



REGIONAL
DISTRICT
NORTH
OKANAGAN

Regional District of North Okanagan – Greater Vernon Water

WaterWise Gardening & Irrigation Handbook



Design

It's all in the planning. The starting point to water conservation is a WaterWise design.

2

Irrigation

How to automate irrigation and reduce your landscape water use.

7

Landscaping

Improve your soil and select the best plants for our climate.

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Troubleshooting

Still using too much water? Chase down leaks with these tips.

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Why WaterWise Gardening?

Residential water use doubles in the summer months as we move outside to enjoy our Okanagan climate.

Water use in homes far exceeds the water used by businesses, parks, and schools in our community.

Reducing water demand helps to avoid building costly infrastructure.

We live in an arid climate that receives minimal precipitation.

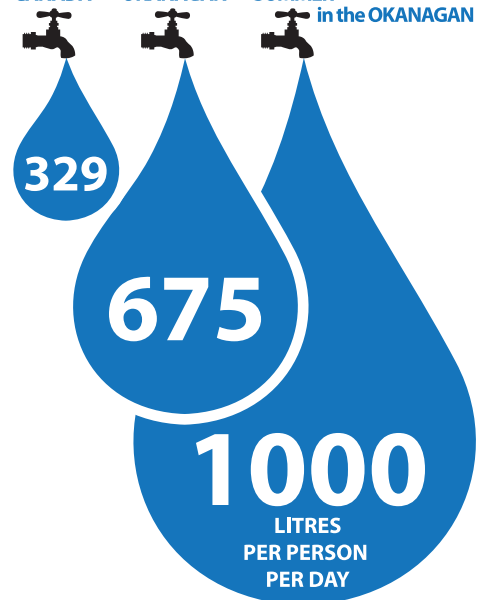
Native plant communities evolved over thousands of years in response to our local climate and terrain to flourish in very dry conditions.

Many people are noticing that they can still have a beautiful yard, but without the big water bill, if they choose to be WaterWise.

By designing your WaterWise landscape to mimic the low water demands of native vegetation, you can reduce your water bill and your yard work.

AVERAGE WATER USE

CANADA OKANAGAN SUMMER
in the OKANAGAN



Section 1

WaterWise Design



1. Have a Plan

How do you want to use your yard? Plan a garden that reduces water consumption.

2. Minimize Lawn

Consider the use of lawn alternatives.

3. Know Your Soil

Do a soil test and take steps to improve your soil.

4. Assess Your Aspect

Understand how slope and exposure affect plantings and yard design.

5. Don't Forget Drainage

Take advantage of natural drainage and harvest rainwater for re-use.

6. Hydro-zones

Identify high, medium and low water use areas, and group plantings by water use.

7. Pick Your Plants

Select the best plants for our climate and keep your landscape worry-free.

1. Have a Plan

Landscape to suit your property. Don't fight your site.

Sketch out your lot's key features, highlight what to keep and what to replace.

Choose plants with low water needs that will thrive in our arid climate without much effort.

Keeping a water-loving plant happy in Vernon is an uphill battle.

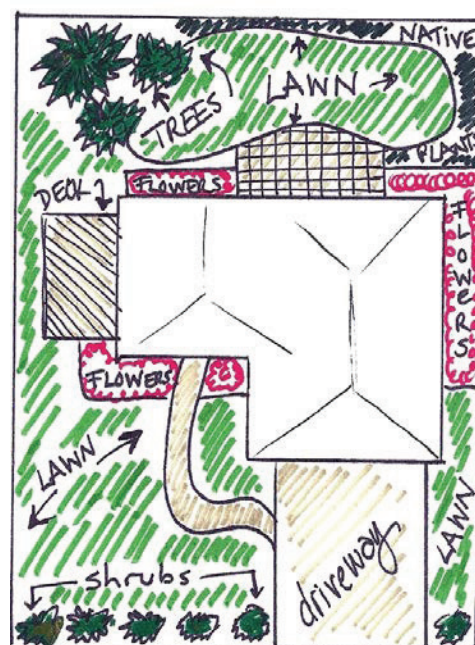
Cedars are a prime example - their shallow roots and high watering needs make them water wasters.

Look at your existing vegetation and see what's doing well.

Save areas of native plants to provide habitat for songbirds and beneficial insects like butterflies.

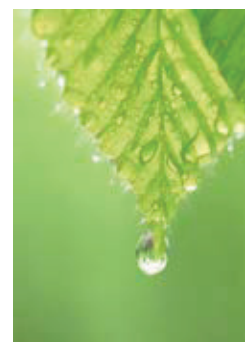
These plants are already adapted to your property, easy to care for, and can give you ideas for what to plant elsewhere.

Protect natural areas such as shorelines and creeks by retaining or creating buffer zones that include native plants.



Avoid invasive plants like Yellow Flag Iris, which reduces wildlife habitat and clogs creeks by spreading in dense clumps.

