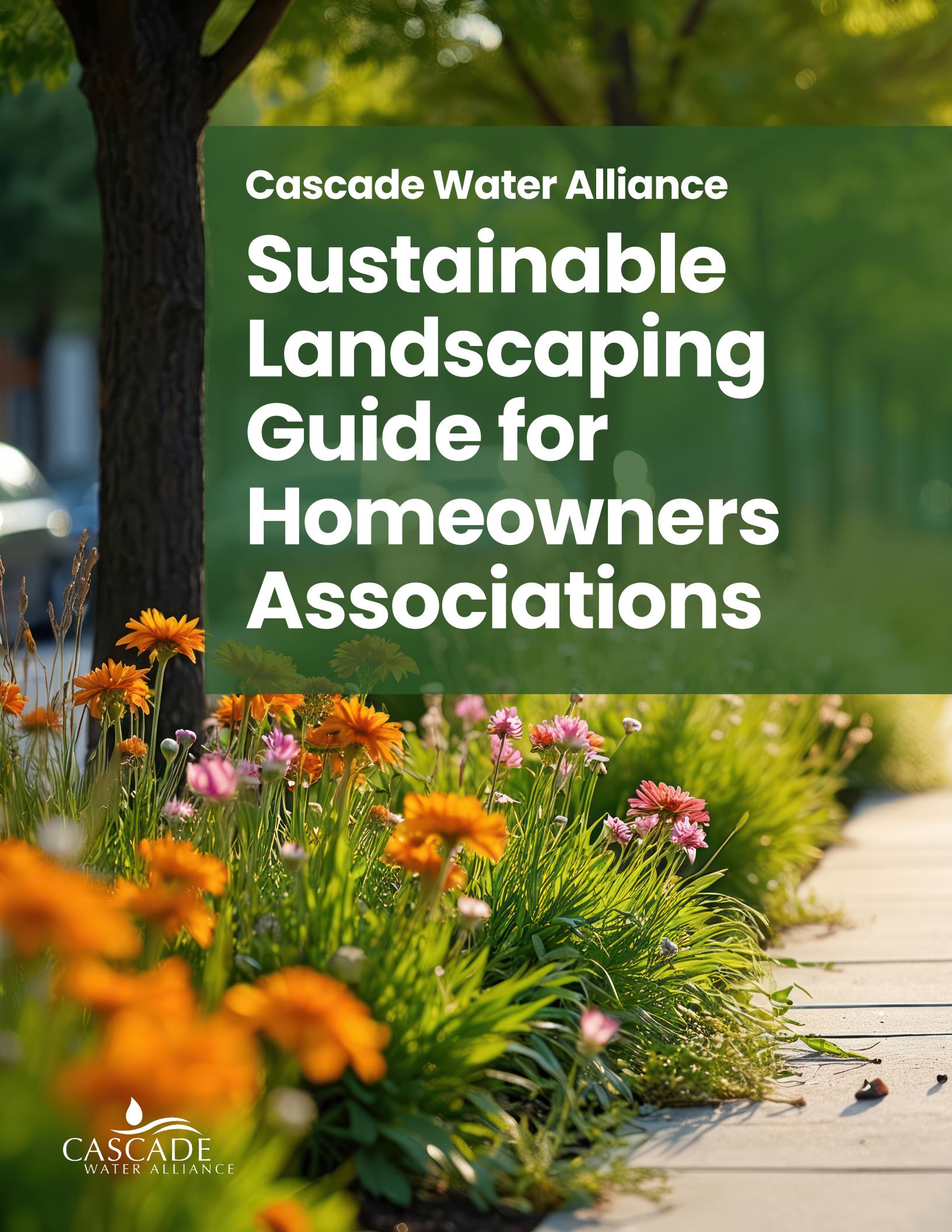

Cascade Water Alliance

Sustainable Landscaping Guide for Homeowners Associations

CASCADE
WATER ALLIANCE

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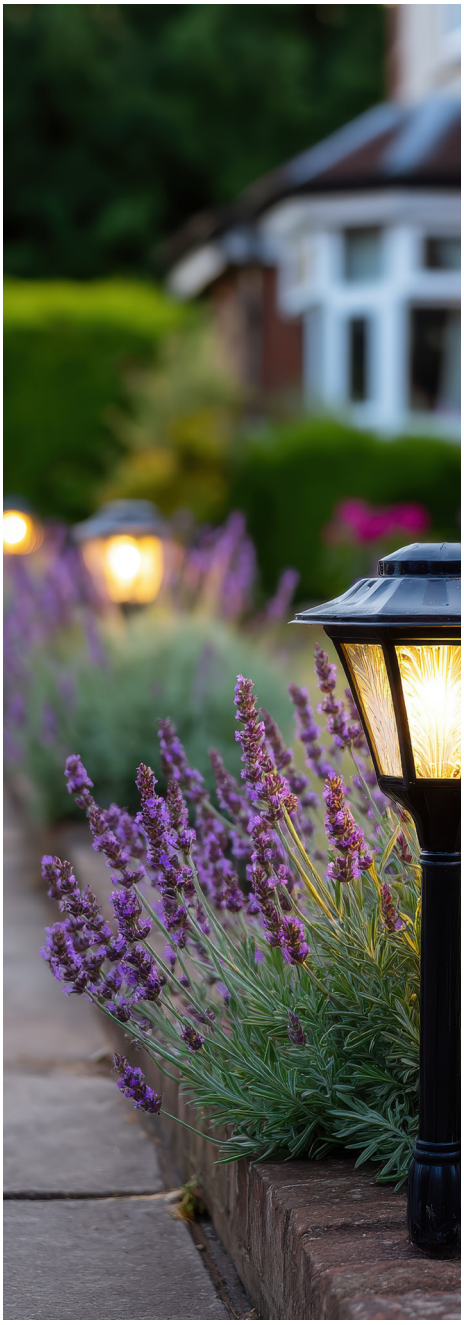


Introduction

Sustainable Landscaping Guide for Homeowners Associations

This guide is intended to help Homeowners Associations (HOAs) understand the benefits of sustainable landscaping and how to set their community on a path toward creating beautiful landscapes that are good for people, wildlife, and the planet.

HOAs face special challenges with landscape and irrigation maintenance. Unlike a single-family home, an HOA neighborhood typically includes common property (sometimes large areas), which is owned and managed by the association.

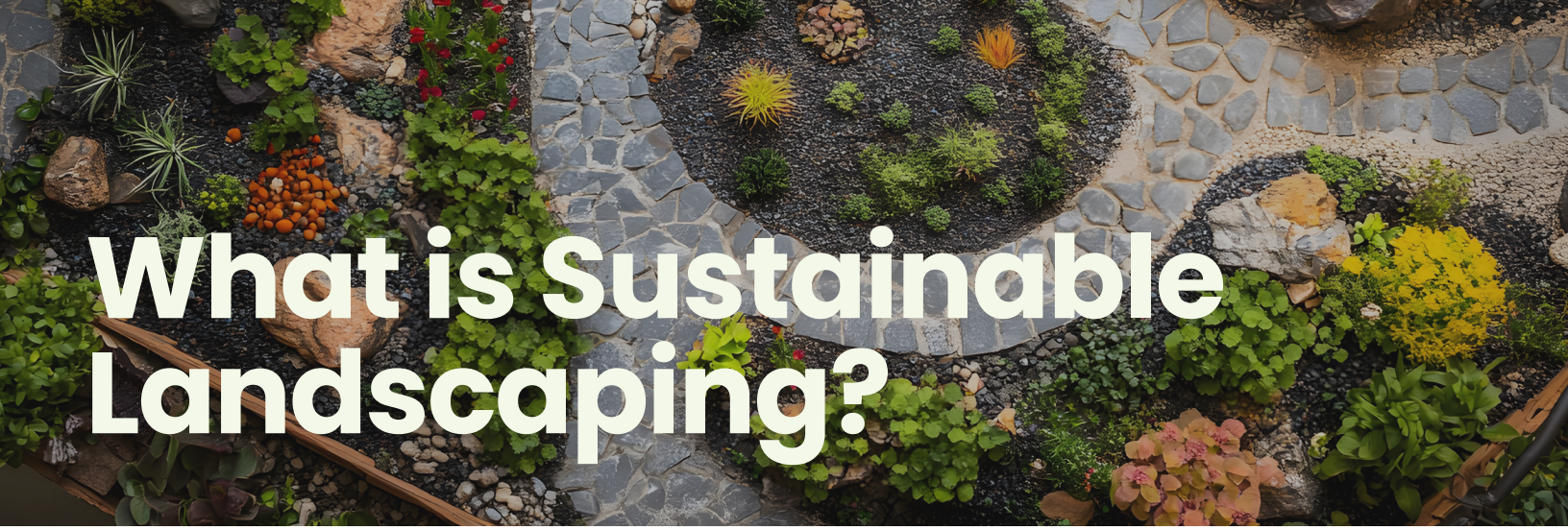
Understanding proper landscape maintenance and reaching consensus about how to manage the landscape can be difficult. HOAs often hire outside companies to manage the landscape and irrigation, which can present another layer of complexity, as these contractors may not practice sustainable landscaping and the HOA may not know how to guide them appropriately.

By using the information in this guide, you will be able to provide clear guidance to landscape and irrigation contractors, helping them manage your property in ways that maintain property values while saving water and other resources.

Find a Pro!

Consider working with a professional landscaper to develop a plan and create a beautiful sustainable landscape.

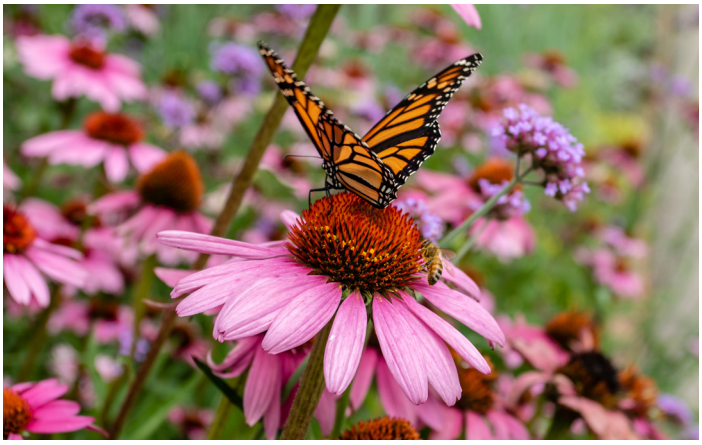
Find an ecoPRO Certified Sustainable Landscape Professional

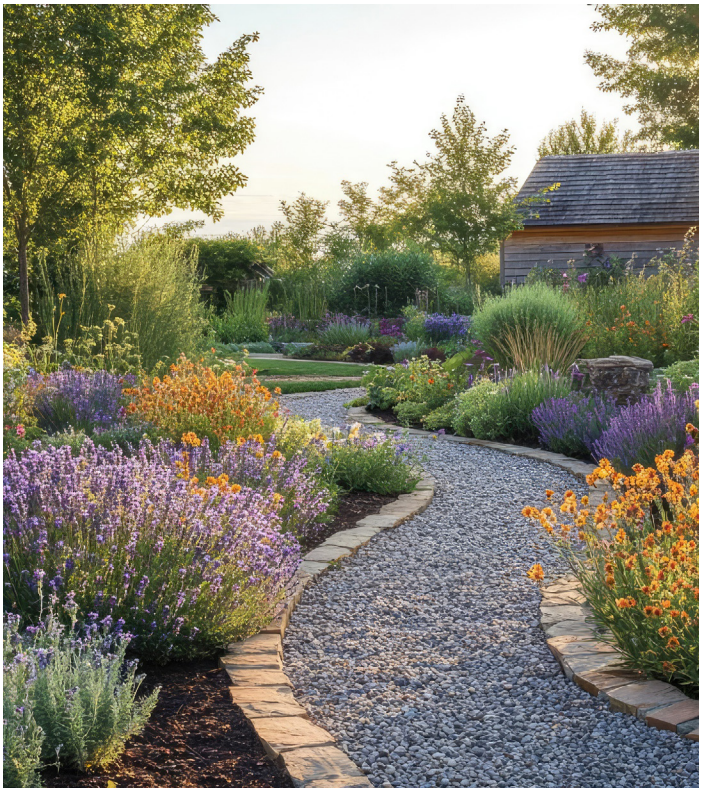


What is Sustainable Landscaping?

