

Tips for Saving Water Indoors and Outdoors

Outdoor Water Use

Abide by local water use restrictions:

Local water suppliers know the limits of their system and will enact voluntary or mandatory restrictions accordingly. Always follow the advice or restrictions provided by your local water supplier.

Stop watering your lawn during drought conditions:

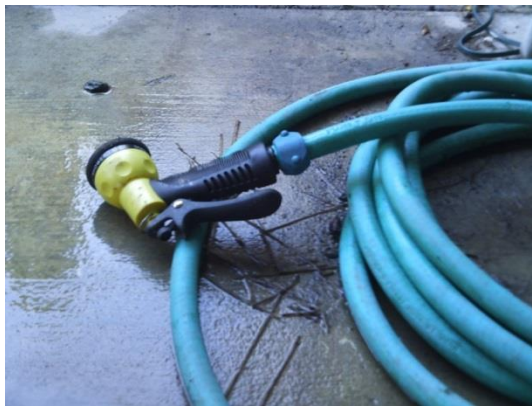
Most lawns can survive extended dry periods without watering - they will turn brown, but will revive once the rain returns.

If you water your lawn, water only as needed:

Frequent light watering can actually weaken your lawn by encouraging shallow roots that are less tolerant of dry periods. Water your lawn only as needed, generally no more than once or twice a week. A good test is to walk across the lawn. If the grass springs back up, it does not need to be watered.

Timing is critical for lawn watering:

The best time to water your lawn is early morning (4 to 6 AM). Avoid watering at mid-day to prevent high evaporation and sun-burned grass.



Use shut-off nozzles on hoses and automatic shut-off devices on irrigation systems:

Unattended hoses can use 10 gallons or more per minute. Use shut-off nozzles to save water. Also, if you have an in-ground irrigation system, use a rain shut-off device that prevents the system from operating during rainstorms.

Keep your blades sharp and high:

Keep your mower blades sharp to prevent tearing of grass and raise your lawn mowers blade to 2 1/2". Longer grass provides shade for the roots and helps reduce water loss.

Use plants that need less water:

There are many varieties of low water use plants that can withstand dry summers and that actually thrive in drier soil.

Plan and design your garden for efficient outdoor watering:

Be aware of the various shade and moisture zones in your yard and plan your gardens and plantings accordingly.



Mulch to keep roots cool and moist:

Mulch can serve as a ground cover that reduces water evaporation from the soil while reducing the number of weeds that compete for soil moisture.

Capture and reuse rainwater:

Use cisterns or rain barrels to capture rainwater from downspouts for use in your yard. A lid, mesh fabric or several drops of baby oil on the surface will prevent mosquitoes from breeding.

Inside Water Saving Tips

Kitchen

Prepare food efficiently:

Speed cleaning food by using a vegetable brush. Spray water in short bursts. Faucet aerators cut consumption.

Defrost sensibly:

Plan ahead to defrost foods overnight in the refrigerator. Don't use running water. Use the microwave or put wrapped food in a bowl of cold water.

Reduce dishwashing:

Use rubber spatula to scrape dishes clean to limit pre-rinse. Let really dirty pans or dishes soak to speed washing. Most newer dishwashers don't require pre-rinsing. Limit dishwasher use to full loads.



Reuse clean household water:

Collect all the water that is wasted while waiting for the hot water to reach your faucet or showerhead. Use this to water your houseplants or outdoor planters. Do the same with water that is used to boil eggs or steam vegetables.

Garbage disposal alternatives:

Avoid using your garbage disposal. Compost leftovers fruits and vegetables.

Bathroom

Fix leaking faucets and toilets:

Research has shown that an average of 8% (or more) of all home water use is wasted through leaks. Test for a leaking toilet by lifting the lid off the toilet tank and putting a few drops of food coloring into the bowl. Wait a few minutes, then look in the bowl. If the food coloring has made its way there, you have a leak.

Install a low-flow toilet:

Low-flow toilets need only 1.6 gallons per flush, saving thousands of gallons per year. Unlike earlier models, low flow toilets available today receive high marks from consumers for overall performance.

Avoid using the toilet as a wastebasket:

Every flush you eliminate can save between two and seven gallons of water.

Brush teeth efficiently:

Don't let the water run while you brush your teeth or shave. Turn the faucet on briefly to rinse. An electric razor saves water.

Conserve water in the tub:

Take showers instead of a bath and save 30 gallons. Filling the bathtub uses about 50 gallons of water. Try filling it just half way.

Shorten your shower by one minute:

Cut back on your shower time and you will rack up big savings in water and energy. If you really want to try and save water, limit your shower time to five minutes or less. Also, install a water-saving showerhead that uses two-and-a-half gallons per minute.



Laundry

Wash only full loads of laundry:

You'll not only save water, but energy as well.

