Welcome

Water is our most precious resource. Climate change and drought can put it at significant risk. Conservation is key to protecting our water supplies.

This kit will help you conserve water and save money. You'll learn how to find leaks and identify inefficient faucet aerators and showerheads. Most homes can be surveyed within an hour. Smaller homes will take less time.

Once you complete the entire survey and send us the enclosed worksheet data, we'll mail you any qualifying water-saving devices you may want. We have free sink aerators, showerheads and toilet flappers, pending availability.

Thank you for taking this simple action toward wise water use. The information contained in the following instructions is based on Valley Water and its contractor's general experience inspecting homes for water leaks. However, your situation may be unique. Please seek professional advice if you are unsure how to conduct the inspections or install the items.

If you attempt to conduct any of these inspections, you agree that you are performing them at your own risk. **Valley Water provides this information and items "as is" and assumes no liability or damage that may result from any inspections, or from the installation or use of the items provided in the indoor survey kit.**

Let's Get Started

The survey will require some simple tools found in most homes. To help track your results, begin by writing your name, address, and contact information on the worksheet provided on pages 9 & 10, or by navigating to the online response form at ***www.valleywater.org/DIYSurvey.***

VIDEO

You can follow along with how-to videos whenever you see this icon.
Go to the Understanding Your Water Use link at ***www.watersavings.org*** to find out more.

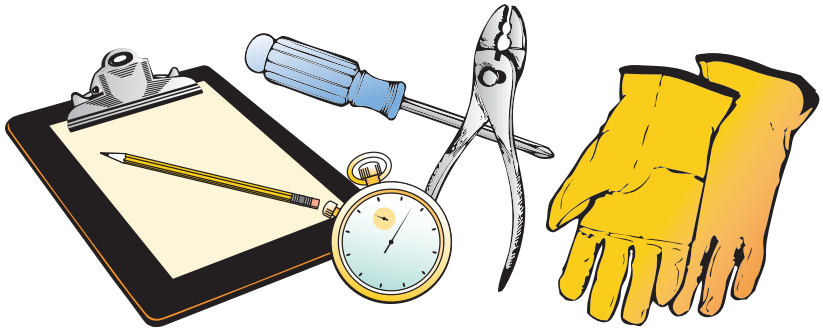
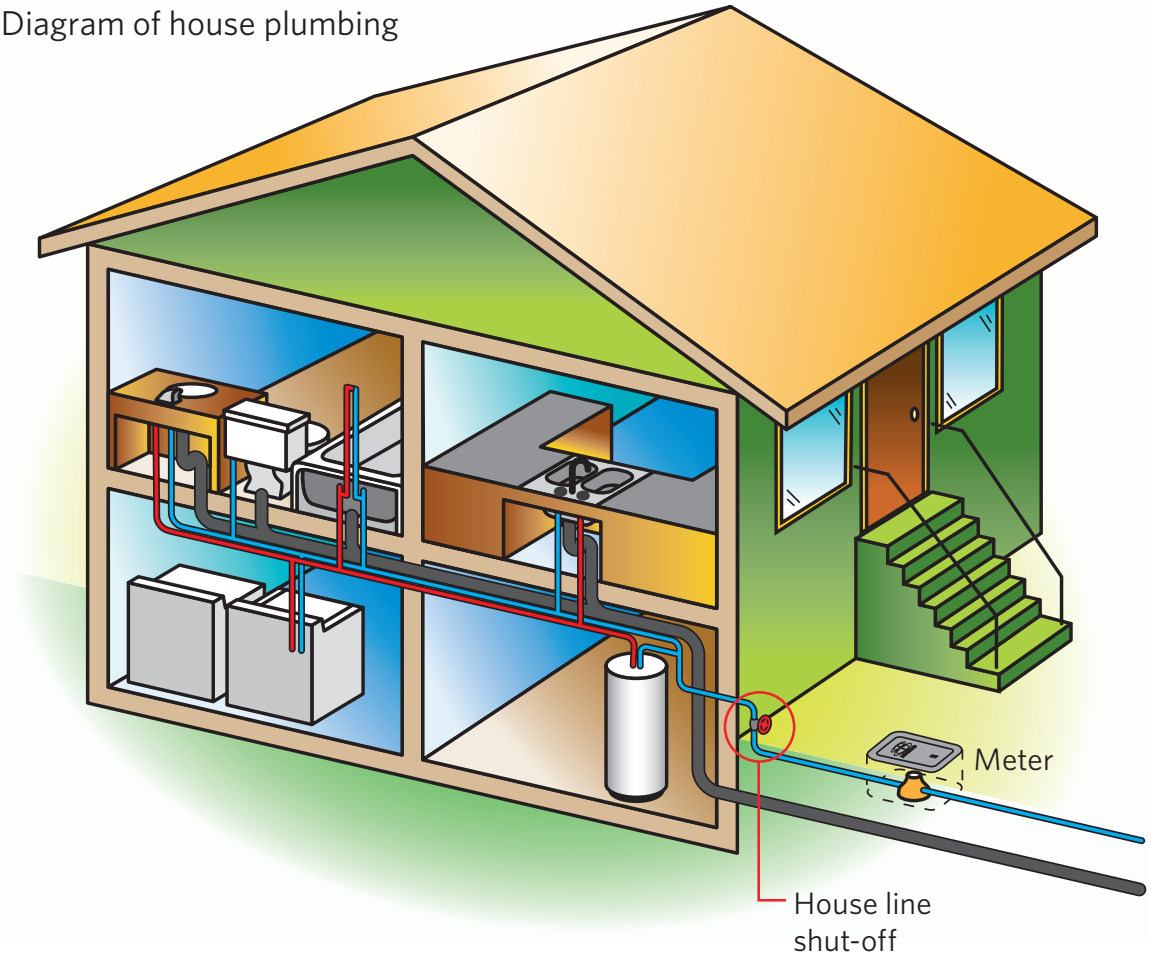
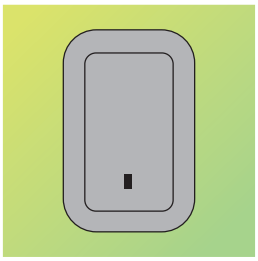


