Guide to Assigned-Day Watering and Lawn Care in the Truckee Meadows

Here in the high desert, lawns and other plants need strong root systems to stay healthy. This guide is designed to help you keep your yard green and healthy throughout the year, while encouraging responsible water use at all times.

During the summer, demand on the water system is extremely high. Our customers' water usage increases 400%—or about 100 million gallons per day system wide. Outdoor watering is the primary reason for this increase. Therefore, it is especially important for all customers to manage their usage during the summer. The Assigned-Day watering program is the cornerstone for efficient water management throughout the year. A direct benefit of the program is the balance and management of peak-day consumption throughout our water system. This has helped Truckee Meadows Water Authority (TMWA) avoid costly facility expansions that would increase rates for all our customers. As an added bonus, responsible water use at home and at work saves money on your water bill.

Customers often wonder if the water we save is used for growth. The answer is no. Water saved by current residents is not allowed to be used for growth. The unused water is retained for drought reserves or stays in the Truckee River. It cannot be re-allocated for new homes or buildings.

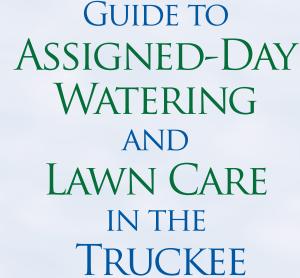
So, when preparing and irrigating your yard throughout the year, be sure to follow these helpful tips. You will keep your landscape healthy and water demands down for the entire community, all while saving money on your bill.

Questions?

For more information, visit our website at www.tmwa.com. Expert advice on gardening can be found by calling the University of Nevada Cooperative Extension at 784-4848.



- No watering between noon and 6 p.m. from Memorial Day through Labor Day.
- Mondays are a no-watering day to replenish and maintain the water system.
- Please don't water when it's raining or windy, or when temperatures are too high.
- Check your irrigation clock routinely and adjust according to watering needs.





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MEADOWS

Truckee Meadows Water Authority is a not-for-profit, community-owned water utility, overseen by elected officials and citizen appointees from Reno, Sparks and Washoe County.

LAWN CARE

Fertilizing

Proper lawn fertilizing will make your lawn greener and healthier. Fertilized lawns are thick, lush, and better able to resist insects and diseases.

Your Lawn Needs Nitrogen

To stay healthy, lawns need four pounds of nitrogen a year for each 1,000 square feet of area. Figuring out how much fertilizer will provide that four pounds of nitrogen is simple:

For example, if a 100-pound bag of fertilizer has a 20% nitrogen content, that means that for every pound of fertilizer, there is 20% nitrogen. So, to get a pound of nitrogen, use five pounds of fertilizer (5 lbs. x 20% nitrogen = 1 lb. of 100% nitrogen). Therefore, to give this lawn its four pounds of nitrogen, it should be fertilized four times a year: once in late March or early April; once in late May or early June; once in late August or early September; and once in mid-October. These four applications will give your lawn all the nutrients it needs to keep it green and healthy.

Change Your Fertilizer

Your fertilizer's composition should vary somewhat. Fertilizer with only nitrogen can be used for the first three applications. However, in the October application, use a balanced fertilizer that contains phosphorus and potassium as well as nitrogen. This will enhance root and leaf growth, as well as discourage diseases.

Four Steps to Effective Fertilizing

Follow these steps when fertilizing your lawn:

- Follow the manufacturer's instructions. Particular care must be taken with some lawn fertilizer and weed control products that can harm trees and shrubs.
- 2. Lightly water your lawn before applying fertilizer.
- 3. Spread the recommended amount of fertilizer using a walk-behind or whirlybird spreader, being careful not to over lap it, which may cause "burning." Don't apply fertilizer by "hand throwing," which usually results in uneven distribution.
- 4. When you water, use the "Water & Wait" method.

More landscape design and care tips can be found at **www.tmwalandscapeguide.com**.

De-thatching

Thatch is the accumulation of leaves, sprouts and roots that build up between the soil and the blades of grass. It's often evident next to sidewalks where a lawn is raised two or more inches. Thatch prevents water, fertilizer and air from reaching the soil. Insects often live there as well, and thatch restricts root development. To eliminate this condition, the thatch must be broken up and removed. De-thatching can be done with a power rake.

Aerating

Small holes, or pores, must be made in the surface to allow air, water, fertilizer and roots to penetrate the soil. This process is called aeration. Punching the holes can be done with an aerator, a machine that removes small plugs from the thatch and soil.

When to De-thatch & Aerate

These operations should be performed in the spring to allow the lawn to rejuvenate throughout the growing months. Aeration and de-thatching are not one-time cure-alls; they are part of an ongoing maintenance program that every lawn should receive.

The frequency of de-thatching and aerating varies from one to four years, depending upon build-up. A new lawn may not need de-thatching for two or three years. An older lawn that has a build-up of thatch may need de-thatching and aerating every year.

Mowing

Mowing heights influence the health and vigor of your lawn. In addition, mowing affects your lawn's root development, transpiration of water through the grass blades, weed resistance and photosynthesis (the food-producing process). Mow your lawn at the correct height to prevent "sun scald." It is also important to remember that your lawn does not have to resemble the closely cropped "green carpet" look of a golf course. Golf course grass is usually a special hybrid that is meant to be short.