Sustainable landscaping is an approach to designing, building, and maintaining landscapes that are eco-friendly and aligned with the area's climate. It uses regionally adapted plants and techniques that reduce water use, fertilizers, energy consumption, and pesticides.

Sustainable landscaping enhances soil, air, and water quality and is more effective at retaining stormwater and promoting infiltration. These landscapes are also more attractive and easier to care for in the long run. Sustainable landscaping will save your HOA money over time.



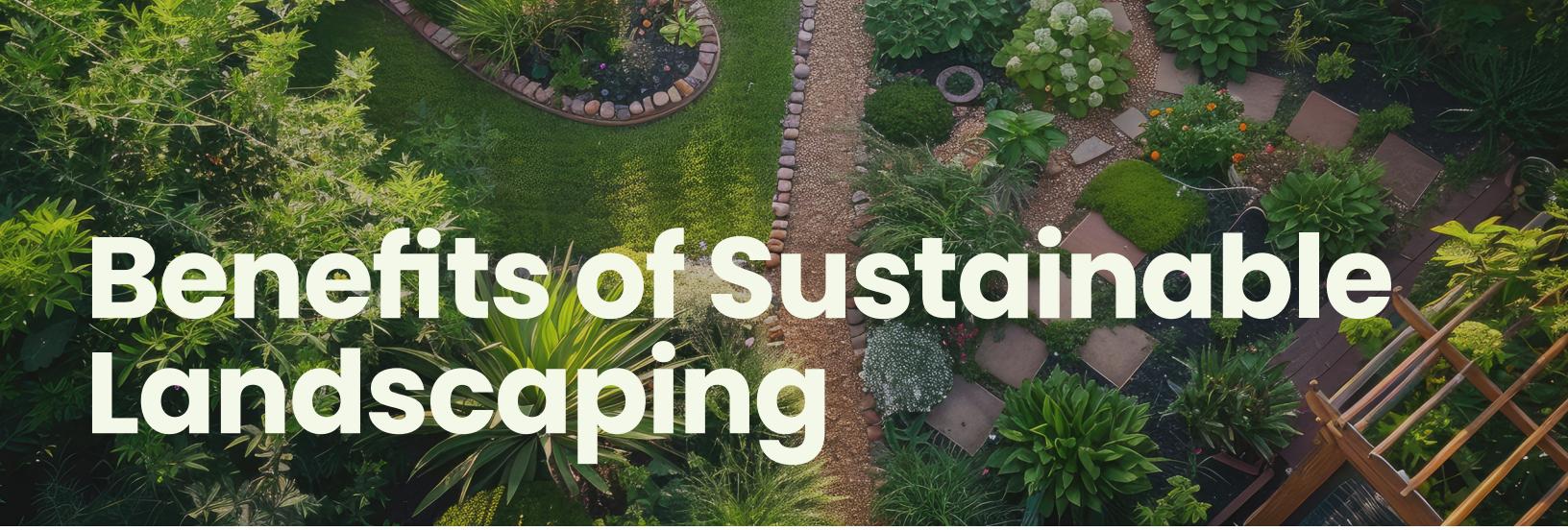


Did you know...

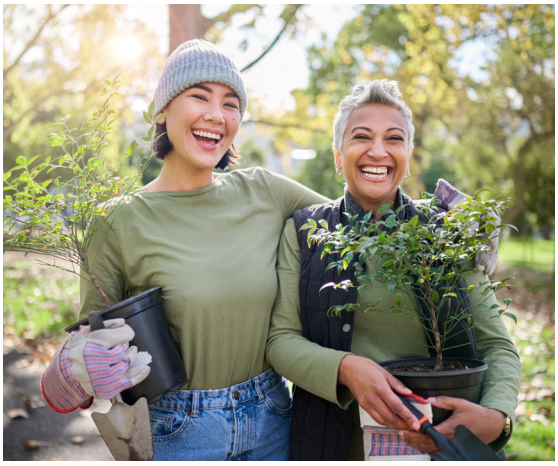
Washington law prohibits an HOA from banning drought resistant landscaping or making rules that would make the landscaping unreasonably costly?

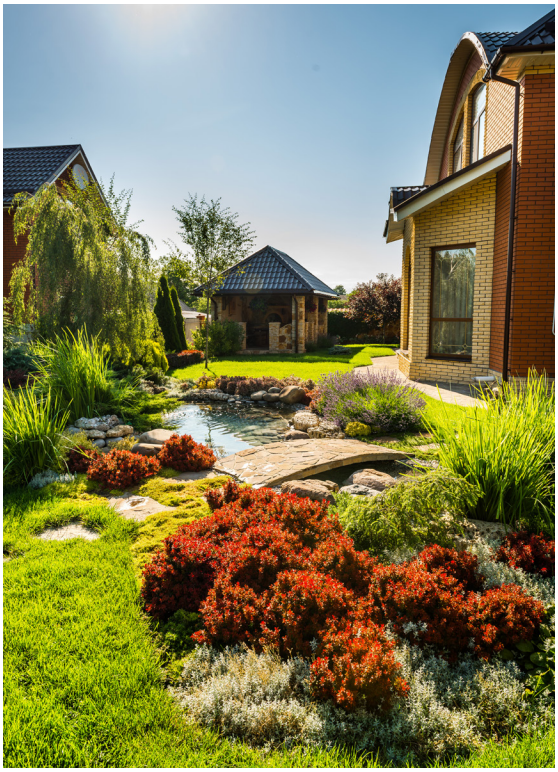
For HOAs formed before July 1, 2018 see: RCW 64.38.057: Governing documents—Drought resistant landscaping, pollinator habitat, wildfire ignition resistant landscaping.

For HOAs formed after July 1, 2018 see: RCW 64.90.512: Installation of drought resistant landscaping, pollinator habitat, or wildfire ignition resistant landscaping.



Benefits of Sustainable Landscaping





Aesthetics

A well-designed and maintained sustainable landscape offers more visual interest than traditional grass-dominated landscapes. It includes greater variety in color, shape, and texture and creates a more pleasant space to enjoy.

Lowered Costs

Sustainable landscapes, once established, require less water, fewer chemical inputs, and less maintenance time – resulting in lower utility bills and landscape maintenance fees.

Water, Waste, and CO_2 Reduction

Sustainable landscapes use less water and produce less yard waste. They also reduce greenhouse gas emissions by minimizing the need for gas-powered lawn equipment.

Energy Efficiency

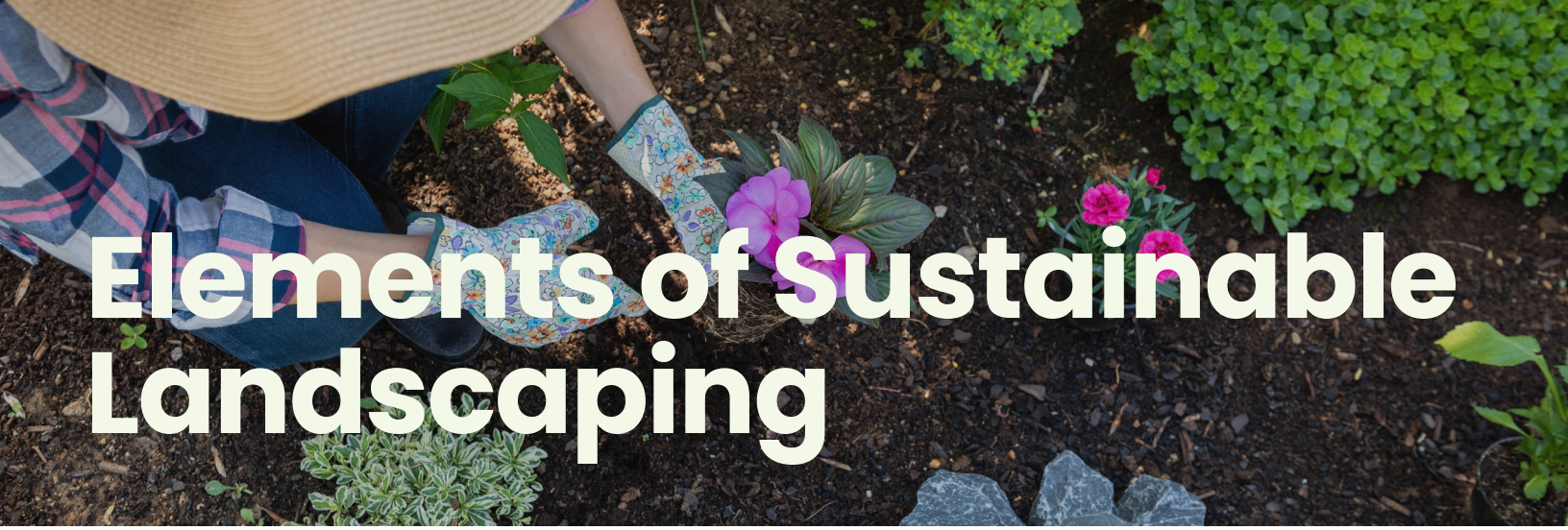
Mature trees and shrubs provide shade that can lower the demand for air conditioning during the summer months.

Biodiversity

Sustainable landscapes support a broad range of plant and animal life. You'll see more birds, butterflies, and other beneficial insects, enhancing both enjoyment and ecological health.

Stormwater Management

Traditional lawn soils often become compacted, causing rainwater to run off quickly and carry pollutants into storm drains. Sustainable landscapes with healthy, well-prepared soil absorb and filter rainwater, protecting local waterways.



Elements of Sustainable Landscaping

Compost and Mulch

Any gardener will tell you that good soil is the basis for a healthy landscape. Healthy soil grows healthy plants, and healthy plants grow stronger and resist diseases and pests better. You can easily improve any type of soil with compost and mulch.

Mix compost into your soil once or twice a year. In new beds, mix 1" - 2" of compost into the top 6" - 8" of soil before planting. In existing beds, spread 1/2" - 1" of compost around plants. Look for compost products with the OMRI (Organic Materials Review Institute) or WA Organic Certification. You can use Cascade's Compost Calculator to determine how much compost you'll need.

Mulch is an organic material – such as leaves, pine needles, straw, or wood chips – that covers the bare soil around plants. This organic layer feeds the microorganisms that help plants grow. A thin layer of finished compost is a great mulch that suffocates weed seeds while building rich soil that retains moisture and protects roots.

