</td>
</tr>
<tr>
<td></td>
<td>• Fruits are small and woody</td>
<td>• Reduced usage of potash fertilizers as this may be contributing to the problem</td>
</tr>
<tr>
<td>Sulphur (S)</td>
<td>• Similar to nitrogen deficiency</td>
<td>• Compounds containing the word ‘sulphate’</td>
</tr>
<tr>
<td></td>
<td>• New growth turns pale yellow, older growth stays green</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Stunts growth</td>
<td></td>
</tr>
</tbody>
</table>
ENERGY CONSERVATION

Light your home efficiently
Install timers to help reduce excessive outdoor lighting and energy usage. Also install energy efficient light bulbs in all your outdoor fixtures. The use of solar lights outside reduces the use of electricity entirely.

Keeping cool in the summer
Increase the efficiency of your air conditioner by up to 10% by properly shading it. Shade will keep the air around the unit cooler, resulting in less energy needed to cool your home. Remember to also clean or replace your air conditioner filter monthly. Dirty filters can restrict air flow and reduce your system’s efficiency.

Equip your home with smart controls
Get your home set up so you can control everything from your irrigation system to outdoor lights using sensors. To conserve energy, turn things on only when you need them.

Eat local foods
Fill your plate with fruits and vegetables from your own garden. If you do not produce your own food, buy local food from your grocery store, farmer’s market or directly from a farm. Always try to buy what is in season when buying locally.

Hang dry your clothes
Instead of using a clothes dryer, hang up your clothes to dry either outside in warm weather, or inside in the winter or on rainy days.
Turn off the tap

Conserving water can reduce the amount of energy needed for processes that include pumping, purifying, and treating drinking water, while also reducing the impact on the water source. Energy conservation includes all types of energy including energy used to pump, purify, and treat drinking water. An easy but effective way to conserve water is to install a moisture or rainfall sensor to ensure that your irrigation system is only watering when it is needed.

Use a push lawn mower

Did you know that an old lawnmower produces as much air pollution as 40 new cars while running? Retire your old gas-powered lawnmower and use a manual or an electrical mulching or reel mower to mow your grass. By using a push lawn mower, you will reduce air pollution and greenhouse gas emissions.

Become an energy generator

Harness the power of the sun and make your own heat and power. The Province of Ontario will pay you for every kilowatt-hour produced by roof-mounted solar photovoltaic panels through the microFIT program. You can also use solar energy to make hot water for your home. Adding a solar energy system to your home may increase the resale value of your home. Environmentally, these systems have the benefit of reducing air pollution, increasing your energy security, and reducing your demand for natural gas, oil, and electricity, while saving money too.

Tree placement for energy conservation

Strategically placing trees around your home can save you a lot in heating and cooling costs. Trees will shade your home from the summer heat and protect it from the winter cold. To shade your home in the summer plant deciduous (leafy) trees on the south and west side of your home, while coniferous (evergreen) trees on the north and east side of your home will protect it from cold winter winds. This can save you a lot in heating and cooling costs, increase property value, and can even offset your home’s greenhouse gas emissions.
London’s Watersheds

Water is life! We use water to grow food, support industry, have fun, get around, and drink.

Watersheds are areas of land that collect water and channel it into a specific watercourse. In London, we are entirely in the Great Lakes watershed however the southern portion of the city flows into Lake Erie via Kettle Creek watershed and the north portion flows into Lake St. Clair via the Thames River watershed. We have 14 subwatersheds that contribute to the health of our neighbourhoods in London.

Remember all of the subwatersheds are connected. Improperly disposing of chemicals, using harsh fertilizers, or other harmful activities can directly affect the quality of our water.

Five things you can do to help reduce pollution in our watersheds:

1. Let water sink into your yard to replenish groundwater and local creeks.
2. Naturalize your property – plant the right plant in the right place to reduce watering and fertilizer requirements.
3. Capture rainwater – water from your roof can be used for outdoor watering of plants and lawn.
4. Check your water footprint – do not waste water.
5. Historically, too much stormwater went directly into the underground sewer system: disconnect eavestrough downspouts from entering these sewers and allow water to flow over land, away from your house.
**POLLUTION PREVENTION**

**Properly store and dispose of your gasoline, oil, and chemicals**

Storm sewers are designed to allow water collected on roads to drain away after rainfall and snow melt. However, some people see them as a handy disposal for materials that pollute. Remember that storm drains lead directly to area creeks and the Thames River. Please care for them and NEVER pour any liquids down the storm drains to ensure the Thames River remains healthy and protected. Similarly NEVER pour any liquids onto your property as materials may drain into local water sources.

