



## Frequently Asked Questions: Trees & Drought in California

### 1. Why do I need to take care of my tree during the drought?

Your trees provide an immense range of health, energy, environmental, and economic benefits:

- Trees improve air and water quality
- Trees provide shade to the landscape and reduce water needs
- Trees help keep your home cooler
- Trees slow stormwater runoff and help recharge groundwater
- Trees reduce soil erosion
- Trees add value – sometimes thousands of dollars' worth – to your home & neighborhood

**Trees are a long-term investment.** Without helping our trees through the drought, we risk losing their benefits. While the drought may not last long, it can seriously damage or kill trees, and these benefits will take 10, 20, or even 50+ years to get back. Taking care of your trees during the drought ensures that we preserve and protect these life-giving benefits for ourselves, our families, our homes, and our communities.

### 2. How do I take care of my trees during the drought – especially my big trees?

Water trees deeply and slowly. Consider installing a drip system or soaker hose - or water by hand – to water the area under the canopy of the tree, out to a few feet past the edge of the branches. Be sure not to concentrate the water at the base of tree, since that will cause rot.

### 3. How often should I water my large mature trees?

Mature trees in your lawn need to be closely monitored. With a generous layer of mulch and monitoring, these trees need to be gradually transitioned to a deep watering 1 - 2 times per month, depending on the number of hot days (over 95 degree F).

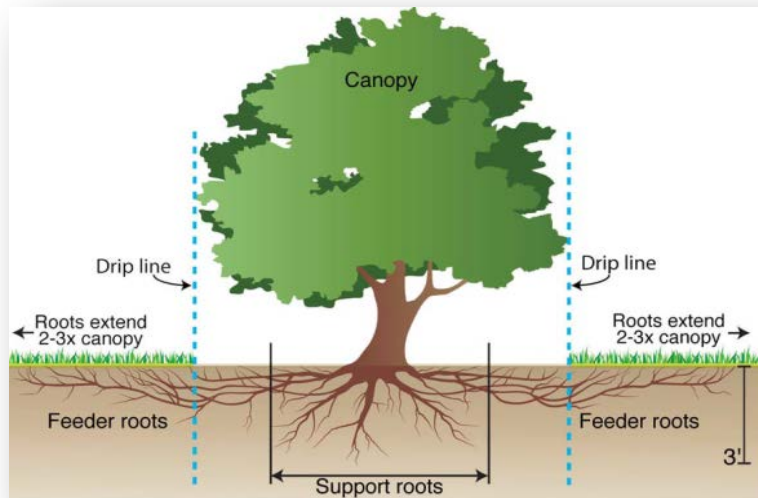
Place a soaker hose or drip irrigation in a spiral pattern toward the edge of the tree canopy (drip line). Check the soil by plunging a long screwdriver or similar tool into the soil. The soil should be moist to at least 18 inches deep, but not soggy.



Water-loving trees such as birch, redwoods, and certain maple will always require close attention. Other tree species, even drought-tolerant ones, planted in a lawn that was frequently watered will be affected when the irrigation is cut back or stopped, particularly if your soil type is heavy or compacted.

#### 4. How often should I water my mature native or drought-tolerant trees?

Trees that have matured in non-turf landscapes adapt the easiest, especially drought tolerant species. Native trees, such as our California oaks, need MUCH less water than most non-native trees. In fact, California oaks may only need one or two deep waterings over the summer, but no water within 1 to 2 feet from the trunk. They absolutely need the soil to dry out for a month or two before more water, if any, needs to be reapplied.



#### 5. How often should I water my young trees?

A newly planted tree needs to be watered more often: 2 - 4 times per week in summer, depending on the soil type. More often for sandy soils and less often for clay soils.

Create a 4 - 5 feet diameter watering basin around the tree using soil to create a small berm or ring of dirt around the tree. Fill the basin with water, allow it to soak in, then add more water. Give newly planted bare root or 5-gallon trees at least 10 gallons of water each time you water. Give newly planted 15-gallon trees about 15 -20 gallons of water each time you water.



Trees that are 1-2 years old have roots that are extending beyond the canopy width, so increase the area being watered and avoid watering within 1-2 feet of the trunk. Trees of this age may require deep watering once a week in summer, and more than that where the soil is sandy.



## 6. How can I tell if my tree is not getting enough water?

Look at the tree leaves. Wilting leaves is the first indicator of lack of water to the roots. Wilting leaves can also mean too much water, but in this drought, that would be rare.



## 7. When should I water my trees?

Water early in the morning or after sunset, when the sun won't evaporate water as readily. Make sure you are watering the soil around the tree, not the leaves, branches or trunk.

## 8. Can I keep my sprinklers?

Sprinklers and spray irrigation are both very wasteful. It's best to convert irrigation systems to drip or low-flow stream rotator heads. If you use stream rotator heads, be sure the water does not hit the tree trunk.

And don't forget to fix your leaks!

## 9. How is watering trees different than watering my lawn?

Your lawn sits on the surface of the ground and has shallow roots. It needs watering a few times a week, usually with a sprinkler.