Don't mow to the edge of lakes or streams.



It is estimated that as much as 50% of outdoor water use is over and above what is needed to maintain an attractive household yard.

2. Minimize Lawn

Save grass for functional areas.

Look at your lawn and ask how much is actually walked or played on? Plant grass in play-zones and other areas where it will be used and enjoyed.

Instead of planting turf on steep slopes or other hard-to-water and mow spaces, try ground cover, shrubs or mulch.

Is the grass there because you don't know what else to do?

Consider replacing lawn with something more interesting to look at and easier to maintain (no mowing and less watering).

Lawns are great play areas. If you are installing new sod or seeding grass, choose drought-tolerant varieties.

Many local turf farms carry special drought tolerant sod that also has the benefit of requiring less mowing as it's slow growing.

Look for these sod varieties:

- Tall Fescue
- Sheep Fescue
- Slender Red Fescue
- Creeping Red Fescue
- Hard Fescue

Lawn alternatives:

Low growing herbs like thyme are great groundcovers that can take some foot traffic and don't need any mowing.

Consider **stepping stones, gravel, river rock, interlocking brick, or permeable paving** if you need a walkway. The one-time cost to build will likely be comparable to all the hours spent maintaining a lawn.

An isolated spot might be a great choice for a **no-mow wildflower meadow**.

A **deck or gazebo** can add value to your property and create a focal point for the yard.

3. Know Your Soil

Select plants and irrigation systems suited for your soil type.

If you have a **clay soil**, pick plants that like having their roots wet.

A **sandy soil** drains quickly so plants requiring "well drained soil" would do better in those areas.

A **sandy loam** is the optimal soil texture - it feels soft and crumbles easily, no hardpan (hard subsurface layer caused by frequent rototilling and compaction), and soaks up rain with little runoff.

Test your soil type by hand.

Dig a hole to test your soil's water holding capacity - if you fill it with water and it drains immediately you've got sandy soil. If the water stays in the hole overnight you have clay.

Check the depth of soil in the hole. Lawns need at least 15cm (6") and shrubs need 30-45cm (12"-18") for healthy root growth.

Water pools faster on clay so you may need to shorten irrigation times and water over several days to meet plants' weekly water requirements.

Match irrigation to your soil

For example: if you find water pools after watering your lawn for 15 minutes and it takes 20 minutes to get 2.5cm of water depth, try watering twice a week for 10 minutes at a time.

You can also purchase special sprinkler heads made for clay soils that spray water slowly.

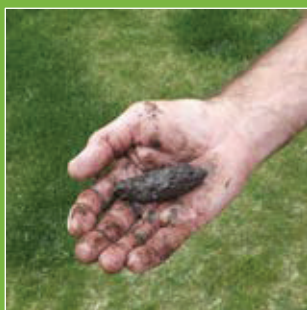
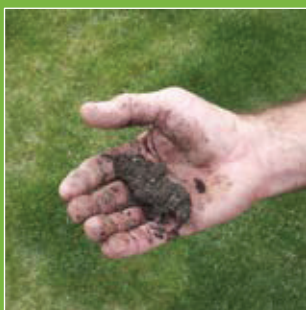
How to assess your soil type:

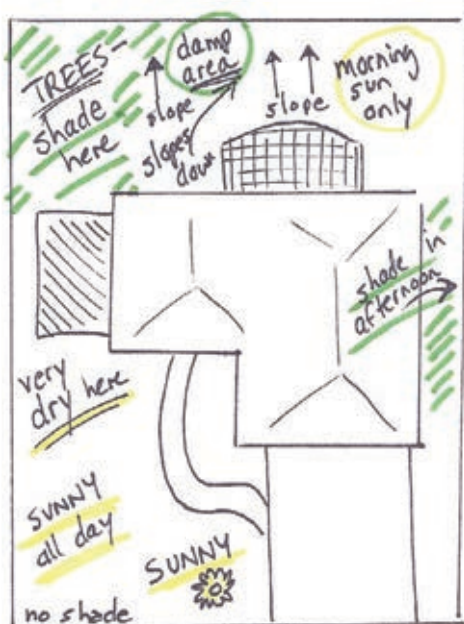
Take a small handful of damp soil and squeeze it firmly.

If it falls apart when you open your hand, you have sandy soil.

If it holds its shape but crumbles when you poke it lightly, you have loam.

If you can mold the soil into a ribbon, it is high in clay.





What is Compost Tea?

Compost Tea is a nutritionally rich, well-balanced, organic plant food made by steeping aged compost in water.

Compost is ideal for adding nutrients and organic matter to your soil.

Feed your compost bin a balanced diet of “greens” (vegetable & fruit scraps, garden debris) and “browns” (dry leaves, shredded paper)

Improve your soil

Healthy soil, high in organic matter, will help your plants grow vigorously and avoid herbicides or pesticides.

