

# Texas Lawn Watering Guide

## Did you know that?

Landscape irrigation can account for more than 30 percent of all the water used during the summer in Texas. Unfortunately, about half of this water is wasted due to over watering.

Soil type, slope of the landscape, water requirements of the turfgrass type, and efficiency of sprinklers all affect how often you need to water.

Turfgrass generally requires more frequent watering than WaterWise plants. That is why it is important to use turfgrass sparingly and in functional areas that can be efficiently watered.

### Characteristics for Selecting Texas Turfgrass

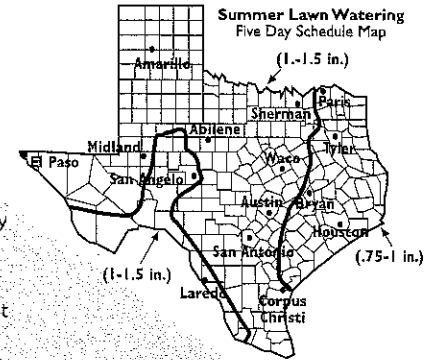
Grass Species (Adapted Region*)	Water Requirement	Shade Tolerance	Fertilizer Requirements**
Buffalograss (3,4,5)	low	poor	0-2
Bermudagrass (6)	moderate	poor	2-5
Centipede (1)	moderate	fair	1-2
Zoysia (3,4,5)	moderate	good	2-5
Carpetgrass (1,2)	high	fair	1-2
St. Augustine (1, 2, 5)	high	good	2-5
Tall Fescue (1, 4)	very high	good	2-5
Bluegrass (1, 4)	very high	good	2-5

\* 1 - East Texas    2 - South Texas    3 - West Texas  
4 - North Texas    5 - Central Texas    6 - Statewide

\*\* Range in pounds of Nitrogen per 1,000 sq. ft. per year

## Soil Type

Lawns grown in sandy soil require more frequent watering than lawns in loam or clay soils. Water can be applied less often to clay and loam soils, but it should be applied more slowly to prevent runoff. Soils can be improved by topdressing the lawn with about one-half inch of compost per year. If you are establishing a new lawn, consider blending topsoil with about 25 percent compost. Soil testing offered through the Texas Agricultural Extension Service would enable you to determine the best product for your lawn.



## Slope

To avoid runoff on sloping areas, place sprinklers near the top of the slope. Apply water slowly for 5 to 15 minutes, off 15 minutes, then on 5 to 15 minutes, etc. until you have applied the correct amount of water. Groundcovers work well in areas that are sloping, narrow, small, odd-shaped, or close to pavement. These areas are hard to water without runoff and overspray.

## Trees, Shrubs, & Groundcover

Established plantings do well in the summer when watered about once a week, especially if mulch is placed around plants. Apply enough water to wet the soil to a depth of at least 12 inches. Low output sprinkler heads, bubblers, or drip irrigation systems will decrease runoff and are efficient ways to apply

water. New plantings require more frequent watering the first year. Grass and weed removal from beneath trees and shrubs allow their roots to be more evenly distributed, increase in number, and utilize a larger volume of soil. Consider Texas-Grown, WaterWise varieties when purchasing new or replacement plants.

#### **Mulch**

This is a layer of material covering the soil surface around plants. Mulch reduces evaporation of water from the soil, keeps the soil cooler, and limits weed growth. Use mulches wherever possible. Three to four inches of mulch should be maintained around plants and trees. Some examples of mulches are pine bark, pine straw, compost, wood chips, or straw.

#### **When?**

Turfgrass takes on a dull, dark appearance and leaves begin to roll when they need water. The best time to water is early morning or late evening when winds are calmer and temperatures are lower resulting in less water loss to evaporation. Water lines tend to have better pressure during these times.

#### **How Much?**

Apply enough water to wet the soil to a depth of four to six inches, reaching the plant's root system. Use a soil probe or screwdriver to determine the depth the water actually reaches. Soil type, amount of rainfall, and season of the year all affect the amount of water you will need to apply. Healthy, properly irrigated turf rarely requires more than one inch of water per week during the summer months. Unless there is an extended dry spell, there is rarely a need to irrigate during the winter.

#### **Application Strategy**

Use a sprinkler that emits large drops of water that remain close to the ground, not one that sprays a fine mist into the air. Water deeply and infrequently to encourage deep, well established root systems. Water trees, shrubs, and other landscape plants separately from turf.

#### **Determine Application Amount**

1. Determine how much water your sprinkler applies:
  - A. Set three to five empty cans at different distances from the sprinkler with the last can near the edge of the sprinkler coverage.
  - B. Run the sprinkler for 30 minutes.
  - C. Measure the amount of water collected in each can in inches.
  - D. Add together the measurements from each can and divide the total by the number of cans to obtain an average.
  - E. Multiply the average by 2 to determine how many inches of water are applied in 1 hour.
2. Locate your area on the map to find out how many inches of water to apply every fifth day to bermudagrass during June, July, and August. Buffalograss needs about 25% less water than what is shown, and St. Augustine needs about 15% more.
3. Subtract any rainfall from the amounts given on the map to determine how much water to apply.
4. This test will also locate uneven distribution of the sprinkler system and define wet and dry spots.

