# HOW TO DETECT WATER LEAKS FOR HOMEOWNERS

# Use your water meter to check for leaks

The best way to determine if you have a leak in your plumbing system is by first checking your water meter.

- 1. Make sure **no** water is being used inside or outside of your house.
- 2. Locate your water meter which is generally on the front wall of your basement where your service enters. For those customers served by a meter pit, the meter is located in the pit generally near the property line.
- 3. There is a small red indicator on the top of the meter. If it is moving but no obvious water is being used, there is a leak somewhere beyond the meter. By timing this for one minute, the size of the leak can be



determined (in gallons per minute).

- 4. You can also take a meter reading (jotting down the meter digits) and wait 1 or 2 hours and take another meter reading (make sure no water is used during this time). If the reading has changed, you have a leak.
- 5. Faucets and toilets can often develop leakage issues as they age and are the most common problem.
- 6. If you are unable to locate the indoor leak, you may need to call a plumber.

#### **Leaking Faucets**

Leaking faucets are generally a result of a worn rubber washer. The washer on a sink is usually located under the handle. These are relatively easy to replace, if you have the right tools. It does require shutting off the water under the sink or at the main shutoff valve and removing the handle. (*Note: faucet handles are not shutoff valves.*) Check your local home center or hardware store on how to repair faucet leaks.

#### **Leaking Toilets**

Toilet leaks can waste hundreds of gallons and often times are silent. Even a small leak can add up to a lot of wasted water and money over time. Fortunately, most toilet leaks are easy and inexpensive to repair.

To help determine if you have a leaking toilet, simply remove the tank lid and place a few drops of food coloring or a dye tablet (available at our office) in back of the toilet tank. Wait about 30 minutes, without flushing, and then look in the toilet bowl to see of any color has come through. If the water is clear, water is not leaking. If you see food coloring in the bowl you have a leak.

In most cases, you will simply just need to replace the toilet flapper and/or filling mechanism. These are available at hardware or home center stores for about \$8.00 each.

#### Flapper Valve Leaks

The most common reason for a leaking toilet is one that has an improperly working or sealing flapper. The flapper is the rubber valve in the bottom of the tank that lifts up when the toilet is flushed. If the flapper is worn or cracked, it allows water to continuously flow from the tank into the toilet bowl without flushing.

#### Flush Handle Problems

If the handle needs to be jiggled to keep the toilet from running, the flush level bar and chain (or the handle itself) may be sticking. Adjust the nut that secures it in the toilet tank. If that does not work, the handle may have to be replaced.

### Overflow Tube Leaks

Ideally the water level should be set so that is about even with the fill line on the back of the toilet tank (approximately ½" below the overflow tube). If the water is too high in the toilet tank and is spilling into the overflow tube, the water level can be adjusted by turning the adjustment screw or by very gently bending the float arm down so that the water shuts off at a level below the overflow tube.

Note: If none of these steps solve the problem, you may need to contact a plumber to repair or replace the toilet.

# Finding Other Water Leaks

Be aware that the exact location of a leak may not always be immediately obvious. Some leaks may start at one location, then flow along a ledge or other channel for a distance before they drain down and create some visible damage.

Look for wet, warped or discoloration stains on your ceilings, floors, walls and woodwork (such as the bottom of your kitchen or bathroom sink cabinet). As you attempt repair, be sure to check again for the actual location of the leak, not just the resulting damage from the leak.

Condensation can also be a form of water leak. While condensation is normal, excessive condensation can cause damage to your walls, ceilings, floors and woodworking. If there is too much condensation, insulating your pipes may stop or reduce the condensation.

# Outdoor Underground Leak Detection

Homeowners are responsible for repair and maintenance of the water service line that extends from your water meter to the curb stop (the water service shut-off valve) and from the curb stop to the water main.

#### Visual Inspection

- 1. Look for portions of your property that are always wet.
- 2. Look at your driveway, curb or street for evidence of water flow. The evidence may not be a steady stream of water; it may only be a puddle that never dries up, or a darker spot (as in what happens when water is spilled on dry concrete).
- 3. If you are unable to locate the leak, you may need to call a plumber.

**Source: Saving Water Partnership**