Almost all of the grasses in the Truckee Meadows are classified as cool season grasses. These are likely to grow taller than the warm season grasses of southern climates. With this natural ability for growth, two- to three-inch deep mowing heights are recommended for these grasses: bluegrass, fescues and ryegrass. In addition, remove no more than 1/3 of the leaf blade. Keeping your lawn at this height gives the blades some shade and will discourage weeds from sprouting.



Leave clippings on the lawn as they will decompose, releasing nitrogen back in the soil. Plus, they are 90% water and will not create thatch.

- Always use a sharp blade when mowing your lawn. A dull blade rips and shreds the grass blades, leaving the ends jagged and brown. In addition, torn and shredded tips are more prone to diseases.
- Sharpen the blades of a reel mower every year. Rotary mowers should be sharpened monthly.
- Mow in alternate patterns, which aids in reducing ruts and compaction.
- Never mow a wet lawn. Wet lawns will clog your mower and create ruts in the turf.

Cool Lawns are Healthy Lawns

Transpiration is the release of water from the plant to help cool itself. If grass blades are kept at the proper mow height, the water transpired from each blade is reduced. This reduction is caused by the blades shading each other and the surrounding soil.

Weed Resistance

Lawn height also affects weed resistance. If a lawn is watered properly and allowed to grow to its ideal height, a healthy, close-knit turf develops. With this comes the turf's ability to compete successfully with weeds for water and nutrients in the soil. The lawn's ability to produce food is also affected. If the grass must overwork to cool itself because of overexposure, it depletes much of its food reserves.

SAVE MONEY AND DECREASE RUNOFF WITH A LAWN BUFFER

Often, when customers water their lawns, there is overspray and runoff, usually onto a driveway or sidewalk. Unfortunately, as the water flows off the pavement, it picks up pollutants such as fertilizer, pet wastes and dripped motor oil. The water then travels to the storm drain without any treatment, potentially polluting the Truckee River.

Install a Lawn Buffer Zone

The best way to capture this overspray and runoff is with a lawn buffer. A lawn buffer is an area of vegetation between your lawn and pavement that can be watered with a drip irrigation system. This buffer zone not only protects water quality, but it can also reduce water bills.

To construct a lawn buffer, observe the amount of overspray occurring from your system and design the buffer width accordingly, to capture all overspray. Then, reroute your lawn sprinkler system to the new lawn edge. For small lawn areas, consider replacing the entire area. Small areas are virtually impossible to irrigate with sprinklers without wasting water and creating runoff. Remove the turf and amend the soil, improving the soil's water-holding capacity. Then, add a drip system or soaker hoses, install plants, and cover the area with landscape fabric and mulch. We suggest the use of water-efficient plants, which will increase your water savings even more. If the buffer area slopes sharply, consider adding terraces to make planting and maintenance easier. This will also help decrease runoff from the buffer area. For mild slopes, be sure to place a small berm at the downslope edge to contain runoff.

Then remember to monitor your new irrigation systems throughout the summer to make sure you are not overwatering. Adjust the system as needed depending on weather and the season. Keep in mind that too much water added to the new lawn buffer will simply add to the runoff problem.

LAWN CARE THROUGHOUT THE YEAR

The way you water will greatly affect the health of your landscape during the growing season.

Spring

This is the time to encourage deep root growth – usually in April and May. Water deeply once every other week to start, then water deeply once each week. Be sure to water using the "Water & Wait" method – on one of your assigned days. Older lawns may need de-thatching and aerating to help roots absorb water and nutrients.

Summer

By June, your landscape will be conditioned and ready for Assigned-Day watering through August. Be sure to continue using the "Water & Wait" method – and only water on your assigned days.

Fall

September and October are the cool down months used to prepare your landscape for its winter rest. It's best to water one day a week, tapering off to every other week as colder weather approaches. A balanced fertilizer will also help your lawn develop stronger roots and store nutrients over the winter period.

Winter

From November through March, your lawn and plants will be dormant. Remember to water trees and shrubs only if there has been no rain or snow for more than a month and only if the ground is not frozen.

STARTING AND ENDING THE IRRIGATION SEASON RIGHT

Give Automatic Sprinklers a Spring Tune-Up

Before you start spring watering, take the time to check your system:

- Make sure all manual drain valves are closed. An open drain valve can waste a lot of water and increase your water bill, costing you a lot of money. You may never even see the water, as it is draining into the ground.
- 2. Open the main valve to the sprinkler system.
- 3. Check all valve wires for frays and loose ends.
- Clean sprinklers to make sure spraying patterns are uniform.
- 5. Check the vacuum breaker for leaks and spring tension. This assembly prevents the backflow of irrigation water into your home's drinking water pipes.
- **6.** Adjust all sprinklers so they spray the landscape, not the sidewalk, driveway, house or street.
- Set the timer for correct times and watering days.Change the battery in the timer if it has this option.

Check www.tmwa.com for irrigation workshops.

