

Household Guide to Water Conservation



**American Water Works
Association**

The Authoritative Resource on Safe WaterSM

Think about water.

It's yours for the taking, 24 hours a day. All you have to do is turn on a faucet. But where does it come from?

The water you use doesn't appear magically. It's carefully processed to be clean, safe, and piped directly into your home, a valuable resource that shouldn't be wasted. The high-quality water that we need and expect in our homes is not an infinite resource. Conserving water benefits you and all those around you.

Besides, you're paying for every drop, whether it's used or wasted. So conservation can benefit your pocketbook, too.

What are the best ways to save water inside the home?

Household water conservation not only saves water, it saves energy, too—energy needed to heat water and to run appliances. There are four places where you can save a lot of water in your home: bathroom, kitchen, laundry, and anywhere you find a leak. You can also conserve by installing water-saving

fixtures and knowing how to prevent a catastrophic leak.

BATHROOMS

The bathroom is where you can make the most substantial reduction in your personal water use. More than 50% of the water used in an average home is used in the bathroom. A lot of that water may be going to the sewer needlessly, adding to the volume of burden on treatment plants.

TOILETS

Every time a toilet is flushed, about seven gallons of water goes into the sewer. There are two ways to cut down here: don't use the toilet for things it was not meant for and reduce the water per flush.

Toilets should not be used as trash cans to flush away tissues, gum wrappers, cigarette butts, spiders, diapers, or anything else that ought to go in a wastebasket or garbage can. All of us do it at one time or another, but use of the toilet as a wastebasket is just a phenomenal waste of water.

Most toilets use more water than is really necessary and work just as well with less. So you can put a brick in the tank to displace some of the water—right? Wrong! The extra weight might crack your tank. Besides, the bricks may begin to disintegrate after a while, causing serious and expensive problems in the plumbing.

Use a plastic soap or laundry bottle instead. It's safe, easy, and inexpensive. Fill a few bottles with water to weight them and put them in the tank. Be careful not to set the bottles where they'll jam the flushing mechanism.



And be sure you don't displace so much water that you have to double-flush to get the toilet to work. Double-flushing wastes water.

SHOWERS, BATHTUBS, AND SINKS

People used to think showers were less wasteful than tub baths, period. This isn't always the case. Some people spend 10 to 20 minutes or more in the shower. Most showers pour out between 5 and 10 gallons per minute, and that can add up in a hurry.

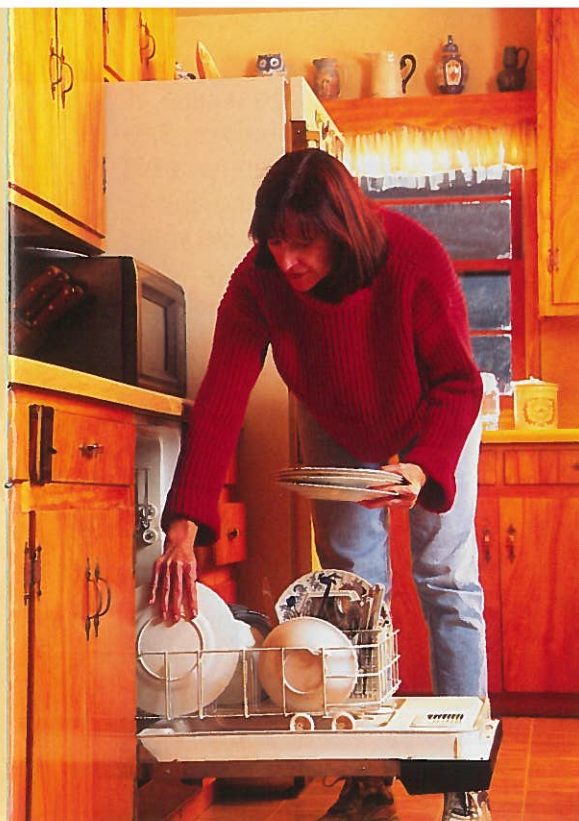
There's no hard-and-fast rule. It's a matter of self-control. A partially filled tub uses far less water than a long shower, but a short shower uses less than a full tub. Time yourself next time you step under the spray. The odds are you really don't need to stand there that long, and you don't need the shower running at full-blast.

When shaving and brushing your teeth, don't leave the water running. Run as much as you need, then turn off the tap until you need some more.

Kitchen

You can conserve water in your kitchen without sacrificing taste or cleanliness.

- Automatic dishwashers claim the most water in kitchens—about 12 gallons per run. The secret here is to make sure the washer is fully loaded before you turn it on. It's going to take 12 gallons whether there's a full load of dishes or just a couple of cups.
- Don't bother rinsing the dishes in the sink before you put them in the dishwasher. Scrape them clean and let the machine do the rest.



- Are you the dishwasher in your household? Remember not to wash dishes with the water running. A sink full of wash water and one of rinse water will do the job just as well.
- Don't let the faucet run when you scrub vegetables or prepare other foods, either. Put a stopper in the sink and use the water collected in the sink instead.
- And for a cold drink of water, don't stand at the sink and let the water run endlessly. Fill a jug with water and keep it in the refrigerator for a refreshing cold drink anytime.

Laundry

Many washing machines use 40 or more gallons of water a load, whether the washer's stuffed full or loaded with only



a couple of socks. Save up for a full load and make your water work efficiently. Or remember to set your machine for a lesser load, if it can be adjusted. As with the dishwasher,

you save energy and electricity, as well as water.

