

Water Conservation Tips

Water conservation not only will save water; it saves energy, and it can save you money. Excessive water use burdens water utilities, overloads sewage treatment plants, and can cause residential septic systems to malfunction or fail.

If lawn sprinkling is negligible, nearly 75% of all residential water is used in the bathroom. Two-thirds of all water used indoors is for bathing and toilet flushing. Studies show that dripping faucets and leaking toilets account for 14% or more of all water used indoors. People use more water than we realize. Here are some pertinent facts:

- ! Faucets flow water at 3 to 5 gallons per minute.
- ! Showerheads flow water at 5 to 10 gallons per minute, so a 5 five minute shower uses 25 to 50 gallons of water.
- ! A bathtub filled half full will contain at least 50 gallons of water.
- ! Older toilets (installed prior to 1994) use 3.5 to 7 gallons of water per flush.
- ! Some new toilets use as little as 1.6 gallons per flush.
- ! Twenty percent of all toilets leak.
- ! Dishwashers use at least 15 gallons of water per load.
- ! Washing machines use 30 to 60 gallons of water per load.

The following tips can help you save water:

In General

If you have a well, check to see if the pump cycles on and off even when water is not being used. If it does, you have a leak.

A water softener produces water having zero hardness, which many Hoosiers consider too soft. It also means the water softener is regenerating more often than necessary to produce aesthetically optimal water, thus wasting water and salt. If you don't need your water softener for iron removal (the aesthetic standard for iron is 0.3 milligrams per liter), install piping and valving so that hard water is mixed with soft water to produce a finished water hardness of 110-140 milligrams per liter (equivalent to Lake Michigan water).

When purchasing a new water softener, look for one fitted with a hardness sensor that automatically triggers regeneration, thus reducing water and salt usage.

Make sure your home is free of water leaks. Many homes have hidden water leaks. Read your water meter before and after a two-hour period when water is not being used. If the dials are moving, or the meter does not have the same reading both times, there is a leak.

Repair dripping faucets. Even the smallest drip can waste 50 gallons or more per day. Larger leaks can waste hundreds of gallons of water. Not good for septic systems. A dripping faucet can usually be repaired by replacing the rubber O-ring or washer inside the valve.

Retrofit all household faucets by installing aerators with flow restrictors to slow the flow of water.

Don't pour water down the drain when there may be another use for it, such as watering plants.

When purchasing a new washing machine, look for one that can be adjusted for size of the load, and

that offers several wash and rinse cycles. This will allow you to optimize its use, thus saving water and energy.

If your clothes washers cannot be adjusted for the size of the load, then operate it only when fully loaded.

Check your swimming pool and your hot tub for leaks.

When not in use, cover your swimming pool or hot tub to reduce evaporation. A covered pool is easier to keep clean; it requires less treatment chemicals; and it's much safer. If left uncovered, a residential swimming pool will waste a minimum of 1,000 gallons of water per month. A covered pool will lose as little as 100 gallons per month.

The Kitchen

Don't run the faucet while waiting for a cooler drink of water. Store drinking water in the refrigerator, or use ice cubes.

Don't use running water to thaw meat or other frozen foods. Defrost food overnight in the refrigerator or use the defrost setting on your microwave.

Don't run the faucet while cleaning vegetables. Rinse them in the sink or in a pan of water.

Install an instant water heater on the hot water line to your kitchen sink so you don't have to let the water run until it heats up.

Don't rinse dishes under the faucet. Run some water in a bowl or the sink for rinsing, or use short blasts from the sprayer.

Don't rinse dishes prior to loading the dishwasher. Most dishwashers do an excellent job of cleaning dishes, glassware, etc. on their own.

Never run the dishwasher with only a partial load.

Garbage disposals alone add 50% to the volume of solids that enter a septic tank. And they require a lot of water to operate properly. Use your garbage disposal sparingly, but never without running water.

The Bathroom

Don't run water continuously while washing your hands. Turn off the water while soaping up, and turn it on again to rinse.

Don't run water continuously while shaving. Fill the lavatory with a few inches of warm water for rinsing your shaver.

Don't run water continuously while brushing your teeth. Turn off the water after you wet your toothbrush. Fill a glass with water for rinsing your mouth.

If you take baths, start off by immediately stoppering the bathtub drain. The initial burst of cold water from the faucet can be offset with hot water later during the fill. Then fill the tub only 1/3 full.

Take shorter showers. Long showers waste 5 to 10 gallons of water every unneeded minute. Limit

your showers to the time it takes to soap up, wash down, and rinse off. Showerheads are now available that allow you to cut off the flow of water without turning off your hot and cold-water valves each time. Better yet, take a bath instead of showering. A bath uses less water than all but the shortest showers.

