



# INDOOR WATER LEAK CHECK GUIDEBOOK



AURORA  
WATER

This guidebook will help you identify and mitigate higher-than-expected water use by focusing on the many different ways water is used inside your home.

# 1

## DETERMINE IF YOUR INDOOR WATER USE IS HIGH

As a rule of thumb, multiply the number of people living in your home by 1,500. This is the average number of gallons of indoor water an individual uses per month. If your total monthly water use is several thousand gallons more than the resulting number, follow the steps below to identify the cause.

**Important Note:** Total water use increases significantly when watering grass or other outdoor plants, so this calculation is for estimating indoor water use only.

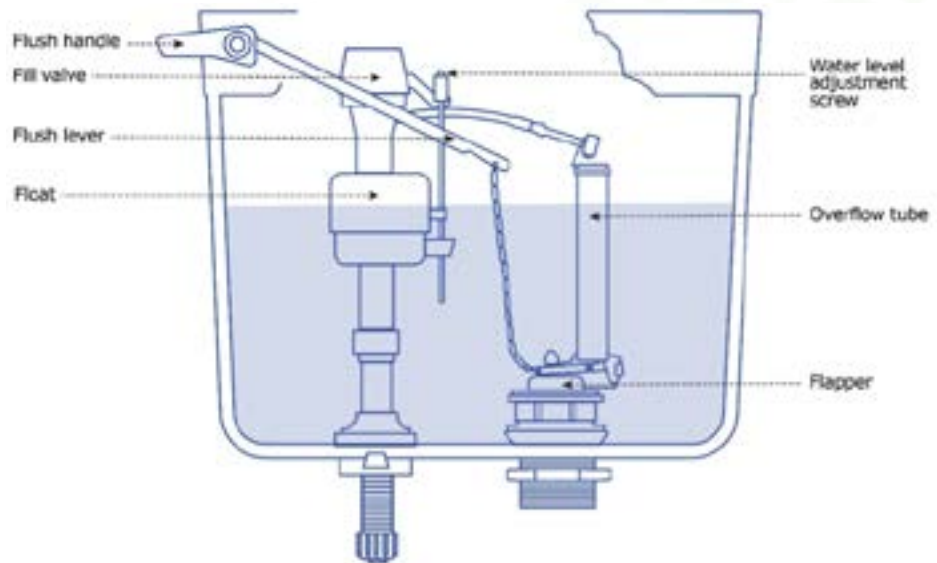
# 2

## CHECK FOR LEAKS ✓ CHECKLIST

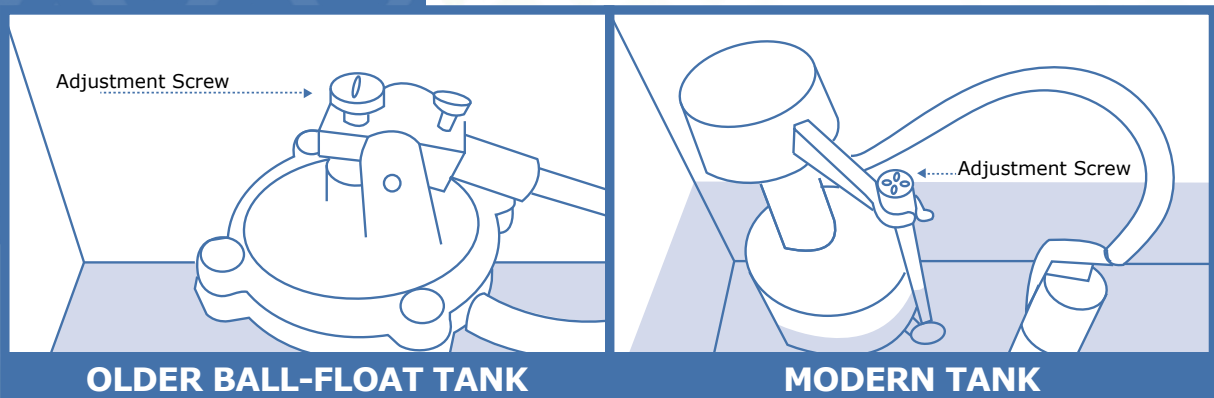
### TOILETS

Toilets are one of the most common causes of high water use, and they often leak silently.

A toilet leak of just one-tenth of a gallon per minute will waste more than 4,000 gallons in one month, which could add more than \$20 to your monthly bill. It's possible for a toilet to leak more than 60,000 gallons in one month.



1. Check each toilet in the home by removing the lid of the tank and listening closely. If it is making any kind of noise in between flushes, it is likely leaking.
2. While the lid is off, check the water level in the tank. Water should not be flowing into the overflow tube. If it is, lower the water level by turning the adjustment screw on the float. If adjusting the float doesn't stop the overfilling, the fill valve and/or float may need to be replaced.