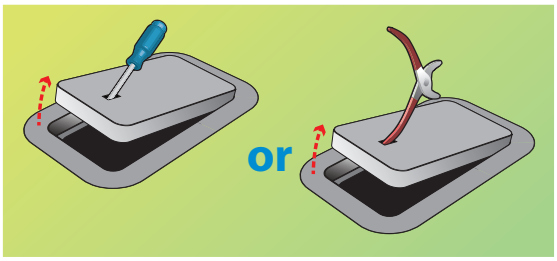
Diagram of house plumbing

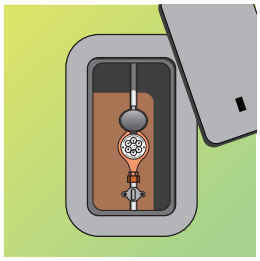


Find your meter

Your water meter is in a concrete box near the curb. Carefully lift the lid and slide it off to one side. We recommend wearing gloves to protect your hands. Be careful not to drop the lid on your meter.







Flip up the meter cover and take a look at the dial. The hands on the dial move any time water passes through the meter. Read the dial on your meter, and then enter the reading into the worksheet (below your contact information).

Leak Tests

Watch our how-to videos to learn how to perform several tests to check for leaks and flow rates.

VIDEO

Meter leak test: Reading your water meter is one of the best ways to identify a leak. Your water retailer can help you find your meter box, and how to open it if you can't find it near the sidewalk in front of your home.

Test 1: The Pin Test

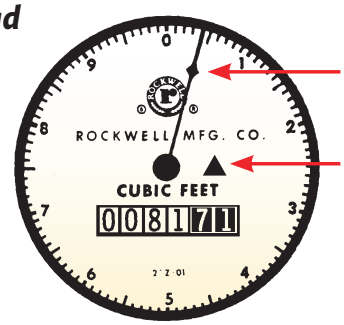
You will use the meter to check for leaks in your pipes and appliances.

Allow at least 30 minutes for the test.

Step 1 Turn off all water-using fixtures and appliances, both indoors and outdoors.

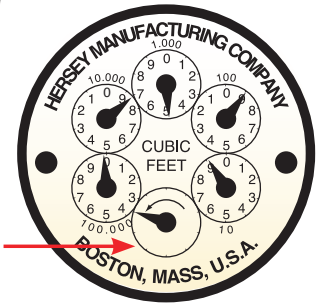
Step 2 Determine your meter type. There are two types: straight-read and round-read meters.

