

## “Do-It-Yourself” Leak Detection and Conservation Tips

### How can I be sure that I have a water leak?

The first step to identify if you have a water leak is by using your water meter.

### How do I find my water meter?



The meter is usually in a plastic or cement rectangular box flush to the ground with a small hole in the top of the box, normally located close to the street and/ or sidewalk or alley close to your property line. The number of the meter should match the meter number on your water bill.

- Choose a convenient time to not use any water on your property.
- Tell everyone on the property that they should not use water for the set period of time, we recommend 1-2 hours.
- Go out to your water meter with a marking pen or a camera and a screwdriver.

### How can I use my water meter to know if I have a water leak?

- After finding the water meter, open the meter box by putting a screwdriver in the hole at the top of the meter.
- Lift off the meter cover and you will see the meter face.
- On the face of the meter you will either see a red needle, which looks like the hand of a clock or you will see a low flow indicator that looks like a triangle or a circle. The needle or low flow indicator will move clockwise as water flows through the meter. Check to see if either is moving or still.

Important, make sure no one is using water! If the red needle or low flow indicator is moving, you have a leak.

- If there is movement, take a pen and mark the location of the needle on the face of the meter. You may also take a picture or write the numbers down.
- Come back after at least one hour and check to see if the needle has moved past the pen mark or if the numbers have changed.

If the needle has moved or the numbers have changed, you have a leak (probably a slow one. If you have a larger leak, you will see the needle moving right away.) One rotation of the red dial is about 7.5 gallons.



- If the needle did not move, you probably do not have any leaks.
- If you have had higher than normal water use, you might have an intermittent leak which would not necessarily show up on your first test.
- If you think you have an intermittent leak, try a longer test, such as overnight, and carefully check your toilets for possible problems. You may want to do this check for a few days.

### How do I read my meter?

It may help to track your water usage. We suggest reading your meter at regular convenient intervals.

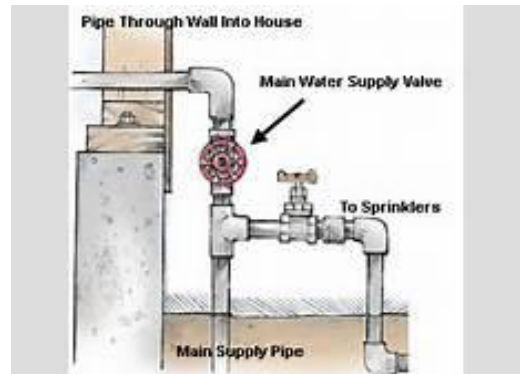
Water meters in the City measure volume in cubic feet. One cubic foot = 7.48 gallons and 100 cubic feet = 748 gallons. Water charges are based on units or 100 cubic feet.

One unit of water = 748 gallons or 100 cubic feet.

### How do I locate a leak?

If there is rotation, do the following to check to see if the leak is in the water line between the water meter and the supply valve to your house or in the plumbing lines on the building side of the supply valve.

Find your water supply valve. This is the valve that turns the water supply off to your home. The valve is usually located on a wall of your home in a direct line from where your water meter is located. A hose bib will often be found at the supply valve location.



Turn the supply valve to the off position. (Be careful to turn the valve slowly, older valves can break easily.) Run a faucet inside your home to verify that the flow of water stops completely. Go out to the water meter and see if the rotation stops. If it stops, the leak is on the house side of the supply valve. If the rotation does not stop, the leak could be on the water pipe running between the water meter and the water supply valve.

If you have a leak inside your building, you can reduce water waste until it is repaired by turning the water supply valve off.

### Where are the most common places to look for a leak?

**Toilet leaks are the most common place to find a leak.**

Toilet leaks in your home or building usually go unnoticed, because they are often silent and out of view. Toilet leaks increase water bills and send drinking water directly into the sewer line without detection.

