



## Potential Reasons for 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, or more, a day
- Filling or topping off a swimming pool;
- Watering the lawn, new grass, or trees; also check for a leaking or turned on outside spigot;
- Kids home for summer vacations or school holidays;
- Guests or additional family visiting;
- 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, 160–200 gallons a day, and 4800–6000 gallons per month. The largest water users are the toilets, clothes washer and showers, which account 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 approximately 20%, and showers use approximately 17%. Faucets account for about 15% and leaks account for 13% of a family's water use. Dishwashers, baths, and other uses account for the remaining water use. Generally, water consumption is higher during the summer due to watering of lawns, pools, and gardening.

Here are a few 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 in the last month that uses a lot of water? 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, outside pipes, and irrigation lines. Look for wet spots in your yard or grass that is greener than surrounding areas, which may indicate a leak.

### Toilet and faucet leaks

The most common cause for a high water bill is a running toilet. A continuously running

toilet can waste up to 200 gallons a day. That can double 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. See the toilet assessment below for help in determining if this is the cause of your high water bill.

### Outdoor and underground leaks

Leaks can also occur in harder to find places, such as under your house, or in the service line between your water meter and your home. Check outdoor spigots and crawl spaces, and look for wet spots in your yard, which may indicate a leak.







### 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 this:

1. Take the lid off of the tank behind the bowl, flush the toilet, then wait for it to fully refill.
2. Put a few drops of dye, food coloring, colored dye tablet (available at some hardware stores), or a pack of colored drink mix in the tank.
3. Wait at least 20 minutes; longer if you suspect it is a small leak. 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	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

## Irrigation Systems

During the summer irrigation systems are a common source of high water use. Watering times generally double during the summer months compared to the winter. Automated irrigation systems should be checked regularly to be sure they are functioning properly and have no leaks or broken sprinkler heads. If a sprinkler valve sticks on, it could waste an extremely large quantity of water. The irrigation timer may not be programmed properly; i.e., sprinklers are watering too often and/or for too long. Reprogramming may be necessary if the power has been off.

## Water Softeners

Customers with water softeners have higher water bills due to the regeneration or backwash cycles their systems go through. The systems are preset to regenerate or backwash on a regular basis. The systems will use water to clean the filter media and discharge the wastewater into the ground next to the system. There are times when these systems will get stuck in a cycle which will cause higher water use.

## What Can I Do if My Bill is Unusually High?

If you receive a bill that you feel is too high, check over the common causes listed above. This may help to pinpoint the source of the high bill. If you feel that your bill is too high call (803) 385-5123. The District's staff will schedule for the meter reading to be rechecked. If the meter reading is checked and found to be accurate, you may need to contact a plumber or other professional to help determine the source of a leak. Property owners are responsible for all private service water lines from the customer cut-off valve to the residence and for leaks inside the home.

## Water Saving Quick Tips

- Teach children about water conservation. One 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 brushing versus 1 pint to wet the toothbrush, turn off faucet, and then 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. 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  $\frac{1}{2}$  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. 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 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. 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.
- Don't wash clothes more often than necessary. The total water used to wash one load of clothes ranges from 20 to 57 gallons.
- 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.

### **In the Kitchen**

- Run the 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.
- 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.