

Preservation

Although our underground source of drinking water is generally protected by about 350 feet of nearly impermeable clay, we must constantly be on the lookout for possible sources of contamination. For this reason, MLGW and the University of Memphis formed the Ground Water Institute in 1992 to study the area’s underground aquifers and serve as a repository for data such as aquifer structure and potential sources of contamination. However, our daily habits at home and at work can also have a great impact on protecting our water supply. Here’s how:

- Be aware of toxic products in your home that could contaminate our ground water if not disposed of properly. Use them up, give them away or switch to safer alternatives.
- Be aware that there are numerous toxic products in your home, which are probably under your kitchen sink and in your garage.



Cleaners: drain openers, chlorine bleach, oven/window/toilet bowl/rug & upholstery/linoleum floor cleaners

Paint & Solvents: furniture polish, metal polish, spot removers, paint thinners, paint

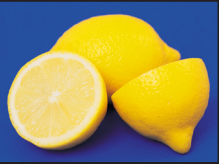
Automotive: auto cleaning products, auto fluids, motor oil, gasoline/diesel fuel, car batteries

Pesticides: ant control, roach control, herbicides/fungicides, insect sprays, moth balls

- These and other common household products are spread on lawns and gardens, dumped in landfills, hosed off driveways, flushed down toilets or washed away by rain into storm drains and sewers. Eventually, these chemicals may leak into our rivers and lakes and can even end up in our ground water, which may affect our drinking water.
- Use these products carefully and dispose of them properly by taking them to a hazardous waste collection or recycling center. If you can’t use the entire product, give it to someone who can.
- Donate leftover paint and solvents to community groups who can use them.
- Never pour used motor oil on the ground or down a storm drain. Take it to an oil recycling center.

TOXIC CHEMICAL ALTERNATIVES

Drain Opener & Cleaner	Alternative: To prevent clogs, pour boiling water directly down your drain twice each week. Use a metal snake or plunger to clear a clogged drain.
Oven Cleaner	Alternative: Mix 3 tablespoons of baking soda with 1 cup warm water and rub gently with steel wool. Use oven liners (foil) to catch spills.
Window Cleaner	Alternative: Mix 2 teaspoons of vinegar with 1 quart of water and use to clean windows and mirrors. After drying, polish with newspaper.
Toilet Bowl Cleaner	Alternative: Mix lemon juice and borax or clean with baking soda.
Linoleum Floor Cleaner/Wax	Alternative: Mop with 1 cup vinegar mixed with 2 gallons of water. Polish with club soda.
Furniture Polish	Alternative: Dissolve 1 teaspoon lemon oil or almond oil in 1 pint of mineral oil for polish. Conceal scratches and nicks with oil from crushed walnuts.
Spot Remover	Alternative: Club soda is great for removing fruit juice, ketchup and other stains; for blood stains, apply cold water immediately; try lemon juice on ink or perspiration stains.
Insect Spray	Alternative: In 4 quarts of hot water, blend 6 cloves of crushed garlic, 1 minced onion, 1 tablespoon of dried hot pepper and 1 teaspoon of pure soap. Let this mixture sit for one to two days. Strain and spray. Or place one cigarette in 1 quart of water overnight then strain and spray.
Flea Product	Alternative: Give your pet brewer’s yeast, garlic tablets or vitamin B as preventatives. Or give your pet an herbal bath with fennel, rue or rosemary.



NOTE: The materials contained herein have been compiled from a variety of sources and are believed to be accurate. However, MLGW makes no warranty and will accept no liability concerning the cost or effectiveness in any individual situation for any of the information contained herein.



Water Conservation



Ways to Conserve & Preserve Our Drinking Water



The residents of Memphis and Shelby County, Tennessee enjoy drinking water that is among the purest in the world. This water is the ultimate recycled product, beginning as raindrops that fell some 2,000 years ago.



Through the years, the water slowly filters through layers of sand and gravel, a natural time-proven filtration system that helps rid the water of harmful bacteria and impurities.

When it reaches its final destination, the tiny raindrops become part of giant, natural reservoirs or aquifers deep in the earth. Memphis is the largest city in the world with artesian wells as its only water source.

It is estimated that the Memphis Aquifer contains 100 trillion gallons of water. While that amount is impossible to imagine, it is safe to say that Memphis has little fear of a water shortage.

This does not mean that we can afford to be careless or wasteful. Actually, quite the opposite is true. Water conservation and preservation are more important than ever.

