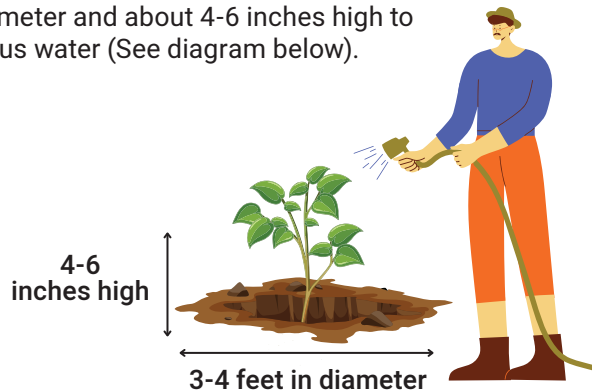


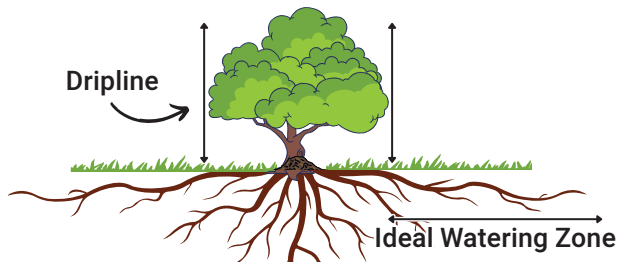
Tree Watering Distance

Target the tree root system when watering!

For newly planted trees: form a small temporary watering well around the tree, about 3-4 feet in diameter and about 4-6 inches high to focus water (See diagram below).



For young trees: 2-3 years after planting, extend the watering zone to the dripline. (See diagram below).



For an established tree: 3+ years, picture a wine glass on a dinner plate. The wine glass is the tree above ground. The dinner plate is the root system – much broader and shallower than people think. Most roots are in the top two feet of soil. A hose, soaker hose, drip heads, or other sprinklers may be used to water the tree. Water the roots, but not the trunk of the tree. Remember to keep an eye on watering duration. Infrequent deep watering to wet the entire root zone is best for the tree.

TIPS

- Frequent watering leads to shallow roots, which dry out more quickly.
- In summer heat, water at the coolest times of day, preferably in the early morning.

Types of Soils

- **Sand:** gritty texture, which has space for air and water, but don't retain water well.
- **Silt:** smooth texture, which has space for air and water; it's better at holding water than sand.
- **Clay:** thick, heavy texture, which holds water extremely well. However, clay soils are vulnerable to compaction and to becoming waterlogged. For this reason, trees may not grow as well in soils high in clay.
- **Loam:** mix of sand, silt, and clay. Loamy soils combine the advantages of all three soils mentioned above while minimizing their disadvantages; ideal for tree growth.

How Do I Know When to Water?

Test the moisture level of your soil!

1. Go to a spot about half-way between the trunk of the tree and the dripline.
2. Insert a garden trowel approximately 4 inches into the soil.
3. Withdraw the trowel, then insert your hand or fingers into the opening you just made.
4. If soil sticks to your fingers, then you don't need to water.
5. If your fingers come out relatively clean, or if the soil feels dry, it's time to water.



SPOKANE TREE WATERING QUICK GUIDE



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Trees need water to live and grow. In Spokane, trees live in a “high desert” environment, which requires more water because during warm or hot days the trees lose large amounts of water through their leaves to keep cool. As a tree grows, it may take more than 100 gallons of water a day during the summer.

Watering Basics

The most critical factor in the establishment and survival of young trees is proper watering. Too little or too much watering can damage the roots, weaken the tree, and make it susceptible to insects and disease. For a quick check on younger trees (1-3 years), when the soil feels dry an inch below the surface - it is time to water.

Types of Soils

Tree water needs vary by season. In Spokane, the growing season may vary from one year to another. Generally speaking, the growing season stretches from April to late October. Some years, a late or early winter may impact this timeline.

Spring: Trees may not need additional water during a rainy spring. Use the soil moisture test (see watering) and water if dry.

- Trees near house foundations, under eaves, or other coverings get little water from precipitation, so keep an eye on them.

Summer: Trees need additional water during the long, hot summers of Eastern Washington.

- Trees with southern, southwestern, or western exposures often show more heat stress and must be watered more frequently.
- Reflected heat from housing walls, driveways, and sidewalks increases stress on trees and so trees must be watered more frequently.
- Native trees, such as Ponderosa pine or Douglas fir, that have been in the ground a few years may need less frequent watering.

Fall: Continue watering until mid-fall. Taper down as lower temperatures arrive.

Winter: Trees, especially evergreens, continue to use some water throughout the winter.

- Watering trees late into the fall will help prevent winter water stress. However, when heavy rain or snow soak the ground, stop watering.

How Often Should I Water?

Establishing a basic watering routine is one key to a healthy tree. Let's look at the primary growth stages of a tree.

- Newly planted. After a tree is planted, water the root zone to eliminate air pockets.
- Once planted, keep the soil moist but not soaked. Start with five gallons of water per inch of trunk diameter per week and adjust as needed to keep the soil evenly moist. Water trees at least once a week, barring rain, and more frequently during hot weather (but remember not to over water.)
- Mulching newly established trees helps prevent moisture loss. For more information on proper mulching refer to the City of Spokane “Tree Stewardship Guide.”
- Planted, 1-3 years old. Young trees should be watered deeply once or twice a week. Establishing a regular weekly watering schedule, such as the five gallons of water per inch of trunk diameter (see above), is a good start.
- After 3 years. Stick with your weekly watering schedule, increasing water amounts as the tree trunk diameter grows. However, keep in mind that once the tree has become established, it can survive somewhat longer periods without water. The soil around large trees can be allowed to dry to two inches deep before the tree requires watering again.