For hand laundering, put a stopper in the washtub for both wash and rinse. Don't let the faucet run.

Leaks

A little leak loses lots! Just a slow drip can add up to 15 or 20 gallons a day, while a pinhole size faucet leak wastes 100 gallons in 24 hours!

Toilets are notorious for their hidden leaks. They can waste hundreds of gallons a day undetected. Leaks occur when the toilet is out of adjustment or when parts are worn, so it's important to check the toilet periodically. Most toilet leaks are at the overflow pipe or at the plunger ball and aren't hard to find.

- If the toilet is leaking at the overflow, the water level is usually too high, although the overflow pipe sometimes may leak below the waterline. To stop this kind of leak, gently bend the arm until the valve shuts off the water about a half-inch below the top of the overflow pipe. Sometimes the valve is worn and will run like a leaky faucet and must be replaced. If you're an experienced "do-it-yourselfer" you can do the job. Otherwise, call a plumber.
- Plunger-ball leaks are only a little more difficult to spot. The best way to check is by dropping a little food coloring into a tank full of clear water and waiting to see if the color shows up in the bowl. If it does, you probably have a leak at the plunger ball, either because the ball needs replacing or because the mechanism is out of alignment. This is a relatively simple repair for a "do-it-yourselfer."

Aside from toilets, most leaks are found in faucets and are most commonly caused by worn washers. Check all the faucets in the house once or twice a year. If any of them drip after you've

turned them off firmly, turn off the water supply line, take the faucet apart, and replace the washer. Usually it's not hard, although some faucet designs do present a challenge. Any good household do-it-yourself book offers easy-to-understand advice if you need it.



Be a Leak Detective

Your water meter is the best leak detector in your home. Turn everything off carefully, so no water is being used anywhere in the house. Then check the position of the meter dial for about 15 minutes. If it hasn't moved, congratulations! You have a relatively watertight home. But if it has, start checking hose connections, faucets, and toilets.

WATER-SAVING DEVICES

Many different kinds of water-saving devices and fixtures are on the market, ranging from special reduced-flow showerheads to water-thrifty shallow-trap toilets. A variety of showerhead adapters also are available to cut down water use from existing fixtures, although a



little self-control to not turn faucets on full-blast does just about as well, at no cost at all. See a good plumbing supply or hardware store for advice, particularly when it's time to replace an old fixture in the house.

Here are some examples of how much water can be saved by using these devices.

Age and Type of Fixture	Water Use Rate (gallons per use)	Estimated Annual Water Savings in gallons per Household
Pre-1950 Toilet (vs 1.6 gallon toilet)	7.0	26,538
1994 Toilet (vs 1.6 gallon toilet)	3.5	9,337
Waterless Toilet (vs 1.6 gallon toilet)	0	7,863
Pre-1980 Showerhead (vs 2.5 gallon showerhead)	8.0 gallons per minute	13,619
Pre-1980 Faucet (vs 2.5 gallon faucet)	7.0 gallons per minute	18,212
Pre-1980 Clothes Washer (vs 27 gallon washer)	56 gallons per load	10,339
1990 Dishwasher (vs 7 gallon dishwasher)	14 gallons per load	675

You can see that by replacing old, inefficient fixtures and appliances you can really save a lot.

SHUTOFF VALVES AND EMERGENCIES

Water heaters have been known to blow out and pipes have been known to burst. Occasionally, a faucet decides to become a fountain. When this sort of thing happens, you'll want to know how to turn everything off before you needlessly waste a lot of water and possibly suffer water damage.

Find the main shutoff valve that turns off water to the whole house. It's usually located where the water pipe comes into the house. Check to see if you have a main shutoff valve that works. If you don't, or it doesn't, ask a plumber to stop by and correct the situation.



What about outside the home?

It's a fact of life that when more water is used outside, more is wasted there. But you don't have to let your lawn turn

brown or the car turn dusty to conserve water. Use common sense instead.

LAWN & GARDEN

Locations that enjoy warm weather during most of the year often find half, or more, of the water piped into homes goes right back out through hoses onto lawns and gardens. Even in northern climates the same thing happens in summer months.

- The basic principle of lawn and garden watering is not to over water. Don't follow a fixed schedule. Water when the grass or plants show signs of needing it. During a cool or cloudy spell, you don't need to water as often.
- Heat and wind will rob your lawn of water before it can use it. Avoid watering on windy days and you'll avoid having most of the water go where you don't want it. Water in the cool of the day to avoid excess evaporation and the chance of harming the lawn.
- Weeds are water thieves, too, so keep the garden free of them.
- Let water sink in slowly. Lots of water applied fast mostly runs off into

gutters. Also, if you let water sink deep, the lawn will develop deeper roots and won't need watering as often but will be more resistant to disease and wear.

- Make sure sprinklers cover just the lawn or garden, not sidewalks, driveways, and gutters.
- Keep track of how long you water. A kitchen timer is a handy reminder for turning off sprinklers.

OTHER OUTDOOR USE

Your garden hose can pour out 600 gallons or more in only a few hours. Thousands of gallons can be lost in a very short time.

- When washing the car, use a bucket for soapy water and use the hose only for rinsing. Running water in the driveway won't get the car any cleaner.
- Another water waster is using the hose to sweep away leaves. Use a rake and broom to clean up sidewalks, driveways, and gutters.

A Good Way of Life

Water conservation is a good way of life, and it's easy to do. It's mostly a matter of using good common sense. Think about water—and when you do—think about conserving it.





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