Composting is the biological decomposition, or breakdown, of organic material by bacteria and other organisms. The result of this organic breakdown is compost: a dark, nutrient-rich soil conditioner. When used as mulch around plants, compost helps protect root systems from heat and water loss.

Compost is ideal for adding both nutrients and organic matter to improve the soil's water holding capacity.

Compost Tea is an excellent high nutrient fertilizer and also helps reduce lawn thatch.

4. Assess Your Aspect

Consider your lot's features including sun and shade or dry and damp areas. Note where it's sunny most of the day - a good spot for a vegetable garden or heat-loving succulents.

Is there a spot at the bottom of a slope where the grass is extra green? You may have naturally damp areas that can support water-loving plants without much additional irrigation.

Or, you may have a north-facing yard perfect for shade-loving hostas.

If lawn is a must, try it on the north side where it grows slower, requires less water and mowing, and stays green longer.



Spending time and money to create good soil in your garden will ensure healthy plants and save you time and money by greatly reducing maintenance, plant replacement, and water use.

- Okanagan Xeriscape Association
okanaganxeriscape.org

5. Don't Forget Drainage

Where appropriate, choose permeable hard surfaces like gravel or stepping stones to allow water to seep naturally into the ground, reducing storm-water pollution and adding groundwater to our aquifers.

Or, plan flower or shrub beds around paved areas and slope the pavement towards the plants to take advantage of the runoff to irrigate your plants.

Use Rain as a Resource



Build a Rain Barrel Video

Download the accompanying 'Make Your Own Rain Barrel' guide at www.rdno.ca/water.



Slow it. Spread it. Sink it! An Okanagan Homeowner's Guide to Using Rain as a Resource is an easy-to-use guidebook that shows you how to capture and re-use the water that falls on your property.

Visit www.okwaterwise.ca to download your copy.

6. Hydro-Zones

Grouping plants with similar water needs in the same area, or "hydro-zoning", makes it easier to ensure your plants get the water they need without overwatering.

Lawns, flowerbeds and shrubs all require different amounts of water.

Place **water-hungry plants** in areas near downspouts or the edges of pavement where water pools, or showcase areas near your front door that you can water by hand.



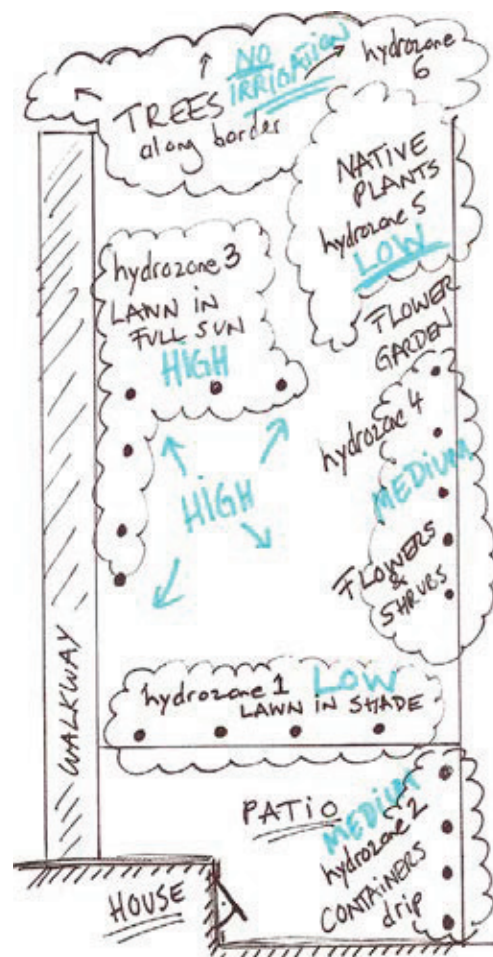
Choose **drought-tolerant plants** for the edge of the yard or other out-of-the-way areas that are harder to reach with the sprinkler.

Irrigation should be designed to match your plants and vice versa.

Install excess capacity.

Irrigation zones are areas that are watered by the same sprinkler or emitter on the same schedule. Installing extra connections now makes it easier and less expensive to expand your irrigation system to add zones to match any new garden beds.

Place two drip emitters per shrub to help water the root zone as it grows and keep at least 15cm (6") away from the stem to avoid rot.



Keep your irrigation plan handy.

Draw out the irrigation system (your designer can do this if it's been professionally installed) so you know where your heads / emitters are and note their specifications so they're easy to replace if broken.

Recognize the limitations of a sprinkler system.

Design your planted areas to match the limitations of the best irrigation system for the job. A narrow strip of lawn less than 2.4m (8 feet) wide is a challenge to water with sprinklers without a lot of overspray and waste.


Consider other plants or hard surfaces for that area instead.