OLDER BALL-FLOAT TANK

MODERN TANK



3. If the toilet does not make any noise in between flushes and water is not flowing into the overflow tube, water may still be leaking through the flapper. To check, put either a colored dye tab or a few drops of food coloring in the tank.



4. Wait 15 minutes **without flushing**, then check to see if the dye has seeped into the water in the bowl. If it has, the flapper needs to be replaced.



5. In order to save water while making repairs, shut off the toilet's water supply valve. Apply a penetrating oil to the valve such as WD-40 to loosen it if necessary.

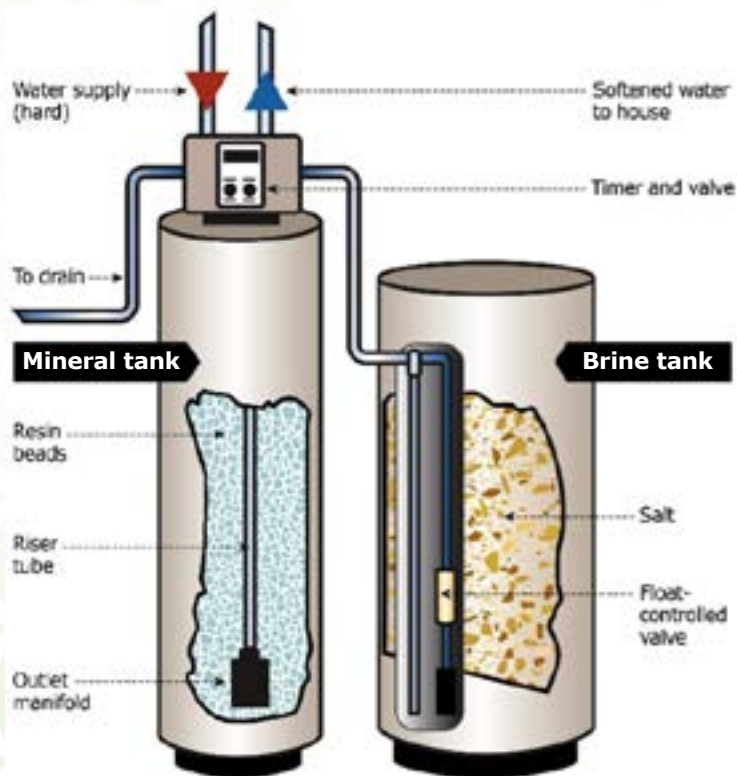


**Depending on the age and/or efficiency of your current toilet, you may be eligible for a rebate on the purchase of a new toilet. Visit our [toilet rebate page](#) for details.**

# WATER HEATER

**An overheated water heater is often the cause of higher water use.**

1. Check the pipe or tube leading from the relief valve. The pipe or tube usually ends at the base of the water heater or at the floor drain. Water should not be constantly running out of the relief valve.
2. If water is running out constantly, check the water heater's temperature setting. If it is at or near the highest setting, lower the temperature. When the temperature is set too high, the water will constantly expand and be released through the relief valve.
3. Check all other pipes leading into or out of the water heater for signs of leaks.
4. If the water heater is running constantly without hot water being used in the home, you may have a leak or break in your hot water line in the walls, ceiling or elsewhere. A plumber will be needed to diagnose the problem.
5. If any of the scenarios listed above apply to your situation, shut off the isolation valve for the water heater to stop further waste and contact a plumbing professional.