Spread 3" - 12" of mulch around new plantings. Create a ring of mulch around established plants with a 3" - 6"-wide mulch-free zone around the stem or trunk. Spread mulch to the drip line or the outer tips of the branches where roots are growing and taking up water and nutrients. Make sure the mulch-free zone always stays clear. Nicely mulched trees, shrubs, and planting beds are attractive, increasing street appeal and property values.

Need Wood Chips?

Wood chips are shredded tree branches and limbs. They are full of microbes and organic matter ready to improve your soil as they decompose. Chip Drop is a nationwide service that connects arborists who have too many wood chips to gardeners who need them.

Compost Calculator

Figure out how much compost or mulch is needed for your project with Cascade Water Alliance's Compost Calculator.

Mulches to Use

- Wood chips
- Wood shavings
- Conifer needles
- Deciduous and evergreen leaves
- Straw
- Grass clippings
- Finished compost

Mulches to Avoid

- Non-organic or rubber mulches
- Material sprayed with pesticides or herbicides
- Beauty bark
- Shavings from stained or laminated wood

Plant Choices

Landscaping with native or drought-tolerant plants is a great way to create a low maintenance garden that supports wildlife and native pollinators. Once established after a few seasons, drought-tolerant plants will need very little water and just a little mulch each year to thrive. If your yard is shady, there are many plants that thrive in low light conditions. Pollinator-friendly gardens support wildlife and improve water quality because these plantings help build soil, reduce pesticide use, and create habitat for bees, butterflies and birds. You have many plant choice options. Look at the Plant Guide in the Resources section to see beautiful and water-efficient plant options.

Minimize Grass

If you want to make the biggest difference possible in your landscape, remove some lawn. Grass is a very water, chemical, and labor-intensive plant. Almost anything you replace grass with will be less work and a more interesting feature in your landscape.

Some grass on your property is fine; lawns are great play spaces for kids and pets and for sitting and entertaining guests. But large expanses of grass require lots of time and resources to maintain. Be bold and reduce your lawn in favor of a new or expanded garden.

Cascade's Lawn Be Gone: Grass Removal rebate program provides rebates to eligible customers who remove part of their lawns and replace them with native and drought-tolerant plants. Visit to learn more about this program.

Meadowscaping

If you still want to have open areas of lawn, consider meadowscaping. Meadowscaping exchanges traditional grass lawns for native grasses, clovers, and wildflowers to create a beautiful carpet of color and texture that will invite hummingbirds and honeybees into your landscape. Meadowscapes don't require mowing, fertilizing, or watering after they're established, which can significantly reduce time spent on landscape maintenance. The plants in a meadow provide habitat for many species of birds and insects, increasing biodiversity and making your landscape more resilient and enjoyable.

FREE Cascade Gardener Classes!

Sign up for Cascade Water Alliance's free gardening classes from local experts on a variety of topics such as sustainable gardening, irrigation, pest control, edible gardening, and more.

Learn more at Cascade Gardener

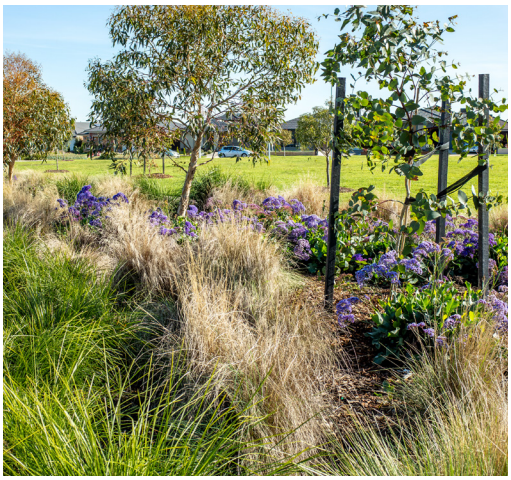
811 SAFETY IS IN YOUR HANDS. EVERY DIG. EVERY TIME.

DIAL 811 Before You Dig!

Lawn Be Gone: Grass Removal

Cascade Water Alliance offers a Lawn Be Gone: Grass Removal rebate program for eligible people and organizations in its service area to receive money for replacing their lawn with native or drought-tolerant plants! Cascade also offers a Lawn Be Gone: Grass Removal guide and instructional videos on their website. Go to the following link to learn more and see if you're eligible for a rebate:

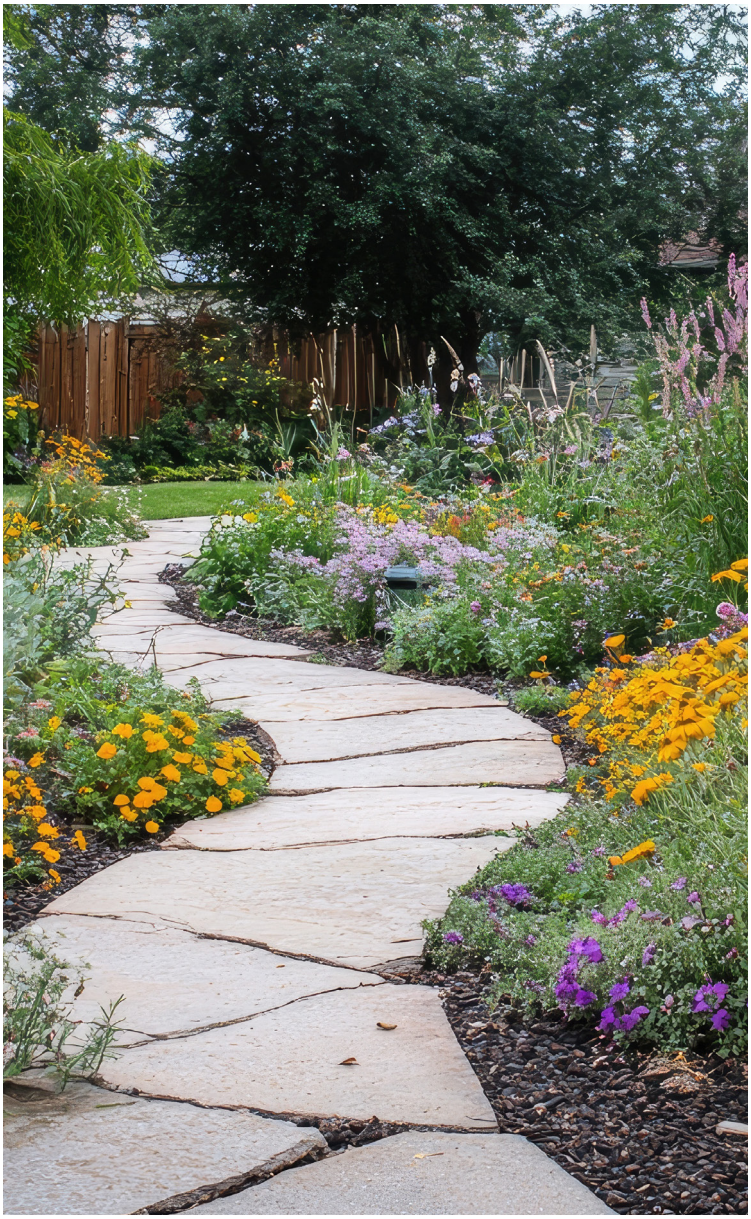
Lawn Be Gone: Grass Removal



Golden Lawns

Consider letting your lawn, or part of your lawn, go dormant (golden) in the summer. Most grass species are adapted to hot, dry summers and will naturally go golden if left on their own. When the fall rains arrive, the grass will turn green again. If you don't want to let the lawn go golden in the high visibility areas, consider letting some of the lower visibility and lesser used areas go golden.

In an exceptionally hot, dry summer, you may still wish to give the lawn a good watering every three or four weeks to lessen the stress on it. A wonderful side benefit to golden lawns is that you don't have to keep mowing them every week. Take advantage of the extra time and work on developing nicer garden beds.



Pesticide-Free Landscaping

The suffix "cide" is derived from Latin and it means "killer." So, think twice before applying pesticides and herbicides to places where your family, pets, and wildlife will roam. Here are some strategies for pesticide-free landscaping:

- Healthy plants will naturally limit weed growth, so put your time and resources into making your plants as healthy as possible.
- Cutting your grass higher will help shade out unwanted plants in your lawn.
- Pulling weeds by hand is free, and it provides good exercise.
- Mulch is your best friend when it comes to stopping weeds in gardens and planting beds.
- Carefully watering only where your plants need it can aid in keeping unwanted weeds from getting a foothold in your garden.
- Vinegar-based products can suppress existing weeds, while corn gluten meal can prevent weed seeds from germinating.
- Insecticidal soaps can help eliminate many pests from your garden.
- Ensure that lawn care products are safe for people and wildlife by consulting Thurston County Environmental Health's Grow Smart Grow Safe guide.

Smart Watering

In King County, Washington your landscape will typically need supplemental water from May through September, with the greatest need from early July to the end of August. However, in many years there is quite a bit of rainfall throughout the summer, especially early summer, which will minimize the need for supplemental watering.

Try to stay in tune with current weather conditions as you water. If it rains a quarter-inch or more, you probably don't need to water for a few days. Use a rain gauge (available to Cascade customers through its website) and check the soil moisture before watering. Most plants, including grass, will be healthier if the soil dries out between waterings. A little bit of stress on the plant will encourage the roots to go deeper looking for water, making the plant stronger and healthier.

When you water, water slowly. Try to apply water at the same rate as the soil absorbs it, like a gentle rain shower. Water consistently; each plant needs one to two gallons of water per week spread over two or three applications. Strive to water in the morning or evening for better uptake and less evaporation. *Water the soil and not the plants.* A timer will prevent you from overwatering. Limit overhead watering and instead use soaker hoses and drip irrigation lines to reduce evaporation and deliver water efficiently to plants.

If you have an automatic, in-ground sprinkler system, consider upgrading to a weather-based controller and make sure you have a functional rain sensor shut-off device. In the "shoulder season" (April – May and September) you may need to water very little depending on rainfall. In July and August, try to run your system so that it applies only one-inch per week on the grass. You can use a rain gauge, empty tuna cans, or similar containers to measure the precipitation rate of your sprinkler system to properly adjust the run times.

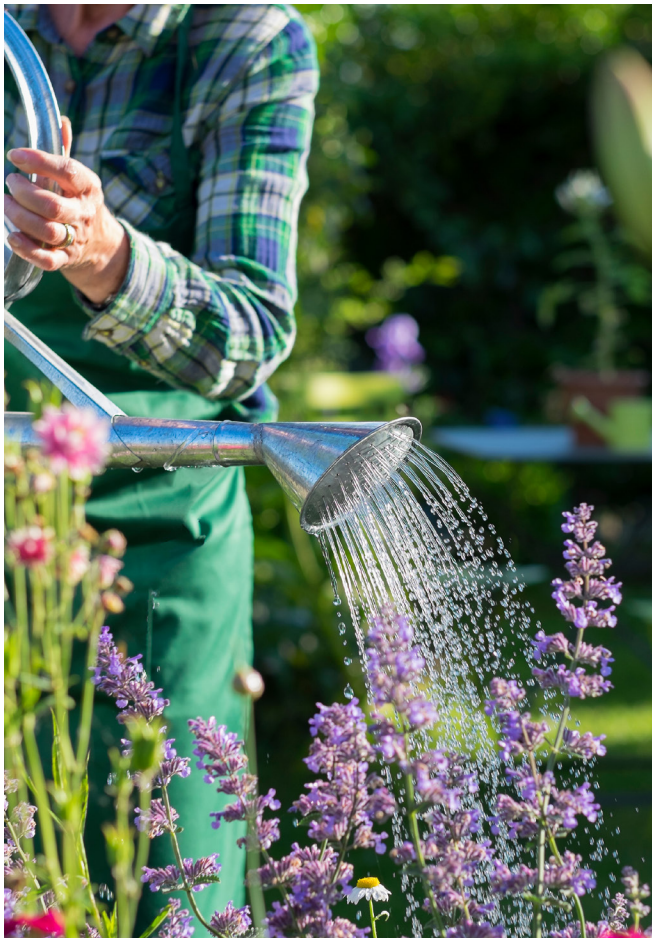
Water in the morning or the evening, away from the heat of the day. Heat and wind can dramatically increase the evaporation rate of water. If you run your irrigation system on a hot, windy afternoon, you can expect 50% or more of the water to evaporate before ever soaking into the soil.