### Common causes of toilet leaks.

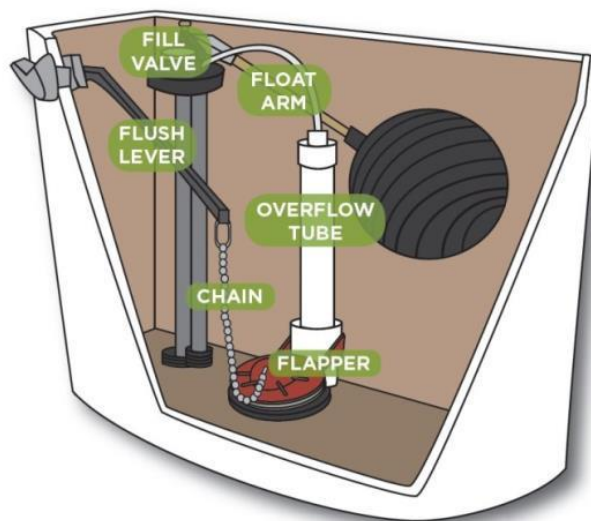
Over time, the toilet flushing mechanisms including the fill valve and the flapper, can decay and cause leaks. Causes of a leaking toilet should not be ignored. Check for flowing water, listen closely for gurgling or hissing noises. The most common causes of a leaking toilet are:

- Water level in the toilet tank is too high. It should be no higher than 1 inch below the overflow tube. If the water level is too high, lower it by squeezing the “C” clip and moving it down the valve rod on a Fluidmaster valve or by tightening the screw at the joint of the ballcock valve. If this adjustment does not lower the water level, the refill valve will have to be repaired or replaced.
- The fill valve is broken.
- The flush lever and chain is blocking the flapper valve from sealing.
- The flapper is worn or warped, preventing a tight seal.

### How to find leaks in the flapper with a dye test.

- Carefully remove the tank lid.
- Drop a few drops of food coloring into the water of your open tank.
- Wait 15 minutes and do not flush.
- If the dye color appears in your toilet bowl, you have a flapper leak.
- The dye water in your tank will be removed during your next toilet flush.

(Note: food coloring may cause staining in the tank.) The City provides customers with dye tablets available for pick-up at the Utility Conservation Counter at City Hall.



If your home has any toilets, which were made before 1991 you may be eligible to receive a rebate of up to \$153.00 from the City of Lompoc. You must replace the toilet with a new Water Sense certified toilet. For more information, please visit <http://www.cityoflompoc.com/Utilities/conservation/#WR>.

The Environmental Protection Agency has partnered with manufacturers to make it easier to identify water efficient fixtures, just look for products with the [WaterSense®](https://www.epa.gov/watersense) logo to save money and water! <https://www.epa.gov/watersense>

### Additional Resources for Customers

Please visit the websites below to see some helpful videos that demonstrate effective “do-it-yourself” repair and conservation tips.

- The County Santa Barbara Water Agency has made some helpful videos that demonstrate effective "do-it-yourself" conservation tips on film! <http://waterwisesb.org/indoorvideo.wwsb>
- For at-home, easy repairs and troubleshooting, visit [H2ouse.org:Water Saver Tour](http://H2ouse.org:Water Saver Tour)

## Showerhead leaks

The average household could save more than 2,300 gallons per year by installing a water-efficient showerhead. Since these water savings will reduce demands on water heaters, households will also save energy.

### Simple fixes for a leaky showerhead

Shower leaks usually occur where the showerhead attaches to the shower pipe. This type of leak may cause water to drip or spray from the back of the showerhead. Here are some simple ways to keep your showerhead from leaking, while delivering maximum performance:

- Remove the showerhead and soak it in vinegar to remove mineral buildup; recommended once a year.
- Replace the washer or “O” ring inside the showerhead to create a tighter connection.
- Apply Teflon tape or plumbers putty to the thread of the shower pipe stem before reinstalling the showerhead to prevent leaks



### Free showerhead replacement



New and improved showerheads deliver great performance at efficient flow rates of 1.5 gallons per minute or less while saving thousands of gallons of water per year (compared to 2.5 gallons per minute).

Usually, showerheads that were manufactured and installed before 1994 should be replaced. Older models could be using more than three times the amount of water. The City has free showerheads for pick-up at the Utility Conservation Counter at City Hall.