Consider purchasing a new water- and energy-efficient clothes washer:

Look for the Energy Star labeled products and save more water in one year than a person drinks in a lifetime. These units create less wear and tear on clothes, clean better, and use less detergent. Some electric utilities offer rebates for qualified models.



TOWN OF BILLERICA REBATE PROGRAM

The Town of Billerica Department of Public Works offers a rebate program to Billerica residents and businesses. The purpose of the Rebate Program is to change out non conserving fixtures with newer more water efficient fixtures and appliances. As a Public Water Supplier this will help us to reduce per person per day water use. Current building codes already require water conserving fixtures, so new construction is exempt from this program. The Rebate Program will help us to conserve water and will help you to save money.

The rebate for qualifying toilets is \$100.00 and for qualifying urinals is \$25.00 each.

The rebate for qualifying clothes washers is \$225.00.

The rebate for qualifying dishwashers is \$100.00.

This program is available as funding allows.

To find qualifying fixtures please visit the link below:

http://www.epa.gov/watersense/product_search.html or for clothes washer <http://cee1.org>

Rain Barrels

What are rain barrels?

Rain barrels are containers used to collect rain water from the roof of a building via the gutter and downspout. The downspout is cut to a height that permits the rain water to flow into a barrel placed beneath it. The barrel should have a spigot to which a hose may be attached, and an overflow hose to direct rain water away from the foundation if rain continues after the barrel is full. Rain barrels are often made from 55-gallon food-grade plastic barrels, although they can also be made of wood. The collected water can be used to water gardens or lawns, wash cars, fill swimming pools or do other household chores.

Why use rain barrels?

Conserve water and reduce stormwater runoff: In the summer months, outdoor tasks such as watering lawns and gardens typically make up about 40% of household water use. With seasonal droughts, restrictions and bans on lawn watering, and the increasing cost of water, it makes sense to use rain water instead of municipal water for outdoor uses. Unless it is collected, rain water runs off impervious surfaces, such as roofs and pavement, gathering pollutants which often end up in local streams, rivers, pond, lakes and marine waters. Keeping and using rain water on your property helps reduce pollution, erosion and improves local watershed health.

Water quantity: Just 1/4 inch of rainfall on a typical roof will fill a rain barrel. A modest amount of rainfall can supply much or all of your outdoor watering needs - a full rain barrel will water a 200 square foot garden. A good rule of thumb is that 1 inch of rain on a 1000 sq ft roof yields 623 gallons of water. You can calculate the yield of your roof by multiplying the square footage of your roof by 623 and dividing by 1000.

Water quality: Rain water is "soft," or free from minerals and chemicals such as chlorine, fluoride, and calcium that are often present in municipal water. Rain water is considered ideal for watering plants or washing cars and windows.

How do I install a rain barrel?

1. Purchase or make a rain barrel.
2. Select location under a downspout.
3. Determine height of barrel.
4. Build a platform to desired height - Elevating a rain barrel a foot or so above ground level increases the water pressure, which comes solely from gravity (unless you install a pump). A full rain barrel typically weighs over 400 lbs, so the platform must be made of sturdy materials such as cinder blocks, bricks, or similar materials. The platform must be flat, level and large enough to support the entire base of the barrel for good stability.

5. Place rain barrel on platform.
6. Cut downspout to fit opening - You should connect the house downspout, which you will have to cut with a hacksaw to accommodate the barrel, directly to the lid opening or via a flexible pipe. Or you may simply direct the downspout to the opening in your barrel. You may also wish to install a downspout diverter, which allows you to divert water back into your downspout during winter or when you do not wish to collect rainwater.
7. Attach a hose to the overflow fitting. Use a length of hose sufficient to drain excess rainfall away from your foundation into a garden area or into another rain barrel. Keep the overflow valve open at all times.

How can I obtain a manufactured rain barrel?

Many Massachusetts towns and cities distribute rain barrels to residents through annual sales. Check with your municipality to see if there is a rain barrel sale planned and for details on how to participate. Or check the websites of the following vendors on state contract for information on sales planned in Massachusetts communities and how to participate. If no barrels are available in your community, try a neighboring community or consider purchasing a barrel directly from the vendor.

You can check the following Massachusetts businesses that make rain barrels, or search for a rain barrel on-line:

- Aaron's Rain Barrels, P.O. Box 1429, Leominster, MA, 978-790-1816, <http://www.rain-barrels.net/>
- The Great American Rain Barrel Company, www.greatamericanrainbarrel.com
- Go Green Solutions, Inc.,
<http://gogreensolutionsinc.com/t/rain-barrels>
- Orbis Corporation, <http://www.orbiscorporation.com/Products/Environmental-Recycling-and-Waste/Rain-Barrels>

How to make your own rain barrel (for photographs of the process, required supplies, and step-by-step directions on rain barrel construction, visit [Mid-America Regional Council](#)):