Straight-read meter



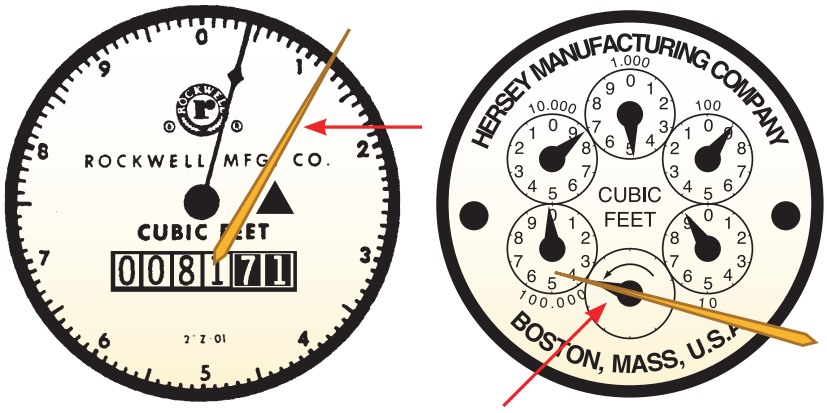
The large hand on the dial or a small triangle is used to test for leaks.

Round-read meter



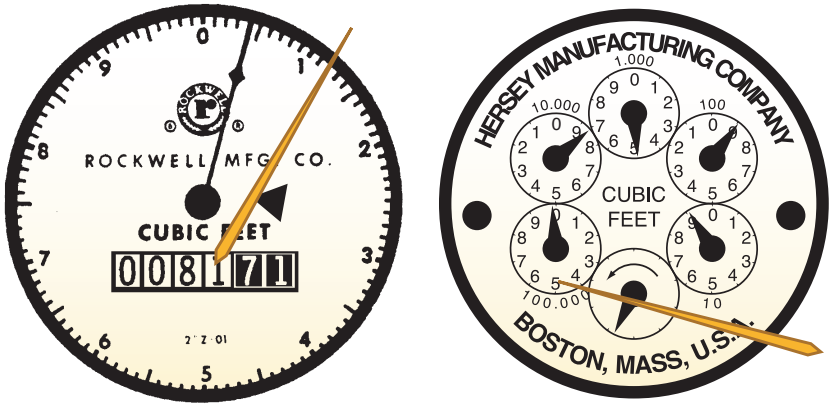
The "one foot" hand, or blank hand, is used to test for leaks.

Step 3 Place a toothpick or pin on the face of the dial so that it lines up exactly with the edge of the triangle or the hand.

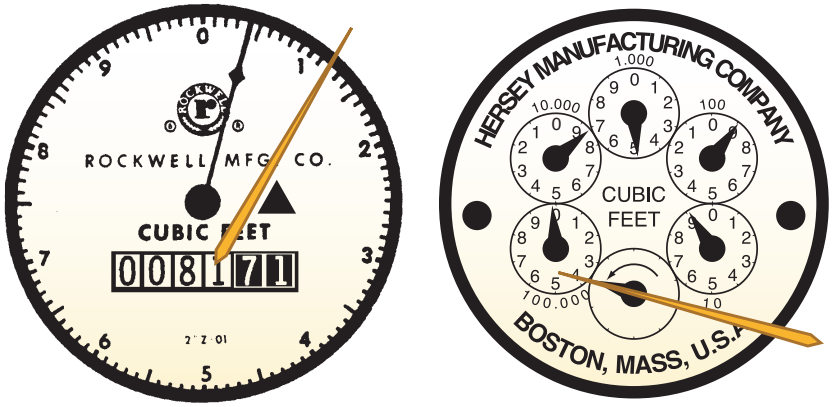


Step 4 Wait for 30 minutes. Then, before turning on any faucets and hoses, check the dial of the meter to see if the triangle or hand has moved.

If the triangle or hand moved:
There is most likely a leak somewhere on the "house" side of the meter, either in a toilet, a faucet, or a pipe. Write the results on the worksheet and go to Test 2, where you will try to locate the leak.

