Parker Water & Sanitation District's Guide to

Outdoor Watering



Outdoor Water Use

More than half of all water used between May and October is used outdoors. That's why Parker Water & Sanitation District has created this guide to help you manage your outdoor water use.

Just enough water

Most lawns in Colorado are over watered. The table provided in this guide suggests the amount of inches per week of water to apply to your lawn to provide adequate moisture for an attractive yard during a typical irrigation season.

- Before you water your lawn, check to see if the grass needs water.
- Gone are the days of setting your sprinkler system and forgetting about it for the summer. Do adjust watering times for seasonal changes in weather, and shut your system down when it rains. Relatively inexpensive rain sensors can be installed that will automatically turn the system off during rain events.
- The water that is available in the District is yours to protect and use wisely.

Contact Us

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Frequently Asked Questions

Is it possible to over water my lawn?

Yes. Most turf in Colorado is over watered. Water your lawn deeply but infrequently, so that the moisture will encourage the roots to go deeper. Deeper roots allow the turf to better deal with the hot days of summer. Watering your turf correctly will also result in a healthier overall landscape.

How do I check my soil's moisture level?

The best indicator is to look at and feel your soil. If the soil is moist, you do not need to water. A soil probe or screwdriver can be inserted into your lawn. If it doesn't go through the soil easily for three to five inches, the lawn may need water.

How can I adjust my sprinkler system to save water?

Check your sprinkler system regularly. Fix or replace broken, clogged or damaged sprinkler heads. Also look for sprinklers that may be set into the ground too deeply or tilted. Sprinkler heads should be vertical and should not be obstructed by surrounding grass, plants or other objects.

Grit and debris can clog sprinkler heads, causing gaps in the spray pattern. Remove the nozzle, wash the screen and run the system briefly to flush debris from the lines.

Make sure your sprinklers produce droplets, not mist. On the top of most sprinkler heads is a small screw that with a minor adjustment can change the radius and may result in a more even application of water.

Outdoor Watering on the Web

Parker Water & Sanitation District: www.pwsd.org

Colorado State University: www.ext.colostate.edu

GreenCO: www.greenco.org

What Can YOU Do?

- Follow PWSD's voluntary lawn watering schedule (on our website during the irrigation season). It not only conserves water, but results in better health for trees and shrubs, which typically require less water.
- Determine what type of soil you have – Sand? Clay? A combination of the two? Water appropriately – clay and combination soils require less water than sand.
- Apply your lawn irrigation water in batches instead of all at once. It is better to set your sprinkler controller for two or three 5 minute run times, than one 10 to 15 minute run time. Water will often penetrate the soil for the first 3 to 5 minutes, but then it can begin to flow off the surface due to the heavy nature of our soils. This practice will also encourage deeper rooting of the turf.
- Water during the night or very early in the morning (3 AM to 5 AM for example) to reduce evaporative losses.
- Train your landscape - if you water too frequently, you encourage shallow roots! Water infrequently but deeply to encourage deeper rooting and a healthier landscape!
- Use proper soil preparation and maintenance practices to help build a healthy soil and vigorous, deep-rooted plants.
- Repair all sprinkler leaks. To detect a leak in your irrigation system, shut down all water sources inside your home, and check your water meter to see if you have any water continuing to flow. This is also a good way to check for leaks elsewhere in your home.
- Kentucky bluegrass, the dominant lawn grass in Colorado, tolerates drought by going dormant. Bluegrass that is dormant turns brown, and in spite of its appearance, is not dead. Do restrict traffic as much as possible on dormant turf, as it can be easily damaged when in this state.

*Written by Craig Miller

Calibrating your Irrigation System: The Catch Can Test

The performance of sprinkler heads depends on many variables, including the pressure and design of the system. For a quick test of your sprinklers output and efficiency, follow these steps to perform a "Catch Can Test" and see how much water your sprinklers use.

1. Place equal-sized containers, such as soup cans or milk cartons, between sprinkler heads (test each zone separately). The containers should all be the same size and shape and should all have vertical sides. The more containers you use, the more accurate the measurement will be. Make a sketch of where the cans are placed.
2. Run your system exactly 15 minutes (time it with a stop watch).
3. Measure the amount of water in each container with a ruler. Record the reading per can on the sketch where the can was placed.
4. Ideally, an irrigation system should apply water uniformly across the lawn. They do not. Make a note on your sketch which containers contain a lot more or a lot less water. Minor adjustments to most systems can improve efficiency and green up the dry spots.
5. Determining Application Rate: To determine Application Rate (AR) of a zone in inches per hour, add up the cans and divide by the number of catch cans used. This gives the average amount of water per can in inches. Multiply this number by 60, and then divide the result by the test time in minutes.

   Example: 0.3" + 0.4" + 0.5" + 0.6" + 0.7" = 2.5"÷ 5 cans = 0.5" (0.5" × 60 minutes) ÷ 15 minutes (run time) = 2" (AR)
6. Find your sprinkler's AR and the Weekly Suggested Water Use in the table to the right to find out how long you should run your sprinklers for the week.

   Example: If your sprinkler's AR is 2.00 inches and it is June, with a suggested water application of 1.25", you should run that zone for 38 minutes total for the week.
7. Determine sprinkler run times: Fill in the schedule on the left based upon the application rates and inches per week. Keep an eye on your lawn and make adjustments as needed.
8. Determining Cycles: A cycle is one complete operation of all of your sprinkler zones. Shorter cycles improve water penetration in heavy soils, on slopes or when sprinklers have a high AR. Run through all zones at one-half or one-third the total time and add additional start times to provide the total water recommended. Try to keep cycles within an hour of each other. This will help prevent puddling and runoff.

Monthly Suggested Water Use

May and September: 1.0 inch per Week

ZONE	APPLICATION RATE (AR)	MINUTES PER WEEK	CYCLES (2 TO 3)	MINUTES PER WATERING CYCLE

June: 1.25 inch per Week

ZONE	APPLICATION RATE (AR)	MINUTES PER WEEK	CYCLES (2 TO 3)	MINUTES PER WATERING CYCLE

July and August: 1.5 inch per Week

ZONE	APPLICATION RATE (AR)	MINUTES PER WEEK	CYCLES (2 TO 3)	MINUTES PER WATERING CYCLE

October: 0.5 inch per Week

ZONE	APPLICATION RATE (AR)	MINUTES PER WEEK	CYCLES (2 TO 3)	MINUTES PER WATERING CYCLE

Recommended Watering Times

Sprinkler Application Rate (AR)	*Weekly Suggested Water Use*			
	.05 inch	1.00 inch	1.25 inch	1.50 inch
0.25 inch	120 min	240 min	300 min	360 min
0.50 inch	60 min	120 min	150 min	180 min
0.75 inch	40 min	80 min	100 min	120 min
1.00 inch	30 min	60 min	75 min	90 min
1.25 inch	24 min	48 min	60 min	72 min
1.50 inch	20 min	40 min	50 min	60 min
1.75 inch	17 min	34 min	43 min	51 min
2.00 inch	15 min	30 min	38 min	45 min
2.25 inch	13 min	27 min	33 min	40 min
2.50 inch	12 min	24 min	30 min	36 min
2.75 inch	11 min	22 min	27 min	33 min
3.00 inch	10 min	20 min	25 min	30 min