RDNO Top 10


WaterWise

Plants


Herbs & Shrubs:




Oregano



Oregon Grape

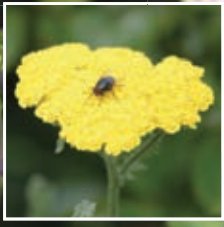


Ninebark




Shrub Rose

Perennial Flowers:




Yarrow

Groundcovers:




Sweet Woodruff




Woolly Thyme


Vines & Trees:



Grape



Amur Maple



Purple Cone Flower (Echinacea)

7. Pick Your Plants

Choose plants with low water needs that will thrive in our arid climate without much effort, such as the RDNO Top 10, above.

Plant shade trees. The shade they cast creates natural “air-conditioning”, lowering air and soil temperatures, and reducing soil moisture loss.

Shade trees can also help cool buildings if planted on the south side of your lot.

Deciduous trees are best to give shade in summer but allow the sun through in winter to warm your home - but keep in mind mature plant size.

Be firesmart if you live within 180m of wildlands.

Choose appropriate plants, use rock mulches or hardscape near your home (within 10 m).

Find a FireSmart plant list at www.firesmartcanada.ca

Look for the **FireSmart Guide to Landscaping**

Find more resources online:

www.waterbucket.ca
www.okanaganxeriscape.org
www.okwaterwise.ca
www.livingwatersmart.ca



Plant in spring or fall.

Avoid summer, when hotter temperatures mean plants need more water to get established.

New plants will need extra water during their first year or two.

Once established, many drought-tolerant or native plants won't need any irrigation in an average year.

Keep plants well spaced to avoid overcrowding when mature.

When planting, turn and cultivate the soil and add compost to improve moisture retention and grow healthier plants that need less water to stay strong.

Section 2

WaterWise Irrigation

Manual vs Automated

Manual sprinklers are relatively inexpensive and easily connect to the end of a garden hose.

But if you have limited time, want to keep your plants or lawn watered while you're away, and prefer not to drag around a hose and sprinkler, consider the alternative, an automatic irrigation system.

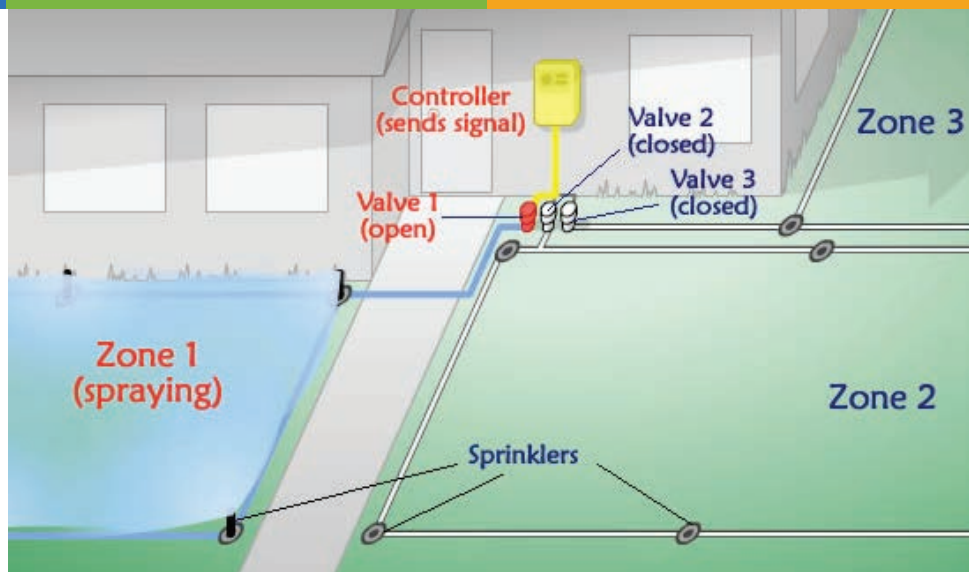
Automatic irrigation systems have the benefit of being **convenient**, allowing you to **water while you're asleep or away from home**, and for **delivering only as much water as is required by your plants**.

Automatic systems can be one of the most WaterWise irrigation methods. But this is true only if the system is set up to water **efficiently**.

Timers are often set once a year and forgotten, so you may be watering every other day in the heat of the summer, as well as during the rainy spring and fall when your plants are already receiving plenty of water.

Or, your system may be set up to water your lawn, shrubs, and trees, all on the same schedule, with the same type of sprinkler.

Different plants have different watering needs - shrubs and trees may only require watering a couple of times a month, if at all, whereas a lawn may need to be watered once a week during the hottest part of the summer.



Example of an automatic irrigation system set-up

Irrigation systems are designed with zones, areas that are watered different amounts and at different times.

The watering schedule for each zone in your system should take into account the type of sprinkler, sun or shade exposure, and soil in that area.

For instance, hanging baskets need to be watered more often than planted shrubs since the pots dry out much faster.

