



# Water Conservation at Home

American Water Works Association; ©1989

Think about water. It's yours for the asking, 24 hours a day. All you have to do is turn a faucet. But now think again. The water you use doesn't come manufactured product - clean, safe and resource that shouldn't be wasted. Water But high-quality water that we need and resource. Besides, you're paying for every conservation can be a solid favor to your



magically from nowhere. It's a carefully piped directly into your home – a valuable will recycle itself eventually come what may. expect in our homes is not an infinite drop whether it's used or wasted. So pocketbook, too.

Water conservation is a good way

of life. Let's practice it together.

## Saving in the Home

Household water conservation not only saves water, it saves energy, too; energy needed to heat water, and to run appliances.

The bathroom is where you can make the most substantial reduction in your personal water use.

Two thirds of the water used in an average home is used in the bathroom, mostly for flushing toilets and for showers and baths. A lot of that water may be going to the sewer needlessly, adding to the volume of sewage and putting an extra 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 – first, don't use the toilet for things it was not meant for; and second, 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. Imagine pouring three two-gallon buckets of water on a bitty spider or piece of tissue – ridiculous!

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.

**CAUTION:** Don't put 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 thing to work. Double flushing wastes more than you save.

*toilets continued*

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 it periodically. It's not hard or complicated.

Most toilet leaks are at the overflow pipe or at the plunger ball. If it's at the overflow, the water level is usually too high, although the overflow pipe sometimes may leak below the waterline. 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 aren't easy to spot. The best way to check is by dropping a little food coloring into a tankful 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 the "do-it-yourselfer".

## Showers

People used to think showers were less wasteful than baths, period. That failed to take into consideration the fact that many of us spend 10 to 20 minutes or more in the shower. Since most showers pour out between 5 and 10 gallons per minute, that can add up in a hurry

There's no hard-and-fast rule. It's more a matter of self-control. A partially filled tub uses far less water than a long shower, while 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, nor do you need the shower running at full, hot blast.



## Kitchen

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, because it's going to take that 12 gallons whether there's a dinner full 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 them with the water running. A sinkful 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 instead.

And for a cold drink of water, don't stand there letting it run endlessly. Store a jug of ice water in the refrigerator.

## Laundry

Many washing machines use 40 or more gallons of water a load whether you have them stuffed full or 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.

## Shaving, Toothbrushing

Don't leave the water running. Run as much as you need, then turn off the tap until you need some more.

Water running unused goes straight down the drain. It adds up to a whale-of-a-lot of wasted water.



## Shutoff Valves & 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. Either that or lay in a supply of wading boots.

## Water-Saving Devices

Many different kinds of water-saving devices and fixtures are on the market, ranging from special reduced-flow shower heads to water-thrifty shallow-trap toilets. A variety of shower head adapters also is available to cut down in existing fixtures, although a little self-control in not turning 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. Try to get one that doesn't use as much water.



## Leaks

A little leak loses lots! Just a slow drip can add up to 15 or 20 gallons a day, while a 1/16-inch faucet leak wastes 100 gallons in 24 hours!

Most leaks, aside from toilets, are 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 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.

It's important to get the size right. The washer has to fit inside a sort of cup on the valve stem and spread out to the edges when it's screwed down. If the drip is still there when you're done, you may have something else wrong. Get in touch with a plumber.

If the leak is in one of those faucets with a single lever or "joystick" to control both hot and cold, the disassembly and repair is still relatively simple, but entirely different from the valve stem-an-washer type. A good hardware or plumbing supply store will have necessary replacement parts and can probably direct you to a good instruction source, too, if you need it.

### shutoff valves & emergencies *continued*

Most sinks, wash basins, and toilets in the house have shutoff valves below them that cut off water to that particular fixture. The hot water heater also has a shutoff valve to cut off hot water to the whole house. Unfortunately, most of us don't have shutoffs for bathtubs and showers, because the plumbing is usually behind the wall. Check your house now and identify all of those shutoff valves; see if they work.

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

## The Great Outdoors

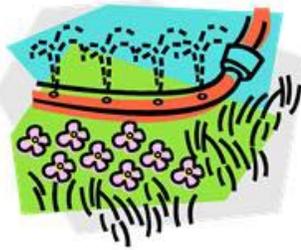
States that enjoy warm weather during most of the year often find half, or more, of the water piped into homes goes right back out through hoses onto lawns and gardens. Northern states find the same in summer months.

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.

The basic principle of lawn and garden watering is not to give them more than they need. 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 they 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, both to avoid excess evaporation and the chance of harming the lawn.

Weeds are water thieves, too, so keep the garden free of them.