Have your irrigation system inspected and serviced annually so it is at peak performance. Cascade provides free irrigation system evaluations for commercial, multifamily, and institutional properties in its member service area. If your system is older, consider updating it as there have been great advances in irrigation technology and drip irrigation.

EPA WaterSense

WaterSense is a voluntary partnership program administered by the U.S. Environmental Protection Agency (EPA). It is a labeling and performance-based program for water-efficient products and a resource for helping you save water in your home and landscape.

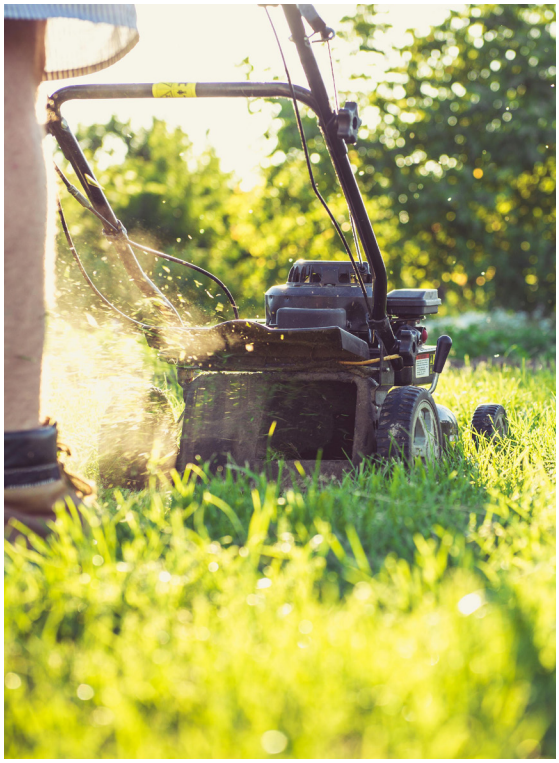
The WaterSense label makes it simple to find water-efficient products, new homes, and programs that meet EPA's criteria for efficiency and performance. WaterSense-labeled products and services are certified to use at least 20 percent less water, save energy, and perform as well as or better than regular models.

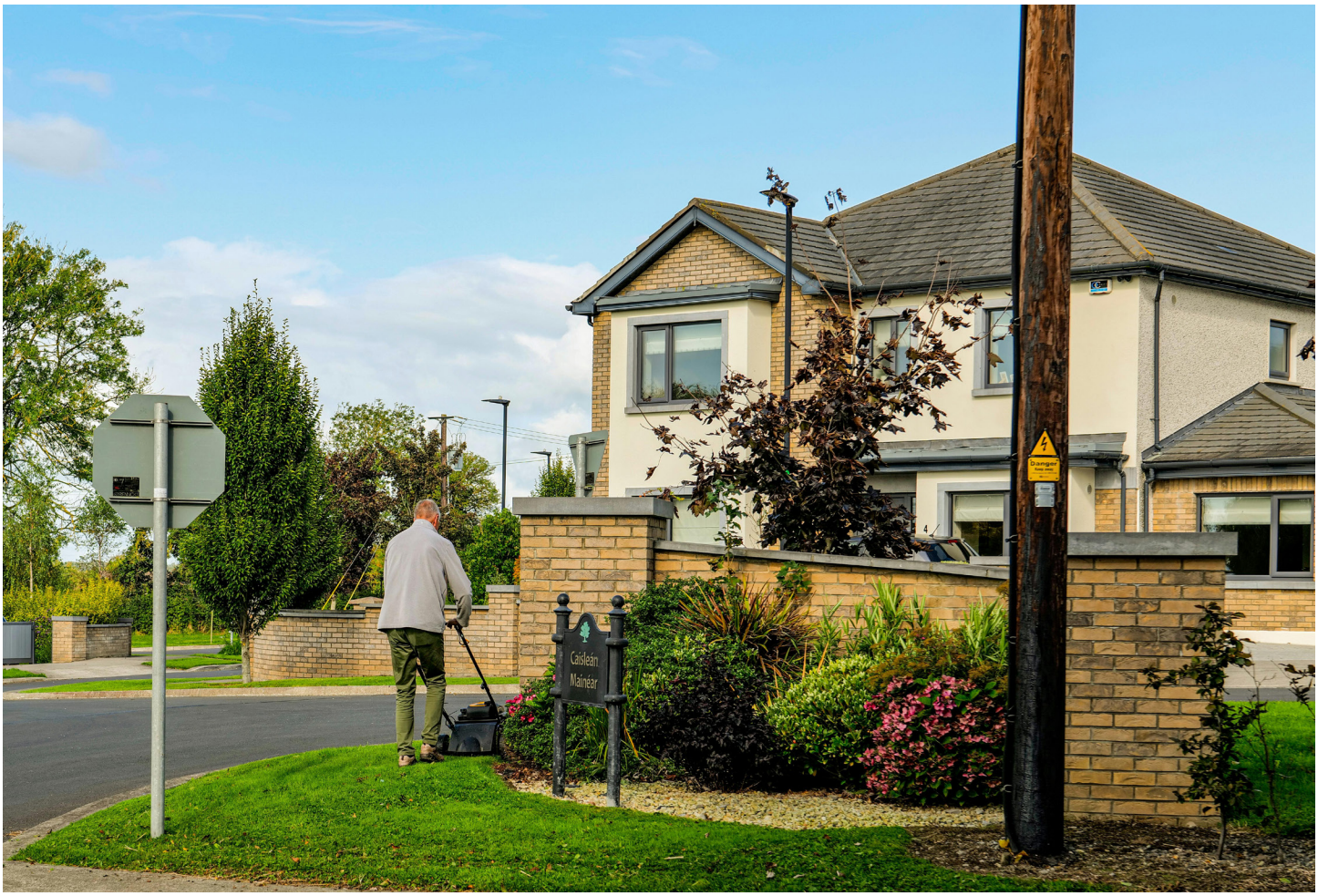


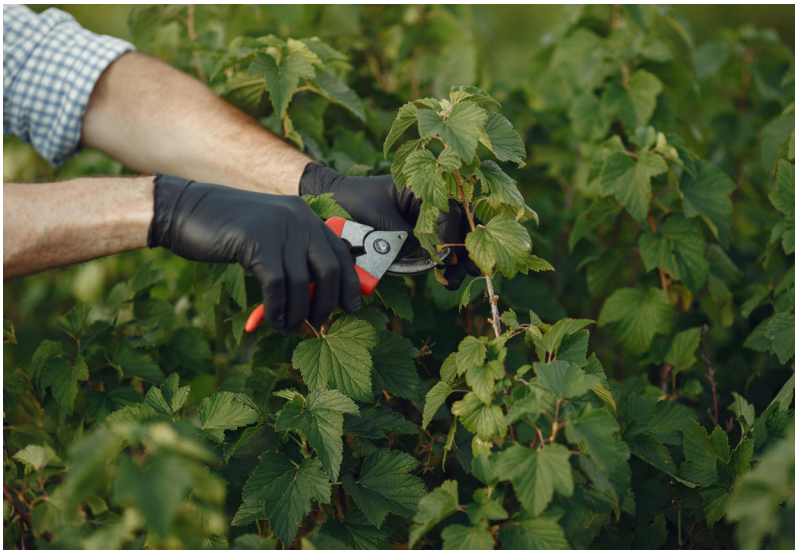
Mowing

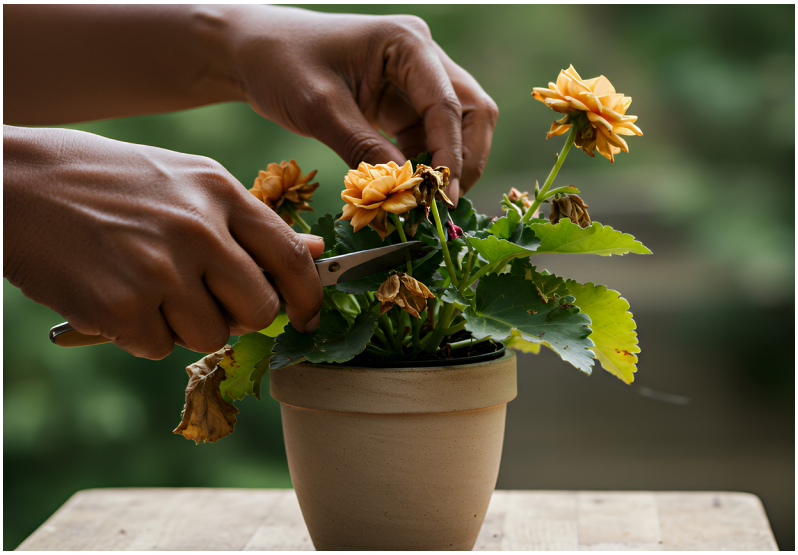
How you mow the grass matters. Follow these tips to keep your grass healthy and minimize the environmental impact:

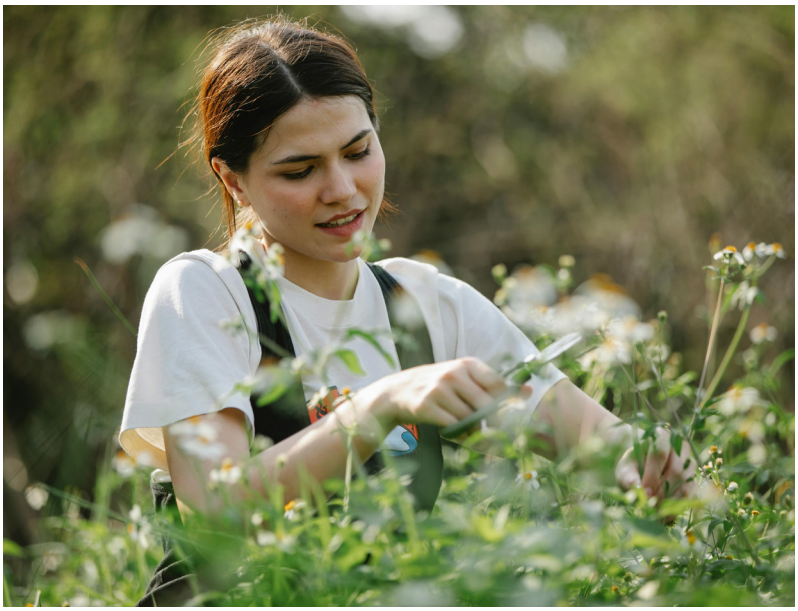
- Set the mowing blade height to 3”.
- Keep the blade very sharp.
- Wait until the grass is dry before you mow.
- Mow frequently, especially in the springtime.
- Alternate the pattern and direction you mow each time.
- Leave the clippings on the lawn to return nutrients to the soil.
- Consider investing in a mulching mower and battery-powered lawn tools.
- If you have a small lawn, a human-powered reel lawn mower is great exercise with zero emissions.