Conservation

Since the shortage of water is not the issue in our area that it is in some parts of the country, we are probably not as concerned about water conservation as we should be. However, just because our water is in abundant supply today does not mean we should take it for granted and be wasteful. Saving water is as easy as shutting off the faucet when you brush your teeth. Keep reading to learn many more water-saving ways.

You can save nearly 100 gallons of water each month just by turning off the water when you brush your teeth.



Saving water ...in your bathroom

Up to two-thirds of the water used in your home is used in the bathroom. Showers, baths and toilets use substantial amounts of water, sometimes needlessly. Not only does this affect the water consumption and energy costs of your home, but it also adds to the volume of water going to sewage treatment plants, making it an even better reason to use water wisely.

- Take shorter showers; this can save up to 10 gallons of water for every minute you reduce your shower time. If you prefer baths, fill the tub only partially; this uses less water than all but the shortest of showers.
- Install a low-flow water aerator in your faucets and showers. While cutting water flow in half, it will actually appear stronger because the water is mixed with air as it leaves the tap.
- Don't use the toilet as a wastebasket. Five to seven gallons of water are wasted each time it is flushed unnecessarily.



- Recycle the water from your fish tank by using it to water plants. It's a great fertilizer!

...in the laundry room and kitchen

One of the luxuries of American life is the abundance of household washing machines and dishwashers. In fact, they are such a convenience that most people now consider these appliances a necessity. But despite their ability to make household duties a bit easier, the careless use of these appliances can turn even the most cost-efficient units into excessive contributors to energy waste in the home.

- Use your dishwasher and washing machine only with full loads.
- If you wash dishes or clothes by hand, don't leave



the water running for rinsing. Either fill a tub or side of the sink with clean water for rinsing.

- Clean vegetables using water in a pan and a vegetable brush rather than letting the tap run needlessly.
- Defrost frozen food without running water over the packages. Place food in the refrigerator overnight or defrost in the microwave.
- Keep a pitcher of water in the refrigerator so you won't have to run tap water until it's cool.
- Listen to the weather forecast. Why should you water your lawn if Mother Nature is going to do it for you?

...in the great outdoors

Driving through Memphis in the spring and summer, you will probably see sprinklers running on many lawns. While it's okay to keep your lawn beautiful, you need to be careful not to be wasteful.

- Water your lawn only when it needs it. Here's a simple test for moisture: step on the grass, and if it springs up when you move, chances are good that it doesn't need watering.
- Water your lawn in the early morning and never on a windy day to avoid evaporation. Lawns like a leisurely soak once a week, rather than quick showers.
- Position your sprinkler so that it doesn't spray the driveway, street gutter or other areas where the water will be wasted.
- Maintain your lawn with grass blades 2½ to 3 inches high. Blades can shade each other and reduce evaporation.
- Aerate your lawn by punching holes six inches apart so water will reach the roots rather than run off surfaces.
- When washing your car, truck or van, fill a pail with soapy water and use the water hose only for rinsing.



- A leaking toilet can waste more than 60 gallons of water each day.
- Use hose nozzles that can be shut off when not in use. A single hose left on uses nearly 300 gallons of water an hour.
- Instead of spraying your driveway, garage and sidewalk with water, use a broom to sweep the area clean.
- Use waterless hand cleaner to wash your hands when they are extra dirty. Not using a steady stream of water will save seven to 10 gallons each time.

Seek the leaks

Even at its bargain price, water is too precious to waste. A slight drip can waste up to 15 to 20 gallons per day, while a leaking toilet can waste more than 60 gallons per day. If your utility bill indicates that your water consumption has increased considerably from one month to the next without a known cause, you need to check your home and yard for signs of water leakage.

- Unexplained wet areas in a yard or underneath a house may indicate a hidden water leak and should be investigated, as should a low, constant sound of running water heard in or near the house.
- Check your toilets for leaks. Add a little food coloring to your tank and if, without flushing, the color appears in the bowl, you have a leak that should be repaired immediately.
- If your investigation fails to reveal a suspected water leak, try observing the water meter dial. If the red test hand continues to move when everything is turned off, a leak is occurring. A plumber may be required to locate and repair the leak, especially if it is beneath a concrete slab foundation or in a sloping or well-drained yard. If there is a hidden leak in the water line, the lost water may flow out to the sewer system completely undetected except by the water meter.