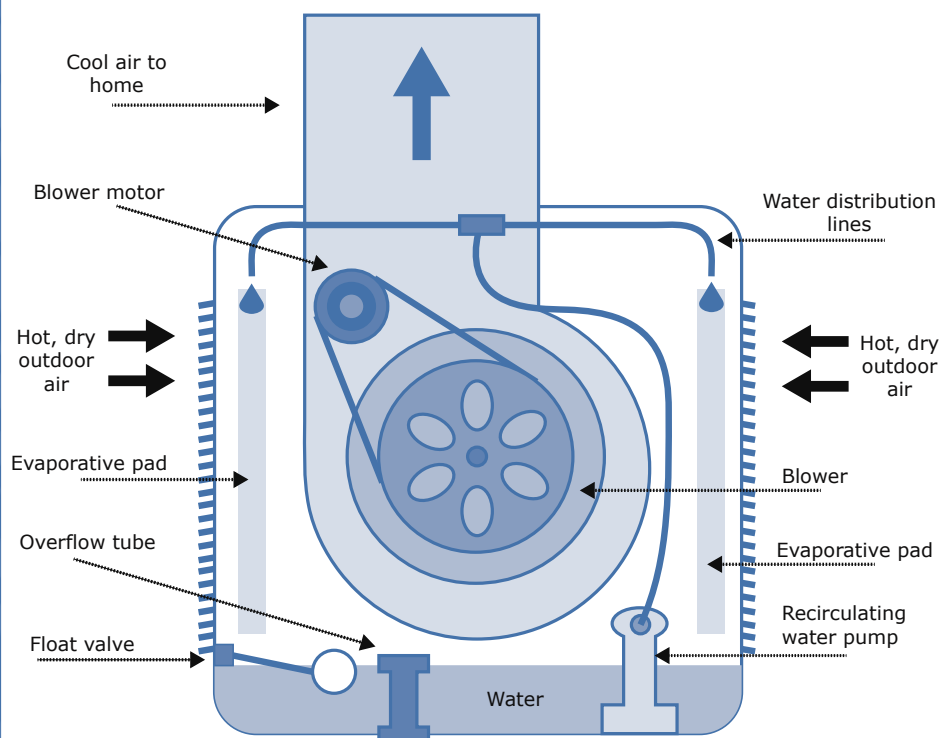
# WATER SOFTENER

1. Check for signs of water leaking from the inlet and outlet valves.
2. Check to see if water is running from the drain line; water should be running from this line intermittently but not constantly.
3. Contact the manufacturer for advice on repairs. If possible, set the water softener to bypass mode while waiting for repairs.

## EVAPORATIVE COOLER

Although very energy efficient, evaporative coolers do use water to cool your home. To keep your cooler running efficiently, install new evaporative pads at the beginning of the summer.

You may see an uptick in water use during hot months when your cooler is running more frequently. Follow these tips to ensure there aren't any leaks adding to your bill.



### Feed Line Leaks

The water line that runs from the water supply to the evaporative cooler is often referred to as the feed line. If this line becomes damaged, it will begin to leak constantly.

### Float Valve Malfunction

Similar to toilet tanks, evaporative coolers have a float valve that maintains the appropriate reservoir water level. If this float stops working properly, water can overfill and start to leak from the unit.

### Cracked Reservoir

A crack in the reservoir pan at the bottom of the evaporative cooler can also cause water to leak from the unit. Another place common for leaks is the seal where the overflow tube penetrates the pan.

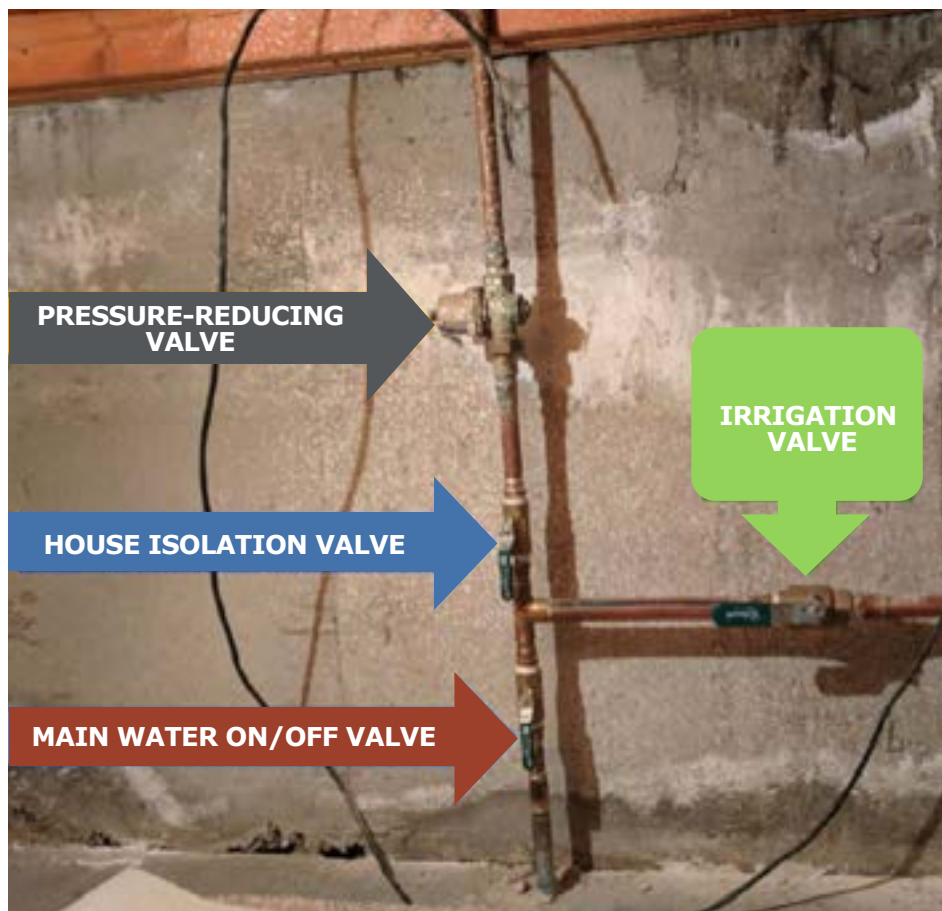
Check the feed line and the area surrounding your evaporative cooler regularly to make sure there are no signs of damage, wet spots or constant leaks occurring. If a leak is suspected, call a professional for guidance on repairs.

