

Leak Detection In and Around Your Home

Leaking faucets, pipes and toilets can waste many gallons of water every day. It is important to locate and then repair any leaks you find. One of the best ways to determine if you have a leak is to monitor the amount of water that is flowing through your water meter. If you have turned off all the faucets in your home and your water meter indicates that water is still flowing through the meter, you probably have a leak.

How to read your water meter

The water meter on your property records all the water used on your property. Once you understand how your meter records your water consumption, you can use your meter to help locate leaks. The first step is knowing how to read your meter.

The types of meters used which record consumption are in US gallons. A water meter reads like your car's odometer. Simply read all the numbers shown from left to right. The meter that is shown here tells us that 90,480 gallons of water have been used.

To find out how much water you've used in any given period, subtract the reading listed on your last bill from the current meter reading.



How to use your water meter to help determine if you have a leak

If water is flowing through your meter, you will see the flow finder move. This is either a small three pointed arrow or a needle on the face of your meter. If the flow finder is moving and you are not using water inside your home, there probably is a leak on your property.

To determine if the leak is located inside or outside your home, you will need to locate and turn off the main water valve for your home. This valve is usually located along an outside wall in your basement or near your hot water heater or washing machine. By turning off the main water valve, you are preventing any water from flowing into your home. This allows you to isolate the problem as being outside your home or inside your home.

1. Turn off your main water valve.
2. Record the reading on your meter and note the position of the needle. You may want to watch the flow finder for several minutes to see if it continues to turn.
3. Wait an hour or two then take another reading.
4. If the second reading has changed from the first reading or if the needle has moved, the leak is outside your home somewhere between the meter and your home. Underground leaks can worsen quickly and result in major water loss. We recommend that you contact a plumber if you do suspect an outside leak. Also notify the [PLWA's Utility Billing Office](#) when you discover the leak and after you have it repaired.
5. If your initial tests indicated that you had a leak and there is no change to the meter reading after you turned off your main water valve, the leak is inside your home.

Identifying toilet leaks - the number one source of leaks inside the home

Toilets are the number one source of water leaks inside the home. The best way to test for toilet leaks is to do a dye test. Put some dye such as kool-aid, food coloring, brewed coffee or cola in the back tank of the toilet before you go to bed. Do not flush or use the toilet. If you see any of the color in the bowl of the toilet the next morning, then you know you have a leak and it should be repaired.

If you discover that you have a toilet leak, make sure the lift chain is free of kinks and that you don't have any mineral buildup around your valves that might prevent them from sealing properly. You can also use the adjustment screw on the overflow pipe to lower the water level in the tank to keep it from flowing into the overflow pipe. Most overflow pipes have a line on the pipe that indicates where the water level needs to be. If the flapper valve or plunger ball isn't properly sealing at the bottom of the toilet, you will also get leaks. Parts are available at your local hardware store to replace these items.

Because a leak inside your toilet can waste up to 200 gallons of water per day, it is important to regularly test your toilet and quickly repair any leaks you discover.