

Common Causes of High Water Bills – and How to Prevent Them

The water industry estimates that an average person uses 3,000 gallons of water monthly, so a family of four would use 12,000 gallons for bathing, cooking, washing, recreation, and watering. But a lot of factors come into play when calculating average use. So, one person's usage may be a lot higher or lower than another person.

- If you take a tub bath, you will use about 42 gallons of water, compared with the 17 gallons required for a shower. New shower heads, however, reduce the water used in an average shower to just 2 gallons a minute versus 5 or 6 gallons that spurt out of older shower heads.
- One toilet flush will use 5 to 7 gallons unless it is in a new home where 1.5-gallon commodes are required.
- Households with lawns or gardens must factor in the amount of water sprinkled on grass, flowers, and vegetables. Outdoor watering uses 5 to 10 gallons per minute. So, in 10 or 20 minutes, you may use 100 gallons – the amount industry experts estimate is used by an average person each day for all personal water needs.
- The number of people in the household is an important factor. Water use generally rises if your family grows.
- A family with a fashion-conscious teenager probably washes more clothes more often than an older person who lives alone. More water is used per load when the machine is set on high.

Dripping Faucet	¼ GPM	= 10,800 gallons per month
Leaking Toilet	½ GMP	= 21,600 gallons per month
Drip Irrigation	1 GPM	= 43,200 gallons per month
Watering Garden – 2 hrs.	5 GPM	= 18,000 gallons per month
Water Garden – 4 hrs.	10 GPM	= 36,000 gallons per month
Unattended Water Hose – 1 night	15 GMP	= 5,400 gallons per month
Broken Houseline – 1 night		= 8,100 gallons per month
Broken Houseline – 1 Day		=21,600 gallons per month
Broken Houseline – 1 week		= 151,200 gallons per month
Broken Houseline – 1 month		=648,000 gallons per month

An unusually high water bill is often caused by a leak or change in water use. Some common causes of high water bills are:

- A leaking toilet, or a toilet that continues to run after being flushed
- A broken water pipe or a leak in the water heater
- A dripping faucet or an open outside spigot
- Filling or topping off a swimming pool
- Watering the lawn, new grass, or trees
- Water-cooled air conditioners or furnace humidifiers
- A water softener that cycles continuously
- Running the water continuously to avoid freezing water pipes in cold weather

Early detection of a water leak can save you money and avert potential disaster.

1. Check your water meter

One of the best ways to tell if you have a leak in some part of your plumbing is to check the water meter. To do this, you will first have to turn off all the water in your home. Shut off all faucets, and make sure the dishwasher and washing machine are not running. Next, watch the meter and see if it begins to change. If it does, you likely have a fast-moving leak. If the meter does not change immediately, wait two hours, and check it again. If it has changed despite all the water being off, you may be dealing with a slower leak. The leak could be anywhere after the meter, or even underground. Remember that all piping after the water main is a homeowner's responsibility.

Track your own use! Once a week, write down your meter reading on your calendar. The quicker you can identify a problem, the quicker you can get it fixed and avoid a high bill. Refer to our Meter Reading Instructional Guide to learn how to correctly read your meter.

2. Monitor your bill

If your bill is rising consistently but your water use habits have not changed, a leak may be to blame. Gather some bills from the past few quarters and compare them to see if there is a steady increase. Your water bill should remain within the same range quarter to quarter. Remember that some of your pipes may be under ground. You may never detect leaks in this part of your system, but you will always pay for them. It is best to have a professional plumber make a thorough check of all the pipes. A warm spot on the floor (with under slab piping) or the sound of water running needs prompt, professional attention.

3. Do-it yourself Toilet Assessment

- Toilets can account for up to 30 percent of your water use, so you should check to ensure they are running properly. The most common type of leak is a deteriorated and/or defective Flush Valve (flapper) Ball – if the flapper does not make a tight seal with the bottom of the tank, water will leak into the toilet bowl, which may or may not be detectable upon casual observation. Check your toilet using these steps:
 1. Take the lid off the tank behind the bowl, flush the toilet, and wait for it to fully refill.
 2. Put a few drops of food coloring in the tank.
 3. Wait one to three hours – the longer time is if you suspect yours, is a small leak.
 4. If there is any color in the toilet bowl, you have a leak.
- The second most common type of leak is an improperly adjusted or broken fill (ballcock) valve. You can check this by taking the lid off the toilet tank, flushing, and seeing if water is draining into the overflow tubes when the tank is full.

