
ENVIRONMENTAL Fact Sheet



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2013

Home Water Efficiency: Fixing Leaks Indoors and Out

Leaks are responsible for wasting tremendous amounts of water and energy. A leaky toilet can waste 200 gallons of water per day and are notorious for high water and sewer bills and overloaded septic tanks. A dripping faucet can waste 3,000 gallons of water a year or enough water to take a shower every day for four months. That's a lot of water. The good news is that it is easy to check for and even repair some types of leaks yourself.



Source: EPA WaterSense

Hello water meter!

- ✓ If you are billed for water based on use, you have a water meter. Water meters ensure that you are only paying for what you use, assist water companies with accounting for any lost water between the water source and your home, and are a great tool to assist you with identifying leaks. In New Hampshire, most water meters are located inside the home in the basement. To get an idea whether there are any leaks in your home that have gone unnoticed, such as a silent toilet leak or a leak in your irrigation system, take a meter reading, wait two hours, and take another reading. Refrain from using any water in between readings. If the meter reading changes, you have a leak.

Nice to meet you, bill.

- ✓ Some water bills include information on how much water you use each month and even provide comparisons to the previous month and year usage. If you notice a jump in usage when reviewing your water bill, you might have a leak. If your water provider does not include this information in your bill, request that they make the change.
- ✓ Another way to get an idea whether you have a leak is to consider that a 2008 water use study on the seacoast of New Hampshire found that indoor water use is approximately 63 gallons per day per capita, while summer use is approximately 93 gallons per day per capita. If you multiply the number of people in your house by one of these numbers you will have an estimate of how much water you should expect to use each day. If your water bill is above this number, you may have a leak.

Check you later.

- ✓ Check your faucets to see if they drip or if water comes out of places it should not. Old and worn faucet washers and gaskets frequently cause leaks in faucets.

- ✓ Inspect other household pipes, fittings and valves for leaks. If you find leaks, don't ignore them—make the repair or call a plumber if you don't know how.
- ✓ Check the shower for leaks near the showerhead and at the tub spout when the shower is on and off. Leaks where the pipe stem meets the showerhead can normally be fixed by unscrewing the showerhead, placing pipe tape around the threads on the pipe stem, and screwing the showerhead back on tightly. Leaks from the tub spout will probably require replacement of the spout.
- ✓ Leaky toilets waste a lot of water and cost a lot in bills. Unfortunately, many toilet leaks go undetected, but the good news is that it is easy to check for a leak by dropping food coloring (12 drops) or a leak detector dye tablet in the tank. Do not flush for 15 or 20 minutes. If the tank leaks, the dye will show up in the bowl. Old and worn toilet flappers are often the culprit and are very easy to replace.

Meet you out back.

- ✓ Check your hose for any leaks. If the hose is leaking where it is screwed into the spigot, replace the hose washer, place pipe tape around the threads of the spigot, and screw the hose back on tightly with a wrench. If your hose has a leak somewhere else, you have a few options. If it is a small leak, you may be able to patch it with tape or a patch kit. If it is a larger leak you can purchase a hose repair kit at your local hardware store.
- ✓ A leak in your irrigation system can cost you a lot in water bills and result in property damage. To locate leaks, turn the irrigation system on and walk the system. Check sprinkler heads to make sure they are working properly and that there are no geysers or puddles beneath. Also, puddled water, soggy spots in the yard, or runoff onto pavement could indicate a leak or over watering. Have your system inspected by a professional irrigation installer. For more information about checking your irrigation system for leaks or inefficiencies, read the fact sheet "Home Water Efficiency: In-Ground Irrigation Systems," at <http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm> and scroll to WD-DWGB-26-22.

Go to the EPA WaterSense website at www.epa.gov/watersense/our_water/howto.html to learn more about how to fix leaks yourself.

For Additional Information

Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.nh.gov, or visit the DES Water Conservation Program webpage by going to www.des.nh.gov, clicking on the "A to Z" list and scrolling down to "Water Conservation."

References and Resources:

U.S. EPA WaterSense Program, www.epa.gov/watersense

Note: This fact sheet is accurate as of March 2013. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.

