



## Common Causes of High Water Bills

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

- A leaking toilet, or a toilet that continues to run after being flushed (see additional information below)
- A dripping faucet; a faucet drip can waste 20 gallons of water a day or more
- Filling or topping off a swimming pool
- Watering the lawn, new grass, or trees; also check for an open hose spigots
- Kids home for summer vacations or school holidays; guests
- Water-cooled air conditioners
- A broken water pipe or obvious leak; check the pipes in the basement or crawlspace; the water heater could also be leaking
- Water softener problems – cycles continuously
- Running the water to avoid freezing water pipes during cold weather

Learning how to save water at home is very important because a typical family of four uses 40-50 gallons of water per person per day or 160–200 gallons for one day. The largest water users are the toilets, clothes washer and showers, accounting for about two-thirds of the water used in an average household. Toilets use up to 27% of the household water supply while clothes washers use 20.9% and showers account for 17.3%. Faucets account for about 15.3% and leaks account for 13.8% of a family's water use. Dishwashers, baths, and other account for the remaining water use. Typically water consumption is higher during the summer due to watering of lawns, pools, and gardening.

### Things to check if you get a bill that's higher than usual

#### Changes in your water use

Did you have house guests, water your lawn more than usual, or do anything else out of the ordinary? If so, this may account for an increase in your water bill.

#### Check for leaks

Leaks, whether unseen or unfixed, can waste hundreds and even thousands of gallons of water. It is important to routinely check your plumbing and home for leaky faucets, toilets, and outside taps and irrigation lines.

## Outdoor and underground leaks

Leaks can also occur in harder to find places, such as under your home, crawl spaces. Also, check outdoor spigots and irrigation systems, and look for wet spots in your yard, which may indicate a leak.

## Toilet and faucet leaks

The most common cause for a high water bill is running water from your toilet. A continuously running toilet can waste up to 200 gallons a day or more depending on the volume flow down the drain. This can cause a terrible increase to a family's typical water use, so fix toilet leaks as soon as possible. Some leaks are easy to find, such as a dripping faucet or running toilet. You can usually hear a running toilet, but not always.







## Do-it-yourself Toilet Assessment

First check for the most common leak: a deteriorated or defected flush valve (flapper) ball at the bottom of the toilet tank. If it does not make a tight seal water will leak into the toilet bowl. To check for a leaky toilet follow steps 1 thru 4:

1. Take the lid off of the tank behind the bowl, flush the toilet, and then wait for it to fully refill.
2. Put a few drops of dye or a colored dye tablet (food coloring works well) in the tank.
3. Wait at least 20 minutes; longer if you suspect it is a small leak.
4. If there is any color in the toilet bowl, there is a leak.

The second most common type of leak has to do with an improperly adjusted or broken fill (ballcock) valve. To check for this take the lid off of the toilet tank, flush, and see 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) for various size leaks.**

Leak Size		Gallons Per Day	Gallons Per Month
	A dripping leak consumes:	15 gallons	450 gallons
	A 1/32 in. leak consumes:	264 gallons	7,920 gallons
	A 1/16 in. leak consumes:	943 gallons	28,300 gallons
	A 1/8 in. leak consumes:	3,806 gallons	114,200 gallons
	A 1/4 in. leak consumes:	15,226 gallons	456,800 gallons
	A 1/2 in. leak consumes:	60,900 gallons	1,827,000 gallons

## Water Saving Quick Tips

- Check your water meter to monitor water use. A flow indicator is located on the top of each water meter. When you believe all of your water is shut-off check the flow indicator to see if it is spinning. If the flow indicator is spinning you may have a leak.
- Teach children about water conservation. Example could be when they are brushing their teeth to turn the water faucets off in between brushing and rinsing.



- Brushing teeth can take up to 2 gallons of water if the tap is left running during the brushing versus 1 pint to wet brush, turn off faucet, and rinse briefly.
- Shaving can take up to 5 gallons if the tap is left running versus 1 gallon to fill basin, and then turn on faucet briefly to wet cloth to rinse at the end.

## In the Bathroom

- Take short showers rather than a bath or reduce the number of baths you take each month. A four minute shower uses about 8 gallons of water, while a full bath uses about 50 gallons of water.
- If you bathe, fill bathtub ½ full. You can save 18 to 25 gallons per bath.
- Don't use your toilet as a waste basket (flushing money down the drain). This practice can also cause a sewer backup as a result of a sewer plug.
- Install water saving devices within your toilet.



- If you have an older toilet, it will use three to seven gallons per flush. To reduce the amount of water in the tank, displace some of the water. A plastic bottle filled with water would be one example. Any object placed in the tank should not release or leak particles or materials into the tank. Never use a brick in the tank unless it is contained in a plastic bag. The object placed in the tank should not interfere with any of the mechanisms or tank operations. Other methods that can be used are devices purchased to go inside the toilet tank such as the toilet dam, early closure flapper or a dual flusher.
- Turn off the water while you shave, brush teeth, washing dishes, etc.

- Install reduced-flow showerheads (2.5 gal/min).



- Older showers may use from 2–10 gallons of water per minute fully opened. Newer shower heads use about 2–3 gallons per minute. The shower heads designed to use less water differ in spray patterns, mounting and functions. Many people step away from the water in the shower when shampooing or soaping. Many water saving shower heads come with a button to shut off the flow without changing the mix of hot and cold water. Simply taking shorter showers will reduce your use of water.

### **In the Kitchen/Laundry room**

- Use the washing machine only when full and/or make sure you use the proper laundry load setting for each load and use a cooler water setting.
- Run dishwasher only when full, using short cycle. Scrape dishes rather than rinse. If washing by hand, catch water in sink and rinse in sink rather than leave water running from tap. Wash full loads in the automatic dishwasher. Use appropriate cycle for type of cleaning needed. Cut down on the number of utensils used in food preparation and serving.
- Don't wash clothes more often than necessary. The total water used washing one load of clothes ranges from 20 to 57 gallons. It is critical that you use the appropriate water level for the size load of laundry.
- Some machines have a suds-saver system. Hot, sudsy water is pumped into a storage tub and later returned to the washer with added hot water and detergent for a second use.
- Front-loading machines use less water to wash the same load than top-loading machines. Front-loading washers fill to just below the door opening. Textiles and items tumble in and out of the water for cleaning. Front-loading washers use less detergent, electricity and water (typically 20 to 28 gallons for front-loading model, compared to 45 gallons in a top-loading wash cycle).
- New high efficiency machines use 50–60 percent less electricity, 40–50 percent less water, and are reported to be more effective in cleaning action, according to studies by the US Department of Energy, and by water and waste-water utilities. Also up to 30 percent more water is removed in spinning, reducing the drying cycle and saving energy.
- Running water down the drain waiting for it to get hot is a waste. If not running water to fill a sink for dishes heat water on the stove or in a microwave.