The following table shows the amount of water that can be lost (and billed to your account) when you have a leak and it goes unfixed:

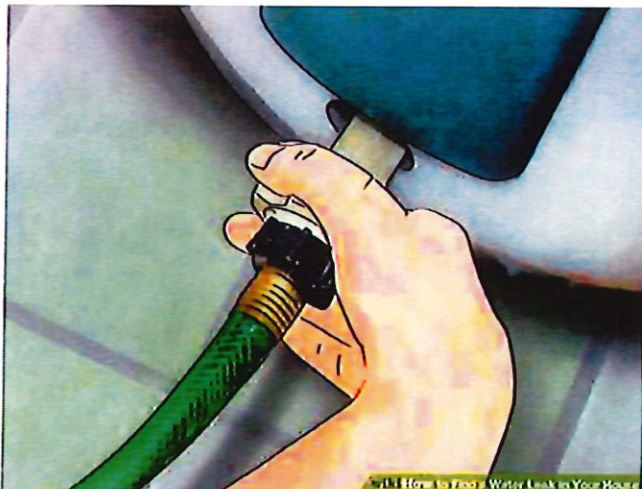
A continuous leak from a hole this size would, over a three month period, waste water in the amount shown below.

Streams Diameter at 50 psi		Gallons	Daily Average
Inches	MM		
1/4"	6.5	1,181,000	13,122
3/16"	4.8	652,000	7,244
1/8"	3.2	296,000	3,288
1/16"	1.6	74,000	822

Check the shower head for leaks. It should be a straightforward home repair if this is a source of leaking.

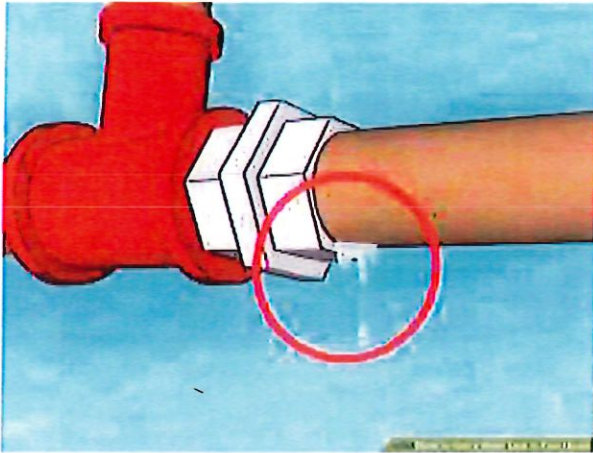


Check the Pressure Relief Valve on the hot water tank. Sometimes these valves are plumbed directly into a drain and may be leaking without your knowledge. If you cannot remove the drain pipe to check for a leak listen for a hissing sound, it may be leaking.



Check exterior usage

Leaks do not just happen inside the home -- they occur outside as well. Check your outside spigots by attaching a garden hose; if water seeps through the connection while the hose is running, replace the rubber hose gasket and check to see all connections are tight. Consider calling a professional once a year to check your irrigation system if you have one. A system with even a small leak could be wasting 6,300 gallons of water per month.



Check the garden. Look at hoses, taps, and drip irrigation systems.

Use common sense

Make a practice of regularly checking in the back of cabinets and under basins for any signs of mold or foul smells that might indicate a leak: prompt attention could save you thousands in repairs. Consider having a professional plumber make an annual inspection of your home to check for leaks or potential problems.

Be especially vigilant if your home is over 25 years old; your plumbing system may be on the declining side of its life expectancy. Inspect all accessible connections at the water heater, pumps, washing machine hoses and valves for oxidation or discoloration – clear signs of a slow leak.

If you suspect a leak anywhere in your plumbing system, call in a professional to make a repair as soon as possible. Do not wait until it gets worse or you could end up with a real mess on your hands!