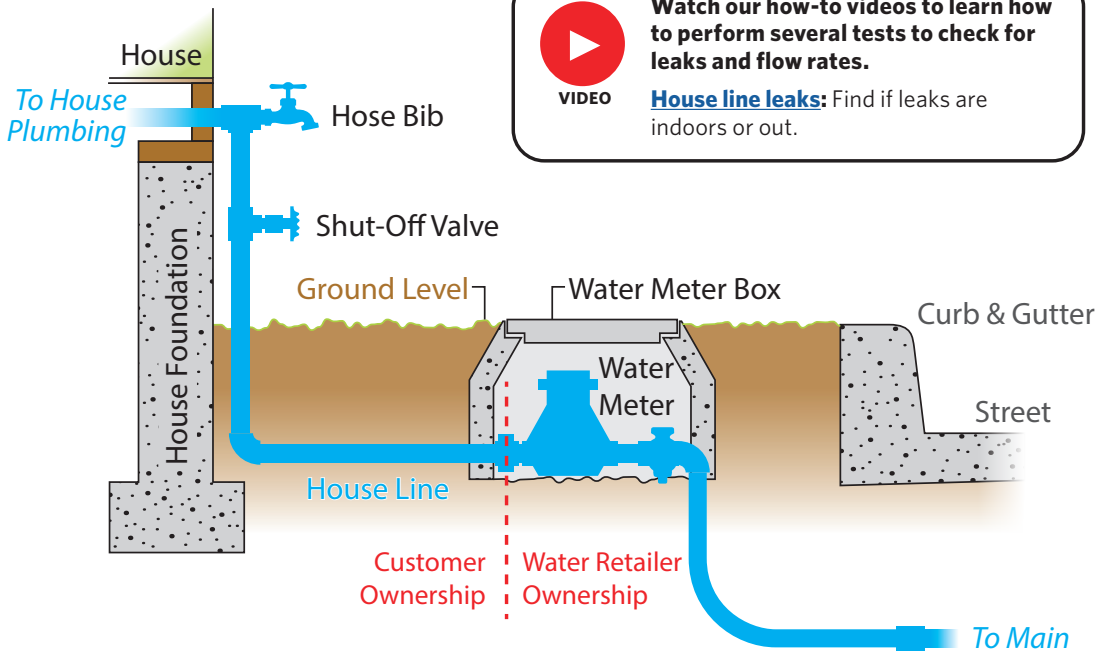


If the triangle or hand did not move:
There is no leak. **Write the result on the worksheet and go to Test 3.**



Test 2: The House Line Test

If the Pin Test indicates a leak, the next step is to test the house line (the pipe that goes from the meter to your house). Keep all of your water using fixtures and appliances turned off.



Watch our how-to videos to learn how to perform several tests to check for leaks and flow rates.

VIDEO

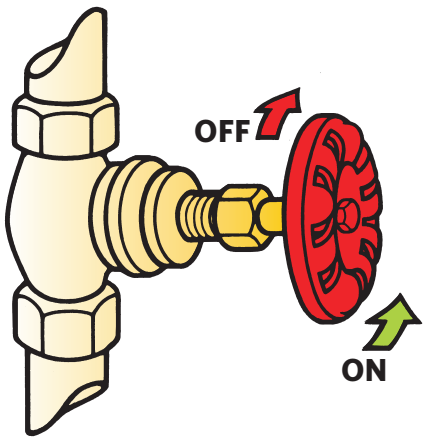
House line leaks: Find if leaks are indoors or out.

Your irrigation system might branch off before reaching your house line shut-off valve. If so, you may need to test both the irrigation pipes and the house line.

If the irrigation system has a shut-off valve, turn it completely off to test only the house line. If there is no irrigation shut-off valve, you will have to test the house line and the irrigation system at the same time.

Step 1 - Find the house line shut-off valve.

Usually, but not always, the house line goes in a straight line from your meter to your house. Turn the valve clockwise as far as it will go. Count the number of turns it takes to shut it off. You will use the same number of turns to turn the water back on once you complete the test.



Step 2 After you have turned off the house line shut-off valve, line up a toothpick or a pin with the hand of the meter, as before. Wait 30 minutes, and then look at the water meter dial.

If the hand **keeps moving**, there is a leak in your house line or shut-off valve (or in your irrigation system if it branches off before the shut-off valve). Call a plumber to fix this leak.

If the hand **stops moving**, there is no leak in the house line. However, there is a leak in the system somewhere after the house valve.

Write your results on the worksheet.

Step 3 Turn the house line shut-off valve back on. Be sure to open the valve completely, using the same number of turns as it took to turn it off.