*For more information, contact your County Agricultural Extension Agent, local WaterWise landscape professional, or Texas WaterWise Council ([www.waterwisetexas.org](http://www.waterwisetexas.org)).*

*Developed by the Texas Water Development Board in cooperation with the Lower Colorado River Authority.*





We have always taken our water resources for granted, but now that we are making the transition to surface water in compliance with the Harris-Galveston Subsidence District's mandates to reduce our dependence on groundwater, people are becoming more interested in using water more efficiently to control costs, too.

*When* and *how* we use water in the yard and garden can make a tremendous difference in *how much* is used. For example, if you water your yard only when it needs it, you could save between 750 and 1,500 gallons of water a month.

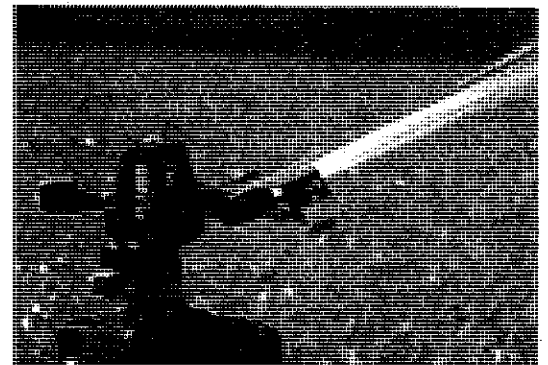
Here are some simple tips to help you put a realistic, cost-effective water efficiency plan into effect outside your home.

- ◆ Use native plants and shrubs

whenever possible in landscaping your yard. They tend to be more drought tolerant, require watering less frequently, and are often low maintenance, too.

- ◆ Different varieties of grasses, plants and soils use different amounts of water. When original landscape planning is an option, "zone" plants according to their water requirements. Experts suggest that grass be watered separately from flower beds and landscaped areas.

- ◆ In Houston, St. Augustine grass has a high "thirst" requirement. When possible, consider converting some of the grassy areas in your yard to native plant zones.



- ◆ As a general rule, proper watering for most Texas lawns means applying 1 to 1.5 inches of water per week during the growing season. To figure out how long you'll need to run your sprinkler, place at least three 1 inch deep cans (e.g., empty cat food or tuna cans) throughout the area the sprinkler covers. Water the length of time you think is correct. Each can should have the same amount of water. If there's less than an inch of water in the cans, you need to water longer. If the cans have an uneven amount of water, the distribution of the sprinkler needs adjustment. The goal is to apply enough water to

wet the soil to a depth of 4-6 inches.

- ◆ Avoid cutting the grass too short. Longer blades of grass will reduce evaporation and root stress since shaded soil will not dry out as quickly. Also, be sure to control any insects that attack your lawn -- quickly and completely.

- ◆ Apply fertilizer sparingly to develop the root system and to help keep the lawn healthy. Too much fertilizer, however, will lead to excessive growth...which will then require more watering. Many experts recommend leaving the grass clippings on the lawn, which will minimize the need for additional fertilizer.

- ◆ **Stormwater runoff** can carry fertilizer directly to streams and rivers, where it can seriously harm water quality. Take care to keep any fertilizer you use *on the grass* and ~~not on concrete driveways or streets.~~



- ◆ Water lawns in the early morning hours when evaporation loss will be less. Early morning waterings are better than dusk since

it helps prevent the growth of fungus.

- ◆ Use a sprinkler that emits large drops of water that remain close to the ground instead of one that sprays a fine mist into the air. Don't water on windy days; this can waste up to 300 gallons in just one watering! Set the sprinkler so that the lawn is watered...not sidewalks and driveways.

- ◆ If you have a sprinkler system, add a rain sensor. There's no point in wasting water if Mother Nature has watered the lawn for you.

- ◆ Raising the lawn mower blades just one notch higher can save between 500 and 1,500 gallons a month.

- ◆ For any small areas of grass, consider using a hose to water by hand to keep waste to a minimum.

- ◆ Use plenty of mulch in the planting areas. Not only does this provide a nice, "manicured" look, but the mulch helps keep the ground from overheating, holds moisture that would otherwise evaporate, and helps to discourage weed growth. A good mulch layer can save up to 1,500 gallons of water a month.

- ◆ Use the kind of watering equipment to suit your "target." Use sprinklers for the lawn areas, and soaker hoses or drip irrigation systems for trees, shrubs, and flower beds.

- ◆ Use drip or trickle irrigation -- the slow, frequent application of small amounts of water to the soil area directly surrounding the plant roots -- to take care of gardens and landscaped areas. Drip irrigation can save up to 60 percent of water delivered by other systems.