Pruning

Prune like a pro to minimize stress on your plants. Unless you are growing fruit trees, your new plants won't need much pruning for several years. Bad pruning can damage plants, so prune gently and follow these basics:

- Prune to encourage natural growth and adhere to a yearly pruning budget of about 1/5 of the plant. Pruning increases vigor, so when a branch is cut off, it encourages the buds behind the cut to grow.
- Improve the health of your plant and prune out the Four D's: Remove branches that are Dead, Damaged, Diseased, and Disoriented (crossing).
- Use thinning or selective pruning cuts – travel down the branch to be removed and cut it off where it meets the limb or trunk.
- Avoid cutting the tip ends of branches (heading cuts), this leads to many buds behind the cut to rapidly grow, creating a bigger plant.
- If pruning is a mystery or if it involves ladder work, consider hiring a certified arborist to take care of your trees and shrubs.

When to Prune

A healthy plant can be pruned just about any time. Avoid pruning when temperatures are below 38°F and during extreme heat or drought.

Here are basic guidelines for when to prune the trees, shrubs and vines in your landscape:

- December – February: Prune most deciduous and evergreen plants, grape, kiwi and roses.
- June – July: Prune stone fruit, water sprouts, Japanese Maple, winter and spring bloomers.
- Prune spring-flowering plants after they have flowered before next year's buds are set.
- Prune summer- and fall-flowering plants in the spring before the year's buds have set.

Moss Management

We're often told that moss is a hideous invader that must be removed from our landscapes. But let's rethink that idea. Moss is a low maintenance, low water, native groundcover that requires no mowing and can be quite beautiful. It increases diversity, since several kinds of moss grow together in your lawn. Moss provides habitat for a myriad of invertebrates, including bugs, worms, and spiders that are a vital food source for birds, amphibians, and reptiles.

Moss is a sponge that absorbs and filters stormwater, and it's great for erosion control. It can grow just about anywhere and stay green throughout the year. It acts as a carbon sink too – no mowing means no emissions or power needed. Encourage your moss for a no-work lawn that provides a home for wildlife and improves water quality. Embrace your moss as an ideal alternative to the typical grass lawn.

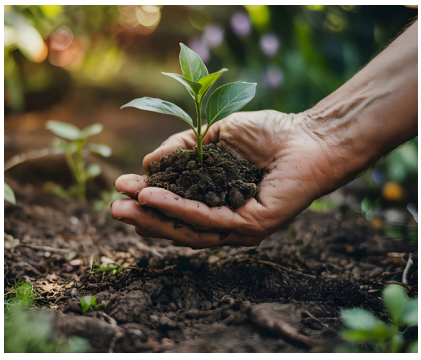
Fertilizing

Some plants need additional nutrients to grow and thrive. Plants consume decomposed plants, animals, and rocks. Look for the OMRI label for safe, organic fertilizers and soil amendments.

Most perennial trees and shrubs don't need added fertilizer if they are mulched with their own leaves, needles, or compost and are planted in the correct place. The only time they would need added fertilizer would be if there was a demonstrated mineral deficiency. Lawns don't need fertilizer if you practice natural lawn care, such as mulch mowing and letting the lawn go dormant in the summer.

Annual flowers, vegetables, and anything grown in a container will need added fertilizer. Use dry fertilizer when preparing soil at planting time. The nutrients in dry fertilizer will be available to your plants in a few months, after microorganisms have converted it to a soluble form that plants can use. Use liquid fertilizer, made from fish and seaweed, in containers and veggie gardens when the soil is cool in the spring and microbial action is slow.

A soil test will provide custom recommendations for fertilizer application. Without test results, use about half the manufacturer's recommended amount so there is less risk of over-application. Too much fertilizer can cause plants to grow unnaturally, making them susceptible to disease and damage. Excess fertilizer can run off your property during storm events and into waterways, affecting marine life. No matter where you live, you are connected to a waterway so any additions you make to your landscape should be safe and non-toxic.



What's OMRI?

Organic Materials Review Institute is an international nonprofit organization that determines which products are allowed for use in organic agriculture. Look for an OMRI label on potting soils, fertilizers, and other gardening products.

Soil Testing

Most King County residents can get five free soil tests through the King Conservation District with custom recommendations for how to improve your soil.

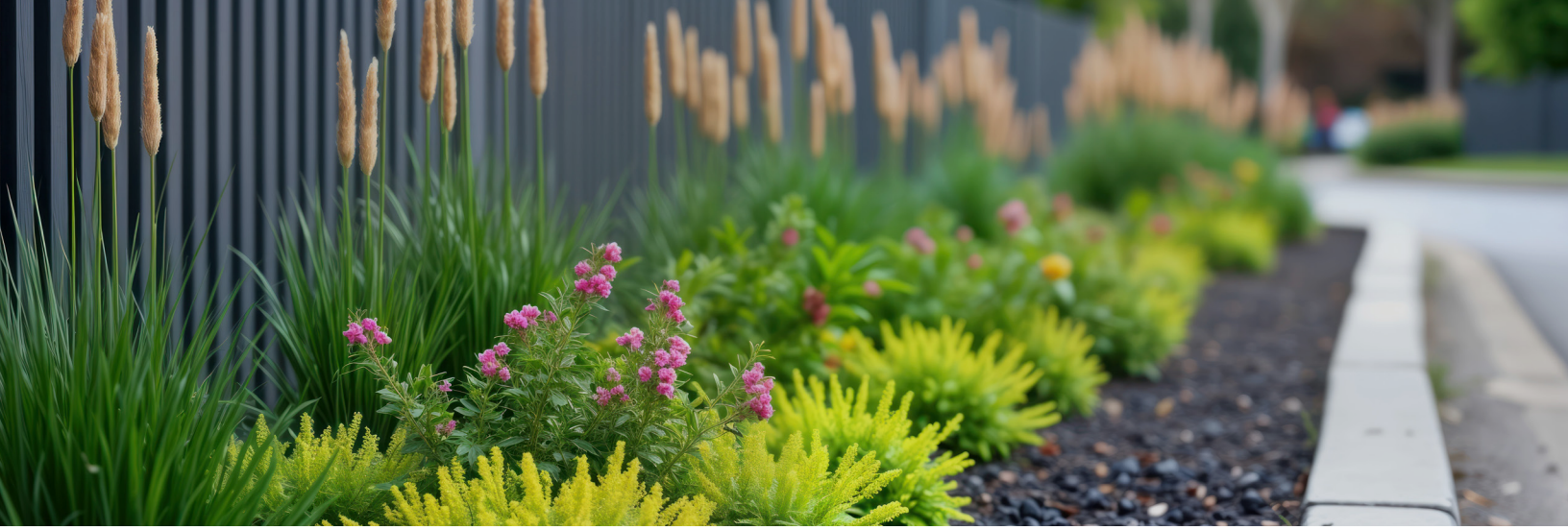
When purchasing fertilizer, the numbers on the front of containers can be confusing. Here's what they mean:

N -- Nitrogen promotes green leafy growth.

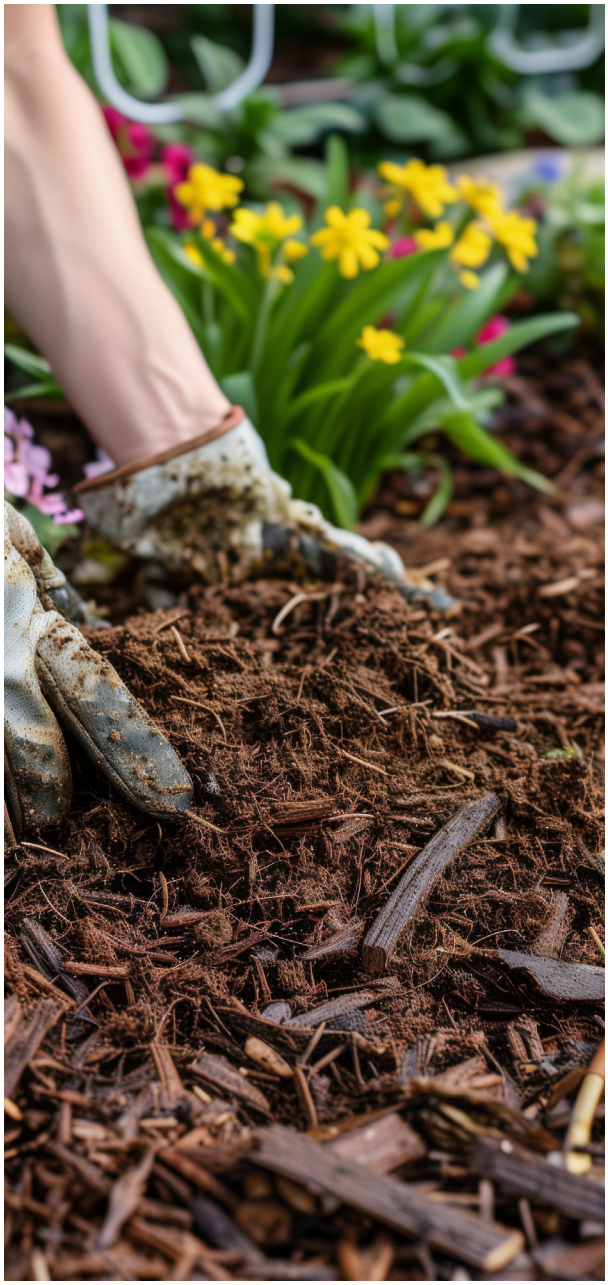
P -- Phosphorous assists in the formation of roots, buds, and flowers.

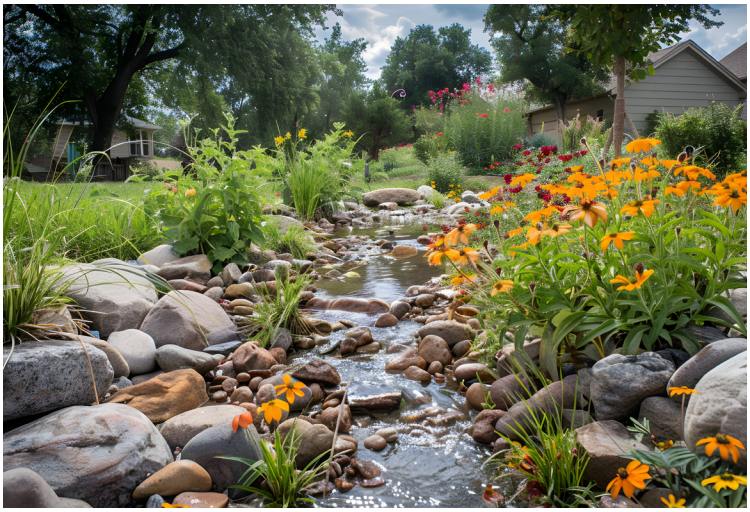
K -- Potassium aids in the absorption of nutrients and trace minerals.

Look for balanced formula such as 3-4-2 for most vegetables or a high nitrogen formula such as 5-1-1 for lettuce, onions, and other leafy greens.