Hose-End Sprinkler Tune-Up

Hand-held and portable sprinklers need to be inspected in the spring, too. Here's a checklist:

 Good hose condition is important. Check for cracks, splits and coupling problems. Replace the rubber washers at the couplings for a snug fit.

- 2. Check the sprinkler for leaks, clogs and malfunctions. Replace washers.
- 3. Check hose bibs for leaks and clogs.

Use these guidelines to periodically check your sprinkler system throughout the summer, too.

FALL SHUT-DOWN

In the fall, as your landscape is being prepared for winter, your sprinkler system should be shut down. Here's how:

Automatic Sprinklers

- 1. Close the main valve to the sprinkler system.
- 2. Open all sprinkler control valves.
- 3. Open all manual drain valves to drain the system.
- **4.** Drain the vacuum breaker (this may freeze and break if not drained).
- 5. Allow a couple of hours for system drainage.
- Close the sprinkler control valves and the manual drain valves.
- 7. Check the main valve to be sure it is closed tightly. If it isn't, tighten it and repeat steps 2 through 6.
- **8.** Cover the vacuum breaker to protect it against freezing. *Optional*
- 9. Turn off the timer and unplug it.

Check www.tmwa.com for winterization workshops.

Hose-End Sprinklers

- 1. Drain hoses and sprinklers.
- 2. Repair any damage to the hoses and sprinklers.
- 3. Disconnect and store them in a warm garage or shed.

Remember, these tips are only a partial guide to sprinkler maintenance. For more information, consult a specialist in sprinkler irrigation.

Watering in Our High-Desert Region

Water on Your Assigned Days

If the last number in your address is even (0, 2, 4, 6 or 8), water only on Tuesdays, Thursdays and Saturdays. If the last number in your address is odd (1, 3, 5, 7 or 9), water on Wednesdays, Fridays and Sundays. No watering between noon and 6 p.m. from Memorial Day through Labor Day. Mondays are a no-watering day to replenish and maintain the water system.



Water Deeper, Less Often

Deep, intermittent watering works best in our dry climate because it promotes deeper roots that survive hot weather. Light, frequent watering is not recommended because it encourages shallow roots that dry out rapidly, especially on hot summer days.

Virtually every plant in your yard will benefit from thorough, less frequent watering. Only new lawns, plant seedlings, and a very few naturally shallow-rooted mature plants (flowering dogwood, roses, rhododendrons) will need watering often enough to keep the topsoil moist all of the time.

In our high desert, clay-based soil takes longer to absorb water – five to six times as long as sandy soils found in other parts of the West. Since most sprinklers are designed to deliver water faster than our soil can absorb it, we recommend that you use the "Water & Wait" method to help the soil better absorb the water.

Water...

Water until puddles form or just before runoff begins. Then turn off the sprinklers. For sloped yards where runoff begins within minutes, we recommend short run times more often through your watering day.

& Wait

Let the water soak down to the roots, waiting about one to two hours. Repeat this process until the water reaches a depth of six to eight inches. Measure by inserting a screwdriver into the soil. It will easily go in as deep as there is moisture.

Automatic Sprinklers

The "Water & Wait" method can also be utilized by setting your sprinkler controller (timer) to water in cycles. For example, if your irrigation controller is set for one long cycle of 30 minutes, adjust the controller for two start times at 15 minutes each or three cycles at 10 minutes each with one to two hours in between each start time. Thirty minutes of watering still occurs, but with a technique that eliminates waste and encourages water to reach the roots and not the streets.

Multiple start times should be added during the heat of the watering season. July and August are the hottest months and should have the most start times on your sprinkler system. The spring and fall months should have less start times because temperatures are milder. And remember to water only on your assigned days according to the Assigned-Day watering schedule.

Free Irrigation Workshops

TMWA offers free irrigation workshops for customers every spring and fall. For details visit **www.tmwa.com**.

How Often to Water

When temperatures are mild (in the 60s and 70s), watering one day a week is all your landscape needs. As temperatures rise (80s and 90s), watering on your assigned days is recommended. For properly trained yards, this is enough even during the hottest part of the summer. Please don't water when it's windy or during the heat of the day. Not only can this burn your lawn, but evaporation is high. In addition, TMWA rules and local ordinances prohibit watering between noon and 6 p.m. from Memorial Day through Labor Day.

Watering Tips for Trees & Shrubs

Since trees and lawn compete for water, it is ideal to keep trees out of your lawn. When planting, dig basins around trees and shrubs to hold water directly over the roots, and provide good drainage. Newly planted trees watered by a drip system must have the emitters located close to the root ball and surrounding area. However, as the tree matures, the emitters need to be relocated outward, toward the tree's drip line. During dry winters, remember that trees and shrubs require additional water.

For more tree care tips, visit www.communityforestry.org.



Watering New Lawns

New lawns require a lot of water to get established. If you're planting a new lawn from seed or by installing sod, it's wise to do it in the spring or wait until fall when temperatures are cooler and there is less stress on the lawn. TMWA requires customers to obtain a 6-week watering variance when watering to establish new lawns. To obtain a variance, please email conservation@tmwa.net or call TMWA's Conservation Hotline at 834-8005.