DIY HOME WATER AUDIT

Complete your Home Water Audit in 10 Easy Steps:

1. Food Colour in Toilet Tanks
2. Water Meter Reading
3. Water Service Line Check
4. Laundry
5. Heating System
6. Garden Hose
7. Kitchen Tap
8. Dishwasher
9. Installing Faucet Aerator
10. Bathroom
    - A. Checking Toilet Leaks
    - B. Checking a Showerhead

1 Food Colour in Toilet Tanks

Toilets are the highest consumers of water in most homes.

To test for leaks, take food colouring and drop it into the toilet tank (NOT the bowl). Do not flush the toilet during this time. Let the colouring sit for 5-10 minutes to colour the tank water.

If dye appears in the bowl within 30 seconds, it means you have a serious toilet flapper or refill valve leak. If you see colour in your toilet bowl, please go to Step 10a.

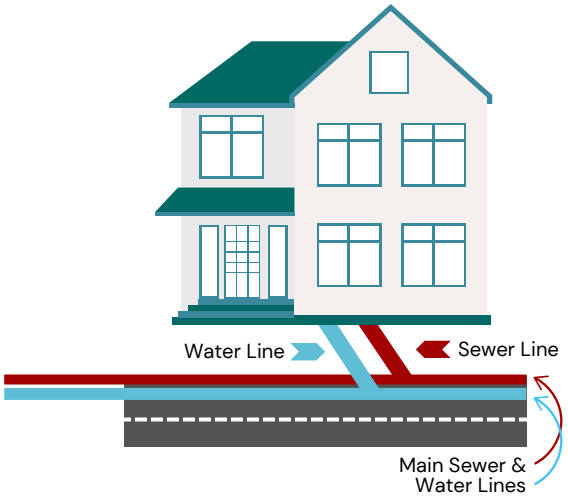
2 Water Meter Reading

If you have a water meter, reading it is an easy way to find medium-to-large leaks in your home.

Before checking for leaks, make sure to stop using any water within your home (taps, toilets, etc.).

Look at the meter dial- you will see a small dial, triangle, or sweep arm. It should be completely still if water is not being used in your home and there are no leaks. If the sweep arm or triangle moves while no one is using water, it means you have a leak.

3 Water Service Line Check

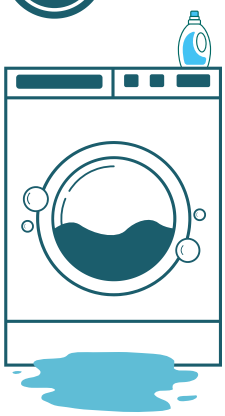


Water may be supplied to your home by a water line that is fed by a Main Water Line, located within the utility right-of-way, usually alongside the roads.

The valve to shut off water to your home is located somewhere along the service pipe (likely at the end of a driveway or front of the property's lawn).

Once you have located your service line, inspect where it enters the home and check for leaks. A service line with a significant leak may cause puddles in front of your home above the service line and water in your basement. To check for additional leaks, inspect interior exposed piping throughout your home.

4 Laundry

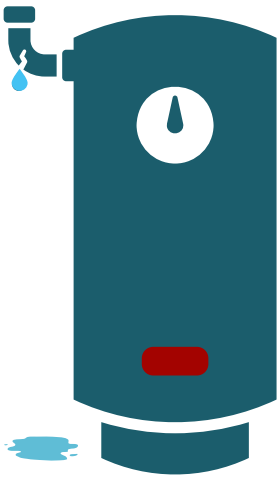


Inspect your washing machine and piping in your laundry area for leaks.

Washers are the second-largest consumer of water in most homes, after toilets.

Consider buying an energy-efficient washer, which can save in water, sewer, and electric costs.

5 Heating System



To inspect your boiler and hot water tank for leaks, look for water accumulation on the floor, or the tray under the unit.

If there's no water, but you see white mineral deposits on the floor, then that's a good indication a leak has dried and left calcium or magnesium behind.

You should also check around the top of the tank to see if pipes or valves are leaking as well. If you can't spot anything, chances are your water heating system is not leaking. However, if you are in doubt, contact a licensed technician to assist.

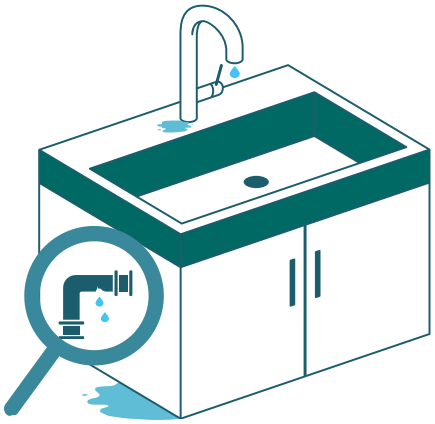
6 Garden Hose

If you have a garden hose attached outdoors to a hose connection, make sure you check it for leaks.

Do the connections leak when you turn on the hose? You can install a hose nozzle that automatically shuts off when you are not using it. Additionally, you can apply plumbing tape to provide a better seal if the connections leak.

Don't forget about outdoor sprinklers as well. Watch them for leaks by checking for pooling in your backyard.

7 Kitchen Tap



Examine your kitchen taps and pipes for any leaks. Remember to check for leaks whether the tap is running or not.

