

During drought, trees are worth the water!



The City of Palo Alto cut water usage by 15% in 2014. Utilities, Public Works and other departments are implementing more ways to preserve and protect this precious natural resource, including:

- Replacing ornamental landscapes with drought tolerant plants
- Offering conservation rebates and incentives for homeowners and businesses
- Increasing use of alternate sources of water for landscaping
- Creating tools like Palo Alto 311 for reporting wasteful use of water
- Working with community organizations to develop educational materials



Do you have recommendations on how the City can improve its conservation efforts?

Contact us at utilities.communications@cityofpaloalto.org for feedback or to request more information and materials.

Trees & Water Resources



Smart watering guidelines
canopy.org/caring-for-trees/trees-and-water



Save our water and our trees
saveourwater.com/trees



Tree needs: Canopy Tree Library
canopy.org/about-trees/canopy-tree-library



Identify your trees
urbantreekey.calpoly.edu



Free Mulch
cityofpaloalto.org/compost



Local water regulations
cityofpaloalto.org/water



City of Palo Alto Urban Forestry Division
cityofpaloalto.org/trees
650 496 5953



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Save our Water And our Trees!



During drought, smart tree watering is a smart investment

Saving water and saving trees must go hand in hand.

Trees are the most valuable element of our green infrastructure because of the benefits they provide and the investment they represent. Urban trees:

- Help water soak into the soil, replenishing groundwater
- Enhance public health
- Create vibrant, livable communities
- Combat climate change
- Represent a water-efficient investment; a well-managed urban forest saves more water than it consumes!

Follow these water-wise tree care tips to protect our urban forest and safeguard our water resources.

Drought Tree Care

1. Different trees, different needs

To determine **how much** and **how often** to water your trees, consider:

Species. Look up your tree species' watering needs on Canopy's tree library. (See back panel)

Age. Young trees require more frequent watering (but less volume of water) than mature trees.

Health. A stressed tree may require more water than a healthy tree. For tips on assessing the health of your tree or hiring a certified arborist visit canopy.org.

Site conditions. Factors like soil type, sun exposure, weather and nearby water sources also influence watering needs.

Should we still plant trees during a drought?

Absolutely! The benefits of urban trees are even more critical in a hot, dry climate. During drought, we must plant new trees to replace those that we will inevitably lose. When planting, choose the right tree for the right place. A properly sited tree will be healthier and longer-lived. Consider factors including: existing access to water, soil type, shade, and overhead wires. Be sure to choose a climate-appropriate, **drought-tolerant** species.

Watering Tips

Hand-watering: A good choice for establishing young trees. Allows for gradual, deep watering.

Drip irrigation: Effective because water is applied at a slow rate directly where it's needed at the tree roots. Soaker hoses can also be very effective and cost-efficient.

Avoid: Sprinklers and spray irrigation can be wasteful. If this method is necessary, use water-efficient nozzles and apply only 1" of mulch to allow water penetration.

NOTE: Lawn irrigation does not water trees effectively. It generally reaches only the first few inches of soil, encouraging weak surface roots to grow.

2. Water wisely

Water gradually and deeply: Apply water slowly and evenly to the tree's root zone, particularly around the drip line, saturating the soil to a depth of 6-12 inches. Allow soil to dry out between waterings.

Decide on frequency and duration: Water is needed most during dry months. Water mature trees once a month or every other month, and young trees every other week.

Assess soil moisture: Dig or probe the soil to a depth of 6 to 12 inches at several locations around the tree's drip line. Damp soil is good. Soggy soil means your tree is getting too much water, which can harm it. Dry crumbly soil means it's time to water!

