



MAIL: 11228 E. Hohokam Lane, Cave Creek, AZ 85331
EMAIL: THDWID.board@gmail.com
WEB: www.TontoHillsWater.org
OFFICE PHONE: (480) 595-0128
EMERGENCIES: (480) 745-1427

BOARD: RALPH SPURGIN, Chairman
RICK NELSON, Secretary
COREY GARRISON, Treasurer
KEITH PEIRCE
STAFF: SUSAN VICTOR, Clerk
BILL VICTOR, Superintendent

Water Conservation Newsletter - Winter 2018

Plug That Leak!

Is It A Big Deal?

A pinhole-sized leak in a pool plumbing system with 40 pounds of pressure will lose approximately 970 gallons of water per day. That's about 30,000 gallons per month.

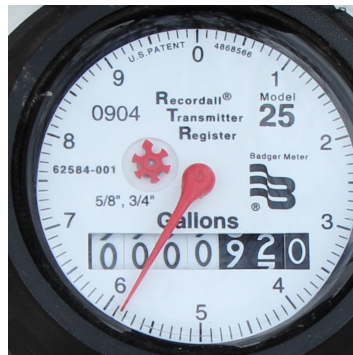
An under slab 1/16" hole can leak 943 gallons per day.

A leaky toilet flapper can waste 900 gallons per month.

A leaky faucet can lose 140 gallons per week or 560 gallons per month.

How Do I Know If I Have A Leak?

The easiest way to determine if you have a leak is to first verify that all water sources on the property are turned off, including your ice makers, toilets (not running), and irrigation systems. Once you are sure this is done, look at the face of the water meter (see picture below)



Typically, there will be a small triangle or star (shown) sometime in a different color than the dial (red or blue) that is a leak detector and will continue to spin clockwise when everything is turned off, but you still have water flowing because of a leak.

Short videos are available on the City of Scottsdale website at <http://scottsdaleaz.gov/Water/videos>.

How Do I Know Where the Leak Is Located?

Once you have determined you have a hidden small leak, and everything is turned off in the house, the following are some troubleshooting steps to narrow down the small leaks location.

Step 1 - Locate your home's main shut off valve and shut off the water at the valve. Check the meter again. If it is still turning, the leak is in your home's service line between the meter and the main valve.



Solutions - Connections and fittings are the most likely points of leaks, and very often occur where the water comes up into the house or where the meter is connected on the owner side. Other than recent digging around your pipes, it is possible for root systems of trees to damage your service line and it may be necessary to expose the water line in these areas to pinpoint the leak.

Step 2 - If meter has stopped turning, the leak is somewhere beyond the main valve inside your house.

Solution - Since irrigation systems are routinely to blame for leaks, isolate the entire irrigation system. Most back flow preventers leading to the irrigation system have small isolation valves and can be used to physically shut off the back-flow preventer. If isolating the entire irrigation system stops the meter's leak detector, you have a leak somewhere in the irrigation system. The only part of the irrigation system that remains under constant pressure is from the connection to the water source to the station boxes housing all your irrigation control valves. Check all fittings between these locations. If you still cannot find any visible leaks, it is possible one of the stations valves is not fully closing and allowing water to flow. Each control valve will need to be checked.

Many people believe that water loss in a pool or spa is due to evaporation instead of a leak. Here is a simple way to tell. Place a bucket on the top step of the pool and fill it with water to the pool's water level. Ensure the auto-fill feature is turned off, if your system has one. After a day, if the water level in the pool is lower than the bucket, there probably is a leak in the pool structure or plumbing system. To further detect whether the cause is the structure or the plumbing system, measure the water loss with the pump running for 24 hours and again with the pump off. If more water is lost when the pump is running, the plumbing is probably the cause.

Step 3 - If the leak detector fails to stop turning after Step 1 and Step 2, you have eliminated all other possibilities besides the leak being inside the house.

Solution - Most plumbing fixtures or appliances in the home have connections that can be shut off. Check everything that has a connection to the water supply, including faucets, toilets, water heaters, hose bibs, water/ice maker from the refrigerator, etc. One of these should be the source of the problem.

If you are unable to locate the leak, you may need to call a plumber. Go to <https://www.tontohillswater.org> and look under DWID Documents/Conservations/Leak Detection companies 2017 for a full list of leak detection companies including vetting information.