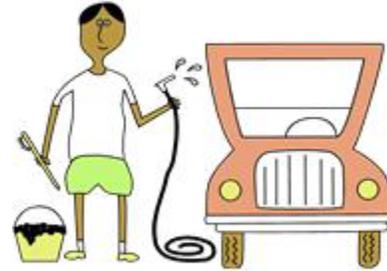
Let water sink in slowly. Lots of water applied fast mostly runs off into gutters. Also, if you let water sink deep, the lawn will develop deeper roots and won't need watering as often, as well as being more resistant to disease and wear.

A kitchen timer is a handy reminder for turning off sprinklers. And make sure when the sprinklers are on that they cover just the lawn or garden, not side-walks, driveways and gutters.

## Other Outdoor Use

Your garden hose can pour out 600 gallons or more in only a few hours. Remember that when you leave the sprinkler running all day or leave the hose un-attended. 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 side-walks, driveways and gutters.

## Meet your Meter

Your water meter is the best detective in the home. It can tell whether you have sizable leaks, as well as how much water various appliances are using. All you have to do is learn its language.

Many meters record gallons just as your car's odometer records mileage. However, Claremont's shows **cubic feet** of water used. For these, you can multiply the figure shown by 7.5, the approximate number of gallons in one cubic foot.

Note that these meters are never reset. To figure out how much water you've used in any given period, just subtract the number of cubic feet used on your last bill from the current meter reading.



## Now, let's do some checking ...

- ◆ If it's summer, turn on the sprinkler and watch the meter dial move for precisely one minute. Multiply the number of gallons by 60 for the quantity used per hour. Then estimate how long you usually leave the sprinkler running. You may be shocked at the hundreds of gallons going onto the lawn and garden every week.
- ◆ Wait for a member of the family to step into the shower and follow the same timing routine. Check the volume consumed in one minute and multiply by the number of minutes a normal shower in your family takes.
- ◆ Watch the meter dial through a full fill cycle on the automatic washer. And remember that each wash gets

more than twice as much water for both wash and rinse cycles.

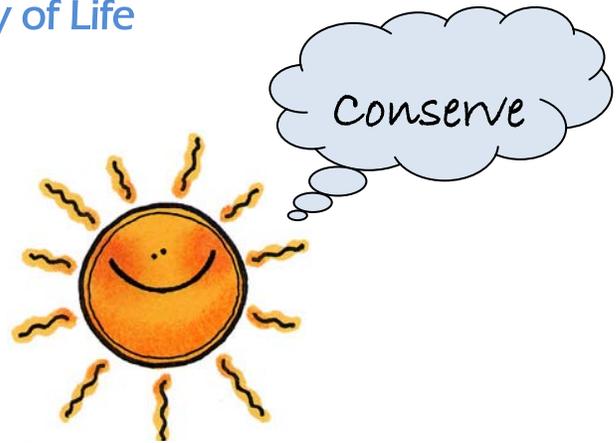
- ◆ For leak detection, turn everything off carefully, so no water is being used anywhere in the house. Then check the position of the meter dial for about 15 minutes. If it hasn't moved, congratulations! You have a relatively water-tight home. But if it has, start checking hose connections, faucets and toilets (with food coloring, remember?)

Sometimes, a meter located outside of the house, at curbside, will indicate a leak when everything inside seems tight. The leak may be hidden underground in the pipes. Call a plumber for advice.

## A Good Way of Life

Water conservation is a good way of life. Remember where water comes from and where it goes. A toilet flush uses up to seven gallons, water taps run about five gallons a minute while waiting for hot or cold, showers use five to ten gallons a minute, and leaks can soak up hundreds or even thousands of gallons per day.

It isn't hard to conserve water; it doesn't change our lives drastically. It's mostly a matter of using good common sense. Think about water – and when you do – think about conserving it.



What can you do to reduce the amount of water you use in your household?

**W**ash laundry and dishes only when there is a full load

**A**lways turn off running water

**T**ake shorter showers

**E**liminate any and all leaks

**R**educe the flow of toilets and showerheads

You can save 300 to 800 gallons of water a month by washing laundry and dishes only when the machine is full. For small loads of laundry, adjust the water setting to a lower level.



If you only have a few dishes wash them in the sink or a dish pan and rinse in a pan of hot water or use a sprayer. Washing dishes one at a time can waste hundreds of gallons of water a month. Remember, dishwashers are designed to clean dirty dishes, so there is no need to pre-rinse. Appliance manufacturers recommend scraping dishes prior to washing them and not pre-rinsing.

### Why Save Water?

- Clean drinking water is a vanishing resource
- Water saved creates smaller waste loads in sewers and septic
- Water saved is money saved with smaller water and sewer costs
- Water saved in hot water heaters reduces fuel bills