**Trees need to be watered less frequently, but with deeper soaking – because their roots grow deep in the earth – the majority of tree roots are 1½ -3 feet deep.** Lawn irrigation does not water trees effectively. It generally reaches only the first few inches of soil, encouraging weak surface roots to grow.

## 10. How else can I help my tree survive the drought?

Stop watering your lawn this summer - let it "sleep" or go gold – or remove your lawn completely – to eliminate competition for water and nutrients. Replace with bark or mulch to help retain ground moisture. Consider sheet mulching to prepare your lawn for drought-tolerant turf and plants.

## 11. Should I mulch my trees?

Yes! Wood chip mulch is one of the best ways to save water and keep your trees healthy. A thick layer of mulch will keep moisture in the soil longer and protect the roots from summer heat, so you use less water and your trees stay happy. Mulching is great, because it:

- Reduces the amount of water needed in your yard by 10 - 25%
- Decomposes and releases nutrients into the soil



- Reduces soil compaction so roots can breathe
- Maintains soil temperature and protects roots from cold and heat
- Discourages grass & weeds – which compete for nutrients – from growing near the tree trunk

## 12. Where can I get mulch?

You can often get free wood chips from your local utility provider or purchase them from a local tree care company or garden store. You can also try a new service called Chip Drop – it's like Uber for mulch: connecting nearby residents with arborists who have wood chip mulch from pruning trees in the community. <http://www.Chipdrop.in>

## 13. How do I use the mulch?

Spread mulch in a 4- 6 inch layer around your tree – your tree would love the mulch to be as wide as the canopy of the tree. You will need to either remove the lawn underneath the mulch or “sheet mulch” with cardboard or newspaper to prevent the grass from growing up through the mulch. Keep mulch 2 - 3 inches away from the tree trunk to prevent rot around the base of the tree. (Great blog on sheet mulching from TreePeople [http://blog.treepeople.org/environment/2013/01/sheet-mulching-101-part-1-2#.Vaa57\\_IViko](http://blog.treepeople.org/environment/2013/01/sheet-mulching-101-part-1-2#.Vaa57_IViko))

## 14. How does watering trees help the drought?

Keeping trees alive helps keep your home cooler, meaning less energy and resources spent on cooling systems and decreased water use in other areas. Deep watering of trees also helps replenish groundwater underneath your land.

## 15. What else can I do to save water and our trees?

Reusing greywater and non-potable water – for example, collecting shower water in buckets as you wait for it to warm up – is a great way to water your young trees that need about 10 - 20 gallons per week. Just be sure your greywater is free of non-biodegradable detergents, soaps, or shampoos or other harmful chemicals.



## 16. How much water does it take to keep my trees alive?

Keeping your trees alive is possible with minimal and proper use of water. More than half of outdoor water is used on lawns. By letting your lawn go brown and concentrating your water on your trees, you are maximizing your water's potential.

## 17. Why not just let my trees die?

Dead or dying trees can be dangerous and pose great risks to your property and your loved ones. Removal of dead or dying trees can cost thousands of dollars. In both cases, letting trees die also eliminates all the great health, home, economic, and environmental benefits that trees bring to your property.



## 18. What about the other plants in my yard?

Other plants – grass, shrubs, and scenic foliage – can, unfortunately, die fairly quickly. The good news is that your lawn will grow back easily once watered, while other plants cost much less to replace. Of course, it would be ideal if you replaced them with drought tolerant plants and/or more trees.

## 19. Won't trees just grow back after the drought?

No. Drought-stressed trees are vulnerable to disease and pests, which will finish off a tree once weakened by drought. And some drought-stressed trees, once too dried out, are unable to absorb water once the rains return or you finally begin watering them. Drought stress affects the long term health and vigor of trees. Your tree may look fine this summer, but die next summer if not watered now. Grass can grow back in just a few weeks, but it can take decades for a tree to grow to full size.

## 20. What about my neighborhood trees?

You can help take care of neighborhood trees the same way as you take care of your own! Get a group together and teach others proper watering techniques, then assign a rotation and let everyone take part in caring for the neighborhood trees together.

## 21. I heard El Niño is coming back – what if the drought ends and I don't need to care for my tree anymore?

We all hope that it rains this year! Recent weather trends, however, indicate hotter temperatures in general and the likelihood of more extreme weather events – such as potential flooding due to El Niño. We need to be prepared for periods of drought and other harsh weather. Trees are important as they can help with climate adaptation in the face of extreme weather. Caring for your trees will ensure a healthier, cleaner, more vital community – whatever the weather.

## 22. Where can I get more info on how to care for my trees?

- Check back often at <http://SaveOurWater.com/trees> for new information on how to care for trees.
- To learn about programs in your neighborhood, you can check with your local urban forestry nonprofit. To locate an urban forest group near you visit <http://californiareleaf.org/network/map/>
- Your local UC Cooperative Extension. Visit [http://ucanr.edu/County\\_Offices](http://ucanr.edu/County_Offices)

*This information is brought to you with the support of the following organizations:*

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