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How to Help Trees Survive the Drought

California is going on four dry years with no end to the drought in sight. With record low rain and snowpack levels to-date, the state's soil is severely dry and affecting the natural landscape, including our trees in the state's natural landscape as well as those in larger urban forests.

Trees growing in nature depend exclusively on rain and snow for survival and because of the prolonged drought, the moisture stored in the soil is now depleted and trees are stressed and in danger of dying or becoming susceptible to pests and diseases. Trees growing in urban forests and lawns may also be stressed and at risk due to unintentional mismanagement of watering; lawn sprinklers will keep a tree alive but it's not the best way to grow healthy tree roots.

Our trees are valuable resources that provide clean air and shade, homes for wildlife and food, healthy communities and increased property values. We must do what we can to help our trees remain healthy throughout the drought. [California Department of Water Resources](#) gathered ideas to help create a strategic plan to keep priority plants and trees healthy with the limited amount of water available:

- The key to saving water while saving trees is to **decide which plants are the most important and dedicate the limited water to them first**. Trees are decades-long investments and should get first priority. Next important are shrubs and perennials. Last on the list include lawn and annual flowers.
- **Check the appearance of the tree(s) for potential drought stress damage**. At first glance, drought stress and leaf drops may look similar but there are subtle differences: brown crispy edges on leaves or visible wilting are both signs of drought stress along

with dieback branches whereas normal leaf drop show even color changes and the leaves are soft as they fall.

- **Determine soil moisture level using a small shovel or large screwdriver.** If the tool cannot be pushed in, or the shovel pulls up dry and crumbly soils, the tree needs water. To get moisture to the tree's roots, do not turn on the lawn sprinklers! Instead:
- **Deep water the tree by laying a soaker hose in a ring around the tree just inside the drip line** (marks the edge of the tree canopy) and continue to spiral outward. Let the hose run until the water soaks into a depth of 8-12 inches. But beware of runoff, especially on clay or compacted soils. Depending on the soil type and hose flow rate, this process may take only a few minutes or a few hours.
- **Check soil to make sure you're not watering too deep or too little.** To prevent runoff you can install a simple battery-operated or windup timer to shut off the hose after a certain amount of time. If water runs off before soaking in, turn the water off for a few hours to allow additional time for the water to soak. If the tree is small, start the soaker hose closer to the trunk since its roots are still young and short in length.
- **Recheck soil once or twice a month and water trees when necessary**, as long as it adheres to current watering compliance within your region. Dormant (bare) trees need moisture to keep the roots alive and soil should remain moist for broadleaf evergreen and needleleaf evergreen trees that grow year round.
- As part of a strategic plan to keep priority plants and trees healthy, **check with your local water supplier about the days of the week allowed to water landscapes.** If you have questions about your trees call the local Cooperative Extension Master Gardeners or your local urban forest or tree foundation.

Although Californians must continue to save water and prevent wasteful water use, it's also important to be strategic with the limited water available to help priority, native plants and trees survive the drought.