

# How to check for a water leak

Finding water leaks can save you water, which means saving money on water and sewer bills. Follow these easy steps to determine if you have a leak in a domestic or a sprinkler irrigation system.

**Step 1.** Turn all water-using appliances off so that no water is being used. This means turning off all water inside and outside the house including showers, sinks, washing machines and any appliance that uses water. If you have a sprinkler irrigation system, turn off the controller and manually shut off the two valves at the double check valve assembly (DCVA) to isolate the irrigation system.



**Step 2.** Take the lid off the meter box and lift the protective cover.

**Watch the meter.** Your meter will have a triangular red or silver and black round disc that is commonly called a “leak indicator.”

- If it is spinning, you have a leak. If there is no indicator and the actual meter dial hand is moving, water is running somewhere in your system and you have a leak – go to step 3.
- If the hand is not moving, note the position of the hand and wait 10 minutes. Check the meter again, if it has moved, you have a slow leak - go to step 3. If not, you do not have a leak.

**Step 3.** Locate the main shut-off valve (see photo at left) to the house. This is usually located close to the meter box.

**Step 4.** Turn off the valve.

**Step 5.** Turn on a faucet inside the house to test.

If water still flows from the faucet after several seconds, the shut off valve is not working. If no water flows through the faucet, the shut off valve is working. Return to the meter.

**Step 6.** Check if the meter’s leak indicators hand is moving.

- If the leak indicator or dial hand is still moving, water is flowing between the meter and the shut-off valve. That means you have a leak between the meter and the customer-side shut-off valve.
- If it is not moving, then you have a leak between the customer-side shut-off valve and possibly somewhere in the house. Check toilets, washing machines, faucets, etc., for any leak.



**Step 7.** To check a toilet for a leak : Flush the toilet and while the reservoir is still filling, add 2 or 3 drops of food coloring to the water in the reservoir.



Wait 15-30 minutes. If the water in the bowl changes colors, the flapper valve needs to be replaced.

# WATER CONSERVATION TIPS FOR INSIDE AND OUTSIDE YOUR HOME

## KITCHEN

Plug up the sink or use a wash basin if washing dishes by hand.

If you use a dishwasher, make sure it's fully loaded before you turn it on.

While you're at it, scrape that plate instead of rinsing before loading it into the dishwasher.

Keep a pitcher of drinking water in the refrigerator instead of letting the faucet run until the water is cool.

Thaw food in the refrigerator overnight rather than using a running tap of hot water.

Add food wastes to your compost pile instead of using the garbage disposal.

When washing dishes by hand, don't let the water run. Fill one basin with wash water and the other with rinse water.

Dishwashers typically use less water than washing dishes by hand. Now, Energy Star dishwashers save even more water and energy.

If your dishwasher is new, cut back on rinsing. Newer models clean more thoroughly than older ones.

Designate one glass for your drinking water each day, or refill a water bottle. This will cut down on the number of glasses that need washing.

Soak pots and pans instead of letting the water run while you scrape them clean.

Wash your fruits and vegetables in a pan of water instead of running water from the tap.

Install an instant water heater near your kitchen sink so you don't have to run the water while it heats up. This also reduces energy costs.

Cook food in as little water as possible. This also helps it retain more nutrients.

Select the proper pan size for cooking. Large pans may require more cooking water than necessary.

If you accidentally drop ice cubes, don't throw them in the sink. Drop them in a house plant instead.

## BATHROOM

You can save water by checking for leaks and installing a fill-cycle diverter or upgrading to a high-efficiency toilet.

If your toilet was installed before 1992, purchasing a [WaterSense® labeled](#) toilet can reduce the amount of water used for each flush.

If your shower fills a one-gallon bucket in less than 20 seconds, replace the showerhead with a [WaterSense® labeled](#) model.

Shorten your shower by a minute or two and you can save up to 150 gallons per month.

Time your shower to keep it under five minutes. You can save up to 1,000 gallons per month.

Toilet leaks can be silent. Be sure to test your toilet for leaks at least once a year.

Put food coloring in your toilet tank. If it seeps into the bowl without flushing, there's a leak. Fix it and start saving gallons.

When running a bath, plug the bathtub before turning on the water. Adjust the temperature as the tub fills.

If your toilet flapper doesn't close properly after flushing, replace it.

