## Where does all that water go?



The average person in Mount Carmel uses approximately 80 gallons per day. That's just over 2,400 gallons per month for each person in your house. Multiply that by a family of 4 and water usage can easily reach 9,600 gallons per month.

Studies have shown an average of $14 \%$ of residential water is lost through leaking fixtures or pipes inside your home. So how can you reduce the amount of water you use? It's easy to check how much water is used and whether you have a leak in your home.

## Be a Leak Detector

An easy way to check whether you have leaks in your house is to read your water meter. Learning to read your water meter can pay off. First, turn off all the water in your house. (Remember to wait for the hot water heater, toilets, and icecube makers to refill, and for any regeneration of water softeners.) Next, go to your water meter and jot down all the numbers you see. Also, look at the flow indicator gauge, which is a small red or black dial. If it is moving, then there is a leak inside the house. If it is not moving, then you do not have a serious leak, but you may have a slow leak such as a toilet periodically refilling itself.

To check for slow leaks, read your water meter before and after a period when no water is being used. This may be when you plan to leave the house for a period of time like going to work, running errands, or shopping. If the readings are different after a period of time (at least one hour), then you have a leak.

Some areas to check for leaks include toilets, faucets, malfunctioning water softeners, swimming pools, water heaters and faulty irrigation valves. Other leaks can be harder to find such as underground leaks, foundation leaks and leaks behind walls. These may require the assistance of a plumber to locate. Even a small drip can add up to big bucks.

A leaky pipe is usually pretty obvious. Visually inspect the pipes in your home and look for any tell-tale watermarks on walls or ceilings. Be sure to look under each sink in your home and around the floor of the toilet.

## Check the pressure relief valve

Hot water heaters have a pressure relief valve to help relief pressure in the home water system. Often times once the relief valve opens, it continues to leak until the valve is replaced. These valves can be dripping on the floor around the hot water heater or may be plumbed outside. If
you find a leak, contact a plumber or someone well versed in this type of repair. Hot water tanks can build up pressure in the home water system and if not relieved through the relief valve, can cause severe damage.

## In the yard

check the outside hose bibs or any other above ground water line. Signs of an outside leak include a wet spot, actual flow of water over the ground surface, or green algae growing in the area. Also, look for any leaks around the valve on the hose bibs and backflow preventers.

Don't forget to check your in-ground irrigation system often and be sure there are no broken or missing sprinkler heads. Be sure to check the sprinkler system valves for leaks too. Sprinkler heads can lose around 20 gallons per minute. That's 300 gallons if the zone runs for only 15 minutes. Multiply that by 2 times per week, and that's over 2,400 gallons per month for one broken sprinkler head. Since your sewer bill is calculated using water consumption, not only do you pay for the water, but you pay another for the sewer. One broken sprinkler head could cost $\$ 28$ or more per month on your water sewer bill.

Pay attention to your hose. Left unattended, a garden hose can pour out hundreds of gallons of water in just one hour. Check all hoses, connectors and spigots regularly to make sure they are in good working order. Replace or repair damaged or leaking hoses, nozzles, spigots and connectors. Outfit your hose with a spray nozzle so water flows only as needed. When finished, turn it off at the faucet instead of at the nozzle to avoid leaks.

## Toilets

Toilets are often the biggest culprit of high-water usage. Sometimes they continue flowing water because the flapper sticks, the chain is caught on something inside the tank, or parts are worn out inside the tank. Since the water flows down the sewer, leaking toilets don't necessarily leave any signs of a leak, until you get the bill. The average leaky toilet can waste about 200 gallons of water per day. That's over 6,000 gallons a month for just one leaking toilet! Some toilets may produce a running water sound that is easy to hear. Some leaks are visible as a small trickle running from the rim to the water in the bowl. Toilet leaks are often silent and can be intermittent, allowing loss of water to go undetected for long periods of time.

To detect silent leaks, remove the lid from the toilet tank, remove any colored or bleaching cleaning agents. Flush to clear the water in the bowl. Then add dye tablets, leak detector fluid, a few drops of food coloring, or a colored instant drink mix to the toilet tank. If there is a leak in the toilet, color will appear in the bowl within 60 to 120 minutes. Flush the remaining color from the tank as soon as the test is complete.

## Showers and Baths

Replace leaky drain plugs in sinks and bathtubs. Check your shower head and tub faucet for leaks and repair them as soon as possible. Even the smallest drip can add up to big bucks.

To save water, consider replacing your shower head with a low flow unit. The older the shower head, the more water it uses. Older fixtures can deliver as high as 8 gallons per minute. Most new shower heads deliver 2.5 gallons of water per minute. Some newer models deliver less than 2.0 gallons per minute.

## Laundry and Dishwashing

Clothes and dish washing machines have hoses and connections that can wear over time and begin leaking. Check the hoses often. If you are going on vacation, consider turning the water off to these units to avoid a major event if the hose breaks while you are away. When you replace your clothes or dish washer, consider a water efficient model that uses less water. Older and non-water efficient clothes washing machines can use as much as 40 gallons of water per load. Older dishwashers can use 11 gallons per load. When purchasing a standard-size dishwasher, consider a model that uses 6.5 gallons of water per cycle or less. Compact models should use 4.0 gallons per cycle. Operate the clothes and dish washer only when you have a full load.

## Avoid Frozen Pipes

If you don't prepare for cold weather, that can mean frozen pipes. Water pipes can burst when standing water freezes and expands. Try These Steps to protect in the winter.

- Locate the valves inside your house that control the water supply to outside faucets. Make sure these inside valves are completely turned off
- on the outside of the house open the faucets, letting any standing water drain out. Keep these faucets open all winter so that any water remaining in the pipes can expand without causing pipes to break.
- Caulk around these outside faucets and anywhere water lines enter your home.
- Use Insulation wrap or tubular pipe covers/sleeves to insulate any unheated areas of your home, such as crawl spaces, basements or attics. These coverings help protect pipes from the cold.

For more information on how to conserve water visit the American Water Works Association website (www.awwa.org). As always, if we can be of any further service, please contact us at: (618) 262-7461.