Install a low-flow showerhead that restricts water flow to 3 gallons per minute or less.

Never use your toilet as a means of trash disposal. Throw tissue, insects, cigarette butts, and similar waste in the trash.

Leaking toilet tanks are a major waste of water, and they are hard on septic systems. Check for leaks by adding some food coloring to your toilet tank. If the tank leaks, color will appear in the bowl within 30 minutes. Worn, corroded, bent, or maladjusted parts are the usual cause of such leaks. Replacement parts are inexpensive, readily available and easily installed. There are books, even web sites, that address toilet repairs. Food coloring may stain the tank if left for an extended period of time. So flush the toilet as soon as the leakage test is finished.

Older toilets (those installed before 1994) can flush efficiently using less water. Install a bottle or bottles in the toilet tank to displace water, thereby cutting down on the amount of water used per flush. Put an inch or two of pebbles in each bottle, fill it to the top with water, and cap it. Position the filled bottles so they don't interfere with toilet tank operating mechanisms. Do not use the infamous brick-in-the-toilet, as continuously wet bricks disintegrate over time, and the detritus can plug drains.

Replace your old high water-use toilet with a modern low water-use model. It will save thousands of gallons of water per year, save energy (for pumping water), and cut your water and sewer bill. Also, it will substantially reduce the load on your septic system.

Outdoors

Don't buy water toys that require a constant stream of water.

Don't install ornamental water fountains unless they recycle water. Locate them where water losses due to evaporation and wind drift are minimized.

As much as possible, plant grasses, ground covers, shrubs and trees that are drought-resistant or native to the Midwest. Native plants usually require less watering.

Plant in the Spring or Fall, when watering requirements are lower.

Don't plant grass or install turf in areas that are difficult to sprinkle without wasting water, such as steep inclines and narrow, isolated strips along sidewalks and driveways.

Outfit your water hose with an adjustable spray nozzle so you can use as much or as little water as you need.

Don't use your water hose to sweep the driveway or sidewalk. Use a broom instead.

Water hoses are notorious for leaking at the connections. Therefore, when finished using the hose shut the water off at the spigot, rather than at the hose nozzle.

Don't leave hoses or sprinklers unattended. Garden hoses can waste hundreds of gallons of water in just a few hours.

Wash your car at a commercial car wash that recycles water. But if you prefer to wash your own car, park on the grass so runoff water is absorbed into the soil. Use soapy water from a bucket, and wash the paintwork and glass first. Even if your soapy water gets dirty it's still suitable for washing chrome, hubcaps, and wheels. Use the hose only for the final rinse.

Mulch around plants to reduce evaporation and promote plant growth.

Use drip irrigation or soaker hoses to reduce water use in the garden. These devices apply very small amounts of water at the plant base where it's needed, rather than on leaf surfaces where it will evaporate. Soaker hoses require no installation, and they can be moved as needed to water the entire garden.

Soil compaction makes water movement into the root zone difficult, especially with clay soils. Aerate the soil at least once a year to reduce compaction and increase the soil's ability to absorb water. That will reduce run-off, especially on slopes.

Set your lawn mower wheels one notch further down so you are mowing higher than usual. Longer grass means less evaporation. The roots of closely cut grass have to work harder, thus requiring more water. Cutting grass close to the ground means more thatch, which reduces the ability of water to penetrate the soil.

Don't over-fertilize your lawn. It wastes money, and it increases a plant's need for water. Apply fertilizers that have slow-release, water-insoluble forms of nitrogen.

Remove thatch from your grass to encourage water movement into the root zone, and reduce run-off. Thatch will accumulate due to excessive fertilization, improper mowing practices, or over-watering.

Sprinkle only when your lawn shows signs of needing it. Over-watering is bad for plants and lawns. It promotes shallow root growth and reduces hardiness. To determine whether or not the lawn needs watering, walk across the grass. If you leave footprints, it's time to sprinkle.

Turn off the sprinkler system if a storm comes up. A heavy rain means you don't have to sprinkle at all.

Use a sprinkler that throws large drops of water rather than a fine mist. That will reduce water losses from wind drift and evaporation.

Locate your sprinkler heads so only the lawn is watered, not the house, sidewalk, or street.

To minimize evaporation, water your lawn during cooler parts of the day. Very early morning is best. To reduce the impact of lawn sprinkling on your water utility, avoid the hours of peak water consumption, usually from 6:00 AM to 7:30 AM, and from 4:00 PM to 7:00 PM.

Cease sprinkling your lawn before water runs into the street. Use a kitchen timer to remind you when to turn off the sprinkler system. Better yet, install automatic sprinkler controls.

Never let the lawn sprinkler run all day.