Turn off the water while you brush your teeth and save up to 4 gallons a minute. That's up to 200 gallons a week for a family of four.

Consider buying a dual-flush toilet. It has two flush options: a half-flush for liquid waste and a full-flush for solid waste.

Plug the sink instead of running the water to rinse your razor and save up to 300 gallons a month.

Turn off the water while washing your hair and save up to 150 gallons a month.

When washing your hands, turn the water off while you lather.

Take five-minute showers instead of baths. A full bathtub requires up to 70 gallons of water.

Install water-saving aerators on all of your faucets.

One drip every second adds up to 5 gallons per day! Check your faucets and showerheads for leaks.

While you wait for hot water, collect the running water and use it to water plants.

Look for [WaterSense® labeled](#) toilets, sink faucets and showerheads and start down the road to savings.

## LAUNDRY

Each load of laundry uses between 27 and 54 gallons of water. Purchase a high-efficiency washing machine to reduce water and energy use up to 50 percent. Try to wash only full loads.

When doing laundry, match the water level to the size of the load.

Washing clothes in cold water saves water and energy, and helps your clothes retain their color.

Have a plumber reroute your greywater to trees and plants rather than the sewer line. Check with your city and county for local codes.

When shopping for a new washing machine, compare resource savings among [Energy Star](#) models. Some can save up to 20 gallons of water per load.

## LAWN

Hire a qualified professional to install your irrigation system and keep it working properly and efficiently.

Adjust your lawn mower to cut grass to the height of 1.5 to 2 inches. Taller grass shades roots and holds soil moisture better than short grass.

Leave lawn clippings on your grass to cool the ground and hold in moisture.

If installing a new lawn, select a lawn mix or blend that matches your climate and site conditions.

Aerate your lawn periodically. Holes every 6 inches will allow water to reach the roots, rather than run off the surface.

If walking across the lawn leaves footprints and blades don't spring back up, it is time to water.

Let your lawn go dormant (brown) during the winter. Dormant grass only needs to be watered every three to four weeks, less if it rains.

Avoid over-seeding your lawn with winter grass. Rye grass needs water every few days, whereas dormant Bermuda grass needs water monthly.

Remember to weed your lawn and garden regularly. Weeds compete with other plants for nutrients, light and water.

While fertilizers promote plant growth, they also increase water consumption. Apply the minimum amount of fertilizer needed.

Catch water in an empty tuna can to measure sprinkler output. Three-quarters to 1 inch of water is enough to apply each time you irrigate.

## LANDSCAPE

Use drip irrigation on plants and trees.

Adjust sprinkler heads so they don't spray walls, driveways or sidewalks.

Use the most efficient types of nozzles and irrigation clocks.

Check the sprinkler system weekly and immediately replace broken or missing sprinklers with identical parts.

Once a month, check the drip line for breaks and emitters for clogs or broken heads.

For best results, shoot for "head-to-head" coverage. That means the spray of one sprinkler should reach the head of the sprinkler closest to it. Make sure grass does not block the spray. Level all sprinkler heads to grade to prevent spray blockage or tripping hazards.

Adjust your irrigation clock seasonally and comply with mandatory watering restrictions.

Water areas in the shade about 30 percent less than sunny areas.

Fine-tune watering times for each station to account for different watering requirements due to exposure, shade and sprinkler output.

Use porous material for walkways and patios to prevent wasteful runoff and keep water in your yard.

Group plants with the same watering needs together to avoid overwatering some while under watering others.

Reduce the amount of lawn in your yard by planting shrubs and groundcovers appropriate to your site and region.

Plant native species.

Plant in the spring and fall, when the watering requirements are lower.

Consider xeriscaping. This landscape method uses plants that do not need much water.

Avoid planting grass in areas that are hard to water, such as steep inclines and isolated strips along sidewalks and driveways.

Leave lower branches on trees and shrubs and allow leaf litter to accumulate on the soil. This keeps the soil cooler and reduces evaporation.

Start a compost pile. Using compost in your garden or flower beds adds water-holding organic matter to the soil.

Use a layer of organic mulch on the surface of your planting beds to minimize weed growth that competes for water.

Spreading a layer of organic mulch around plants helps them retain moisture, saving water, time and money.

Use 2 to 4 inches of organic mulch around plants to reduce evaporation and save hundreds of gallons of water a year.

