

How to Read Your Meter and Use It to Measure Leaks

If you have a water meter you can check your plumbing system for undetected leaks by following these easy steps:

- Find your water meter. They're often located in the front yard near the street.
- Turn off all running water and water-using appliances, and don't flush the toilet.
- Read the dial and record the reading.
- After 15-20 minutes, recheck the meter.
- If no water has been turned on or used and the reading has changed, a leak is occurring. The rate (gallons per minute) of the leak can be determined by dividing the number of gallons by the elapsed time. (Check all TOILETS for silent leaks by testing them with food coloring. If the leak can't be found and fixed, you should call a plumber.)



You should read the meter like a car odometer. You should read the meter from left to right and include the last zero on the meter. If the small black/red triangle or star (leak detector) is moving, water is going through your meter. This means that you have something on or you have a leak.

A lot more water comes out of a faucet than we realize...



- A tiny drop of water can add up to 15 gallons a day
- A stream $1/32^{\text{nd}}$ of an inch loses 25 gallons a day
- A stream $1/16^{\text{th}}$ of an inch loses 100 gallons a day
- A stream $1/8^{\text{th}}$ of an inch loses 400 gallons a day
- A stream $1/4^{\text{th}}$ of an inch loses 1,600 gallons a day

Helpful Hints to Customers

- Leaks are frequently the cause of excessive water bills
- A small faucet drip will run 30 gallons daily, 900 gallons monthly.
- A leak $1/16''$, as large as a regular knitting needle, will waste 970 gallons a day (29,100 gallons monthly).
- A leak $1/8''$ in diameter will waste 3,600 gallons daily (108,000 gallons monthly).



TOILET Facilities are Responsible for 75% of all Leaks

Common practices which result in waste of water in the home:

- Running water continuously while shaving
- Running water continuously while washing dishes
- Running the water until cold to get a drink
- Running water continuously while washing face and hands (instead of using a stoppered lavatory for water)
- Allowing a faucet to drip or a seemingly small leak to continue
- Improperly watering lawns and flowers

Take the 10 Minute WaterSense Challenge



DETECT AND CHASE DOWN LEAKS



Did You Know

that easy-to-fix water leaks account for nearly 1 trillion gallons of water wasted each year in U.S. homes? In fact, the average household leaks nearly 10,000 gallons of water per year, or the amount of water it takes to wash 300 loads of laundry, and could be costing you an extra 10 percent on your water bills.

In just 10 minutes, you can search your home for leaks and crack down on water waste. Many common household leaks are quick to find and easy to fix. Worn toilet flappers, dripping faucets, and leaking showerheads all are easily correctable and can save on your utility bill expenses and water in your community.

So put on your detective hat, lace up your running shoes, and take this 10-minute challenge to detect and chase down leaks!

www.epa.gov/watersense/fix-leak-week



Start by Gathering Clues

These clues can help you detect leaks before you even start investigating your home.

1

Check Your Utility Bill

A place to start is to examine your utility bill for January or February. It's likely that a family of four has a serious leak problem if its winter water use exceeds 12,000 gallons (or 16 CCF) per month. You can also look for spikes—is your water use a lot higher this month than it was last month? Learn more about your water bill:

www.epa.gov/watersense/understanding-your-water-bill.

2

Read Your Water Meter

Find your water meter, which is usually near the curb in front of your home but can be inside your home (e.g., in the basement) in cold climates. Use a screwdriver to remove the lid on your meter, which is heavy and usually marked "water."

Now that you've found the meter, take a reading during a period when no water is being used. If the meter does not read exactly the same after two hours, you probably have a leak. Here's a tip on how to read a water meter:

www.smarthomewatguide.org/how-to-read-your-water-meter.

3

Take a Toilet Test

Put a few drops of food coloring into the tank at the back of your toilet and let it sit for 10 minutes. If color shows up in the bowl, you have a leak. Make sure to flush afterward to avoid staining, and consider replacing your old toilet flapper if it is torn or worn. Check our Fix a Leak web page for handy videos that show you how to do it.

While you're waiting to see if your toilet has a leak, walk around your house with the checklist on the next page and see if you can chase down any other water wasters.

Checklist for Chasing Down Leaks

Here are some of the places leaks may be hiding in your home.

Some leaks require a simple fix—a worn toilet flapper, loose pipe connection, or showerhead with stray spray. But you may want to consult a licensed plumber to stop your running toilet, broken sprinklers, water heater drips, or malfunctioning water supply lines. Take a quick inventory of clues to water waste:

IN THE BATHROOM

- ☐ Toilets: Listen for running water and conduct the food coloring test described on the first page.
- ☐ Faucets: Listen for drips and turn on the tap to check for water going the wrong direction.
- ☐ Showerheads: Turn on and look for drips or stray sprays that can be stopped with tape.
- ☐ In the tub: Turn on the tub, then divert the water to the shower and see if there's still a lot of water coming from the tub spout; that could mean the tub spout diverter needs replacing.
- ☐ Under the sink: Check for pooling water under pipes and rust around joints and edges.

IN THE KITCHEN

- ☐ Faucet: Listen for drips and tighten aerators or replace fixtures if necessary.
- ☐ Sprayer: Check to make sure water is spraying smoothly and clean openings as needed.
- ☐ Under the sink: Check for pooling water under pipes and rust around joints and edges.
- ☐ Appliances: Check for pooling water underneath dishwashers and refrigerators with ice makers, which could indicate a supply line leak.

IN THE LAUNDRY OR UTILITY ROOM

- ☐ Under the sink: Check for pooling water under pipe connections.
- ☐ Clothes washer: Check for pooling water, which could indicate a supply line leak.

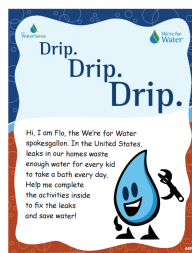
IN THE BASEMENT OR UTILITY ROOM

- ☐ Water heater: Check beneath the tank for pooling water, rust, or other signs of leakage.

DON'T FORGET TO GO OUTSIDE

- ☐ At the spigot: Ensure tight connections with the hose and see if the hose washer needs replacing.
- ☐ In-ground irrigation system: Check for broken sprinklers or nozzles spraying in the wrong direction. You may want to consult an irrigation auditor certified by a WaterSense labeled program to improve system efficiency: www.epa.gov/watersense/find-pro.

FOR THE KIDS



Kids aren't just the leaders of tomorrow, they're the dreamers and doers of today. "Test Your WaterSense" and try other fun activities at Flo's Kids Zone at:

www.epa.gov/watersense/watersense-kids.

THROUGHOUT THE HOUSE

Check for signs of moisture or mold on your walls, ceilings, or floors. This could indicate that a pipe is wreaking havoc behind the scenes and requires the attention of a professional.

If you want to do a more detailed investigation for leaks, check out the Arizona Municipal Water Users Association Smart Home Water Guide at www.smarthomewaterguide.org.

If any of your fixtures needs replacing, remember to look for the WaterSense label when purchasing plumbing products. WaterSense labeled products are independently certified to use at least 20 percent less water and perform as well or better than standard models.

For more information, visit www.epa.gov/watersense/fix-leak-week.

MARK AN X FOR LEAKS