A sustainable landscape enhances the beauty, value, and environmental health of your community. Start small and aim for steady progress. You'll see the benefits in reduced costs and a healthier, more attractive landscape for years to come.





Cascade Water Alliance

Resources

Plant Guide

Recommended Trees	Sun	Part Shade	Shade	Deciduous / Evergreen	Native, Pollinator, Drought-Tolerant, Edible, Medicinal	Rain Garden Zones	Tree Sizes Small: up to 30' Medium: 30'-70' Tall: more than 70'
Black Elderberry *Sambucus nigra*	☀	⛅		Deciduous	P, E, M	1, 2, 3	Medium, pink flower clusters
Blue Elderberry *Sambucus cerulea*	☀	⛅		Deciduous	N, P, E, M	2, 3	Medium, flowers are used for tea
Chinese Red Birch *Betula albosinensis var. septentrionalis*	☀	⛅		Deciduous	P, DT	3	Medium, striking bark
Cornelian Cherry *Cornus mas*	☀	⛅		Deciduous	P, DT, E	2, 3	Small, delicious fruit
Douglas Fir *Pseudotsuga menziesii*	☀			Evergreen	N, DT, E, M	3	Large
Hazelnut *Corylus avellana*	☀	⛅		Deciduous	E	3	Medium
Honey Locust *Gleditsia triacanthos f. inermis*	☀	⛅		Deciduous	DT	2, 3	Medium, fantastic foliage
Mountain Hemlock *Tsuga mertensiana*	☀	⛅	☁	Evergreen	N, DT	3	Small, good for urban spaces
Osoberry *Oemleria cerasiformis*	☀	⛅	☁	Deciduous	N, P, E	2, 3	Small, dark blue edible berries
Pacific Crab Apple *Malus fusca*	☀	⛅		Deciduous	N, P, E	1, 2, 3	Medium, small fruit
Pacific Ninebark *Physocarpus capitatus*	☀	⛅	☁	Deciduous	N, DT	1, 2, 3	Small, red peeling bark
Paperbark Maple *Acer griseum*	☀	⛅		Deciduous	DT	3	Small, red peeling bark, winter interest
Paper Birch *Betula papyrifera*	☀			Deciduous	N, DT	3	Medium, good for narrow spaces
Garry Oak *Quercus garryana*	☀			Deciduous	N, DT	3	Small, very adaptable
Rough Bark Maple *Acer triflorum*	☀	⛅	☁	Deciduous	DT	3	Small, fall color
Western Serviceberry *Amelanchier alnifolia*	☀	⛅		Deciduous	N, E	2, 3	Medium, small if grown in shade
Shore Pine *Pinus contorta var. contorta*	☀			Evergreen	N, DT	3	Large, good for narrow spaces
Silk Tassel *Garrya elliptica*	☀	⛅		Evergreen	P, DT	2	Medium, long silver catkins in winter
Vine Maple *Acer circinatum*	☀	⛅	☁	Deciduous	N	2, 3	Small, fall color
Weeping Alaska Yellow Cedar *Xanthocyparis nootkatensis*	☀	⛅		Evergreen	DT	3	Large, good for narrow spaces
Western Yew *Taxus brevifolia*	☀	⛅		Evergreen	N, DT	3	Medium, soft needles, hedge plant
Witch Hazel *Hamamelis × intermedia, h. virginiana, h. mollis*	☀	⛅	☁	Deciduous	M	3	Small, needs good drainage, fall and winter blooms

Recommended Shrubs	Sun	Part Shade	Shade	Deciduous Evergreen	Native Pollinator Drought-Tolerant Edible Medicinal	Rain Garden Zones	
Black Chokecherry *Aronia melanocarpa*	☀	⛅		Deciduous	P, DT, E	2, 3	Edible berries in fall, very adaptable
Bay Laurel *Laurus nobilis*	☀	⛅		Evergreen	DT, E, M	2, 3	Slow growing, keep small in a container
Bear's Breeches *Acanthus mollis*	☀	⛅	☁	Evergreen	P, DT	2	Spiny, summer dormancy
Black Twinberry *Lonicera involucrata*	☀	⛅	☁	Deciduous	N, P, DT, M	1, 2, 3	Yellow flowers and dark purple berries
Blueberry, Highbush *Vaccinium corymbosum*	☀	⛅		Deciduous	E	2	Needs acidic soil, delicious berries
Evergreen Solomon's Seal *Disporopsis pernyi*		⛅	☁	Evergreen	P, DT	2	Stunning in the landscape, protect from slugs in spring
Goumi *Elaeagnus multiflora*	☀	⛅		Deciduous	P, DT, E, M	2, 3	Highly adaptable, early bloomer, nitrogen fixer, June berries
Grapes *Vitis var*	☀			Deciduous	DT, E	3	PNW favorites: buffalo, canadice, van burien, vanessa, venus
Hardy Fuchsia *Fuchsia magellanica*	☀	⛅	☁	Deciduous	P, E	2	Favored by hummingbirds
Hardy Kiwi *Actinidia arguta*	☀	⛅		Deciduous	E	2, 3	Need male and female plants, small, smooth fruit ripen in September
Hops, Common *Humulus lupulus*	☀			Deciduous	E, M	2	Climber, requires summer water
Hydrangea *Hydrangea var*		⛅	☁	Deciduous	P	3	Beautiful flowers for arrangements
Labrador Tea *Rhododendron groenlandicum*	☀	⛅		Evergreen	N, E, M	1, 2	Leaves are used for tea
Mock Orange *Philadelphus lewisii*	☀	⛅		Deciduous	N, P	2, 3	Upright growth, ideal for narrow spaces
Ocean Spray *Holodiscus discolor*	☀	⛅		Deciduous	N, P, DT	2, 3	Dazzling creamy white flower plumes
Orange Honeysuckle *Lonicera ciliosa*	☀	⛅	☁	Deciduous	N, P, M	2	Drought tolerant when grown in shade
Pacific Coast Rhododendron *Rhododendron macrophyllum*	☀	⛅		Evergreen	N, DT	2, 3	Good for narrow spaces
Red Flowering Currant *Ribes sanguineum*	☀	⛅		Deciduous	N, P, E	2, 3	Fantastic spring blooms, good for narrow spaces
Red Osier Dogwood *Cornus sericea*	☀	⛅		Deciduous	N	1, 2, 3	Bark offers fall / winter colors
Russian Sage *Perovakia atriplicfolia*	☀			Deciduous	P, DT	3	Silver foliage and profusion of purple flowers
Smoke Tree *Cotinus var*	☀			Deciduous	DT	3	Burgundy foliage, great smokey flower plumes
Snowberry *Symphoricarpos albus*	☀	⛅	☁	Deciduous	N	2, 3	Highly adaptable, captivating white berries
Strawberry Tree *Arbutus unedo*	☀	⛅		Evergreen	DT, E	3	Can be arborized for small tree, red berries are ripe in late fall
Sweet Cicely *Myrrhis odorata*	☀	⛅	☁	Deciduous	P, DT, E	2, 3	Deep taproot, deadhead flowers to keep seeds from spreading
Tall Oregon Grape *Berberis aquifolium*	☀	⛅		Evergreen	N, P, E	2, 3	Year-round color, early bloomer

Perennials, Grasses, and Groundcover

	Sun	Part Shade	Shade	Deciduous / Evergreen	Native, Pollinator, Drought-Tolerant, Edible, Medicinal	Rain Garden Zones	
Bunchberry *Cornus canadensis*		☀	☁	🌳	N	2	Groundcover
Cardinal Flower *Lobelia cardinalis*		☀	☁	🌲	P	1, 2	Great bog plant, striking deep scarlet blooms
Catmint *Nepeta vars*	☀	☀		🌲	P, DT	3	Silver foliage, large plumes of purple flowers
Chinese Astilbe *Astilbe chinensis*		☀	☁	🌳	P	2	Long lasting flower spikes, many colors available
Common Blue Violet *Viola sororia*		☀	☁	🌲	E	2	Spreading groundcover
Common Camas *Camassia quamash*	☀	☀		🌳	N, P, E	2, 3	Deep blue flower clusters, staple food of the Salish people
Coral Bells *Heuchera sanguinea*		☀	☁	🌲	DT	2, 3	Groundcover, dark leaved varieties can handle full sun
Daylily *Hemerocallis fulva*	☀	☀		🌳	P, E	2, 3	Edible flowers, many colors to choose from
Deer Fern *Blechnum spicant*		☀		🌲	N, E	1, 2, 3	Perfect for a damp shady place
Elecampane *Inula helenium*	☀	☀	☁	🌳	P, M	2, 3	Large sword-shaped leaves, towering flowerstalks with wild yellow blossoms
Everygreen Huckleberry *Vaccinium ovatum*		☀	☁	🌳	N, E	3	Slow growing, glossy dark green leaves, tasty berries
False Lily Of The Valley *Maianthemum dilatatum*			☁	🌳	N, E, M	2	Spreading groundcover, spring blooms
False Solomon's Seal *Smilacina racemosa*		☀	☁	🌳	N, DT	2	Stunning in the landscape, white pendulous flowers
Feverfew *Tanacetum parthenium*	☀	☀	☁	🌲	P, DT, M	2, 3	Miniature daisy-like flowers, will grow just about anywhere
Foamflower *Tiarella trifoliata*		☀		🌳	N	2, 3	Groundcover, showy white flowers
Fringecup *Tellima grandiflora*		☀	☁	🌳	N	2, 3	Groundcover, delicate pink flowers
Goat's Beard *Aruncus dioicus*		☀	☁	🌳	N, P	1, 2	Not favored by deer
Hardy Cyclamen *Cyclamen coum*		☀	☁	🌲	P	2	Groundcover, fall / winter bloomer
Hardy Geranium *Geranium macrorrhizum*		☀	☁	🌳	P, DT	3	Groundcover, lovely purple and pink flowers
Hellebores / Lenten Rose *Helleborus var*		☀	☁	🌳	P, DT	2	Winter blooms
Hot Lips Salvia *Salvia microphylla*	☀	☀		🌲	P, DT	2, 3	White flowers with red tips, a delight in a border planting
Hyssop *Hyssopus officinalis*	☀	☀		🌲	P, DT, M	2, 3	Deep blue flowers, great border plant
Jerusalem Sage *Phlomis fruticosa*	☀	☀	☁	🌲	P, DT, E	2, 3	Curious flowerstalks with yellow flowers filled with sweet nectar, perfect for sipping
Kinnikinnick *Arctostaphylos uva-ursi*	☀	☀		🌲	N, DT	2, 3	Groundcover, red berries
Lady's Mantle *Alchemilla mollis*	☀	☀	☁	🌳	P, DT, M	2	Fast growing groundcover, spreads
Lavender, English *Lavandula angustifolia*	☀	☀		🌲	P, E, M	3	Also French, Spanish, and other lavenders, great for flower border
Lemon Balm *Melissa officinalis*	☀	☀	☁	🌳	P, DT, E, M	2, 3	Leaves smell like lemon, great for herbal tea
Love In A Mist *Nigella sativa*	☀	☀		🌳	P, DT, E	2, 3	Self-sowing annual, many colors available