To prevent any chemicals from leaking onto surfaces that could potentially drain into a nearby water source, keep your chemicals elevated off the ground or place and absorbent pad underneath them.

**Eliminate de-icers in the winter months**

Common de-icers used around the home contain sodium chloride, calcium chloride, potassium chloride, magnesium chloride, and ferrocyanide salts. At high concentrations these salts can be toxic to the natural environment causing damage to vegetation, soil organisms, wildlife, and freshwater ecosystems such as the Thames River. Alternatively, clear the snow and apply sand to improve traction in the winter months.

Have you seen this fish around your neighbourhood?

Started by Trout Unlimited Canada, the Yellow Fish Road program is an environmental education initiative designed to help Canadian’s understand that storm drains lead directly to our rivers, lakes and streams. It is important to prevent pollutants from entering stormdrains to protect our watersheds. The fish are painted by students and community groups around the city. For more information visit: www.yellowfishroad.org.

**What is Household Special Waste (HSW)?**

HSW is any material that is corrosive, flammable, ignitable or reactive.

Stewardships Ontario’s Orange Drop Program allows Ontarian’s to return designated materials free of charge to local Municipal Depots such as the one at the City’s W12A Landfill site, 3502 Mannings Drive.
Compost your yard and kitchen waste

Composting garden and kitchen material keeps this material from going to the landfill. This can reduce the weight of your curbside garbage by 40% or more. Materials that are rich in nitrogen include kitchen scraps such as vegetables and fruit, crushed egg shells, tea bags, coffee grounds with filters, and paper towels. Whereas, materials such as dry leaves, bread, pasta, rice, sawdust and shavings, finely ground wood chips, shredded paper, shredded egg cartons and cardboard are rich in carbon. Items that should NOT go into your backyard composter include pet manure or litter, weeds that have gone to seed, diseased plants, meat, fish, fowl, fats and oils, sawdust or shavings from chemically treated or painted wood, and invasive plants and weeds. For more information visit www.london.ca/compost.

Dealing with your pet waste

If you are a pet owner, safely compost your dog’s waste by creating a dog waste digester. Simply follow these easy steps:

1. Choose a site that has good drainage, exposed to sunlight, and away from your vegetable garden.
2. Select a bin such as a composter, old garbage bin or a tub. Make holes in the bottom for drainage.
3. Dig a hole big enough that the bin is flush with the surface. Make the hole 5 cm wider than the bin allowing for backfill with gravel to be placed around the bin. Also allow for 5 to 10 cm of gravel below the bin as well.
4. Backfill the bottom of the hole as well as around the bin with gravel for drainage.
5. Replace the topsoil, seed, or plant around the buried bin.
6. Add dog waste.
7. Add septic starter. Use one envelope to start and a new one every month so the compost develops.
8. Put the lid on, add more dog waste daily.

Recycle

Reduce the amount of waste your home sends to the landfill by recycling. Remember to properly dispose of not only your paper and plastics but other materials such as electronics. For information please visit the City of London’s website at london.ca/recycle or download the my-waste App.
### Growing Naturally

#### JAN FEB MAR APR MAY JUNE JULY AUG SEP OCT NOV DEC

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**Mow**

As needed during growing season. Leave clippings on your lawn as they provide valuable nutrients and moisture.

**Water**

2.5 cm (1 inch) of water once a week. Water deeply and infrequently to promote deep roots.

**Overseed**

Late spring or mid-August to mid-October. Ask your garden centre to recommend a suitable mix.

**Fertilize**

Late Spring
Mid-August to mid-September
Late October to early November

**Check for Grubs**

Late March through May and early September through November.

**Check for Chinch Bug**

Chinch bugs suck sap from the grass and turn the lawn brown in areas. Check mid-July to mid-August.

**Check for Sod Webworm**

Sod webworms are caterpillars that cause baseball sized brown spots. Check in September.

**Control Dandelions**

Most effective to remove dandelions in October.

**Check for European Cralenfly**

Watch for yellow patches mid-May to mid-June. Larvae, known as leatherjackets, feed in August through early winter.

**Dethatch and Aerate**

Spring or fall during good growth. Helps soil breathe.

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*Photos courtesy of Forestry Images (www.forestryimages.org)*