If these plants were all on the same zone, your shrubs would get overwatered while trying to keep the hanging baskets happy.

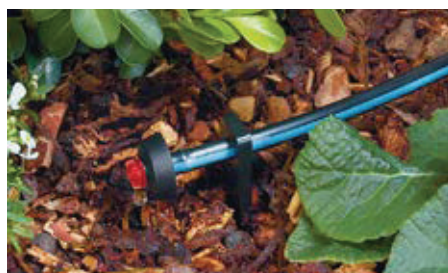
Your system should allow you to **apply the right amount of water for each type of plant by the most effective method**, which could be rotor sprinklers, sprays, or drip emitters. Adjustable spray heads are available in various shapes, drip rates, and other features.



ROTOR



SPRAY / MICRO-JET



DRIP EMITTER

If you are considering installing or upgrading an existing automatic irrigation system, there are several inexpensive features that will save you money.



Rain sensor



Pressure regulator



Pressure gauge



Backflow prevention device

System Components

“Smart” controllers or automatic shut off devices automatically adjust watering based on rain, soil moisture, evaporation and/or plant water use. These new controllers are a relatively small expense compared to the ease of use and water savings they provide. Many controllers or timers can be retrofitted with these add-ons.

Rain or moisture sensors are an inexpensive addition to your irrigation system. They measure the amount of rainfall or water in the soil and shut off your irrigation system when an adequate amount has been received.

Low or high pressure can affect sprinkler performance. For every 5psi reduction in pressure there's a 6-8% reduction in water use. You can choose sprinklers based on the water pressure on your site and also install a **pressure regulator**.

An ideal irrigation system will have uniform pressure between all zones but this can change over time due to wear. A **pressure gauge**, available for about \$10 at local irrigation supply stores, can be used to check how much pressure each head and zone is emitting.

Backflow prevention devices prevent irrigation system water, which may have dissolved dirt or chemicals, from contaminating your indoor water supply. Irrigation suppliers can give advice on the right device for your irrigation system. Most residential irrigation systems use a hose bib vacuum breaker or dual check valve. Check annually for leaks.

Keep **replacement parts** handy. Emitters or spray heads often need to be replaced as they wear. This can affect spray pressure or pattern, leading to water missing some areas.

Sediments in the water can build up and block emitters too. Every few years, remove the heads and clean out excess build up to keep your system performing up to standard. A **filter** will help protect your investment. Clean filters each spring.

Consider adding more sprinkler heads to ensure **head-to-head coverage**. Each sprinkler's spray should reach the next sprinkler head. Never mix sprinkler types or emitters on the same zone. A zone covering shrubs should only have drip emitters while the lawn would be on a separate zone with spray heads or rotors.

Even the best irrigation controller won't perform well if the system was installed incorrectly. When looking to hire a designer or contractor to install or repair your system always get multiple quotes, check references, and confirm they are insured.

The Irrigation Industry Association of British Columbia (IIABC) maintains a list of **Certified Irrigation Designers** at www.irrigationbc.com.



Smart controller




Filters and screens






Replacement parts

Irrigation Timeclock Settings - North Okanagan

New weather-based controllers automatically adjust to historical or current weather conditions. If you don't have a weather-based irrigation timeclock, use this chart to calculate watering times for the driest month, July, and then adjust the time for each month using the Water Budget function (%), or manually (minutes/week).

 Lawn		 Rotors	 Sprays	Low-Volume Sprays
April	Minutes / Week	73	22	79
	Water Budget	55%	60%	55%
May	Minutes / Week	92	27	108
	Water Budget	70%	75%	75%
June	Minutes / Week	119	36	130
	Water Budget	90%	100%	90%
July	Minutes / Week	132	36	144
	Water Budget	100%	100%	100%
August	Minutes / Week	112	27	122
	Water Budget	85%	75%	85%
September	Minutes / Week	73	22	79
	Water Budget	55%	60%	55%
Fall/Winter		OFF	OFF	OFF

Assumed precipitation rate: *0.47 in/hr *1.75 in/hr *0.43 in/hr

 Shrubs		 Dripline	 Sprays	Low-Volume Sprays
April	Minutes / Week	35	18	74
	Water Budget	33%	50%	55%
May	Minutes / Week	63	27	95
	Water Budget	60%	75%	70%
June	Minutes / Week	98	32	122
	Water Budget	93%	90%	90%
July	Minutes / Week	105	36	135
	Water Budget	100%	100%	100%
August	Minutes / Week	91	32	122
	Water Budget	86%	90%	90%
September	Minutes / Week	35	18	74
	Water Budget	33%	50%	55%
Fall/Winter		OFF	OFF	OFF

Assumed precipitation rate: *0.58 in/hr, *1.75 in/hr *0.43 in/hr
based on 0.9GPH, 18"x18" spacing

Match When & How You Irrigate to What You're Irrigating

Your plants need different amounts of water in the spring, summer and fall. A full year timer can be programmed with yearly temperatures and rain levels in mind.