To measure the water flow from your kitchen tap, you can use a measuring cup, or any one-litre container.

A flow rate of 11.4 Litres per minute (LPM) is equivalent to filling:

- A one-litre container in five seconds
- A one-litre measuring cup in 2.5 seconds

If your tap's flow rate exceeds 11.4 LPM, consider replacing your current faucet with an aerator (follow the included installation instructions). If your tap's aerator or tip cannot be removed, you can find clip-on aerators at local hardware stores.

Don't forget to check under the sink for leaks as well.

8 Dishwasher

Inspect your kitchen dishwasher and its surrounding pipes for leaks. When checking the pipes under the sink, make sure to test for leaks with the water both on and off.

For new appliance purchases, consider energy-efficient models which can help save water.

9 Installing Faucet Aerator

Installing a new faucet aerator on your sink taps can conserve up to 7.6 Litres of water per minute. This not only saves water but also reduces energy consumption by lessening the amount of hot water used.

Installation Instructions:

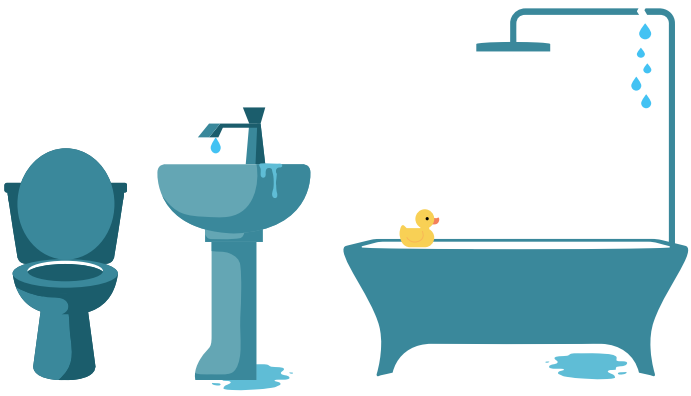
- Remove the old aerator and dispose of it in your metals recycling bin.
- Thoroughly clean the faucet's threads, both inside and outside.
- Install the new aerator according to the manufacturer's instructions.

Note: occasionally remove the aerator and rinse for best results.

10 Bathroom

Check your bathroom taps and pipes for any leaks. Assess the water flow from your bathroom tap in the same way as you did for the kitchen tap. The flow rate for bathroom taps should be less than 7.6 litres per minute (LPM). This is equivalent to filling:

- A one-litre measuring cup in less than four seconds
- A one-litre container in less than eight seconds



A Checking Toilet Leaks

Return to the toilet where you placed colouring into the tank. Check the bowl of the toilet: is the water in the bowl clear or is there colour from the dye? If there is colour, water from the toilet tank is leaking into the toilet bowl. If the leak is large, you will be able to hear the toilet "running" and the dye will show up in the bowl within a minute or two. The size of the leak is directly proportional to the speed the dye shows up in the bowl.

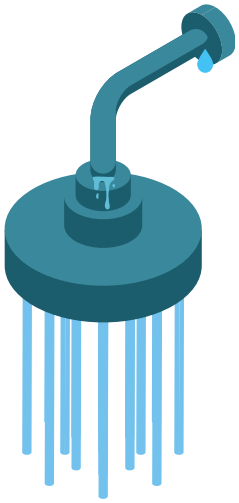
Check your toilet manufacturer's instructions for how to replace/repair the toilet flapper or refill valve. Consider replacing your toilet if it is more than 15 years old.

B Checking a Showerhead

To measure the flow rate of your shower, use the same method as you did for the kitchen and bathroom taps.

A flow rate of 11.36 Litres per minute (LPM) or less is considered water-efficient.

By installing a new showerhead with a lower flower rate, you can reduce both your water and energy consumption, potentially saving up to 11.36 LPM.



Another frequent issue is leaks from the shower diverter valve, which is the switch or knob that toggles between bathtub and shower flow. Repairing the shower diverter valve is complex and should be done by a certified plumber.

The Importance of Regular Water Audits

Did you know that doing regular audits has the following benefits:

- **Cost Savings:** Identifying and fixing leaks or inefficient fixtures can lead to substantial savings on your utility bills. Even small drips add up over time.
- **Environmental Conservation:** A water audit helps in reducing water wastage, thus conserving this vital resource. With increasing concerns about water scarcity, using water efficiently is crucial for environmental sustainability.
- **Improved Water System Performance:** By detecting and resolving issues in your water system, a water audit can enhance the overall performance and efficiency of your plumbing. This ensures a consistent and reliable water supply.
- **Prevent Home Damage:** Water leaks can cause significant damage over time, leading to costly repairs. Water audits can identify hidden leaks that might be causing unseen damage to the structure of your home.
- **Awareness and Education:** Conducting an audit can educate homeowners about their water use habits and how to be more efficient. This awareness can lead to long-term changes in behavior that contribute to water conservation.
- **Increased Property Value:** Homes with efficient and modern water systems can be more attractive to potential buyers, potentially increasing the property's value.
- **Preparing for Drought Conditions:** By optimizing water use, homeowners can better prepare for periods of drought or water restrictions, ensuring they can maintain essential water use during these times.