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## Faucet Leaks

Repairing or replacing a leaky faucet can save hundreds of gallons per month. Faucet leaks usually occur from worn parts or from loose water supply connections. Leaks may be obvious, such as a continuous drip, or harder to find, such as a leak under the sink. While a continuous drip may be annoying, a hidden leak can cause water damage to walls if not found early on.

### How to keep your faucet from leaking

Check for leaks and do regular maintenance, including:

- Replacing worn fittings, washers and gaskets inside the faucet. Depending on the manufacturer many types of faucets require new O-rings, cartridges, or ceramic discs.

- Tightening the water supply tubing at the fittings. Make sure the fittings are secured tightly at the wall and faucet. If this does not prevent more leaking, the water supply tubing may need to be replaced.
- Removing the aerator and soaking it in vinegar to remove mineral buildup; recommended once a year.

### **Free, efficient faucet aerators**

If you do not have aerators on your faucet, you may be using more water than you need! These small devices help make an existing faucet more efficient by adjusting the water flow. Aerators attach to the spout of the faucet and mix air and water to provide a smooth flow of water without sacrificing performance. The City provides customers with free aerators for pick-up at the Utility Conservation Counter at City Hall.

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### **Additional resources for customers**

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- For at-home, easy repairs and troubleshooting, visit <https://www.h2ouse.org/faucet-leak-detection>

## **Irrigation System Maintenance**

Across most of the state, at least 50% of a homeowner's yearly water use is from outdoor irrigation. A residential water bill can double or triple in the summer and early fall months due to watering turf and other plants. If you're irrigating in the late evening or early morning, it's hard to know if there are malfunctioning parts of your system, including leaks.



### **Best Practices for Maintaining your Irrigation System:**

- Check your irrigation system during all seasons to find inefficiencies such as broken, misaligned, or clogged sprinkler heads and to check for leaks at the irrigation valves. Repair or replace immediately. For information about irrigation maintenance click here. (missing website)
- Turn system on and check all spray heads for a broken head or look for green areas that may indicate a line leak.
- Adjust sprinklers to water the landscape, not the concrete or asphalt. Irrigation overspray is a common water waste in the landscape.

- Water between 4 p.m. and 10 a.m. to reduce evaporation and water loss from wind.
- Adjust your irrigation controller according to the seasons. Remember the controller should be turned off for the winter. Make sure your sprinkler timer is set properly and not over irrigating, malfunctioning, or on “default.”



Irrigation overspray is a prohibited water waste activity.

- Install a rain sensor so your system shuts down automatically with large amounts of rainfall.
- Consider removing any unused turf and replace with Lompoc climate-appropriate plants that require little or no irrigation at all! For a list of over 2,000 plants and their water use ranking (low, moderate or high) check out the Plant Database located on the WaterWiseSB website at <http://waterwisegardeningsb.org/plants.php>.
- The City also has a Smart Landscape rebate. For more information on water-wise plantings, free landscape evaluations, local gardening classes, and recommendations for making your landscape more efficient, visit the WaterWiseSB landscape page at <http://waterwisegardeningsb.org/Garden-Resources>.
- Free mulch is available to City customers by contacting the Urban Forestry Department at 875-8034.

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<http://waterwisesb.org/indoorvideo.wwsb>

### **Additional locations to check for a leak**

- If you have a water softener, check to make sure it is working properly. Check the salt reservoir. Increased salt use correlates to increased water usage and may indicate a change in the regeneration schedule or malfunction.
- If you have a water filtration system or reverse osmosis system, check to make sure that you do not have a leak around the filters, systems or water lines.
- Check all faucets, showerheads, hot water heaters, ice maker lines and hose bibs for leaks.

### **Additional resources for customers for leak repair and water conservation tips**

- More water conservation information can be found at the following websites:
  - Waterwise Santa Barbara - <http://waterwisesb.org/home.c>
  - H2ouse - <https://www.h2ouse.org/water-conservation>
  - WaterSense EPA - <https://www.epa.gov/watersense>