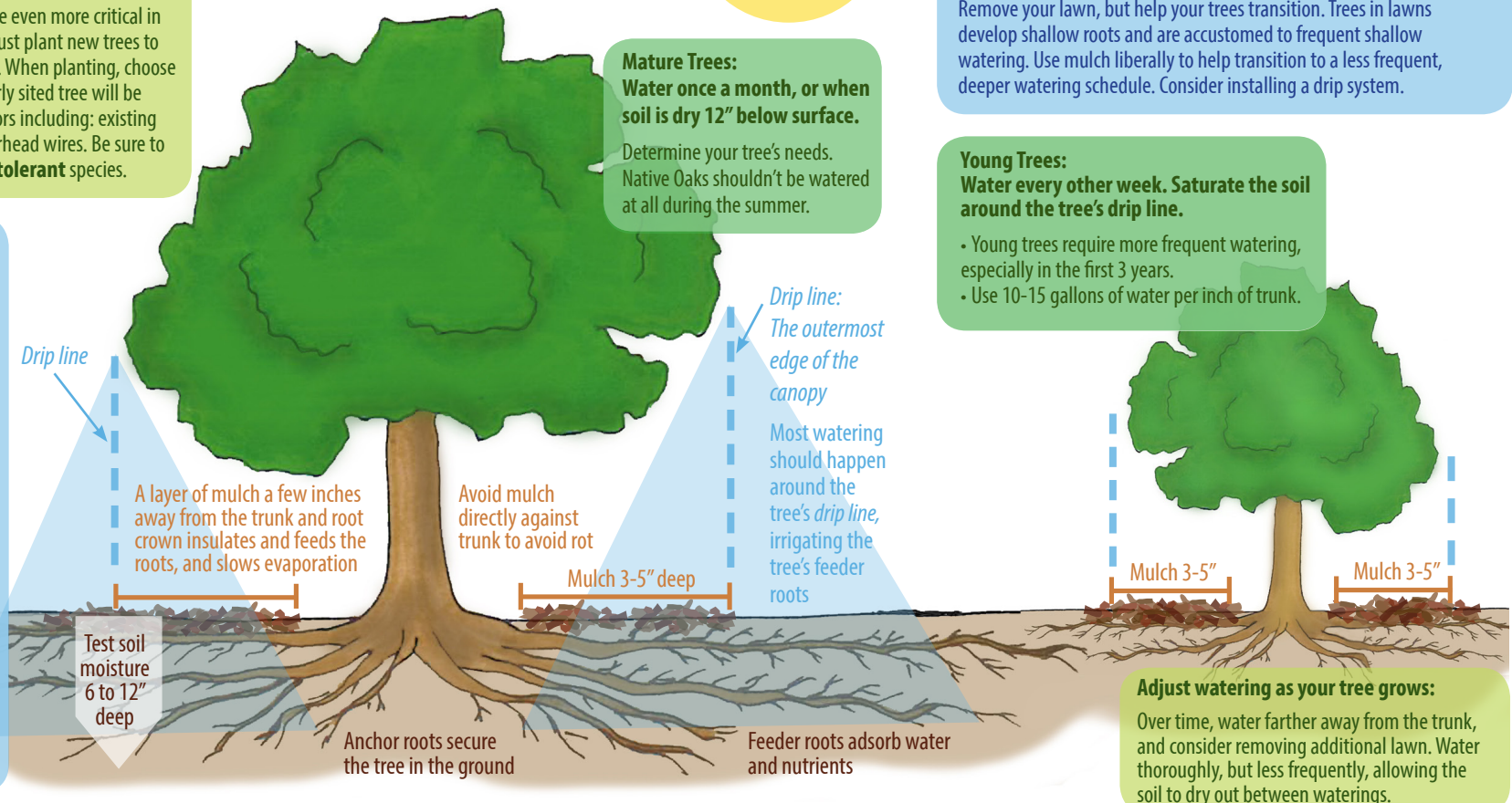
Trees are worth the water!

Mature trees represent significant, long-term investments and offer a host of environmental benefits. They should be nurtured and preserved whenever possible.

Smart watering is needed most during hot summer months and dry periods in other seasons

Mature Trees:
Water once a month, or when soil is dry 12" below surface.

Determine your tree's needs. Native Oaks shouldn't be watered at all during the summer.



3. Mulch to conserve moisture

Mulch serves to:

- Insulate tree roots from extreme temperatures
- Slow evaporation, so you can water less often
- Suppress weeds
- Feed nutrients into the soil as the mulch breaks down
- Provide a buffer, protecting the tree from mowers

Mulching Tips

1. Use organic matter such as wood chips or leaf matter.
2. Apply mulch 3-5" deep (or 1 inch deep if using spray irrigation), extended at least as far as the drip line.
3. Keep mulch a few inches away from the base of the tree.
4. If weeds persist, place a layer of newspaper or cardboard underneath the mulch.
5. Replenish mulch every spring

Conserve water throughout your landscape

Remove your lawn, but help your trees transition. Trees in lawns develop shallow roots and are accustomed to frequent shallow watering. Use mulch liberally to help transition to a less frequent, deeper watering schedule. Consider installing a drip system.

Young Trees:
Water every other week. Saturate the soil around the tree's drip line.

- Young trees require more frequent watering, especially in the first 3 years.
- Use 10-15 gallons of water per inch of trunk.