
Watering Trees During Drought



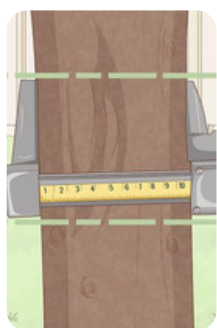
Trees first. Always.

In a drought, trees are the highest priority in your landscape — above grass, above flowers, above everything. A lawn that dies can be reseeded. A tree that dies took 20, 40, or more years to grow. It cannot be replaced on any reasonable timeline.

This summer, with low snowpack and minimal groundwater recharge across Eagle County, many trees are relying entirely on what you give them. Here's how to water them right.

How much water does a tree actually need?

The rule of thumb from Colorado State University Extension is simple: apply 10 gallons of water per inch of trunk diameter at each watering. Measure your tree's trunk diameter at about knee height:



2" diameter tree = 20 gallons per watering

4" diameter tree = 40 gallons per watering

8" diameter tree = 80 gallons per watering

Trees on sites without lawn irrigation need approximately 10 gallons of water each week per inch of trunk diameter during drought. Trees inside an irrigated lawn zone are getting some help, but may still need supplemental deep watering if that lawn irrigation is reduced or shut off.

Where to water



Tree root systems may spread two to three times wider than the tree is tall, with most absorbing roots in the top foot of soil. Water should be applied across the entire area under the full span of the branches — what's called the dripline. Don't just water at the base of the trunk. That's one of the most common mistakes, and it misses most of the roots. Think of the dripline like a circle on the ground tracing the outermost tips of the branches. That whole circle is where the roots are most active.

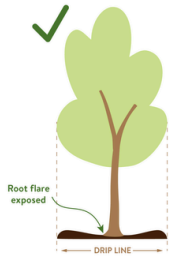
How to water — slow is everything



To ensure the water reaches the roots, use a deep root fork (inserted no more than 8 inches), a soaker hose on a low setting, or a soft spray wand. Placing a running garden hose against the base of the trunk for a few minutes is far less effective. The goal is water soaking slowly into the soil to a depth of 12 inches — not running off the surface. If water is pooling or running, slow it down.

A practical method: lay a soaker hose in a spiral out to the dripline, run it on low for 30–60 minutes using a hose timer, then move it. If your trees have drip irrigation, run a drip cycle for 30-60 minutes depending on the number of emitters and emitter type per tree. Always check your drip zones for leaks and clogged emitters before running them regularly for extended periods.

PROPER MULCHING



Mulch to retain moisture

Apply 4 inches of organic mulch onto the bare soil within the dripline, keeping it 1ft from the base of the trunk and never directly against the trunk. Mulch dramatically reduces soil temperature, slows evaporation, and keeps the water you apply in the ground where roots can use it. At our elevation with intense sun and low humidity, mulching can effectively double the value of each watering. Aim for 2–3 inches of wood chip mulch minimum around trees and shrubs to reduce soil temperature and retain moisture in Colorado's arid climate. 3-4 inches is recommended. Refrain from using organic or flammable mulches at the base of structures.

Newly planted or young trees need more attention



New trees need consistent deep watering, especially in drought. Transplant shock alone can cause a tree to drop leaves or stop pushing new growth. A stressed young tree is also far more susceptible to insects and disease. If you planted anything in the last 1–3 years, treat it as a priority even above your established trees. Trees generally take one year to establish for each inch of trunk diameter — so a 2-inch caliper tree needs a minimum of two years under normal conditions. Any tree still in that establishment window is especially vulnerable right now.

Signs a tree is in drought stress



Watch for: wilting or curling leaves mid-season, early fall color (yellowing or browning before August), leaf scorch along the edges, early leaf drop. If you're seeing these, your tree is telling you it needed water yesterday. Start a deep watering regimen immediately. Drought-stressed trees become susceptible to root and branch die-back and subsequent insect and disease problems — damage that can kill trees years after the drought ends. Acting now is protecting a long-term investment.

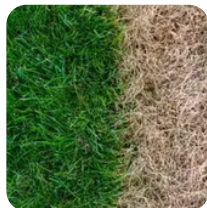
Use your foundational environment for context



The hillsides around your neighborhood aren't just scenery — they're a reference point. Look up from your yard: if the surrounding landscape is sagebrush, rabbitbrush, and scattered pinyon-juniper, you're in semi-arid shrubland, and that's the ecological baseline for your site. If you're higher up with denser pine, spruce, and aspen on the slopes around you, you're in montane woodland. Any tree in your landscape that could plausibly grow on those surrounding hillsides without anyone watering it can likely weather a drought summer on its own, especially once it's been in the ground for several years. Any tree that couldn't survive out there without irrigation — an ornamental maple, a fruit tree, a cottonwood planted away from the river, or anything that belongs to a wetter climate or a riparian zone — is here because of you. It is living outside its home range, and in a drought year, it needs your help.

Watering Turf During Drought

Keep your lawn alive without keeping it green.



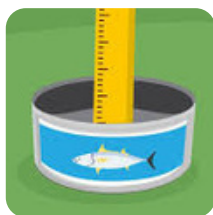
During drought years, the goal isn't a perfect lawn, the goal is a lawn that comes back. Kentucky bluegrass, the most common turf grass in Eagle County, has a built-in survival trick: dormancy. When it doesn't get enough water, it goes brown and stops growing. The leaves die back, but the roots and crown stay alive underground, waiting for better conditions. Colorado experienced major drought years in 2002 and 2012, and in both cases, most dormant bluegrass lawns recovered completely once water returned.

Brown is not dead. Brown is sleeping.



Here's how to keep it dormant. The minimum should be one good soak every two weeks. For Kentucky bluegrass in dormancy, about 1 inch of water applied every two weeks — roughly 2 inches per month — is the target to keep the grass dormant but alive. This is the survival floor. Less than this for more than 4–6 weeks puts the lawn at real risk.

Keep it dormant.



If your lawn has been dormant for six weeks without water, apply 1 to 1½ inches in a single application, then water again seven days later. It should begin to green up after the second application. What does 1 inch of water actually look like? Set out a tuna can or shallow container when you run your system. When it has ½ inch of water in it, that zone has applied roughly 1 inch to the soil (accounting for absorption).

When and how to water.



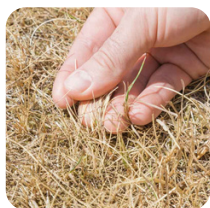
Water early morning or evening, before 8 a.m. or after 8 p.m., to minimize evaporation in our dry, high-altitude air. Water deeply and slowly. A quick 5-minute burst runs off the surface and doesn't reach roots. Slow soaking to a depth of 4-6 inches is what actually keeps grass crowns alive. Don't fertilize. Fertilizer won't perform without adequate water, pushes growth, and adds stress to an already stressed lawn. Hold off until conditions improve.

Mow high if you mow at all.



Keeping cool-season grass at 3.5–4 inches helps it tolerate heat stress. Cutting short removes protective leaf mass and exposes the soil to more evaporation. Stay off it. Dormant grass crowns are fragile. Foot traffic on a dry dormant lawn can damage the growing points that need to survive. Keep kids and pets off as much as possible during the hottest, driest stretches.

Know what to expect:



Your lawn will turn brown. That's the plan. Once Eagle County gets meaningful precipitation or you're able to resume normal irrigation, Kentucky bluegrass will green up again within 2–3 weeks. Patience and minimal water now means you won't be re-sodding in the fall.