Perennials, Grasses, and Groundcover

	Sun	Part Shade	Shade	Deciduous Evergreen	Native Pollinator Drought-Tolerant Edible Medicinal	Rain Garden Zones	
Low Oregon Grape *Berberis nervosa*		☀	☁	▲	N, P, E	2, 3	Glossy leaves, yellow flowers and blueberries
Mondo Grass *Ophiopogon japonicus*		☀	☁	▲	DT	2	Dense planting can choke out weeds
Nodding Onion *Allium cernuum*	☀			○	N, P, DT, E	2, 3	Groundcover, deer resistant
Oregano *Origanum vulgare*	☀	☀		○	P, DT, E, M	2, 3	Spreading groundcover, purple or white flower clusters
Oregon Stonecrop *Sedum oreganum*	☀	☀		○	N, DT	3	Groundcover, good for rockery, highly adaptable
Pacific Bleeding Heart *Dicentra formosa*	☀	☀	☁	○	N, P	2, 3	Delicate foliage, delightful heart-shaped pink flowers, early bloomer
Pearly Everlasting *Anaphalis margaritacea*	☀	☀		○	N, P, DT	3	Silver foliage, clusters of white pearl flowers
Piggyback Plant *Tolmiea menziesii*		☀	☁	○	N	2, 3	Groundcover
Plantain Lilies *Hosta*		☀	☁	○	DT	2	Groundcover, deer love this one
Porcupine Grass *Miscanthus sinensis*	☀	☀		○	DT	2, 3	Also called chinese silver grass, distinctive light purple seed plumes
Rhubarb *Rheum rhabarbarum*	☀	☀	☁	○	DT, E	2, 3	Stunning in the landscape, delicious in pies
Rosemary *Salvia rosmarinus*	☀	☀		▲	P, DT, E	2, 3	Hardy and delicious, blue-purple flowers a beloved by people and pollinators
Rush, Taper-Tipped *Juncus acuminatus*	☀			▲	N	1	Many rush varieties for swales and rain gardens
Sage *Salvia officinalis*	☀	☀		▲	P, DT, E, M	2, 3	Classic culinary herb, beautiful as a border plant
Salal *Gaultheria shallon*		☀	☁	▲	N, E	2, 3	Glossy dark green leaves, fruit make delicious syrup
Sea Kale *Crambe maritima*	☀			▲	P, DT, E	2, 3	Large dark green, glossy leaves with white flowers
Shasta Daisy *Leucanthemum × superbum*	☀	☀		○	P, DT, E	2, 3	Easy to grow, great cut flowers
Slough Sedge *Carex obnupta*	☀	☀		▲	N	1, 2	Many sedge varieties for swales and rain gardens
Sweet Box *Sarcococca ruscifolia*		☀	☁	▲	P, DT	2, 3	Winter blooms, heavenly fragrance
Sweet Woodruff *Galium odoratum*		☀	☁	▲	P, DT, M	2, 3	Groundcover, can out-compete many weeds
Sword Fern *Polystichum munitum*		☀	☁	▲	N, DT	2, 3	Large fern, great for a shade garden
Thyme *Thymus vulgaris*	☀	☀		▲	P, DT, E	2, 3	Well suited to mingle among a flower bed, easy to grow in a container
Variegated Japanese Sedge *Carex oshimensis 'Evergold'*	☀	☀	☁	▲	DT	2, 3	Many sedge varieties for swales and rain gardens
Western Maidenhair Fern *Adiantum aleuticum*	☀	☀	☁	○	N, DT	2	Delicate foliage, small fern
Western Red Columbine *Aquilegia formosa*	☀	☀		○	N, P	2, 3	Delightful red and yellow flowers
Western Trillium *Trillium ovatum*		☀	☁	○	N, DT	2	Distinctive three-petal flower, perfect for woodland planting
Wild Ginger *Asarum caudatum*		☀	☁	▲	N	2, 3	Groundcover, not edible
Wintergreen *Gaultheria procumbens*	☀	☀	☁	▲	E, M	2	Groundcover
Woodland Strawberry *Fragaria vesca*	☀	☀	☁	○	P, DT, E	2, 3	Groundcover, less aggressive than beach strawberry
Yarrow *Achillea*	☀	☀	☁	○	P, DT, E, M	2, 3	Fantastic umbrella flowers, comes in many colors

Choosing a Landscape Contractor

Information to Obtain from Landscape Contractors

Choosing a landscape contractor can be a daunting task. Ideally, you'll want to find a company that will incorporate sustainable landscaping into the maintenance of your property for a reasonable price. Use the questions below to help you make your choice and incorporate the information you obtain into the scope of work of your contract with the company. Include regular walk-throughs with the contractor to check on progress and ensure they are implementing sustainable landscaping practices in the maintenance of your property.

Sustainable Landscaping Questions:

Healthy Soil

- ☐ What soil building actions do they practice?
- ☐ How do they utilize compost and mulch?

Plant Selection

- ☐ Do they assess the site to identify microclimates?
- ☐ Do they utilize plants that are well adapted to our region?
- ☐ Do they prioritize native plants and drought-tolerant plants in their selection?
- ☐ Are they using varieties that are more resilient to a changing climate?

Watering

- ☐ How do they match irrigation to soil and plant types?
- ☐ How do they conserve water?
- ☐ How often do they change the watering schedule throughout the season to match changing weather conditions?

Irrigation System Inspection and Maintenance

- ☐ How often do they inspect the irrigation system?
- ☐ Do they maintain a map of all components?
- ☐ How quickly can they repair broken lines or missing spray heads?
- ☐ Are they experienced with drip irrigation?

Mowing and Lawn Care

- ☐ Do they use mulching mowers?
- ☐ How high do they set the mower blade?
- ☐ Do they aerate the lawn?
- ☐ What are their practices for moss?

Pruning and Tree Care

- ☐ What is their training in arbor care and pruning?
- ☐ Do they have certified arborists on staff?

Pest Control Strategy

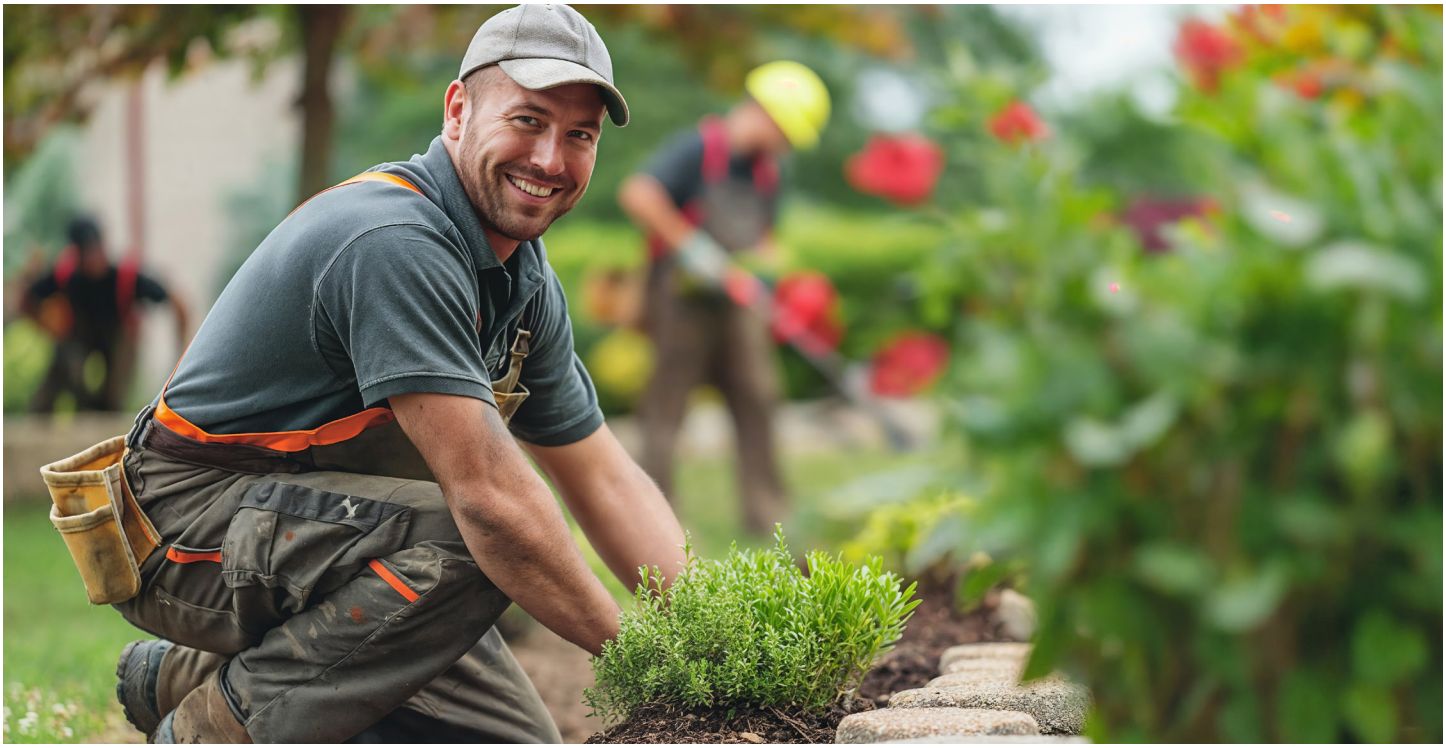
- ☐ Do they have an Integrated Pest Management plan?
- ☐ Do they use toxic products only as a last resort?
- ☐ What are their pest management strategies?

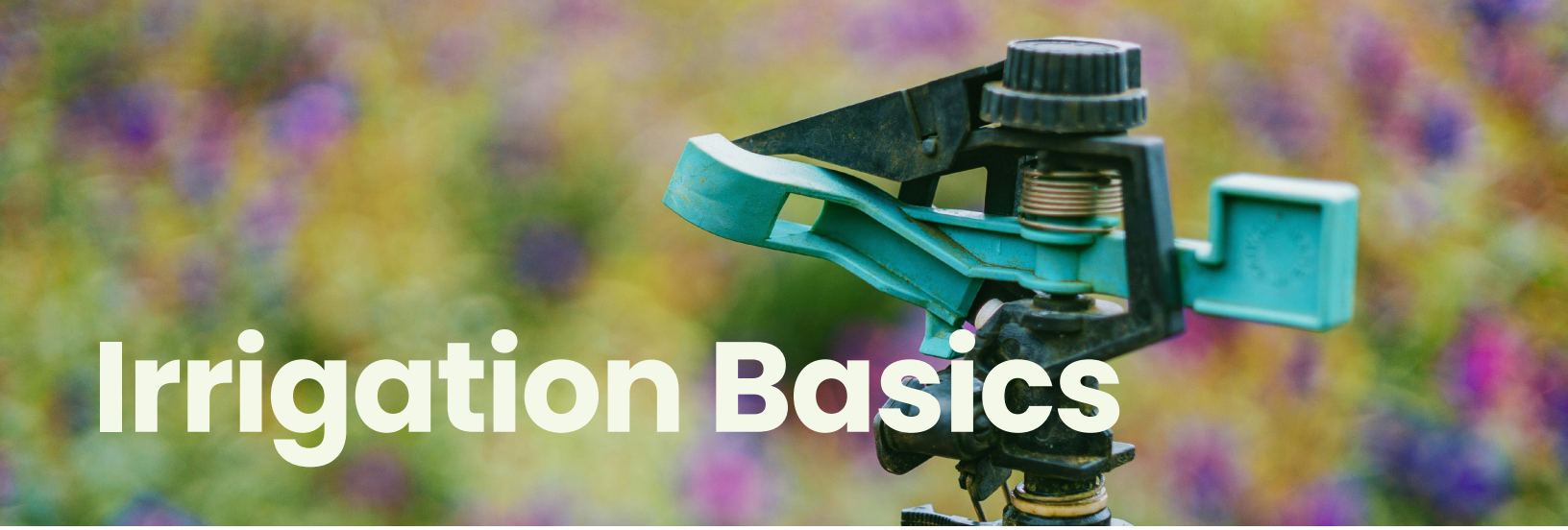
Resource Conservation

- ☐ Do they use battery-powered blowers, trimmers, and mowers?
- ☐ Will they compost leaves, grass, and trimmings on site?

