

When to Water and How Much



Remember, the goal is to water the roots of your plants where they drink. Wetting the soil surface without penetrating the root zone does nothing for your plants. Overwatering literally drowns plants, rotting their roots and inhibiting nutrient absorption.

So how much is right? The best way to find out if plants need water is to watch for signs that they are thirsty. You can also check how well your soil retains moisture by digging in several inches with your finger or a garden trowel. If the soil feels moist, wait awhile. Use the chart below—and a good reference book—to determine when and how much to water your various plants to keep them healthy.

Annuals

Water where the roots are: roots may be shallower or less widespread if soil is compacted or disturbed.

- Most roots are in the top 12 inches of soil, spreading just a short distance from the plant.

Signs it's time to water:

- Soil is dry below surface.
- Evergreen leaves are dull or bronze. Try not to let plants wilt. Most will be stunted or die if allowed to dry out.

When to water and how much:

- Check soil often to make sure it stays moist 1 to 2 inches below the surface.

Trees, Shrubs, Perennials

Water where the roots are: roots may be shallower or less widespread if soil is compacted or disturbed

- Root systems can go down a couple of feet, and may extend two to five times the branch spread.

Signs it's time to water:

- Wilted leaves.
- Yellowing deciduous leaves before autumn.
- Difficult to push a screwdriver or trowel into soil.

When to water and how much:

- Water needs vary widely by plant and situation; many may not need irrigation a few years after planting in proper conditions.
- Refer to gardening books or ask nursery experts about drought-tolerant plants for your garden.

- Don't ignore trees and shrubs in a drought summer.

Lawns

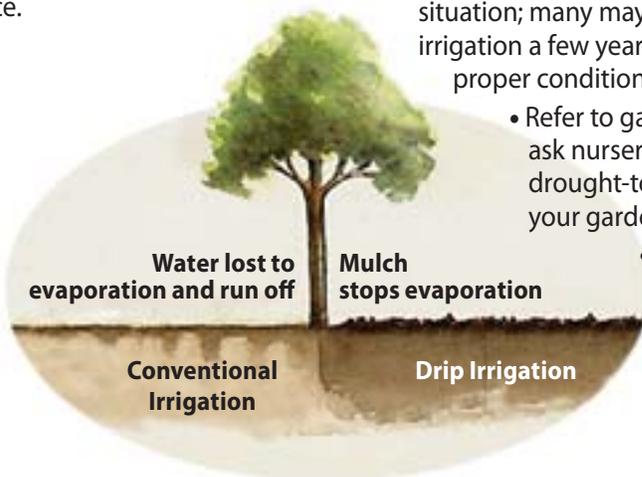
Water deeply but infrequently to moisten the whole root zone. Deep watering allows for a deep root growth that keeps lawns healthier.

Signs it's time to water:

- Dull green or bluish color.
- Footprints show long after you walk across the lawn.

When to water and how much:

- Apply no more than 1 inch of water each week during summer, including rain. (See chart below.)
- It is equally important to let the top few inches dry out during the week, in order to drive roots deeper into the soil.
- Lawns that are allowed to brown out recover better if they get a thorough soaking once a month in summer.



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King County

Department of
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Five Steps to: Natural Yard Care





When to Water and How Much

How Long Should You Water?

Planting beds

To determine the delivery rate of your watering system, perform this simple test. Run sprinklers or drip/soaker lines for 15 minutes, then wait a few hours and dig into the soil to see how deep the water has reached. Repeat until soil is moist as far down as the roots grow. Check the soil every few weeks in summer to keep up with seasonal changes.

Lawns

Most lawns need only 1 inch of water each week to stay green throughout a Northwest summer. To find out how long your sprinklers take to supply this amount, place several short, straight-sided, empty containers (like tuna or cat food cans) throughout your lawn. Place some near the edges of the

spray pattern and some near the center. Turn on the sprinkler(s) for 15 minutes, then measure the water depth in each can with a ruler and determine the average depth. Finally, use the chart below to estimate how long and how often to water your lawn each week.



Average depth in your cans after 15 minutes	How long you should water if you have:		
	Clay soil (water once per week*)	Loamy soil (water twice per week)	Sandy soil (water three times per week)
1/8"	2 hrs.	1 hr.	40 min.
1/4"	1 hr.	30 min.	20 min.
1/2"	30 min.	15 min.	10 min.
3/4"	23 min.	11 min.	8 min.
1"	15 min.	8 min.	5 min.

*May need to be split into two or more applications a few hours apart to prevent runoff

Source material from King County Local Hazardous Waste Management Program, Seattle Public Utilities and the Saving Water Partnership

This page can also be downloaded from the King County Solid Waste Division Natural Yard Care Web site www.kingcounty.gov/soils. Click on *Documents*.

Alternative Formats On Request
 206-296-4466 • TTY Relay: 711
 1-800-325-6165 ext. 6-4466