## WINTERIZE BEFORE A FREEZE

Be sure to winterize your evaporative cooler to avoid freezing, cracking and leaking.

- 1: Turn off water supply to the evaporative cooler.
- 2: Disconnect the water line from the cooler to the water supply.
- 3: Empty the water from the cooler by removing the drain.
- 4: If desired, remove the evaporative pads and cover the cooler.





## MAIN SHUT-OFF VALVE

1. Locate the shut-off valve on your main water line. It is typically located in the basement or crawlspace.
2. Check for signs of leaking at or near the shut-off valve. If the valve is leaking, contact a plumber for repairs.
3. If a severe leak or break ever occurs inside your home, the water supply to the entire home can be shut off by closing this valve.

### Backflow Prevention Device



### Sprinkler Valve Box



## IRRIGATION SYSTEM LEAKS

**If you cannot find any sign of leaks indoors, there may be an irrigation leak outside. Below are some quick tips for identifying irrigation leaks.**

1. Check your backflow prevention device and/or the irrigation line branching off from the main water line in the basement or crawlspace. If you can feel water moving through the pipes when the sprinkler system is off or if the pipes are cold to the touch, there may be a system leak.
2. Check all hose spigots on the outside of the house for leaks.
3. Open any sprinkler valve boxes on the property and check for leaks at the valves.
4. Walk the property and look for signs of water leaking from any sprinkler heads or soft/wet spots in the grass. Either of these signs could indicate a leak or break in the underground line.
5. If any of the above irrigation leaks are found, turn off the water to the irrigation system either at the backflow or the irrigation shut-off valve in the basement or crawlspace. Note that simply turning the sprinkler controller to the "off" position will not necessarily stop the leak; it is best to turn off the system's water supply.
6. If any of the scenarios above apply to you, repair the leak yourself or contact a landscape company, plumber or other contractor who performs irrigation system repairs.

## CONSIDER OTHER REASONS FOR HIGHER-THAN-EXPECTED USE



### INTERMITTENT TOILET LEAK

Sometimes the water in a toilet runs, stops for a minute or more and then starts running again. This start-and-stop leak may occur for several reasons, such as the flush handle sticking slightly or the flapper not sealing completely.

Replacing the flapper, flush handle/lever, and/or the flush chain might solve this type of leak and can be an inexpensive and relatively easy repair. The materials for these repairs are sold in most hardware stores and step-by-step tutorials showing how to do the replacements can be found on the internet.



### CHANGE IN HOUSEHOLD SIZE

The number of people living in a household is a major factor in the amount of water used indoors. Remember, the average person uses approximately 1,500 gallons per month.

House guests visiting for extended periods of time can also cause indoor use to increase temporarily. For example, it's common for water bills to increase during the holidays if friends and family are staying at your home.



### BEHAVIOR CHANGES

Changes in behavior can result in an increase in water bills. Common causes include:

- People in the household transitioning to a work-from-home employment situation
- An increase in the number of loads of laundry being washed
- Household residents taking longer or more frequent showers

Consider any and all behavior changes that may result in increased water use when evaluating why a water bill has increased.



### FURNACE HUMIDIFIERS

Depending on factors such as the brand or efficiency of the humidifier or the square footage of your home, water usage might increase slightly when the furnace humidifier is running more frequently. If you suspect that the humidifier is causing significantly higher-than-expected water bills, have the system inspected by a professional to ensure it is functioning properly.



### WATERING GRASS AND GARDENS

Water use increases significantly during summer months when grass and other plants are being watered. Even hand-watering a small garden can increase water use more than one might expect.

However, remain aware of how much water is being used during these months. Even though increased water use is to be expected, you may still be using more water than necessary. If a summer water bill is significantly higher than that of the same month of the previous year, refer to prior sections in this guidebook and our [Outdoor Water Assessment Guidebook](#) to diagnose the cause of the increase.

## Contact Aurora Water Conservation for further guidance

Using our guidebooks will empower you to identify and resolve many common water-use issues. If you need further assistance or want more information other than what is offered in our online resources, contact a water conservation specialist at 303.739.7195 or [conservation@auroragov.org](mailto:conservation@auroragov.org).



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