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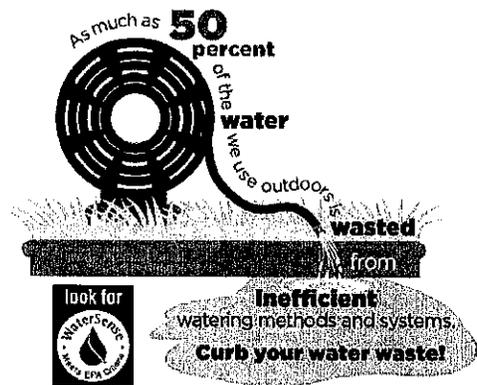
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WD-DWGB-26-20

2013

Home Water Efficiency: Lawn Watering and Maintenance

On average, we use approximately 50 percent more water in summer and some community water systems in New Hampshire have even reported a whopping 100 to 200 percent increase in water use during this time. This leap in demand comes at a period when water resources are already most stressed due to high temperatures and increased demand from vegetative growth; therefore, it is important that we maintain a careful balance between our needs and the needs of nature to ensure the availability of enough clean water into the future. While we use water outdoors for many purposes such as washing cars, patios, and siding, playing on slip'n'slides, and filling pools, the majority of outdoor water use can be attributed to outdoor watering of lawns and landscapes. Experts agree that much of this water is wasted due to inefficient watering practices. The good news is that experts also agree that we have the potential to cut our outdoor water use in half, saving money, water, and energy, while potentially even increasing the health of our lawns. By giving your lawn only what it needs you will actually improve the durability of grass, reduce the need for chemical amendments, and decrease lawn mowing frequency.



Source: EPA WaterSense

Stay sharp.

- ✓ Raise your lawn mower blade height to three inches. Longer grass blades retain moisture better, keep weeds to a minimum, and encourage roots to grow deeper and stronger.
- ✓ Keep the mower blades sharp. Mowing with a dull blade gives grass a "split ends" look making grass seem drier than it is.

Maintain control.

- ✓ Water deeply and infrequently to encourage deep, strong root systems. New Hampshire receives an average of 3.75 inches of rain per month. Your lawn and landscape need no more than 1 inch of rain per week, so there will be periods when your lawn requires no watering. When supplemental watering is necessary, watering just enough is imperative. Too much or too little water can inhibit root growth and make grass more susceptible to dry conditions, while too much water can also lead to fungal diseases and wash away important nutrients.
- ✓ Replace your irrigation system's clock timer controller with a WaterSense-certified weather-based irrigation controller and soil moisture sensor and you are guaranteed to save. Weather-based irrigation controllers and moisture sensors ensure your system is set to give your landscape the optimal amount of water. Learn more about WaterSense-certified controllers and irrigation companies at www.epa.gov/watersense.
- ✓ Install an automatic rain shutoff switch on your irrigation system. These switches allow you to take advantage of the water Mother Nature provides without having to pay for it.

- ✓ Adjust how long you water your lawn each week based on how much rainfall is received. Doing so will ensure a healthy landscape and minimize water waste. Follow the three simple steps below to learn how:
 - 1) Determine the rate of flow from your sprinkler. Place cans (tuna cans work well) at various locations on the lawn. Mark a one-inch depth on the inside of the cans. Time how long it takes your sprinkler heads or hose to deliver an inch of water to each of the cans, and average the times. This is how long you should run your sprinklers or hose to deliver an inch of water. Normally sprinkler heads flow at a rate of 1.5 inches to 1.7 inches per hour.
 - 2) Determine how much it rains each week so you can adjust your watering duration accordingly. This is easily done by placing a rain gauge in your yard and checking on it once a week, maybe on trash day. Rain gauges can be purchased for a few dollars at your local hardware or garden store. Subtract the height of water in the rain gauge from 1 inch. If you get a negative number, you do not need to water. If you get a positive number, this is how much water your lawn needs.
 - 3) Multiply the inches of water needed by the number of minutes it takes your system to water 1 inch and that will indicate the length of time to run your sprinklers. Empty the rain gauge and repeat this process again in a week.

Watering Duration (Minutes) = (1 inch - X) * Y
 X = Weekly Rainfall received at rain gauge
 Y = Number of minutes it took to fill can to one inch
- ✓ Utilize drip or trickle irrigation instead of spray nozzles for landscape plantings. These systems apply water near the root zone of the plant, ensuring a complete watering while reducing excess water usage.
- ✓ Use mulch around vegetated areas. Mulch helps to retain moisture and keep weeds out.
- ✓ To learn more about appropriate fertilization and drought resistant seed types go to the University of New Hampshire Cooperative Extension website at www.extension.unh.edu/resources/category/Home_and_Garden.

Time it right.

- ✓ To reduce water waste from wind and evaporation, irrigate between 9 p.m. and 9 a.m. and when it's not windy. Even better, irrigate between 4 a.m. and 6 a.m. when water demand is low.
- ✓ If you notice water running off vegetative surfaces you are either over watering or not allowing enough time for water to absorb. If your soils are clayey or you are watering on a steep slope, it may take additional time for water to absorb into the soil requiring watering times to be cycled. For example, set your irrigation controller to water at five minute intervals.

For Additional Information

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References and Resources:

U.S. EPA WaterSense www.epa.gov/watersense/
 Water Use It Wisely www.wateruseitwisely.com/

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