

Tree watering is a key part of tree care. Trees use water to move nutrients from the soil up the roots to the leaves for photosynthesis and move produced sugars to roots all with water. More importantly, trees lose 90% of the water they take up in order to cool themselves, a process called transpiration. In order for trees to function and stay healthy it is important that they receive enough water. However it can be difficult to recommend an exact amount due to many variables such as tree species, location, soil, temperature, and exposure. In the hot climate of Folsom it is even more important that trees receive sufficient amounts of water to make it through the warmest months, May - October.

Here are a few tips that should keep your trees healthy:

Symptoms of drought stress:

- Leaves dying from tip but usually not at the whole leaf margin.



- The tree dying from the top down.



- Dropping leaves mid-summer.



- Wilting



1. **Water newly planted trees immediately.** This will help the tree to adjust and lessen the stress of transplanting.
2. **Continue consistent, deep watering for newly transplanted trees for the first 3-5 years.** This encourages the trees to establish roots and thrive during the heat and drought of summer. Even drought tolerant trees need good irrigation to establish a strong root system.
3. **Know how much water and when.** Not enough water can be harmful, but too much water can be just as harmful. It is important to know your soil type as this determines the water holding capacity of the soil. This information can be obtained by performing a soil test (See "Soil Test" info on City Arborist website). Trees need a period of deep watering (16"-18") followed by a dry period. This allows air to permeate the soil and reach the roots. A thick layer of mulch will keep the soil moist during the periods of minimal water and reduce compaction. (See "Mulch" article on City Arborist website.) Water should cover the entire root zone*. A hose attached to a fan sprinkler will result in a wide distribution. Be careful not to get water on leaves as this may spread fungal spores resulting in disease.
4. **Water according to need.** Once trees are established, you can change your watering schedule to what the species needs. **WUCOLS**** is a great resource for determining your plants water needs.
5. **Don't over fertilize.** Fertilizer is a salt, which in excess can be detrimental to trees. Salt can reverse osmosis and capillary action pulling water out of the tree.
6. **Remember, trees do better with better soil conditions.** Bait tree's roots into growing in a favorable place with the right soil, air, temperature, moisture, and nutrients.
7. **Native Oaks are special.** Native oaks (Valley, Blue, and Interior Live) only need irrigation maybe once a month, but only on the coolest days of each of the warmest months.

General watering guidelines for most trees and landscapes (not native oaks):

(May vary by local conditions)

Up to 69° F	0 x /week
70 – 80° F	1 x /week
80 – 90° F	2 x /week
90- 100° F	3 x /week

Glossary:

***Root zone** – The entire area where roots are growing below the tree. Depending on species this zone can be up to 2 or 3 times the canopy diameter.

****WUCOLS** – Water Use and Classification of Landscape Species (<http://ucanr.edu/sites/WUCOLS/>) A water classification system for plants based on their region. Folsom is in region 2.

- **Remember, during a drought trees must be given top watering priority over your lawn. Lawns can be replaced in a matter of months whereas a 50 year old tree will take 50 years to replace.**

