



## DO YOU HAVE A WATER LEAK?

Does your water/sewer bill seem high? You may have a leak. First check the water reading dates on your bill. The most current read is 30 days old by the time you receive the bill. Think back to what water events happened during the time frame covered by the reading dates on the bill. Did you have company? Landscape? Plant a garden or a tree? Is there a reason for the higher usage? If not, call the Water Billing Department at (815) 439-4250 to check the usage on the next bill. This will show if the usage is still high or back to normal.

## HOW TO FIND A WATER LEAK

If your water bill is unusually high, without a known cause, you probably have a leak. Leaks are not always obvious. If you have a leak, the sooner you find it the better. Here are some easy ways to check for leaks:

### TO CHECK THE TOILETS USE THE DYE TEST:

95% of water leaks are due to leaky toilets. Toilets can leak in six different ways; some cannot be seen or heard.

**DYE TEST** every toilet when checking for leaks:

- First, take the lid off the tank, the tank water is your next flush water. (The tank water should stay securely in the tank until the toilet is flushed.)
- Add several drops of food coloring to the tank water until it is a strong color.
- **DO NOT FLUSH FOR ONE (1) HOUR.**
- Put the lid back on the tank and flip the seat up so you can see the water in the toilet bowl. (If the coloring is already in the toilet bowl you have a bad leak, turn off that toilet until you can fix it).
- Continue to monitor the bowl several times during the hour. If the colored tank water makes its way to the bowl, you have a leak.
- If, after one hour, the color remains in the tank and the water in the bowl is clear, the toilet is not leaking.
- Repeat this test on all toilets in your home.
- If you find a toilet leak, replace the parts in the tank and run the **"DYE TEST"** one more time to be sure everything is installed securely.

### TO CHECK THE METER TO DETERMINE THE SIZE OF THE LEAK, USE THE 4-HOUR TEST:

- Find your water meter; it should be the only meter inside your home. It will be on the lowest level of your home on the wall that faces the street, many times in the right-hand or left-hand corner. The **"4-HOUR TEST"** will show whether or not you have a leak and the size of the leak.
- You will be taking two (2) readings from the water meter, one at the beginning of the four (4) hour period and one at least four (4) hours later. Each time you take a reading you should write down what time it is.
- A good time to run this test is when everyone is going to be out of the house (or asleep) for at least four (4) hours and when you believe no water should be going through the meter.
- Write down the first reading from the water meter. Write down every digit and the time. Use no water after this reading.
- When you return home (or wake-up), go straight to your meter and read it again. Write down the time and the second reading.
- If the reading is the same as the first reading then you are not experiencing a leak. If the reading is not the same, then you have a leak. Subtract the first reading from the second reading to see how much water went through your meter during the test time.

### **TO DETERMINE THE MONTHLY IMPACT OF A WATER LEAK:**

Use the information you found during the **4-HOUR TEST**, and follow the example below.

EXAMPLE: If the two reads were nine (9) hours apart and 30 cubic feet (cf) went through the meter during that 9 hour time frame. Here is how to calculate how much is leaking per month:

- ✓ In a 30 day month (30 days x 24 hours) there are 720 hours.
- ✓  $720 \text{ hours} \div 9 \text{ hour test time frame} = 80$ . So there are 80 sets of 9 hours in a 30 day month.
- ✓ If 30 cubic feet leaked in 9 hours and there are 80 sets of 9 hours in the month, then  $30 \text{ cf} \times 80 = 2400 \text{ cf}$  of water potentially leaking each month. (And leaks usually get larger slowly.)
- ✓ To calculate the cost of your leak, add the water rate and sewer rate together and multiply by the number of 100 cubic feet. Water Rate = w, Sewer Rate = s. (These rates are located on the back of the bill.)  
 $w + s = ws \text{ rate}$ . In the example above, it would be  $24 \times ws \text{ rate} = \text{cost of leak}$ .

**FYI: CUBIC FEET TO GALLONS: There are 7.48 gallons in one (1) cubic foot.**

### **CONFIRMING SPRINKLER SYSTEM LEAKS:**

Sprinkler systems are the most economical way to uniformly water, unless something in the system cracks. Once there is a crack (either in a sprinkler head or in the sprinkler lines underground), water gushes through the crack(s) when the system is on and may slowly leak in underground cracks when the system is off. Visually check the yard for sprinkler leaks by looking for a spot that is soggy than any other area and by watching the sprinkler heads when the system is on to see if they are spraying in the usual and uniform pattern.

Some sprinkler leaks are harder to confirm and isolate. The first thing to do is eliminate inside possibilities by using the **DYE TEST** on all toilets and the **4-HOUR TEST** on the meter. By running these two tests, you can be confident your leak is outside and you will have an idea of how large the leak is. When all indoor plumbing seems leak free, run the **4-HOUR TEST** again. If your water meter is still showing water leakage, shut off the water feed valve (**Call your sprinkler system company to find out how to do this without damaging your sprinkler system.**) to your sprinkler system and run the **4-HOUR TEST** again. If the leak stops when the sprinkler system feed valve is shut off, then the sprinkler system is most likely where the leak is.

### **CALL THE WATER BILLING DEPARTMENT IF YOU HAVE ANY ADDITIONAL QUESTIONS:**

If you receive an estimated reading on your bill, or a zero (0) usage bill when you know water is being used, call the Village Water Billing Department at (815) 439-4250 for assistance.

Be **green** and conserve resources when possible!