Small Leaks Add Up

The US EPA reports that 1 out of 10 homes has a water leak greater than 99 gallons per day. Nationwide total water loss due to leaks is estimated at 1 trillion gallons every year. For something as seemingly small as a showerhead dripping 10 times a minute, 500 gallons of water per year are lost. Similarly, a faucet dripping once per second adds up to 2000 gallons every year. Common water leaks are often easy and inexpensive to fix and can reduce water bills, prevent damage to homes, and help protect drinking water sources.

Water leaks often occur at faucets, showerheads, toilets, and outdoors at external spigots, pools, and lawn irrigation systems. Checking for leaks begins with listening and watching faucets, showerheads, and spigots for drips. Inside your home look for the appearance of water puddles or water staining. Toilets can be tested by listening for toilet "running" or placing a drop of food coloring in the tank. After ten minutes check for any color in the toilet bowl to indicate a leak from the tank to the bowl. Watch for puddles at the base of the toilet where it meets the floor for puddled water. Outside the home sodden, squishy ground may indicate a leak (or failing septic tank, see: HENV-502, Septic System Failure and Environmental Impacts). If you can hear running water but cannot find evidence of a leak, make sure all faucets are closed and any appliances that use water are off then watch your water meter. If the meter advances, you have a water leak. Larger leaks that may occur due to pipe failures can be discovered by paying attention to water bills for spikes in usage.

Large leaks may require a plumber to correct the problem, however smaller leaks may be relatively easy to repair on your own. Faucet gaskets and pipe fittings should be inspected, and while disassembled a new aerator installed. Showerheads may develop leaks at the threading between the showerhead and pipe. For both showerheads and faucets, adding or replacing Teflon (pipe) tape on the threads may correct the leak. If a toilet tank leak was located, the flapper is often the source of the problem as over time the rubber may degrade or develop mineral build-up. If the flapper is suspected to be the problem, they can be easily and inexpensively replaced.

Water Leak Resources:

EPA Leak Detection Checklist: https://www.epa.gov/sites/default/files/2017-02/documents/ws-ourwater-detect-and-chase-down-leaks-checklist.pdf

Calculate water loss using the USGS drip calculator. https://water.usgs.gov/edu/activity-drip.html

Choate, D. (2020). *Water Street Blog – Stop the Drip, save a Bit*. American Water. Retrieved February 23, 2023 from American Water https://waterstreet.blog/2020/03/17/stop-the-drip-save-a-bit/

United States Environmental Protection Agency. (2023). *Leaks Can Run, but They Can't Hide*. Retrieved February 23, 2023 from https://www.epa.gov/watersense/fix-leak-week