Or use the Water Budget (%) function to cut back the amount of water used by the system without having to re-set all the zone timers.

How to use the Water Budget function:

Set your irrigation controller to the number of minutes per week you want to water in July. This is the hottest part of the summer, when your plants will need the most water.

Then, each month, change the percentage on the water budget function to cut back how much you're watering.

Example:

Lawn – Rotors

In July, you want to water about 132 minutes per week.

Set the controller to water once per week for that long, or twice a week for 66 minutes each run time.

On May 1st, change the Water Budget function to 70%. This will cut back your watering time to 92 minutes per week.

Use this table as a starting point to determine how much to water.

Test your irrigation system to see if it matches the precipitation rates listed* - if more water is applied by your system, cut back on the number of minutes per week it runs.

If you find water pooling, cut back on daily irrigation and spread the irrigation time out over several days. If we are having a rainy month, lower the percentage more.

If you don't have a Water Budget function on your controller, use the minutes per week to guide your settings.

Still not sure how much to water?



Go to irrigationbc.com and click the green calculator for the Irrigation Industry Association of BC Landscape Irrigation Scheduling Calculator.

Section 3

WaterWise Landscaping

- Lawns
- Shrubs & Garden Beds
- Trees



Love Your Lawn with Less Water

One inch a week will do. Learn more at www.rdno.ca/water

Lawns



Your lawn only needs 2.5cm, or 1 inch, of water per week, including rainwater, during the hottest part of the year.

Irrigation specialists agree that **watering deeply and less often** is the best way to promote a healthy lawn.

An easy way to check if your lawn needs water is to walk across it - if you leave footprints, it is time to water.

Healthy lawns also go through dormant cycles, just like trees, meaning that a period of golden brown colour is normal in summer.

When the grass looks brown, the first thought often is that it needs more water.

That might be the case if it's in an area your sprinklers don't quite reach, but try hand watering for a few weeks on the same schedule as your sprinklers. If the grass greens up, your irrigation system needs to be adjusted.

If it stays brown, the problem is likely the result of poor soil, disease, pests or animals, and not a lack of water. See *Troubleshooting on page 13* for tips on how to fix these problems.

Overwatering can lead to overgrowth.

Too much water makes plants grow more than they should, meaning extra mowing, pruning, and fertilizing.

Check your system once a month to make sure the spray is staying on your plants and not the pavement.

Sprinkler heads are easily broken, particularly those near driveways or walkways.

Sprinkler heads can be easily replaced to reduce overspray and better fit the area you're watering.

During the monthly check, make sure that all of the sprinkler heads are directed where they are needed.

Simple changes like redirecting or readjusting the spray head can prevent runoff or uneven watering.

Aerating your lawn and around trees at least once a year helps improve water penetration.

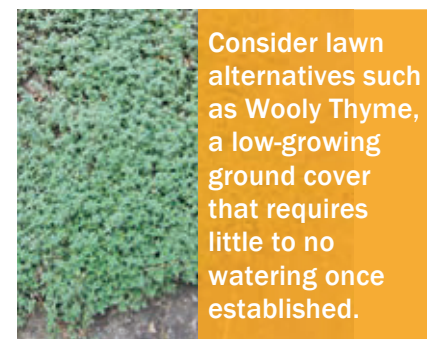
Topdress - add no more than 6mm (1/4") of topsoil mixed with compost in a thin layer over the lawn. This returns nutrients to your lawn like a fertilizer while also helping improve your soil.

Plan to topdress immediately after aerating in the spring.

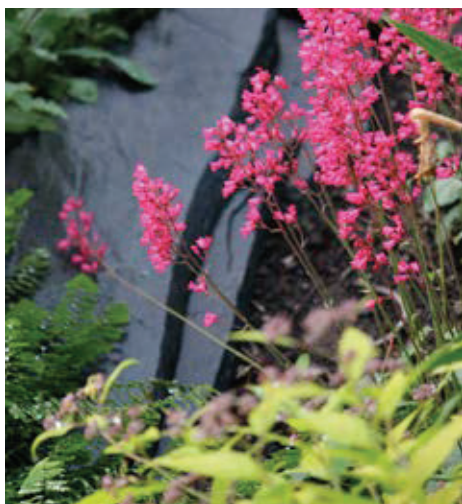
If grass is well established it also helps to leave the clippings on the ground after mowing. This recycles nutrients back into the soil.

If you are regularly mowing to the recommended 6-8cm, clippings should be short and mix well into the lawn.

Train your lawn to use less water by delaying watering until June to encourage deep root growth.



Consider lawn alternatives such as Woolly Thyme, a low-growing ground cover that requires little to no watering once established.



Mulch Makes A Difference!