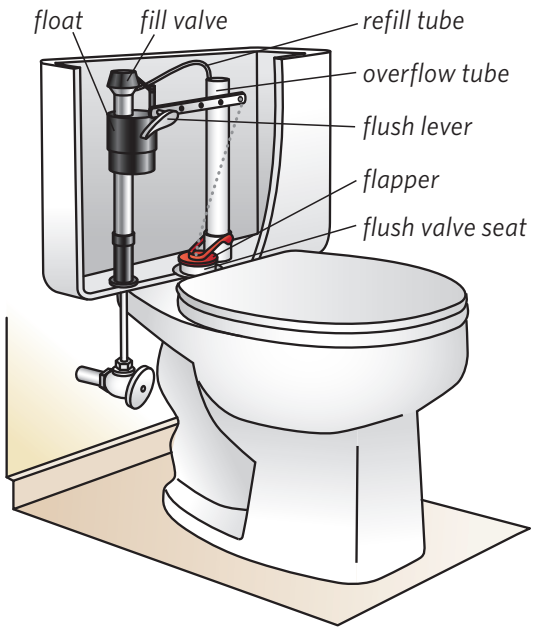
Test 3: Check for Toilet Leaks

You should test your toilets for slow or intermittent leaks not detected in the Pin Test.

Step 1 - Listen: If you hear the sound of running water or a hissing sound, it means your toilet has a leak and is trying to refill.

Step 2 - Look: Remove your toilet tank lid and flush the toilet. Check to see that all the moving parts work smoothly, without getting hung up or tangled.

Step 3 - Check the water level:
After the tank has refilled, check to see if water is flowing down the overflow tube. This leak may be silent. To correct it, adjust the water level or repair the float valve. The water level should stop about one inch below the top of the tube.



VIDEO

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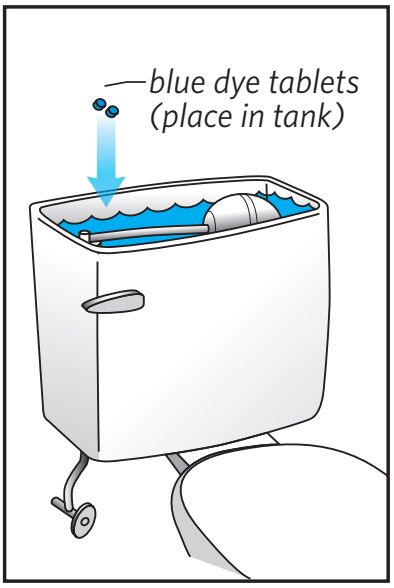
Measure sink and shower flow rates: Figure which appliances are ready for an upgrade.



Step 4 - Flapper Test: The flapper valve is the rubber stopper at the bottom of the toilet tank. A dye test will tell you if the flapper valve is leaking. Put the blue dye tablets from your home survey kit or a couple of drops of food coloring into the toilet tank, and then replace the tank lid.

Wait 15 minutes and do not flush the toilet. Then check the water in the toilet bowl.

If the water in the bowl turns color: Your flapper valve is leaking and must be replaced.

If the water doesn't turn color: Your flapper valve is not leaking.

Write the results in the worksheet.

Test 4: Measure Flow Rates of Faucets and Showerheads

Step 1 - Your home survey kit contains a plastic flow meter bag.

To measure flow rate:*

1. Turn the water on all the way.
2. Hold the bag open and place it under the flow for exactly 5 seconds.
3. Remove the bag and turn off the water. Read the flow rate on the side of the bag.
4. Record your flow rates on the worksheet.

VIDEO

Watch our how-to videos to learn how to perform several tests to check for leaks and flow rates.

Toilet leak test: Check your toilets for leaks with leak detection dye, available with the DIY Water Wise Indoor Survey.

Step 2 - Look for dripping faucets, both indoor and outdoor.

The most common cause of faucet leaks is a worn washer.

Step 3 - Check around your water heater, dishwasher, and washing machine.

Standing water, moisture or signs of water damage around these machines could mean water is leaking.

*Efficient showerheads should have a flow rate of 1.75 gallons per minute (gpm) or less while the bathroom faucet should flow at 1.0 gpm or less and the kitchen sink at 1.5 gpm or less. If your fixtures flow at rates above these recommendations, consider requesting high efficiency aerators and showerheads and we will provide them for free.