



## Your Sprinkler System Audit

We hope you found your sprinkler system audit useful. Here is additional information that may be useful as you manage your outdoor water use.

### Watering Schedule

We recommended schedule based upon the precipitation – or “flow” – rate for each type of zone and the zone operating pressure. Many sprinkler systems apply more water than the soil can absorb. The “cycle-soak” approach, where you split the recommended watering time over two cycles with a soak break in between, is necessary for landscapes with clay soil, steep slopes and when sprinklers have a high precipitation/flow” rate. This approach promotes deeper roots and reduces runoff, which negatively impacts water quality of groundwater and the river.

### Water Pressure

Pressure is what forces the water through your system and to the landscape. Too much or too little water pressure reduces efficiency and wastes a lot of water. Ideal pressure should be 30 pounds per square inch (psi) for spray heads and 55 psi for rotor heads.

Low pressure produces a weak spray pattern of water that does not reach the adjacent head.

If your pressure is low:

- water when your home has no other water demands,
- modify your system so there are fewer sprinkler heads in each zone, or
- consider multi-jet rotary nozzles

High pressure produces a fine mist which causes water loss from evaporation. It can also wear out sprinkler system components faster. If your pressure is high:

- install pressure regulating heads or
- install a pressure regulator on the system

### System Maintenance

During the audit, we identified issues that may require some TLC (i.e. repairs, replacements or maintenance). Schedule a reminder to walk around your system at least once a month to find and fix any new issues.

What should you look for?

- Broken, tilted or clogged heads
- Heads that are not covering the desired area (dry lawn patches, wet sidewalks)
- Water leaving your landscape (“run-off”) – reduce watering times or aerate your lawn
- Soggy areas of your landscape and/or low pressure/low water output might indicate that there is a leak in the main or lateral lines
- Drip lines might have holes or be clogged – use goof plugs to avoid geysers and check connections to ensure proper flow through the system

## Technology

New technology, such as a rain sensor or a soil moisture sensor, can help you conserve water in your landscape. Rebates and “tech checks” (1:1 assistance) are available for Fort Collins Utilities water customers.

## Root Depth

For a healthy lawn, roots should be 6 to 12 inches deep. This is accomplished by deep infrequent watering. Short, frequent watering leads to short roots that stay close to the surface. Deep roots greatly enhance your lawn’s ability to withstand extreme temperatures and increased days between watering. A healthy lawn with deep roots is also able to out-compete weeds, too.

## Other Useful Terms

- Precipitation Rate (PR): the amount of water your sprinkler system applies over a given amount of time, typically reported in inches per hour. PR will vary by brand and type of sprinkler head. The PR is a key factor in determining how long to run your sprinklers. Do not mix different types of sprinkler heads with different PRs within a zone.
- Distribution Uniformity (DU): a measurement of a sprinkler system’s ability to apply water uniformly over the surface of a landscape. The amount of water put out by a sprinkler system is never completely uniform; some area will receive more water than others. Minor system adjustments may improve DU and help reduce spots.
- Evapotranspiration (ET) Rate: the amount of water, in inches, a typical lawn uses through soil evaporation and plant transpiration. The lawn's need for water is affected by the amount of sunlight, temperature, humidity and wind exposure. For example, shaded lawns protected from the sun and wind will use less water. When watering, the goal is to replenish only the amount of water that has been lost through ET.

## Water-Wise Tips

- Avoid watering when it is windy or raining.
- Reduce number of watering days in the shoulder months (May, Sep, Oct).
- Overwatering is worse than under-watering. Hand water dry spots instead of overwatering the entire lawn.
- Consider replacing some grass with water-wise plants. Many species provide seasonal colors and textures for year-round beauty.
- Aerate your lawn at least once a year during either early spring or late fall.
- Use fertilizer sparingly since it encourages grass growth that requires more and more water and mowing. If you must, only lightly fertilize bluegrass in the spring and fall with a slow-release fertilizer.
- Use mulch in planting beds and around trees and shrubs to maintain soil moisture and protect against weeds.

## Mowing Tips

- Mow Early - mowing when it is cool reduces the stress on a lawn.
- Mow Sharp - dull mower blades tear grass, creating unnecessary stress on the lawn.
- Mow High - mow bluegrass 2½-3” tall to promote deeper rooting and shade the plant's root zone. Never cut off more than 1/3 of the leaf blade.
- Leave clippings where they fall as they add nutrients to the soil. A mulching mower chops grass into small pieces.

### Looking for a Contractor?

Statewide training or certification requirements for irrigation contractor do not exist in Colorado. However, there are several organizations that provide optional certifications, including the Irrigation Association ([www.irrigation.org](http://www.irrigation.org)), Water Sense ([www.epa.gov/watersense](http://www.epa.gov/watersense)) and Associated Landscape Contractors of Colorado ([www.alcc.com](http://www.alcc.com)). To find out what qualifications to look for when hiring a contractor, visit the Irrigation Association website, navigate to the 'Search' tab and select 'Consumer Info'. We are working with the industry to help support water-wise practices through our Certified Landscape Professional program.

### Other Resources

Fort Collins Utilities: 970-212-2900 or [fcgov.com/utilities](http://fcgov.com/utilities)

Local weather station data: [ncwcd.org](http://ncwcd.org)

CSU Extension fact sheets: [ext.colostate.edu](http://ext.colostate.edu)

Daily Lawn Watering Guide: [fcgov.com/lawnguide](http://fcgov.com/lawnguide) or *Coloradoan* weather page.

Xeriscape: [fcgov.com/xeriscape](http://fcgov.com/xeriscape)

CSU Turfgrass Program: [csuturf.colostate.edu](http://csuturf.colostate.edu)

CSU Extension Master Gardeners: [cmg.colostate.edu](http://cmg.colostate.edu)