Top-dress your shrubs and garden beds to protect plants, conserve water, suppress weeds, and nourish soil.

Mulch is basically anything that covers the soil.

Different mulches have different uses and functions: rocks retain heat, leaves retain water and return nutrients, while cardboard suppresses weeds better than landscape fabric.

Shrubs & Garden Beds



Drip (or trickle) irrigation, micro spray jets, micro-sprinklers and bubbler irrigation all apply a very small amount of water, slowly and precisely, minimizing evaporation, runoff, and overwatering.

These are a better choice for shrubs, flowers, or vegetables over the typical rotor sprinkler heads used on lawns.

Use components that provide flexibility.

For example, a drip system should have water emitters placed close to the root zone of each plant.

As the plant grows, the emitter may need to be moved.

A flexible hose with in-line emitters will accommodate plant growth without requiring the relocation of the main irrigation pipe.

If your soil seems thin (less than 45cm of good topsoil), top-dress by adding up to 1cm of topsoil mixed with compost in the spring.



Letting leaves drop and remain at the base of the plant also helps return nutrients and adds to the mulch cover protecting the roots.

Compost: slow food for soil.

Well-aged compost can be layered on top as a mulch to slowly break down and leave nutrients for your plants.

Or, compost can be dug in and used to amend your soil to improve its water retention capacity or break up clay soil structure.

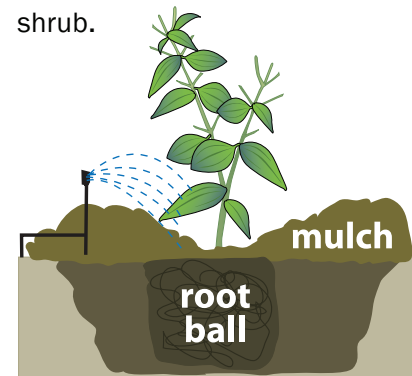
Double dig to break up soil – avoid frequent rototilling as it compacts soil.

Mulch well around plants, bushes and trees.

Using 2-4 inches of mulch reduces water evaporation, prevents soil erosion, keeps soil cool, and helps control weeds that compete for water.

Check mulch each spring and add more to keep a good depth around the roots/dripline.

It helps to leave a small area of thinner mulch close to the trunk, creating a basin around the shrub.





Trees = Natural A/C

One thing you won't see in the forest is manicured lawn around a tree. Newly planted trees are at a disadvantage when they have to compete with grass for water, air and nutrients.

Keep grass from the planting area for at least one year. If you mulch around trees instead of planting grass, you also prevent possible trunk damage by lawn mowers or string trimmers.



Trees

How much water your tree should receive depends on the size of the tree.

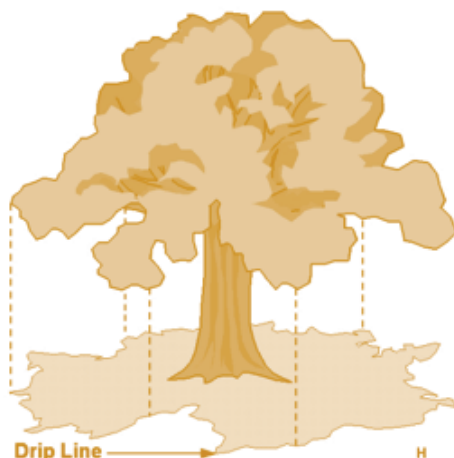
A general rule of thumb is to use approximately **10 gallons (38 litres) of water per 1 inch (2.5cm) of trunk diameter** for each watering. Measure trunk diameter at knee height.

Unless we are experiencing extremely hot temperature, most trees thrive on being watered **3 times per month, April through September**. Healthy mature trees should be able to withstand a short-term drought.

Water should be distributed evenly under the dripline of the tree.

There are several irrigation methods to choose from:

- **Soil needle (deep root feeder)** - Work the needle into the soil at an angle to a depth of 8 inches. Water a minimum of four sites around young trees and 12 for medium to large trees. Scatter the sites around the area bordered by the drip line. For new trees and those planted within five years, place the needle at least three feet from the trunk.
- **Sprinkler or hose** using a spray nozzle at medium pressure.
- **Automated drip irrigation system/soaker hose**. For Medium to Large Trees (8-15" diameter or bigger at knee height) a soaker hose should be coiled several times under the dripline of the tree.





Section 4

WaterWise Troubleshooting

Do you have dry or brown spots on your lawn or drooping shrubs?

Don't assume it's because you're underwatering.

Possible causes:

- Sprinkler is blocked by another plant that has grown larger, a rock, or lawn furniture.
 - Sprinklers are not covering from head to head. A nozzle may be worn out/broken or the spacing between sprinkler heads must be adjusted. Nozzles should have matching precipitation rates, but worn out nozzles change the rate.
- High pressure may be causing misting, meaning the spray evaporates before it reaches the plants. A pressure regulator can help.
- The soil in that spot is different, causing run off or pooling. If the soil is hard and compacted at the surface, aerating your lawn is a good way to allow better water penetration. Topdress to improve poor soil quality.

