



*Drinking water is a precious resource to be used wisely. Your water purveyor works diligently to eliminate leaks in the water distribution system. Many leaks occur inside the home. Finding and repairing leaks saves both water and money.*

#### **Places to look:**

*Check indoor and outdoor faucets, toilets, dishwashers and washing machines for drips (or stains underneath or behind). Check the lines that go to refrigerator ice makers. Also check irrigation systems for broken sprinkler heads and leaks.*

#### **Fact:**

*A dripping faucet, at one drip per second, will waste 2,082 gallons of water per year. That's enough to fill more than 41 bath tubs!*

## **Check for Leaks**

Follow these steps to detect home leaks.

1. Locate your water meter.
2. Turn off all water (inside and out). Leave master valve open.
3. Read your meter - write down the number.
4. To find out how large the leak is, wait 1 hour and read meter again. (Cubic feet per hour.)
5. If the number has changed, there is a leak. The next step is to find the leak. Is it in your home, or in the service line?
6. Turn water off at master valve.
7. Repeat steps 3 and 4.
8. If the number changes again, the leak is in the service line. If you aren't able to fix it yourself, contact a plumber.
9. If the number doesn't change, the leak is past the master valve and likely inside your home. In this case, check for leaks in toilets, etc.

*To detect irrigation leaks, you must know where the system ties into your home's water supply. They usually connect between the meter box and the master valve. Look for your system's double check valve assembly; the connection is likely close by. A leak would be detected in step 5 or 8 above. If you need help with leak detection, call your local water purveyor.*

The Water Purveyors Association of Kitsap (WaterPAK) began in 1993. It is comprised of water purveyors and other related agencies in Kitsap County.

[www.waterpak.org](http://www.waterpak.org)



## **A Homeowner's Guide to Leak Detection**

**And How to Fix the Leaks You Find!**



# WaterPAK

Resource • Conservation • Education





Every homeowner should be familiar with their home water system. Locate your water meter and master water supply shut-off valve. Evaluate your water usage and make changes where you see waste. Contact your water purveyor for ways to reduce water usage in your home and landscape.

## Your Water Meter

Your water meter is the best detective in your home. It can tell if you have leaks.

Find your water meter; it's usually near the street under a metal or plastic lid. Meters record water usage in cubic feet like car odometers record mileage. One cubic foot of water equals 7.5 gallons. To see how much water you used, subtract the number on your last bill from current meter reading.

Non-digital meters have a small arrow that spins to show small water volumes like leaks.

## Find Your Master Valve

The master water supply shut-off valve controls water flow into the home. Every occupant needs to know the location. You'll need it fast in an emergency - you can't waste time searching while the basement floods. Locations may include:

- Where water supply enters the home, such as garage or foundation
- Near the clothes washer hookup
- Near the water heater

**Once you find your master valve, tag it!**

# Fixing the 2 Most Common Leaks: Faucet and Toilet

## Fixing Faucets

You don't have to be a professional to find or fix a leaky faucet. Leaks are commonly from a worn washer.

Follow the steps to fix a washer leak:

1. Shut off water at nearest shut-off valve.
2. Remove parts, with stem and nut (counter clockwise). Lift out faucet assembly.
3. Remove screw holding washer in place.
4. Remove old washer and wipe area clean.
5. Replace with proper size washer.

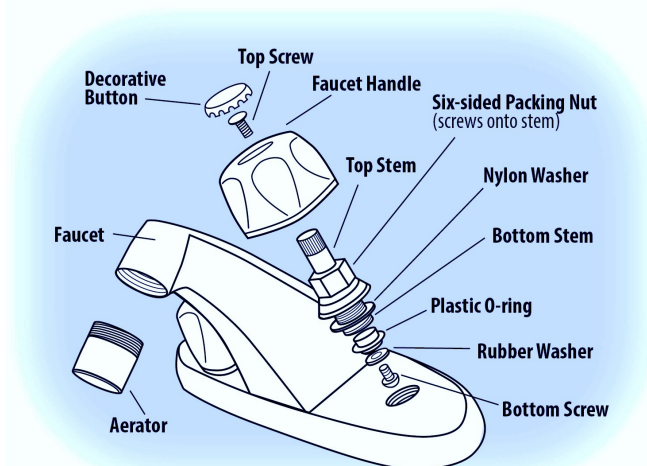


Illustration provided by the Portland Water Bureau

6. Replace screw and all assembly parts. Turn faucet handle as far as possible to close it, then loosen handle slightly.
7. Make sure faucet is in off position. Turn water back on at the valve.

Brochures on fixing various faucets can be found at local hardware stores. Short videos are available online at numerous websites.

## Toilet Leaks

Toilets often have silent leaks. A running toilet that overflows 1 gallon of water every 5 minutes can waste 288 gallons per day or 8,640 gallons per month.

1. Put a few drops of food coloring in toilet tank. Wait 15 minutes (don't flush). If colored water appears in bowl, there's a leak. The stopper ball/flapper likely needs to be replaced.
2. If ball isn't worn, see if it fits snugly into flush valve. Clean valve if corroded. If ball still won't seat properly, straighten guidewire or chain and make sure it's not catching anything. If it still leaks, replace stopper ball/flapper.
3. If toilet whistles, whines or won't shut off after these adjustments, hardware stores sell complete replacement kits with instructions.