Next time you add or replace a flower or shrub, choose a low-water-use plant and save up to 550 gallons each year.

Collect water from your roof by installing gutters and downspouts. Direct the runoff to plants and trees.

For automatic water savings, direct water from rain gutters and heating, ventilation and air conditioning (HVAC) systems to water-loving plants in your landscape.

Use a trowel, shovel or soil probe to examine soil moisture depth. If the top 2 to 3 inches of soil are dry, it's time to water.

Set a kitchen timer when using the hose as a reminder of when to turn it off. A running hose can discharge up to 10 gallons per minute.

Check your sprinkler system frequently and adjust sprinklers so they water your lawn and not the house, sidewalk or street.

Minimize evaporation by watering during the early morning, when temperatures are cooler and winds are lighter.

Timing is everything when it comes to irrigation. Learn how to set your controller properly.

Look for [WaterSense® labeled irrigation controllers](#).

Learn how to shut off your automatic watering system in case of malfunctions or rain.

Apply water only as fast as the soil can absorb it.

If water runs off your lawn easily, split your watering time into shorter periods to allow for better absorption.

Water only when necessary. More plants die from overwatering than from under watering.

Install a rain sensor on your irrigation controller so your system won't run when it's raining.

Water dry spots by hand instead of running the entire irrigation system longer.

Don't water your lawn on windy days when most of the water blows away or evaporates.

Water your plants deeply but less frequently to encourage deep root growth and drought tolerance.

Use sprinklers that deliver big drops of water close to the ground. Smaller drops and mist often evaporate before hitting the ground.

Use a rain barrel to harvest rainwater from gutters for watering gardens and landscapes.

For hanging baskets, planters and pots, put ice cubes on top of the soil to give your plants a cool drink of water without overflow.

Remember to periodically check your sprinkler system valves for leaks, and keep sprinkler heads in good shape.

Spring is a great time to give your irrigation system a checkup to ensure it's working efficiently.

Pruning properly can help your plants use water more efficiently.

## **POOL**

Cover your pool to reduce evaporation. Pool covers reduce evaporation by 90 percent, limit windblown debris and conserve energy.

An exposed pool loses 50 to 70 gallons of water per square foot per year to evaporation. During the hot summer months, you may lose up to 4 inches of water each week.

Wind exposure can increase evaporation in uncovered pools. Plant trees and shrubs that buffer your pool, but won't shed or drop leaves in the water.

Wash cartridge filters when your pump operating pressure increases by 10 pounds per square inch (psi). You can wash cartridges on landscape areas since chlorinated pool water is diluted with clean water. Never allow wash water to run into the street.

Warmer water means higher evaporation rates. Professionals recommend 78 degrees Fahrenheit as the ideal recreational pool temperature.

When you drain your pool or spa to the sewer, you allow the water to be cleaned and used again, rather than wasted.

Make sure your swimming pools, fountains and ponds are equipped with recirculating pumps.

When backwashing your pool, consider using the water on salt-tolerant plants in the landscape.

Don't overfill the pool. Lower water levels will reduce water loss due to splashing.

Instead of building a private pool, consider joining a community pool.

Trickling or cascading fountains lose less water to evaporation than those that spray water into the air.

Use a grease pencil to conduct a bucket test to check for pool leaks. An unnatural water level drop may indicate a leak.

## GENERAL TIPS

Winterize outdoor spigots when temperatures dip below freezing to prevent pipes from leaking or bursting.

Insulate hot water pipes for more immediate hot water and energy savings.

Use a commercial car wash that recycles water. Or, wash your car on the lawn and water your grass at the same time.

Use a hose nozzle or turn off the water while you wash your car. You can save up to 100 gallons every time you wash.

Wash your pets outdoors in an area of your lawn that needs water.

When cleaning fish tanks, give the nutrient-rich water to your nonedible plants.

When you give your pet fresh water, don't throw the old water down the drain. Use it to water your trees or shrubs.

Use a broom instead of a hose to clean patios, sidewalks and driveways, and save water every time.

Set water softeners for a minimum number of refills to save water, chemicals and energy.

Report broken pipes, leaky hydrants and errant sprinklers to property owners or your local water provider.

Know where your master water shut-off valve is located. If a pipe bursts, this could save gallons of water and prevent damage.