- It may be extra sunny or shady compared to the rest of the lawn - this might be a good spot for a garden bed or other garden feature.
- Pets may be favouring that spot for their bathroom breaks.

Don't have enough soil?

If not, topdress.

- Dig a small hole, about 15cm deep for lawn areas and 45cm deep around shrubs, to test your soil.
- If the soil isn't black and crumbly sandy loam to those depths, you can gradually add soil to increase the depth and improve the vigour of your plants. This is called topdressing (see page 11).



Weeds are breaking through your mulch.

Over the years, bark or other plant-based mulches break down to provide nutrients to your soil.

- Add more mulch in the spring to keep the depth at around 5-10cm.
- Using cardboard as a weed barrier can be more effective than landscape fabric under mulch.

Leaks?

A leaking irrigation system is a major outdoor water waster. Irrigation pipes are made of brittle plastic which cracks easily due to changes in weather conditions and natural earth movement. The most common place for a crack is at the joints.

How to Check for Leaks:

Shut down all of your indoor water appliances - make sure no one flushes the toilet, runs the clothes washer, or washes their hands.

Check your water meter and see if the red triangle is moving or if the numbers are moving. There should be no movement.

If there is, the leak could be inside (e.g. a leaky toilet flapper) or outside in your irrigation.





WaterWise Troubleshooting

Find more tips online at www.rdno.ca/water

Is the leak inside or outside?

To help pinpoint the leak, write down the water meter reading before and after your outdoor irrigation system completes a cycle.

- Anything more than 1-2 cubic meters (220-440 gallons) per watering event could be considered excessive.

Also check your indoor fixtures for leaks, like dripping taps.

- Add a few drops of food colouring in your toilet tank and if the colour shows in the bowl you have a leak there.
- For more tips, visit www.rdno.ca and go to Services > Engineering > Water > Water Conservation.



If you suspect an irrigation system leak:

Call a certified irrigation professional for an assessment - they have the equipment to check for underground leaks and can test your controller to ensure it is functioning properly.

Find a list of local certified professionals on the Irrigation Industry Association of B.C. website at www.irrigationbc.com.

Lawn requires too much mowing and watering.

Grass that is over watered and fertilized is like a body on steroids. Too much growth leads to too much mowing. Too much water or fertilizer means the grass roots don't have to grow far, and shallow roots mean weak grass that always needs more water and fertilizer.

To encourage a healthy lawn:

- Aerate yearly, top dress with compost, and mow high (keep blades at 3").
- Delay watering until June, unless we have a hot spring, to encourage deep root growth.
- Avoid watering when it is windy - wind blows the water off target and causes evaporation.

IRRIGATION

Start-Up & Shut-Down

Spring Check List:

- ☒ Check backflow prevention device.
- ☒ Clean filter(s) & screen(s).
- ☒ Test run each zone - check for run time. Adjust run time to appropriate number of minutes/day(s) for the spring or use the Water Budget Function. Check controller monthly to adjust timer to weather changes.

Not sure? Refer to **Irrigation Timeclock Settings** on page 10.

- ☒ Watch each test run to check for overspray. Adjust heads/emitters and replace broken equipment.

Winterize to Avoid Leaks:

- ☒ Have an irrigation specialist blow out your irrigation in the fall to remove any water that could freeze and crack your pipes and fittings.
- ☒ Avoid blow-out pressures higher than the system design pressure (30-50 psi) that can damage your system.

Resources

Web Links

Regional District of North Okanagan - Water
www.rdno.ca/water

Okanagan Xeriscape Association
www.okanaganxeriscape.org

Irrigation Industry Association of British Columbia
www.irrigationbc.com

Okanagan WaterWise
www.okwaterwise.ca

Waterbucket
www.waterbucket.ca

Okanagan Basin Water Board
www.obwb.ca

BC Water & Waste Association
Cross Connection Program
www.bcwwa.org/cc

Living Water Smart
www.livingwatersmart.ca

Certified Professionals

Look for the appropriate certification from the following organizations, when seeking qualified professionals in the fields of landscape and irrigation design and construction:

Irrigation Industry Association of BC (IIABC)
Certified Irrigation Designers and Technicians in the installation and maintenance of irrigation systems.

www.irrigationbc.com
Tel: 604.859.8222

Canadian Nursery Landscape Association (CNLA)
Landscape Industry Certifications are provided to Technicians, Designers and Managers who are qualified to supervise landscape construction.

www.canadanursery.com
Toll-free 1.888.446.3499

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Contact:
Regional District of North Okanagan
9848 Aberdeen Road
Coldstream, BC V1B 2K9

www.rdno.ca/waterwise
250.550.3700

