

# Water Usage/Conservation Tips and Facts

The average water usage **per person** is 100 gallons per day or 3000 gallons per month! Here's how...

- The average toilet uses 3.5 gallons of water per flush
- A five-minute shower can use 25 to 50 gallons of water
- The average bath takes about 36 gallons of water
- Automatic dishwashers (short cycle) uses 8 gallons per cycle
- Older washing machines use an average of 41 gallons to wash and rinse
- Outdoor watering with an average hose uses 10 gallons per minute
- Brushing teeth and rinsing uses 1/2 gallon
- Dishwashing and rinsing in the sink uses 8-27 gallons

The above usage is calculated minimally. You can count on using quite a bit more if you leave **the water running while brushing your teeth, shaving, washing the dishes**, using old toilets that require more water, running the dishwasher and washing machines on longer cycles and filling the bath tub to the top. Even a small leak can add up to 25 gallons per day!

*Remember, water is not cheap or limitless. Please use this natural resource wisely and save on your water bill.*

## Water conservation Tips

- Take shorter showers/use less water in the bathtub
- Turn the water **off** while brushing teeth or washing hands and shaving.
- Today, any washers scoring excellent in water efficiency tests used about 13 gallons or less to do our 8-pound load.
- Use a layer of mulch around plants to reduce evaporation
- Install EPA approved aerators on faucets and water wise showerheads
- Check all water fixtures for leaks and make repairs
- Check for leaking toilets (silent leaks)
- Water the lawn early in the morning or late evening to reduce water loss due to evaporation
- Check irrigation systems for underground leaks
- Create an online account to keep up with daily water usage. (Contact office for details)
- Replace old toilets. If a family of 4 replaced one 3.5 gallon per flush toilet with a 1.28 gpf toilet they can save around 35 gallons of water per day or 12,775 gallons per year or \$100.76 dollars per year on water and sewage charges.

## To Check for a Leaking Toilet

Toilets are one the most common sources of leaks in the home, usually unnoticed by the residents because the leaks are often silent and out of view. EPA identifies a "Silent leak" as being caused by a worn or warped toilet bowl flapper. These types of leaks are responsible for as much as 500 gallons per day of water usage. Most toilet leaks will send the wasted water

directly into the sewer line without detection by residents. Several research studies have found 20% to 35% of all residential toilets leak to some degree.

Large toilet leaks can be detected when the valve constantly emits a hissing or gurgling sound when the toilet is not in use. Smaller, though significant, leaks require the further investigation. Removing the tank lid to inspect the flush mechanisms is the first step.

The water level in the tank should be no higher than 1 inch below the top of the overflow tube. Some tanks require a lower water level, but none are ever higher. If the water level is to the very top of the overflow tube, water is slowly leaking into the overflow tube and down the drain. The problem has one of three causes: 1) the water level is adjusted too high; 2) the float is damaged and not shutting off the refill valve; or, 3) the refill valve (ball-cock assembly) is worn and needs replacement.

Performing a dye test will allow detection of leaks in the flapper valve. Test procedures include placing dye tablets or food coloring into the tank water to turn the water dark blue. **If the dark blue water appears in the bowl within 30 minutes, there is a leak in the flapper valve.**

There are several causes for these leaks, but flapper valves are the most common problem. The flapper provides the barrier, holding the water in the tank until the user activates the flush handle, pulling on the chain attached to the flapper valve. When the flapper is raised, the water in the tank rushes into the bowl creating the flush. After the flush is complete, the flapper falls back down onto the valve seat to retain the water as the tank refills. Leaks occur when the flapper valve does not create a water tight seal. The seal can be compromised due to several reasons: a) the chain snagging, not allowing the flapper to drop completely onto the valve seat; c) the valve seat is worn; or c) the flapper is worn or warped. A worn or warped flapper is the most common cause by far, and can be easily replaced.