Example Properties

- ☐ Will they allow you to visit properties they manage?

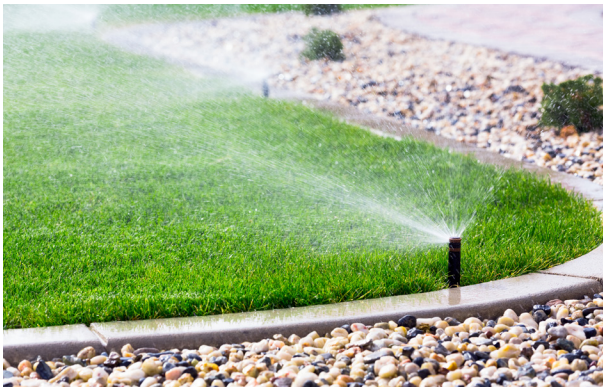




Irrigation Basics

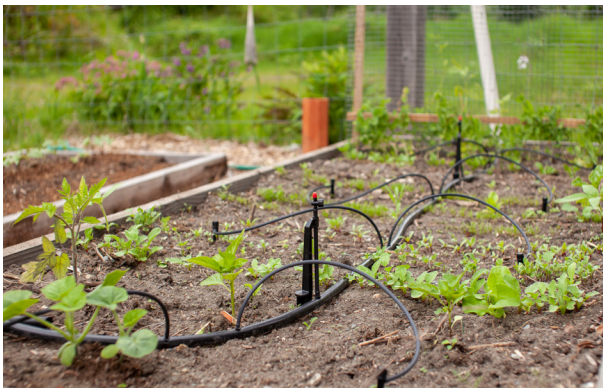
How does an irrigation system work?

A residential irrigation system consists of a network of pipes that deliver water to different areas of a garden or lawn. The system is managed by a controller that automates the watering schedule based on the needs of the plants. Sprinklers or drip emitters are strategically placed to ensure the even distribution of water, minimizing waste and promoting healthy plants. Sensors can be incorporated to detect soil moisture levels and adjust the watering accordingly.



Components

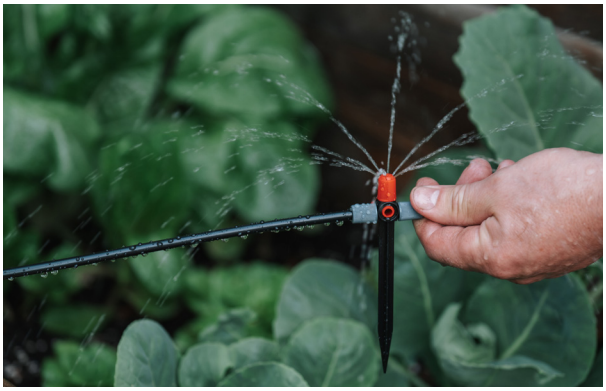
Point of Connection (POC) – The water source. Generally, irrigation water comes from the municipal water supply. However, alternate sources such as well water or a retention pond may also be utilized.



Controller – The brain of an irrigation system. A device that automates the watering schedule for a landscape based on the needs of the plants and local weather conditions. Wires travel from the controller to each valve box in the ground and send a 12-volt electrical signal to open and close a designated valve.

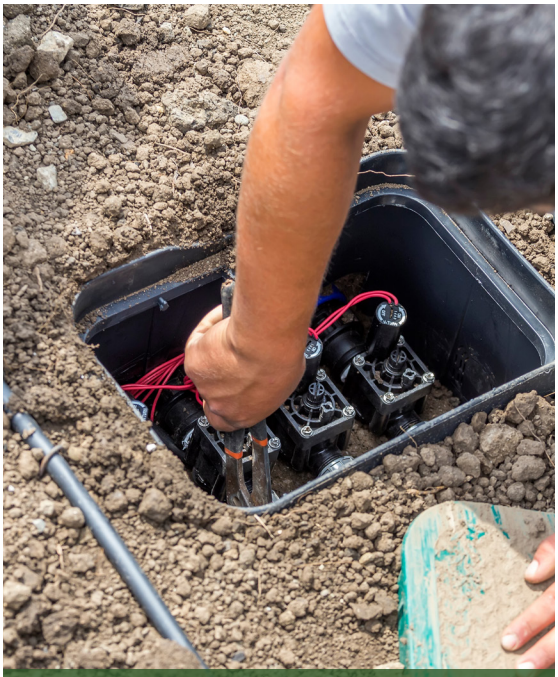
Backflow Prevention Device – A metal device with spring-loaded valves attached to your POC to prevent contamination of the water supply should a pressure drop in the municipal water system cause water to temporarily flow backwards.

Main Line – A pipe that supplies pressurized water to valve boxes within a property.

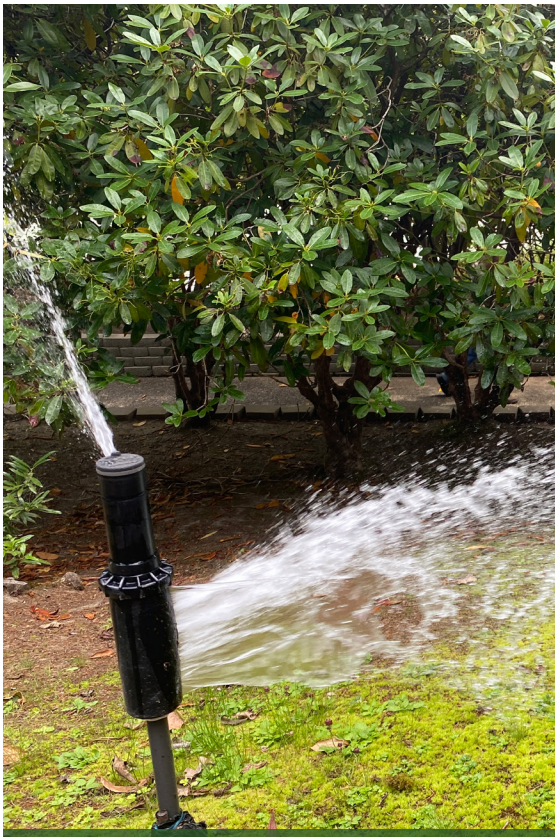


Valve Box – A durable enclosure (usually high-density plastic) in the ground that houses and protects the irrigation valves and main line. It keeps the valves clean and safe from dirt and debris, making maintenance easier and preventing damage to the pipes and electrical wiring.

Zones – An irrigation system can't water an entire property at the same time, so it is broken into various sections, or zones. The irrigation system delivers pressurized water through one zone at a time. This is why it may take considerable time to completely water all zones in the system.



An irrigation valve box



Breaks and leaks waste water and stress thirsty plants

Sprinklers – A device connected to a zone line that waters specific garden or lawn areas. Types include rotors for large areas, spray heads that pop up in varying sizes, and small emitters for pots.

Drip Irrigation – A method of watering plants where water is delivered directly to the root zone through a network of tubing and small emitters. This type of watering requires lower pressure, so a pressure reducer is often attached to the valve for a drip zone. Drip irrigation typically delivers water much more efficiently than overhead spray heads.

Soil Moisture Sensor – A device that measures the amount of moisture present in the soil and prevents the irrigation system from running when the soil already has adequate water. Typically installed in the root zone of landscaped areas, it helps ensure irrigation only occurs when necessary. The soil moisture sensor should be inspected and tested annually to confirm proper operation and accurate readings.

Rain Sensor – A device that detects rainfall and prevents the irrigation system from running during or shortly after a rainfall event. Usually mounted on a roof gutter or other exposed area, the rain sensor should be checked annually to ensure that it is operating properly.

Common Problems and Solutions

Breaks and Leaks – Check for broken pipes or heads in your irrigation system each month of the watering season. Ignoring breaks can waste water, deprive plants of needed hydration, and lead to a high water bill. If you have a break, set that zone's duration to zero minutes so other zones can continue operating. Notify your irrigation contractor if you have a break and hand-water until repairs are done.

Can't Locate – Valve boxes and controllers can sometimes be hard to locate. Don't cover valve boxes with mulch or debris. This makes it harder to find the valve box when needed. Note the location of key components on a site map.

Clogged Nozzles – Dirt, debris, or mineral buildup can block sprinkler nozzles, leading to uneven watering. Inspect all nozzles throughout system. Replace clogged nozzles.

Controller or Timer Malfunctions – An outdated or incorrectly programmed controller can cause watering at the wrong times or for the wrong duration. Look through scheduling thoroughly. If any errors are discovered, correct them immediately. If the controller is malfunctioning, replace it with a weather-based controller model.

Misaligned Spray Heads – Spray heads can sometimes become misaligned and spray water onto the pavement or into structures. Carefully inspect each zone in operation at least once per season to ensure that each spray head is delivering water where it's supposed to.

Valve Issues – Faulty valves may stick open or closed, resulting in overwatering or dry spots. Shut off the main water, open the valve and rinse to remove any debris. Reinstall the valve, open the main water, and test the system. If it is still faulty, replace the valve.

Online Resources

CASCADE WATER ALLIANCE

Cascade Water Alliance is a municipal corporation in King County, Washington that provides water supply to 400,000 residents and an employment population of about 380,000. Cascade encourages everyone to use water wisely and protect our water resources.

Learn more by visiting cascadewater.org

Composting & Soil Testing

- Washington State University Extension Backyard Composting
- King Conservation District Soil Testing

Drought Tolerant Plants

- Washington State University Extension Drought Tolerant Landscaping for Washington State

Fire Wise Planting

- Washington State Department of Natural Resources

Garden Questions

- The Garden Hotline—Ask a Question
- UW Center for Urban Horticulture—Gardening Help
- WSU Master Gardeners King County—Gardening Help

HOA Resources

- Greening Your HOA
- Wildlife-friendly Maintenance Ordinances

Irrigation & Saving Water

- US EPA WaterSense
- King County Department of Natural Resources
- Cascade Water Alliance

Meadowscaping Resources

- Meadowscaping Handbook
- Lawn Conversion to Native Alternatives
- West Multnomah Soil and Water Conservation District Resources
- Online Class Landscaping with Nature: Turning Battles into Partnerships New Directions in the American Landscape

Natural Lawn Care

- King County
- Oregon State University Extension Climate Friendly Lawn Care

Pest Control

- Washington State University Extension Hortsense
- Oregon State University Integrated Pest Management
- University of California Agriculture and Natural Resources
- University of California Integrated Pest Management Natural Enemies Gallery

Plant Lists

- Great Plant Picks from Elizabeth Miller Botanical Garden
- King County Native Plant Guide
- Plants For A Future Edible Plant Database
- USDA Plant Database
- Washington Native Plant Society

Rain Gardens & Stormwater Landscaping

- Rain Garden Handbook for Western Washington
- King County RainScapes: Natural Rainwater Solutions

CASCADE WATER ALLIANCE

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