## Potential 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 bib
- 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

Generally, water consumption is higher during the summer due to watering of lawns, pools, and gardening. Typically, an average family of four uses 4000-5000 gallons of water a month. 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, and outside taps and irrigation lines.

## 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. 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:

- Take the lid off of the tank behind the bowl, flush the toilet, then wait for it to fully refill.
- Put a few drops of dye or a colored dye tablet (available at some hardware stores) in the tank.
- Wait at least 20 minutes; longer if you suspect it is a small leak.
- If there is any color in the toilet bow, 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 | Cubic Feet per Quarter |
| :---: | :---: | :---: | :---: | :---: |
| 00 | A dripping leak consumes: | 15 gallons | 450 gallons | $\begin{gathered} 180 \text { Cubic } \\ \text { Feet } \\ \hline \end{gathered}$ |
|  | A $1 / 32 \mathrm{in}$. leak consumes: | 264 gallons | 7,920 gallons | $\begin{aligned} & \text { 3,168 Cubic } \\ & \text { feet } \end{aligned}$ |
| - | A 1/16 in. leak consumes: | 943 gallons | 28,300 gallons | 11,319 Cubic Feet |
| $\bullet$ | A 1/8 in. leak consumes: | $\begin{gathered} 3,806 \\ \text { gallons } \end{gathered}$ | 114,200 gallons | 45,681 Cubic Feet |
|  | A 1/4 in. leak consumes: | $15,226$ <br> gallons | 456,800 gallons | $\underset{\text { feet }}{182,721 \text { Cubic }}$ |
|  | A 1/2 in. leak consumes: | 60,900 gallons | $\begin{gathered} 1,827,000 \\ \text { gallons } \\ \hline \end{gathered}$ | 730,800 Cubic Feet |

## 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.

## When All Else Fails...

## Courtesy of the County of Lake, California Website: Excessive Water Use Mystery "Solved" (and a good sense of humor)

Jennifer and Jim kept getting HUGE water bills. They knew beyond a doubt that the bills weren't representative of their actual usage, and no matter how they tried to conserve, the high bills continued.

Although they could see nothing wrong, they had everything checked for leaks or problems: first the water meter, then outdoor pipes, indoor pipes, underground pipes, faucets, toilets, washer, ice maker, etc. -- all to no avail. The HUGE water bills continued.

One day recently, Jim was home sick and kept hearing water running downstairs. He got up from his sick bed to investigate, and stumbled onto the cause of such high water bills. Apparently, what he discovered was happening all day long when they were not at home. Knowing that few would believe him, he taped this clip of "the problem".

Click (here) to view the attached video. (3 MB) or go to:

## http://www.co.lake.ca.us/Assets/SpecialDistricts/Images/CatFlushingVideo.wmv

## 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. Most often, the Town's utility billing program will detect unusually high bills, and the Town will automatically send our utility staff out to check the meter and the property for a leak. If you feel that your bill is too high and you have not been contacted by the Town about it, call 540-687-5152. Town 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 public water main to the residence and for leaks inside the home.

