

Water Conservation Information Sheet

Assess and Prioritize

The first thing you need to do when water conservation is suggested is to assess your property and make decisions about lawns, plantings and water use.

- Re-think your lawn. Perhaps your priorities have changed and you can do with less lawn. Irrigated lawns require five times more water than other landscape plants and although it is the least expensive planting initially, in the long run it takes far more in maintenance time and cost than other plantings and is the largest drain on outdoor water.
- If reducing or eliminating your lawn is not an option, make sure your grass is growing where it will thrive. Many homeowners try to maintain grass where it simply does not grow well. Even in the best of watering conditions, grass is not the best choice under trees, on steep slopes, along paved or cemented areas or where there is heavy foot traffic. There are alternatives to grass: plants; ground covers like kinnikinick (dried leaves and bark of various plants); and hardscaping with bricks and pebbles.
- You may need to prioritize which of your plants will receive the most water. If your garden is small enough, watering by hand or with a hose equipped with a shut-off device should not be difficult. However, if your gardens are extensive, you may not be able to adequately care for all vegetation with hand watering and may wish to consider a micro/drip irrigation system. If you already have an in-ground irrigation system, you can convert it to micro system. To make outdoor watering work, you should determine which plants are most susceptible to stress or are most valuable in terms of replacement cost, prominence in the landscape and enjoyment.
- Examine all garden areas to make sure that plantings are grouped according to water requirements. You may need to move or adjust plantings to make their water needs match; placing water guzzlers next to water sippers is inefficient. Place plants with high water requirements in areas that receive water naturally, like drainage ways, depressions or at the bottom of hills.

Lawn Care

Lawns normally go into a summer dormancy when regular rainfall decreases and temperatures increase. They stop growing and often turn brown. This is a normal process and does not mean the lawn will die. In dry weather, keep off the lawn as much as possible. Grass blades become brittle without water and are more easily damaged.

How much water?

Lawns need only 25 mm (1 inch) of water per week, including rain. Longer, infrequent watering will help to develop deeper, healthier roots. Keep your grass two to two and half inches high and you will help the soil retain moisture and reduce evaporation from sunlight and wind.

Aerate your lawn

Aerating promotes grass roots to absorb all the natural moisture that is available. Aerating also lets air flow into the soil and provides the grass roots with oxygen. You can aerate simply by stabbing the lawn with a gardening fork or by renting a powered aerator.

De-thatch you lawn.

Thatch is the layer of organic matter that forms between the blades of grass and the soil. A thin layer of thatch can be beneficial, preventing evaporation of water from the topsoil. Too much thatch can be harmful and can rob the roots of the oxygen and water needed for healthy growth. Remove the thatch from your lawn at least once a year, using a rake, a thatching attachment on your mower or a thatching machine.

Fertilizer

A well-balanced soil that is properly watered should not need fertilizer. Don't give your lawn too much fertilizer, as it might outgrow its soil limitations and watering regime. Avoid applying fertilizer, herbicides or pesticides during the dormant period.

Lawn Alternatives

Consider replacing some areas of the lawn with low-growing ground covers or herbs. Another alternative is to cover parts of your garden with hardscape made from natural or synthetic materials, such as flat rocks, flagstones, concrete, asphalt or compact gravel.

Mowing Tips

- Keep mower blades sharp to avoid tearing the grass.
- Don't cut wet grass
- Set mower height to leave 50 to 65 mm (two to two and half inches)
- Leave grass clippings to decompose; they act as mini-mulch to reduce evaporation.

Flower and Vegetable Gardens

- About 70 to 80 per cent of all plant problems are directly related to incorrect watering.
- Water around the base of plants slowly and deeply — moistening the top 4 to 6 inches of soil — at least once a week. Light, frequent watering is harmful because it encourages shallow root growth and enhances germination of weed seeds. You can check the soil wetting depth with a screwdriver or stake.
- Water plants early in the morning to avoid evaporation from the sun and wind.
- Watering in the middle of the day increases the amount of water lost to evaporation by as much as 40 percent.
- Consider installing drought-tolerant native plantings. A drought-tolerant plant can survive with very little, if any, artificial watering or irrigation once it is established. Natural rainfall is usually enough for these plants, if they're growing in the right habitat (i.e. one similar to their natural habitat), and they can usually survive weeks of dry weather.
- Plants with gray, fuzzy, waxy or finely divided leaves are also considered drought-tolerant. Perennials like daylilies, flax, pinks, bellflowers and peonies thrive under dry conditions. Annuals like cosmos, sage, mallow and California poppies are also drought-tolerant and provide season-long colour in your garden. Check with your garden centre for further suggestions.

Mulching

Mulching around plants reduces the number of weeds (which compete for water) and conserves soil moisture and moderates soil temperatures. The recommended depth for mulches is 2 to 4 inches (5 to 10 cm). Good mulches are straw, bark, gravel or wood chips.

Trees and Shrubs

- When watering trees and large shrubs, water around the drip-line of the tree (area below the branches where water drips from the leaves) — not at the trunk. A great way to water trees is to use milk or water jugs. Fill with water and poke small holes about 8 in the bottom of each. Place these around the drip line of each tree. The water seeps out slowly into soil near the roots, where the tree needs water the most.
- Avoid heavy direct watering by hose, which can wash away soil, exposing the roots to pests and disease, and making shrubs and small trees more susceptible to blow down.
- Keep turf at least two feet from the trunks of young or newly planted trees as it will compete with the trees for water. Consider applying mulch in this area.

General Tips

- Weed regularly. Weeds will compete with your plantings for moisture.
- Consider installing a micro/drip irrigation system. These systems can be tailored effectively to individual plant and garden needs. During even the most stringent water conservation measure, micro and drip irrigation systems can be used to water flowers, trees, shrubs and vegetables.
- Make sure hoses are in perfect condition. A hose delivers about 27 litres of water per minute so a leaking hose or coupling can add up to significant water waste.
- Use nonporous containers like glazed pots, as they are more efficient at retaining water. Also, use larger containers (pots 10 inches (25 cm) in diameter and larger) as the larger the volume of soil, the slower it dries. Nest smaller pots inside larger ones and insulate the space between the pots with potting soil. This will keep the roots cool and will slow down evaporation.
- Consider collecting and recycling water by installing rain barrels outside of your home. Installing rain barrels at the downspouts of your eaves troughs is a great way to collect rainwater to use on your planters or in the garden during our dry summer months. Make sure each barrel has a secured lid to prevent children gaining access; this also will discourage breeding mosquitoes, prevent contamination and keep out wildlife. You will also need an overflow attachment and hose attachment for watering.